The ALCHEMIST in LITERATURE

From Dante to the Present



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THEODORE ZIOLKOWSKI





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In memory of ALEXANDER STEPHAN (1946–2009) student, colleague, friend, who transmuted archival dross into the gold of knowledge

Preface

When I revealed to my family and friends that my interests were leading me from cults and conspiracies (Lure of the Arcane, 2013) to alchemy, they began giving me strange looks. I hastened to assure them that I had no intention of stealing off to a laboratory to crouch over crucibles and alembics while awaiting the generation of the philosopher's stone. Rather, I was returning to my study and the library in an effort to understand a different mystery. Why have alchemy and the figure of the alchemist since the twelfth century exerted such a powerful appeal in Western culture? Why did so many great writers of the late Middle Ages and Renaissance, despite their own skepticism, feel called upon to satirize what was known as "the Art"? Why, even after the lure of creating fortunes by transmuting base metals into gold was proved scientifically unfeasible, did the alchemist continue to provide such an alluring figure in European literature? Why did such twentieth-century thinkers as C. G. Jung and Mircea Eliade devote so much of their work to the topic? Why have the terms "alchemy" and "alchemist" become such positive buzzwords in advertising and publicity?

In that context, then, I want to emphasize that this book is not about alchemy as such—a topic on which the bibliography is vast and rich. In the first chapter I discuss alchemy only to the minimal extent necessary to introduce some of the principal ideas, terms, and names that occur in the literary works featured in later chapters. As my title indicates, this book focuses not on alchemy but on its practitioners. Because general notions of alchemy often permeated culture quite broadly, alchemical images turn up frequently in works—for instance, Shakespeare's poems and plays—that have absolutely nothing to do with the Art or its adepts. In contrast, I address works in which self-proclaimed alchemists actually appear as the principal figure or, at least, as a significant representative. Throughout it has been my aim to discover, from one period to the next, the reasons that explain the attraction of a figure so remote from the general rationalism of modern times. The fact that views of the alchemist have indeed, and especially since the late eighteenth century, undergone transmutations from one generation to the next justifies my chapter divisions and their headings.

While the bibliography on alchemy itself is awesomely vast and covers many millennia, the studies of alchemy and literature, though considerable and steadily increasing, are still manageable. First, numerous books and viii Preface

articles, cited at the appropriate points in my notes with full bibliographical details, have been devoted to specific writers and their use of alchemy: for instance, Ronald Gray's Goethe the Alchemist (1952); Geneviève Spencer-Noel's Zenon et le thème de l'alchémie dans L'Oeuvre au noir de Marquerite Yourcenar (1981); and William T. Gorski's Yeats and Alchemy (1996). A second group of works deals with the theme during specific periods in several national literatures: Timothy Materer's Modernist Alchemy: Poetry and the Occult (1995) (English poetry of the twentieth century); Stanton J. Linden's Darke Hierogliphicks: Alchemy in English Literature from Chaucer to the Renaissance (1996); Burkhard Dohm's Poetische Alchemie: Öffnung zur Sinnlichkeit in der Hohelied- und Bibeldichtung von der protestantischen Barockmystik bis zum Pietismus (2000); Randall A. Clack's The Marriage of Heaven and Earth: Alchemical Regeneration in the Works of Taylor, Poe, Hawthorn, and Fuller (2000); and Anke Timmermann's Verse and Transmutation: A Corpus of Middle English Alchemical Poetry (2013). A third group, finally, considers works in a longer or broader comparative context. Bettina L. Knapp's *Theatre and Alchemy* (1980), based on her conviction that "any play may be interpreted alchemically" (16), uses alchemical terminology to describe the dénouement of various dramatic works even when they have nothing to do with alchemy or alchemists. Robert Marteau's La Récolte de la rosée: La Tradition alchimique dans la littérature (1995) consists of poetic and loosely organized reflections on an assortment of mainly French texts from the Middle Ages to the present. David Meakin's Hermetic Fictions: Alchemy and Irony in the Novel (1995) looks in detail at twelve writers from Zola to the present in English, French, and German who use alchemical images. Robert Stockhammer's Zaubertexte: Die Wiederkehr der Magie und die Literatur 1880–1945 (2000) considers alchemy along with other occult practices in mainly German and French literature of the specified period. Elmar Schenkel's essayistic Die Elixiere der Schrift: Literatur und Alchemie (2003) surveys in some forty pages roughly the same periods and many of the same texts as I do in my chapters. Historians of art have also produced beautifully illustrated catalogues and studies of alchemy and alchemists in art from antiquity to the present: for instance, Gareth Roberts's The Mirror of Alchemy: Alchemical Ideas and Images in Manuscripts and Books (1994) and Urszula Szulakowska's Alchemy in Contemporary Art (2011).

What to my knowledge we never find, however, is a study devoted to the figure of the alchemist in literature, either in a specific literary period or in a comparative context since the Middle Ages. John Read's *The Alchemist: In Life, Literature and Art* (1947) devotes a chapter (25–55) to two English examples—Chaucer's *The Canon's Yeoman's Tale* and Ben Jonson's *The Alchemist*—before turning for the balance of his brief

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monograph to the figure of the alchemist in art from Dürer to Joseph Wright. A partial exception is Joachim Schummer's article "Historical Roots of the 'Mad Scientist': Chemists in Nineteenth-Century Literature" (*Ambix* 53 [2006], 99–127), which argues that the modern image of the "mad scientist" is based on medieval depictions of the alchemist. I have not undertaken in the following chapters to deal with the vast spectrum of aspects loosely considered "alchemical," from the specifically operative to the broadly hermetic, from colors and elements to "chymical weddings" and psychological sublimation. Instead I propose to consider the alchemist himself, initially as a mirror of shifting attitudes toward alchemy and, later, as an exemplification of the writer's view of his art, the psychoanalyst's interpretation of dreams, and several others.

Obviously, in a study surveying so many centuries and literatures, one cannot aspire to completeness. No doubt, having restricted myself mainly to works in English, French, and German, I have missed examples that will occur to some readers. But I believe that I have introduced enough cases from each period to establish a persuasive pattern—a pattern into which, I hope, other examples will readily fit. I have dealt with alchemy as such only to the extent necessary to clarify the literary texts, citing in my notes several works that will take the interested reader further. After all, with relatively few exceptions—for instance, Goethe, Huysmans, and Yeats—the knowledge of the writers and poets remained fairly general and restricted mainly to what was commonly known during their respective times. For my own purposes, by the way, I have found especially handy and useful as a reference tool the recent Alchemie: Lexikon einer hermetischen Wissenschaft (1998), edited by Claus Priesner and Karin Figala, which includes biographical sketches of the principal alchemists as well as articles on alchemical terms and procedures.

In some cases, even when translations are available—and often they are not—I have preferred for the sake of accuracy and consistency in the rendition of alchemical terms to provide my own versions. The recapitulations serve two purposes: first, many works are not available in translation or easily accessible modern editions; second, the recapitulations are not mere retellings but amount to critical analyses. In the case of a few names—notably Raymondus Lullus and Arnoldus de Villa Nova—I have retained the alternate forms used by the various authors.

I am grateful to Jacqueline Baker, Senior Commissioning Editor for Literature at Oxford University Press, for her encouraging initial interest in my project and for patiently guiding it through the review process. Two anonymous readers offered heartening critiques of my manuscript and provided useful suggestions for its improvement. Rachel Platt, Senior x Preface

Assistant Commissioning Editor for Literature, was my constant email companion and adviser as I prepared my final copy, obtained images and permissions, and submitted the various forms required for publication. Kim Richardson's scrupulous and sensitive copy-editing reconciled my manuscript with the most recent stylistic norms while respecting my own style and preferences.

I also want to express my appreciation to Jackie Brown of the British Library, Sabine Tolksdorf of the Staatsbibliothek zu Berlin–Preußischer Kulturbesitz, and Eva Soos of the Pierpont Morgan Library, New York, for their assistance in obtaining permissions for the use of images from their respective collections, as acknowledged in the proper places.

As always, my wife, Yetta, like Christian Rosencreutz's Alchimia, has accompanied my thinking and writing with encouragement, suggestions, and criticism as this opus developed from its obscure *materia prima* through its seven stages of clarification to the quintessence of its conclusions. The dedication acknowledges a close friend and distinguished scholar, all too early deceased, whose research and critical insights produced significant studies of twentieth-century cultural/political issues that remain timely still today.

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Introduction, or Materia Prima

In 2011 the publishers of Forgotten Books brought out a work that had been sent anonymously to their website: *The Book of Aquarius: Alchemy and the Philosopher's Stone*. The volume, which appeared as a paperback and audiobook, was rapidly translated into German, soon required a second edition, and, because at the author's insistence it remains in the public domain, is also available as a free download on the Internet. It opens with the bold statement:

The Philosopher's Stone is real; you can make it at home. The Stone makes old people young, heals all forms of sickness and disease, extends your life, turns any metal into gold, and more, as you will learn. This isn't a myth or a metaphor, it's a fact.²

The anonymous author, explaining that the stone is made from a single ingredient, urine,³ goes on to provide (chapters 19–30) precise instructions for creating it. (To be fair, the author concedes at the end that s/he has succeeded so far in attaining only the first or "Black Stage" of the process).⁴ In addition to its actual practice, the book covers in readable prose the theory and history of alchemy illustrated with scores of quotations from various alchemistic works, all of which are available on various websites, which are helpfully identified.

What accounts for the publication and popularity of such a work in the twenty-first century? Most obviously, "alchemy" has become a veritable catchword of the times, with almost a hundred million hits on the Internet. In addition to a useful Alchemy Web Site (http://www.levity.com/alchemy/), which has been in existence since 1996 and offers links to scores of classic texts and striking images, we find restaurants from Brooklyn to San Diego presenting themselves as "Alchemy" as well as a computer game with the same designation—not to mention a Miami

¹ This term, written with a genitive plural in Latin (*lapis philosophorum*) and German ("Stein der Weisen"), is normally, though not always, rendered in English with the possessive singular.

² The Book of Aquarius, 2nd edn (Lexington, KY: Forgotten Books, 2011), 1.
³ Book of Aquarius, 14.
⁴ Book of Aquarius, 244.

boutique (<www.shopalchemist.com>), a DI and rapper terming himself "The Alchemist," and an Australian heavy-metal band called "The Alchemists." In France, an Alchemist's Garden near Avignon was opened to the public in 1999: its three sections symbolize through the colors of their plants the alchemical process of transmutation, from the black of disintegration through the white of sublimation to the red of perfection. In 2012 the Akademie der Künste in Berlin presented an exhibition of the late "light-graphic" experiments of the photographer Heinz Jahek-Halke under the heading "Der Alchemist." Neil Irwin's book on directors of central banks in the United States, England, and the European Union is entitled The Alchemists (2013). Software packages and network management firms styling themselves "Alchemy" promise to improve our computers, while a consulting firm with the same name proclaims the "Art of Transforming Business." The cover of an issue of Scientific American (December 2013) declared supercomputers "The New Alchemists"; a recent article in *The Economist* (May 12, 2012) on extending the periodic table of elements was headed "Modern Alchemy"; and The New York Times (October 16, 2012) reported that Princeton University chemists "toil in a modern-day hunt for an elusive power: alchemy." (At that same institution, when it was announced that the chemists were moving into new facilities and that economists would occupy the grandly refurbished chemistry building, it was predictably quipped that chemistry was being replaced by alchemy.)

Google advertises books with such titles as *The Herbal Alchemist's Handbook*, *The Alchemist's Kitchen*, *The Path of Alchemy: Energetic Healing and the World of Natural Magic*, and *Music as Alchemy: Journeys with Great Conductors and Their Orchestras*. A reviewer calls the Rumanian writer Mircea Cartarescu "the alchemist of Bucharest." Nor should we forget Harry Potter, whose first adventure, in *Harry Potter and the Philosopher's Stone* (1997), featured his successful endeavor to prevent the villainous Voldemort from obtaining the legendary stone that, produced by (the historical) alchemist Nicolas Flamel, transforms any metal into gold and produces the elixir of life.⁶

The typicality of these examples is confirmed by Google Ngram Views, whose graphs show that the occurrence of the term "alchemy" in Englishlanguage books since 1800 displays a steady rise toward an initial highpoint in the 1920s and then, after a conspicuous drop during the thirties

⁵ Katrin Hillgruber, "Der Alchemist von Bucharest," *Tagesspiegel* (Berlin), June 6, 2012. ⁶ The US edition (New York: Scholastic, 1998) changed the original title to *Harry Potter* and the Sorcerer's Stone because the publishers feared that young American readers would be put off by a title including the word "philosopher."

and forties, surges to new heights in the 1960s and beyond. In all these cases the now trendy phrase suggests the transformation of something ordinary into something better—whether food, music, computers, or business—by analogy with the alchemist's promised transmutation of base metals into gold by means of the philosopher's stone.

Alchemy is of course no modern invention; it has existed for centuries and in many cultures from East to West. Wherever it occurs, however, alchemy is based on two fundamental principles, exoteric-natural and esoteric-spiritual, or operative and speculative: the generation of stones and metals, and the correspondence of microcosm and macrocosm.

THE GENERATION OF STONES AND METALS

The first of these principles concerns the growth of ores within the earth. In many cultures, as Mircea Eliade demonstrated in a seminal study, "sexuality [is] a particular sign of all living reality." Many mythologies view the earth as an Earth-Mother or *Terra Mater* who is fertilized by the Heaven-Father, often in the form of rain. See, for instance, the Greek myth of Gaia, who first bore Uranos, the Heaven, and then mated with him to produce the seas, mountains, and other offspring. This compelling nature myth has survived into modern times in poetry and art. Joseph von Eichendorff's archetypal Romantic poem "Mondnacht" (*c*.1830) begins with the lines:

Es war, als hätt' der Himmel Die Erde still geküßt (It was as though the Heaven Had quietly kissed the Earth)

and then goes on to describe the enlivened awakening of nature—the fields, the forests, the poet's own soul—on a moonlit evening. Gustave Courbet's painting L'Origine du monde (1866; Musée d'Orsay, Paris) contains an explicit depiction of a voluptuous female torso viewed orthogonally from upper thighs to breasts with genitals clearly exposed. Pablo Picasso's La source (1921; Moderna Museet, Stockholm), portraying a woman clad in a loose Grecian garment and holding in her lap a large urn from which water flows, exemplifies more discreetly the widespread ancient belief that "the source of rivers was indeed considered as the

⁷ Mircea Eliade, *The Forge and the Crucible*, trans. Stephen Corrin, 2nd edn (Chicago: University of Chicago Press, 1978), 34–42, here 36.

vagina of the earth." As Eliade summarizes: "if streams, galleries of mines, and caves are compared to the *vagina* of the Earth-Mother, everything that lies in the belly of the earth is alive, albeit in the form of gestation."

The belief in a fertile *Terra Mater* accounts for the theory, widely held from classical antiquity into the nineteenth century, that stones and metals grow within the earth like organic matter. The Stoic Strabo (64 BCE–19 CE) reported in his *Geography* (5.2.6) that iron renewed itself in the mines on the island of Elba, as did the acclaimed marble on Paros and rock salt in India. A few decades later the elder Pliny (23–79 CE) assured the Roman readers of his *Natural History* (34.49) that the black lead (*nigrum plumbum*) in the mines of Spain, Gaul, and Britain restored itself when exhausted. "Apparently this is accomplished by the air streaming in to the point of saturation through the expanded air holes, just as miscarriages make some women more fertile." The belief was so firmly held that, as recently as the seventeenth century, exhausted mines were closed down from time to time in order to allow the ores to replenish themselves, and it survives today in the folklore of mining communities, as evident in the German miners' slogan "Es wachse das Erz!" ("May the ore grow!"). 10

The theory was argued by analogy. Why shouldn't stones grow in the earth since, after all, they grow in all other realms of nature? The body produces *calculi* in the form of kidney or bladder stones; the oyster generates pearls just as, according to legend, the dragon nurtures in its forehead the precious *draconites* and the unicorn the rare *carbunculus*. Ancient and medieval scientists thought that onyx and amber grow in plants, while coral and stalactites give evidence that water precipitates stones. For centuries, finally, it was held that meteorites as well as certain fossils (e.g. *glossopetrae*) and primitive implements (known in German as *Donnerkeile*) were stones brought forth by the air.

The belief in the generation of metals and minerals did not disappear with antiquity. In the standard German encyclopedia of the eighteenth century the article "Mineralisches Reich, Regnum minerale" explains the generation of minerals according to a Christianized theory of celestial

 $^{^8}$ Eliade, Forge and Crucible, 41, citing etymological examples from several ancient Near Eastern languages.

⁹ Frank Dawson Adams, *The Birth and Development of the Geological Sciences* (1938; rpt. New York: Dover, 1954), 77–136 ("On the 'Generation of Stones'"); and Paul Sébillot, *Les travaux publics et les mines dans les traditions et les superstitions de tous les pays* (Paris: Rothschild, 1894), 392–402.

¹⁰ Hanns Bächtold-Stäubli (ed.), *Handwörterbuch des deutschen Aberglaubens* (Berlin: De Gruyter, 1927), vol. 6, 207–11 ("Metalle, Erze").

¹¹ Theodore Ziolkowski, "The Mystic Carbuncle: Transmutations of an Image," in: *Varieties of Literary Thematics* (Princeton, NJ: Princeton University Press, 1983), 34–85, here 68–70.

influence. "The minerals also have their genesis and seed (like the animals and plants) from God and through the influence of the stars." When the stars cast their rays upon the earth, their powers are sublimated, distilled, and spread through the planet. In the process they encounter "a fertile moisture" and coagulate into tangible bodies from which, according to the purity of the site, various metals are "born." The proof, the author argues, can be seen in the fact that metals in the earth, as long as they are still in the process of growth, become increasingly "ripe" or "mature" ("immer zeitiger").

In the standard textbook of Romantic *Naturphilosophie*, Gotthilf Heinrich Schubert's "Aspects of the Night Side of Natural Science" (*Ansichten von der Nachtseite der Naturwissenschaft*, 1808), the discussion of metals provides the transition from inorganic nature to the organic world. Here, Schubert says, we see the shapes of the upper world reflected in the realm of metals. "In general, as I have shown elsewhere, the transition from the kingdom of minerals to that of plants and animals must in every respect be sought in the metals." Their combustibility hints at their chemical affinity with organic matter just as their colors and shapes imitate the higher organic world. "The whole kingdom of metals," he concludes, "seems to have arisen at the boundaries of the two worlds, from the decline and deterioration of the inorganic, and to bear within itself the seeds of the new organic age."

It is a principle repeated routinely in fundamental alchemistic texts that alchemy, when it changes base metals into gold and silver, is simply accelerating the process of nature herself. The renowned fourteenth-century Italian physician and alchemist Petrus Bonus, claiming that the art of alchemy is nobler than any science other than theology, put it thus in his tract, *Pretiosa margarita novella*:

In producing gold, the Art of Alchemy does not pretend to imitate the whole work of Nature. It does not create metals, or even develop them out of the metallic first substance; it only takes up the unfinished handiwork of Nature (*i.e.*, the imperfect metals), and completes it (transmutes metals into gold). It is not then necessary that Nature's mode of operation, or the proportion of elements, or their mixture, or the proper time and place, should be so very accurately known to the Artist. For Nature has only left a comparatively small thing for him to do—the completion of that which she has already begun. ¹⁴

¹² Johann Heinrich Zedler (ed.), Grosses Vollständiges Universal-Lexikon aller Wissenschaften und Künste, 64 vols (Halle/Leipzig: Zedler, 1732–50), vol. 21, 340–4.

¹³ Gotthilf Heinrich Schubert, Ansichten von der Nachtseite der Naturwissenschaft (1808; rpt. Darmstadt: Wissenschaftliche Buchgesellschaft, 1967), 200–1.

¹⁴ Petrus of Ferrara Bonus, *The New Pearl of Great Price*, trans. A. E. Waite (1874; rpt. New York: Arno, 1974), 152–3.

In the sixteenth century the Swiss scientist and alchemist Paracelsus (Theophrastus von Hohenheim) wrote in his treatise *Of the Nature of Things*,

It is sufficiently manifest and knowne to every one, that all naturall things grow and are ripened through heat and moisture.... Seeing therefore this is by divine ordination naturally possible, who can gain-say or not believe that a man is able, through the wise and skilfull Art of Alchymy, to make that which is barren, fruitfull, and that which is crude, to ripen, and all things to grow, and to be increased.¹⁵

One of the most beautifully illustrated text-and-image works of alchemy, the anonymous *Splendor solis* (*c*.1500; traditionally but wrongly attributed to the legendary Salomon Trismosin, allegedly the teacher of Paracelsus), begins by explaining that unaided nature cannot cause imperfect metals to be made perfect instantly, "but by the secrets of Our Art this can be done."

Here Nature serves Art with Matter, and Art serves Nature with suitable Instruments and methods convenient for Nature to produced such new forms; and although the before mentioned Stone can only be brought to its proper form by Art, yet the form is from Nature.¹⁶

In sum, the alchemist "put himself in the place of Time." ¹⁷ Yet, as Eliade continues in his discussion of "Alchemy and Temporality," while the alchemist dreamed of accelerating the tempo of things, "he was afraid of Time" and "aspired to eternity and pursued immortality, the *elixir vitae*."

THE CORRESPONDENCE OF MICRO-AND MACROCOSM

From the very beginning the art of transmutation on the natural-physical level was understood as a metaphor for the alchemist's own spiritual transformation and as analogous to relationships on the cosmic level. This was expressed most emphatically, but also most enigmatically, in what is widely regarded as the basic text of alchemy: the so-called *Tabula smaragdina* or *Emerald Table* by none other than Hermes Trismegistus,

¹⁷ Eliade, Forge and Crucible, 169–78, here 174.

¹⁵ Cited from the translation by J. F. M. D. (London, 1650), as reproduced in: *The Alchemy Reader: From Hermes Trismegistus to Isaac Newton*, ed. Stanton J. Linden (Cambridge: Cambridge University Press, 2003), 155 (book 2: Of the growth, and increase of Natural things).

¹⁶ Splendor solis: Alchemical Treatises of Solomon Trismosin, ed. from the 1682 manuscript by "J. K." (London: Kegan Paul, n.d.), 18.

the legendary founder of alchemy who was reputedly a contemporary of Moses and Prometheus. The brief tract begins with a statement stressing the parallel of micro- and macrocosm: "That which is above is like to that which is below, and that which is below is like to that which is above, to accomplish the miracles of one thing."18 It goes on to discuss, in highly metaphorical terms, the creation of the world generally and, by analogy to the philosopher's stone, from the opposing principles of male and female: "The father thereof is the Sun, the mother the Moon." Following its creation the stone is borne in its womb by the wind to earth, which becomes its nurse. (We recognize here the familiar principle of generation in the Earth Mother.) "The power thereof is perfect," for if it is cast upon the earth it has the power to separate the elements. It ascends from earth to heaven and then descends again, uniting "things superior and inferior." Whoever owns this stone therefore has supreme knowledge. "Thus thou wilt possess the glory of the brightness of the whole world, and all obscurity will fly far from thee." The tract concludes with the statement that it has described allegorically "the operation of Sol": that is to say, the alchemist's art.

This belief, which has survived through the ages, has been expressed in a variety of ways. As the philosopher Schelling put it in a famous statement at the end of his "Ideas toward a Philosophy of Nature" (*Ideen zu einer Philosophie der Natur*, 1797): "Nature aspires to be visible spirit while spirit aspires to be invisible nature" ("Die Natur soll der sichtbare Geist, der Geist soll die unsichtbare Natur seyn"). Or, in the more poetic terms of a contemporary believer: "Alchemy is a rainbow bridging the chasm between the earthly and heavenly planes, between matter and spirit. Like the rainbow, it may appear within reach, only to recede if one chases it merely to find a pot of gold." 19

The association of the exoteric and esoteric principles—generation and complementarity—that determined alchemy in the West took place in Alexandrian Egypt from roughly the fourth century BCE to the seventh century CE.²⁰ As Claus Priesner explains in his history of alchemy, their respective approaches betray a fundamental difference between Egyptian and Greek thinking and acting. "The Egyptians concerned themselves with the practical-experimental investigation of nature; the Greeks, on the contrary, regarded practical work as socially degrading and resorted to the

¹⁸ The *Emerald Table* is reproduced in virtually every anthology of, and book on, alchemy. I cite it here from *The Alchemy Reader*, 28.

Stanislas Klossowski de Rola, Alchemy: The Secret Art (New York: Avon, 1973), 7.
 Eliade, Forge and Crucible, shows that a similar spiritualization of chemistry took place in China (109–26) and India (127–41). See also Linden, "Introduction," in: Alchemy Reader, 6–7.

purely speculative-philosophical occupation with nature."²¹ The priests of ancient Egyptian religion were not simply spiritual advisers but also practical technologists, who were responsible in their workshops for providing their temples with statues of fine metals, with jewels, and with expensively dyed textiles and woodworks.²² Of the 159 extant formulas preserved in the so-called Stockholm Papyrus, nine are concerned with the imitation and counterfeiting of silver and seventy-nine others with the imitation of jewels and pearls.

Alchemy emerged when the chemical-technical tradition of the Egyptian temple artisans was animated in Hellenistic times by the ideas of Greek philosophy and mystery cults.²³ This origin explains the most widely accepted etymology of the word: from Greek chyma ("molten metal"), which became *chymeia* or *chemeia* and, with the Arabic article al, alchymeia. (Alternatively it may be derived from Chemia, "the land of black earth," a Greek designation for Egypt.) Fundamental to alchemistic beliefs, as is implicit in the *Tabula smaragdina*, was Empedocles' theory of the four elements: earth, water, air, and fire. This theory was subsequently elaborated by Aristotle's theory of a primal matter (materia prima), which was modified by four basic qualities: heat and cold, dampness and dryness. The application of these qualities to the primal matter produced the four elements: fire, for instance, is warm and dry while water is cold and damp. To the extent that water can freeze, it is related to earth: to the extent that it can evaporate, it is akin to air. By analogy, the metals contain a watery element because they can melt.

Here we find already a philosophical-scientific basis for the transmutations that are supposed to occur in alchemy. Ancient Gnosticism, which emerged in Alexandria in the second century CE, provided alchemy with further philosophical justification. Its doctrine positing a dualism of God and Matter, of Good and Evil, offered a counterpart to the alchemistic dualism of macro- and microcosm. Its belief that the human soul is a divine spark striving to cast off the earthly dross in which it is imprisoned and return to its celestial home corresponded to the alchemistic endeavor to rid base matter of its impurities in order to attain pure gold and, in the process, to improve the alchemist's own self-understanding and character.

In sum, it was the introduction of Greek ideas into Egyptian technology that produced alchemy and generated the alchemistic belief that an understanding of the processes and transmutations of nature leads to an

²¹ Claus Priesner, *Geschichte der Alchemie* (Munich: Beck, 2011), 17. See also Linden, "Introduction," 7–8.

²² Priesner, Geschichte der Alchemie, 12–14.

²³ Priesner, Geschichte der Alchemie, 14–21, here 14.

understanding of the spiritual world and, ultimately, to the transformation of the alchemist's own character. In his attempt to produce gold, the perfect metal, the alchemist sought to rid his own soul of its earthly dross and to achieve spiritual perfection. As the Polish alchemist Michael Sendivogius (1566–1636 or 1646) observed in his *Novum Lumen Chymicum* (1604):

The searchers of Nature ought to be such as Nature her selfe is: true, plaine, patient, constant &c. and that which is chiefest of all, religious, fearing God, not injurious to their neighbour. Then let them diligently consider, whether their purpose be agreeable to Nature; whether it be possible, let them learne by clear examples, *viz.* out of what things any thing may be made, how, and in what vessell Nature workes.²⁴

THE MAGNUM OPUS

The creation of the *lapis philosophorum* or philosopher's stone—known also as "elixir" (for its magical healing properties) or "tincture" (for its ability to change the color of objects) or "quintessence" (as the sublimated essence of all matter)—is described by the different alchemists in various manners. The disparate materials used and the stages of the process are complicated by the highly allegorical language and images used to conceal the secrets from all but initiates. Indeed, the descriptions are so varied that, as Stanton J. Linden has remarked, "it is now much more common to see alchemy as pluralistic rather than singular, as 'alchemies' rather than 'alchemy." 25

Nevertheless, although the work methods of the alchemists have been little investigated and by no means fully understood,²⁶ the process comprises several basic steps: most commonly seven according to many writers, including the author of *Splendor solis* and Paracelsus. It takes place within a sealed, egg-shaped vessel known as *vas hermeticum*, placed within an athanor, or alchemist's furnace, which provides a steady source of heat.²⁷ (The vessel obviously takes its name from Hermes; because its seal was reputedly made airtight by magic, the word "hermetic" came to have its modern sense.) The *vas hermeticum* is also known as the philosophical egg: partly because of its spherical shape but also because, according to the author of *Splendor solis*, the four elements are all united

²⁴ A New Light of Alchymie, from the English translation of J. F. M. D. (London, 1650), in: Alchemy Reader, 175–83, here 176.

Linden, "Introduction," 4.

²⁶ See Lawrence M. Principe, "Arbeitmethoden," in Alchemie: Lexikon einer hermetischen Wissenschaft, ed. Claus Priesner and Karin Figala (Munich: Beck, 1998), 51–7.

²⁷ See Lawrence M. Principe, "Lapis philosophorum," and Karin Figala, "Opus Magnum," in Alchemie: Lexikon, 215–20 and 261–3.

in the egg: the shell is earth, the white is water, the skin between shell and white is air, and the yolk is fire.²⁸ It was therefore the appropriate vessel in which to reenact the process of creation.

Regardless of the material initially placed into the *vas hermeticum* for the experiment—whether, for instance, gold or mercury, lead or fecal matter—the first step or operation, according to *Splendor solis*, is dissolution. "This dissolution is nothing but a killing of the moist with the dry, in fact a PUTREFACTION, and consequently turns the MATTER black" (38). The dried or putrefied matter may then be subjected to *calcinatio* or pulverization. The process of dissolution and coagulation is rendered by the formula *solve et coagula*, which occurs almost ritually and often symbolically in alchemistic texts. (The term "spagiricus" or "spagyric," to designate the alchemistic preparation of medicinal remedies, was coined by Paracelsus from the Greek verbs *spao*, "to separate," and *ageiro*, "to combine.")

Because the initial step reduces the impure matter of nature to its primal state or materia prima, which is inevitably black, that stage is also called *nigredo*. The reconstituted *materia prima* comprises sulphur and mercury, which should not be confused with the chemicals known under those names today: sulphur designates the fixed elements of the materia prima (earth and fire) and mercury its volatile elements (water and air). These elements, reunited in the vas hermeticum, produce the stone through the process known as *conjunctio*. The stone now undergoes repeated degrees of sublimation through distillation (cohobatio)—degrees known as cauda pavonis or "peacock's tail" because they display a sequence of different colors until the stone attains the purity of white (see Figure 1.1). At this white stage of the process (albedo) the stone—which can actually be powder or liquid in form—has the power to transmute baser metals into silver if it is mixed with them. It must be further sublimated through fermentatio until it becomes red (rubedo) before it is capable through projectio of transmuting base matter into pure gold. As recapitulated in the summary of Splendor solis, "heat turns every black thing white, and every white thing red... and causes earthly things to be penetrated by a Spiritual force...and cleanses that which is unclean" (35). (In light of later literary works it should be mentioned at this point that a by-product of the *magnum opus*, when the basic matter used is human sperm or blood, is a *homunculus* or tiny human being.)

Many other technical terms are known. George Ripley in his *Compound of Alchymie* (or *Twelve Gates*, 1471) increased the stages to twelve: calcination, solution, separation, conjunction, putrefaction, congelation, cibation,

²⁸ Splendor solis, 32 (Fifth Parable).



Figure 1.1 Splendor solis (1582), plate XVI: Cucurbit with peacock. © The British Library Board. Harley MS 3469.

sublimation, fermentation, exaltation, multiplication, and projection (the process through which the stone transforms other matter). The Alchemy Web Site lists 109 terms for alchemical processes, each with its own characteristic equipment: for instance, the cucurbit, or gourd-shaped flask, over which the alembic was fitted for distillation: a so-called "helmet" with an extension or delivery tube through which the distillate could be siphoned off. But it is not useful for our purposes to discuss those that do not occur in the literary texts. ²⁹

During the early history of alchemy other systems were readily assimilated into its beliefs. As Petrus Bonus reminds us, the ancient sages had good reason for associating each of the seven metals with one of the seven planets, as the heavenly influence from which it derived its peculiar properties. Thus lead was assigned to Saturn, tin to Jupiter, iron to Mars, gold to the Sun, copper to Venus, silver to the Moon. But to Mercury they assigned no metal, because only these six have attained to coagulation, with fusibility and malleability: Mercury held its place not as a metal, but as the First Matter of all metals.³⁰ This conjunction of metals with the planets tied alchemy to astrology in what is known as astrologia inferior, and accounts for the frequency of astrological and numerological symbols in alchemy, where the number seven enjoys a mystical significance. The title page of Splendor solis, for instance, states that the book "is divided into seven parts, in which is described the hidden mystery of the old philosophers, as well as all that nature requires to clearly accomplish the whole work."

In addition to astrology and numerology, Christian and mythological images were eagerly adopted for alchemistic purposes. Thus the putrefaction through which the element is reduced to its *materia prima* is often represented as death, while the sublimation appears as resurrection: images that lead easily to the appropriation of Christian iconography for alchemistic purposes. One piece of equipment—a distillation vessel whose alembic arm leads back to the vessel to provide constant circulation—was

²⁹ A useful introduction to the principal terms and processes may be found in Wayne Shumaker, *The Occult Sciences in the Renaissance: A Study in Intellectual Patterns* (Berkeley: University of California Press, 1972), 170–86. See also E. J. Holmyard, *Alchemy* (Baltimore: Penguin, 1968), 43–59; and Lyndy Abraham, *Dictionary of Alchemical Imagery* (Cambridge: Cambridge University Press, 1998).

³⁰ New Pearl, 239–40.
³¹ Lawrence M. Principe and William R. Newman, "Some Problems with the Historiography of Alchemy," in: Secrets of Nature: Astrology and Alchemy in Early Modern Europe, ed. William R. Newman and Anthony Grafton (Cambridge, MA: MIT Press, 2001), 385–431, in their justifiable eagerness to reassert the scientific content of early alchemy perhaps go too far when they claim that "among many alchemists these images are merely metaphorical or heuristic" (413)—that is to say, meaningless.

known as the pelican, from the Christian belief that the pelican tears open its own side in order to feed its young (as did Jesus through the lance wound on his side).

Familiar Latin literature also provided appropriate images. In the last of its seven (!) parables, to illustrate the process of solve et coagula, Splendor solis refers to Ovid's tale of an ancient sage who, desiring to rejuvenate himself, would "allow himself to be cut to pieces and decoct to a perfect decoction, and then his limbs would reunite and again be renewed in plenty of strength" (33; presumably an allusion to the tale of Pelias in *Metamorphoses* 7). Elsewhere (third parable), to illustrate the power of gold to renew itself, the author refers to Virgil's account of Aeneas, "who went to a tree, which had golden branches, and as often as one broke a branch off, another one grew in its place" (29). The repeated distillations of cohobatio are often represented by a dragon swallowing its own tail. In the scores of often handsome illustrations of Renaissance alchemistic texts. the colors—from black by way of various hues to white and red—provide for a rich symbolism. Black birds, black gowns, black water, and so forth often occur in representations of the first stage or putrefaction, while a variety of other colors lead by way of the green dragon to the red lion and the gold crown of perfection.³²

The alchemistic processes are represented through an infinite variety of allegories that are strikingly depicted in the most important alchemistic treatises of the Renaissance.³³ The union of Sun and Moon, for instance, symbolizing the stage of coagulation of pure elements, is often depicted as the coupling of a crowned, nude pair representing king and queen, or of a red man (Sulphur) and white woman (Mercury); their offspring, representing the conjunction of male and female, is portrayed as a hermaphrodite or *rebis* (from Latin *res binae*), often sporting both male and female genitalia. The imagery symbolizing the processes of alchemy is so rich and varied that it cannot possibly be described in its entirety.

HERMES' ART

Its place of origin in Alexandria, the center of ancient learning, accounts for the fact that the legendary founder of alchemy is known as Hermes

³² See Claus Priesner, "Farben," in: Alchemie: Lexikon, 131–3.

³³ Beautifully reproduced examples in color, notably from *Splendor solis*, are available at the Alchemy Web Site (http://www.levity.com). (The images in the modern reprint are in black and white.) See also the reproductions in such volumes as Klossowski de Rola, *The Secret Art of Alchemy*.

Trismegistus or "Hermes the Thrice-Great." In Greek mythology Hermes is the god of eloquence, of music, of merchants and thieves, and, as the god of roads, the *psychopompos* or conductor of souls of the dead to Hades. Hermes' Egyptian counterpart, as god of all the arts and sciences and inventor of hieroglyphs and magic, is Thoth, whose name means "three times very great."34 When the Greek Neoplatonists identified Thoth with Hermes, they coined the name "Hermes Trismegistus" to designate the deity, who soon became the father of the new science of alchemy, also known from its eponymous founder as Hermeticism, and author of the group of early alchemistic texts known as the Corpus Hermeticum. 35 These were allegedly discovered in Hermes' tomb by Alexander the Great, or taken from the hands of the dead Hermes in a cave near Hebron years after the Flood.³⁶ (Isaac Casaubon proved in 1614 that the tract was not primordial but composed during the period of the Roman empire.)

He introduces himself at the end of the *Tabula smaragdina*: "I am called Hermes Trismegistus, because I hold three parts of the wisdom of the whole world." This perplexing statement was explained by Sir Isaac Newton in his "Commentary on the Emerald Tablet": Hermes or Mercurius (his Roman name) "is called thrice greatest, having three parts of the philosophy of the whole world, since he signifies the Mercury of the philosophers, which is composed from the three strongest substances, and has body, soul, and spirit, and is mineral, vegetable, and animal, and has dominion in the mineral kingdom, the vegetable kingdom, and the animal kingdom."37

Following the conquest of Alexandria in the seventh century Arabic scholars preserved and transmitted the ancient alchemical lore. Because the texts had to be translated into Arabic and because the Greek originals were often lost, misunderstandings and confusions inevitably arose when, in the course of the twelfth century, alchemy was discovered in the West and the Arabic texts were now translated into Latin. The first alchemical work in Latin, from which we can date the renaissance of alchemy in Europe, was the Liber de compositione alchemiae (Book on the Nature of Alchemy) by Robert of Chester (Robertus Castrensis) in 1144.38

³⁴ Felix Guirand (ed.), New Larousse Encyclopedia of Mythology, trans. Richard Aldington and Delano Ames (London: Hamlyn, 1959), 27.

³⁵ Zbigniew Szydlo, "Hermes Trismegistos," in: Alchemie, 173–6. See also Hermetica: The Ancient Greek and Latin Writings Which Contain Religious or Philosophic Teachings Ascribed to Hermes Trismegistus, ed. and trans. Walter Scott, 2 vols (Oxford: Clarendon,

³⁶ Linden, "Introduction," in: *Alchemy Reader*, 9–12, here 11.
37 *Alchemv Reader*, 246–7, here 247.
38 Priesner, *Geschichte der Alchemie*, 41. ³⁷ Alchemy Reader, 246–7, here 247.

It was not until the twelfth century in Europe that alchemy began to produce a literary response generally, and specifically in the form of alchemists appearing in significant works. These literary responses fall into six principal periods—Renaissance, Romanticism, mid-nineteenth century, fin de siècle, *entre deux guerres*, and contemporary (post-1945)—and in each case specific social and intellectual reasons account for the literary phenomenon. To be sure, there is a vast library of alchemistic texts, some of which display considerable literary merit as well as artistic beauty. A standard history and bibliography discusses over 250 authors between 1200 and 1700.³⁹ But we shall be concerned in the following chapters not with those primary alchemistic texts but with literary works in which alchemists play a role. They constitute a significantly more restricted group than that large, diffuse body of literary texts that exploit alchemical imagery.⁴⁰

³⁹ Karl Christoph Schmieder, *Geschichte der Alchemie*, ed. Franz Strunz (1832; rpt. Munich-Planegg: Barth, 1927).

⁴⁰ On poetry dealing with *alchemy* and not alchemists, see Didier Kahn, "Alchemical Poetry in Medieval and Early Modern Europe: A Preliminary Survey and Synthesis. Part I—Preliminary Survey," *Ambix* 57 (2010): 249–74.

Satirizations, or *Nigredo*

THE HISTORICAL CONTEXT: 1144-1789

The early Middle Ages effectively lost sight of alchemy. In the course of the twelfth-century Renaissance it began to reemerge and set out on what might be called its golden path to glory, peaking around 1600 and then steadily declining again until its virtual disappearance in the late eighteenth century. It is not my intention to attempt here anything approaching a history of alchemy during these centuries, a period on which there is still considerable disagreement among historians of science and historians of religion and philosophy. I wish simply to provide a general framework for the following discussion of the literary texts. ¹

For our purposes and convenience we might note two dates: Robert of Chester's Latin translation of the *Liber de compositione alchemiae* in 1144 and Antoine Laurent de Lavoisier's *Traité élementaire de chimie* in 1789. No doubt at least some European scholars of the day had heard rumors of the art that had been preserved by Arabic alchemists, but when the British Arabist Robert of Chester presented to the educated public his translation of a classic Arabic alchemical text in dialogue form, he observed in his preface, "Since what Alchymia is, and what its composition is, your Latin world does not yet know, I will explain in the present book." Five centuries later alchemy had already been largely discredited when Lavoisier published his epoch-making work—as revolutionary intellectually as the political developments of that same year—which replaced the existing

¹ On the disagreements see Lawrence M. Principe and William R. Newman, "Some Problems with the Historiography of Alchemy," in: Secrets of Nature: Astrology and Alchemy in Early Modern Europe, ed. William R. Newman and Anthony Grafton (Cambridge, MA: MIT Press, 2001), 385–431. For the history see the magisterial work of Lynn Thorndyke, A History of Magic and Experimental Science, 8 vols (New York: Columbia University Press, 1923–58), and, more recently, Lawrence M. Principe, The Secrets of Alchemy (Chicago: University of Chicago Press, 2012); or more popular introductions such as: E. M. Holmyard, Alchemy (Harmondsworth, England: Penguin, 1957); F. Sherwood Taylor, The Alchemists (New York: Collier, 1962); or Claus Priesner, Geschichte der Alchemie (Munich: Beck, 2011).

² Adam McLean, The Book of the Composition of Alchemy (Glasgow, 2002), 5.

theory of phlogiston with the new theory of oxidation and established the basis for modern chemistry, thus effectively and ultimately separating it from alchemy.

In its early stages, it should be stressed, Western alchemy was still restricted essentially to the transmutation of metals; we hear little or nothing about the esoteric or speculative aspects that later seized the imagination. The most profound thinkers of the age took the claims of alchemy very seriously, albeit with a cautious ambivalence. But they had nothing but contempt for the growing cohort of charlatans who sought to capitalize on the new science. Roger Bacon (c.1214-20 to 1292) distinguished between what he called "speculative" and "operative" alchemy. The former concerned the generation of things from the basic elements ("in generatione rerum ex elementis"). He goes on to discuss the operative "keys" of alchemy ("De clavibus alkimie"), by which he means the processes through which medications (which he calls "elixir") may be obtained. "These methods are known to all who are experienced in this science," he concludes, "and the books are full of them." 4 Yet he also stressed, in his *Opus majus*, that alchemy "is scarcely so perfected that the greater metals may be produced from the lighter ones, as gold from lead, and silver from copper."5

St Thomas Aquinas, while rejecting "fraudulence" in the sale of artificial gold and silver, accepts that "there is no reason why science should not exploit natural causes to produce natural and true effects." Albertus Magnus, who was well acquainted with the writings of the alchemists and discusses them in his *Book of Minerals* (1261–3; chapters 7–9), agrees with the Arabic philosopher and physician Avicenna (980–1037) that metals cannot be transmuted. Instead, like skillful physicians who use cleansing remedies to clear out corrupt matter that prevents good health, adept alchemists first "cleanse thoroughly the material of quicksilver and sulphur, which are present in metals. And when it is clean, they strengthen the elemental and celestial powers in the material.... And then nature itself performs the work, and not art, except as the instrument, aiding and hastening the process."

³ Part of the Opus tertium of Roger Bacon, ed. A. G. Little (Aberdeen: The University Press, 1912), 83–6 ("De expositione enigmatum alkimie"), here 86.

⁴ Opus tertium, 86.

⁵ The Opus majus of Roger Bacon, trans. Robert Belle Burke (Bristol: Thoemmes, 2000), vol. 2, 626.

⁶ St Thomas Aquinas, *Summa theologiae*, Latin text and English translation (London: Blackfriars, 1975), 221 (2a2ae.77, 3).

⁷ Albertus Magnus, *Book of Minerals*, trans. Dorothy Wyckoff (Oxford: Clarendon, 1967), 171–9, here 178.

Recent studies have proved that the Spanish intellectual Raimundus Lullus (Ramon Llul, 1232–1315/16), while one of the principal mediators of Arabic learning, never turned to alchemy and, indeed, criticized it. But after his death a number of alchemical writings were falsely attributed to him, on the basis of which he was called as recently as 1832 "incontestably the most famous alchemist of his century." A century later Petrus Bonus in his *Pretiosa margarita novella* (1330) accepted the premise of transmutation but with the proviso that it could be accomplished only with the help of God. He notes with dismay, however, that the motive prompting many self-styled alchemists is "an illiberal love of gold."

Their hearts are as hard as the flints which they wish to change into the precious metals, and they are as ignorant withal of the elementary facts of Nature as the poorest labourer. The consequence is that they fall an easy prey to impostors and itinerant charlatans...instead of learning to prepare the Stone, they dissipate their money, and have empty pockets for their pains. ¹⁰

It was the rapid growth of charlatanry that caused Pope John II in 1317 to issue his bull Spondent quas non exhibent, divitias pauperes alchymistae ("The poor alchemists promise riches that they cannot deliver") and order their expulsion. The meaning of the bull has been much disputed.¹¹ Some readers, taking the adjective *pauperes* to mean "false" or "cheating," regarded it as a total rejection of alchemy. Others, reading it as "poor" or "bumbling," understood the bull to be no more than a rejection of incompetent alchemists. Many contemporaries, in fact, believed that the pope was himself an alchemist and attributed his vast wealth at the time of his death to his proficiency in the art. Still others assumed that the bull, issued early in his papacy, was an honest rejection but that the pope in his later years changed his opinion and accepted alchemy. In any case, the problem of charlatanry prompted quite a few other rulers to issue similar prohibitions, for instance, Charles V of France in 1380, Henry IV of England in 1404, the Signoria of Venice in 1488, and the Council of the Free Imperial City of Nürnberg in 1493. 12 In all these cases, however, the prohibitions were

⁹ Karl Christoph Schmieder, *Geschichte der Alchemie*, ed. Franz Strunz (Munich–Planegg: Barth-Verlag, 1927), 166.

⁸ Antonio Clericuzio, "Lullus, Raimundus," in: *Alchemie: Lexikon einer hermetischen Wissenschaft*, ed. Claus Priesner and Karin Figala (Munich: Beck, 1998), 224–7.

¹⁰ Petrus of Ferrara Bonus, *The New Pearl of Great Price*, ed. Giano Lacinio (New York: Arno. 1974). 19

¹¹ See the discussion in Schmieder, *Geschichte der Alchemie*, 159–61. See also Charles Mackay, *Memoirs of Extraordinary Popular Delusions*, 2 vols (Philadelphia: Lindsay and Blakiston, 1850), vol. 2, 158–9.

¹² See Karin Figala, "Alchemieverbot(e)," in: *Alchemie: Lexikon*, 39–40.

based on the belief in the transmutation of metal—not on any spiritual or esoteric meaning of alchemy.

By the sixteenth century these attitudes had begun to change. A convenient terminus a quo—though, again, it should not be taken absolutely—is 1462, when the humanist Marsilio Ficino was commissioned by Cosimo de Medici to translate the Byzantine manuscript of the Corpus Hermeticum that had come into his possession. Believed to be the work of Hermes Trismegistus and older than the Hebrew Bible, it contained, along with the Tabula smaragdina, a number of theosophical tracts that provided an allegorical and theological basis for alchemy. We see the effect of this change within a few decades, as for instance in the famous passage in Martin Luther's "Table Talks," where he called alchemy "truly the natural philosophy of the ancients, which I like very much" ("illa veterum philosophia naturalis, quae mihi vehementer placet"). ¹³ Luther approved of alchemy not simply because of its usefulness in preparing metals (transmutation) and distilling herbs and roots, "but also because of its lovely allegorical meaning, namely, the resurrection of the dead at the Last Judgment" ("tum etiam propter allegoriam, quam habet pulcherrimam, resurrectionem mortuorum in die extremo"). A century later a handsome work of images falsely attributed to Nicolas Flamel (1330-1418, a Parisian public scribe who may or may not have been an alchemist), Le Livre des figures hieroglifiques (1624), contributed to the religious interpretation of alchemistic symbols. Around the same time, the German Rosicrucian Michael Maier in Atalanta fugiens (1617) designed fifty emblems in which he adapted classical mythology to the uses of alchemy.

During these decades such alchemists as the Englishmen John Dee and Edward Kelley and the Polish Michael Sendivogius found a grateful reception in Prague at the court of Emperor Rudolph II (1552–1612), one of the most eager royal sponsors of alchemy, along with Duke Friedrich I of Württemberg, Count Moritz von Hessen-Kassel, and others. ¹⁴ This phase of high popularity and belief is fittingly illustrated by the life and career of Johann Joachim Becher (1635–82), an alchemist and early mercantile theorist who sought to persuade various courts (Munich, Mainz, Vienna) that alchemy represented a potential source of income for the state and could also support the production of goods and thereby contribute to the increased prosperity of the whole. ¹⁵

¹³ Martin Luther, Werke. Kritische Gesamtausgabe. Tischreden, vol. 1 (Weimar: Böhlau, 1912), 566 (#1149).

¹⁴ See Pamela H. Smith, "Fürstenalchemie," in: Alchemie: Lexikon, 140–3.

¹⁵ Pamela H. Smith, *The Business of Alchemy: Science and Culture in the Holy Roman Empire* (Princeton, NJ: Princeton University Press, 1994), locates Becher's life knowledgeably in the context of his times.

A related example may be seen in the career of Johann Friedrich Böttger (1682–1719) who, at the Dresden court of August the Strong, Elector of Saxony and later King of Poland, compensated for his failure to create gold by discovering the formula for what turned out to be the equally valuable "white gold" of porcelain.

During this same period vast anthologies of important texts were published—the immense *Aureum vellus* (the first of many editions in 1599), the six-volume *Theatrum chemicum* (from 1602) and Elias Ashmole's *Theatrum chemicum Britannicum* (1652)—along with beautifully illustrated works depicting alchemistic processes: Leonhard Thurneysser's *Quinta essentia* (1570), Michael Maier's *Symbola aureae mensae* (1617), and the French *Mutus liber* (1677). All of these works, and others, served to enhance the familiarity of the art, which had previously been restricted largely to those with access to the manuscripts. (For instance, the first complete edition of Paracelsus's works appeared in 1589–91).¹⁶

Just as alchemy had reached this peak of popularity and power, cracks were beginning to appear in its golden veneer. Already Luther's contemporary Paracelsus (Theophrastus von Hohenheim, 1493/4–1541) had initiated a shift, and thereby broadened the understanding of alchemy's goals by redirecting its focus toward medicine or iatrochemy. While he did not deny the possibility of transmutation of metals, he subordinated that process to the preparation of effective medications. "Not like those who say that alchemy should make gold and silver; here, rather, the undertaking should be: make arcana [secret medicaments] and direct them against diseases; that's the way, that's the reason."¹⁷ To this end he rejected the Aristotelian theory of four elements, introducing instead the "hypostatical" triad of mercury, sulphur, and salt (not to be confused with their present-day meanings).

Similarly, the two great scientists of the seventeenth century, Robert Boyle and Isaac Newton, while not rejecting alchemy, began to approach it differently. Alchemy had from the beginning been a laboratory endeavor: that constitutes its link to modern chemistry. But alchemy differs from chemistry both in purpose and method. "The purpose of alchemy is the perfection of all things in their kind and most especially of metals; that of chemistry is the gaining of knowledge concerning different kinds of matter and the use of this knowledge for all manner of ends." ¹⁸

¹⁶ See also Didier Kahn's magisterial account, *Alchimie et Paracelsisme en France à la fin de la Renaissance (1567–1625)* (Geneva: Droz, 2007), which in passing briefly mentions a few literary works.

Quoted in Priesner, Geschichte der Alchemie, 53–9, here 57.
 Tavlor. The Alchemists, 151.

As for method, rather than basing its work upon ancient texts, chemistry seeks by experimentation to describe and classify material changes in new ways. In sum, alchemy works deductively, from principle to experiment, whereas chemistry works inductively, from experiment to general principle. This shift is evident in the work of Boyle and Newton.

This does not mean that there was an immediate lessening in the publication of alchemical works. Indeed, one bibliographer concluded that "between the years 1650 and 1675 or 1680 more alchemical books appeared in English than in all the time before or after those dates."19 Newton, who had a imposing collection of alchemical works in his library and studied in particular the Corpus Hermeticum—in his commentary on the Emerald Tablet he explained the unity of superior and inferior through the analogy of sulphur and mercury, which unite like man and woman to procreate a more noble offspring²⁰—still believed that "the key to the understanding of the true composition of material and the inner organization of nature was to be found in ancient texts."21 "He sought in alchemy the source of all the apparently spontaneous processes of fermentation, putrefaction, generation, and vegetation" and, in his essay "Of Natures obvious laws and processes in vegetation" (1672), argued that "metals vegetate after the same laws as those observed in the vegetation of plants and animals."22 At the same time, his discoveries in physics and optics were based on careful experimentation and had nothing to do with the aims of alchemy.

Boyle's principal work—The Sceptical Chymist, or Chymico-Physical Doubts & Paradoxes, Touching the Spagyrist's Principles Commonly Call'd Hypostatical, as They are Wont to be Propos'd and Defended by the Generality of Alchymists (1661)—does not constitute, as the title suggests, a wholesale rejection of alchemy. He denied the Aristotelian theory of the four elements as well as Paracelsus' alchemical triad of sal, sulphyr, and mercurv. Instead, in a manner anticipating but not yet attaining the modern theory of elements, he presented the elements as simple, unmixed bodies from which "perfectly mixt bodies"—the substances known today as chemical unions—are formed.²³ At the same time, in such writings as his Dialogue on Transmutation, he reaffirmed his belief in transmutation and the powers of alchemy. The Jesuit polymath Athanasius Kircher, one

¹⁹ John Ferguson, "Some English Alchemical Books," Journal of the Alchemical Society

^{2 (1913): 2–16,} here 5; quoted by Linden, *Darke Hierogliphicks*, 200.

²⁰ Linden, *Alchemy Reader*, 246–7.

²¹ Priesner, *Geschichte der Alchemie*, 93.

²² Betty Jo Teeter Dobbs, *Alchemical Death and Resurrection: The Significance of Alchemy* in the Age of Newton (Washington, D.C.: Smithsonian Institution Libraries, 1990), vol. 4, 2. Priesner, Geschichte der Alchemie, 89.

of the most learned men of the century, in his *Mundus subterraneus* (1665) took alchemy seriously but distinguished three aspects: *alchemia metallurgia*, or straightforward metallurgy and mining; *spagyrica*, a term borrowed from Paracelsus to designate the preparation of medicaments; and *transmutatoria*, which he did not fully deny but which, he contended, could be attained only by means of devilish powers.

While the separation of esoteric and exoteric, or spiritual and scientific, alchemy was tentatively evident from the early 1600s on, it was only with Lavoisier's revolutionary work of 1789 that the modern science of chemistry split definitively from alchemy, which with few exceptions, as we shall see in the next chapter, disappeared. Yet despite these developments the ambivalence regarding alchemy extended well throughout the eighteenth century. In 1732 the standard eighteenth-century German encyclopedia opens its entry "Alchymie" with the definition: "the art of transforming metals, and bringing them to ripeness, also the Lapidem Philosophorum or the Stone of the Wise, and, in a word, to make gold."24 It goes on to sketch a history of the art from Hermes Trismegistus by way of the Egyptians and the early Arabic scholars to the Latin writers of the late Middle Ages, weighing the pros and cons (e.g. citing Phillip Melanchthon, who called alchemy "sophisticam quandam imposturam") but concluding: "Because experience teaches us the possibility and even the certainty of the same [transmutation], one should not simply discard it wholly but also not esteem it too highly and trust and believe each one individually."

In fact, books about alchemy experienced a certain upsurge in the third quarter of the eighteenth century, but, as an early historian of alchemy put it: "The glitter that they sought to give alchemy was nothing but a gold-plate without inner meaning" and resembled the flare of a flame that is about to be extinguished.²⁵ However, he remarked later (596–7), the disappearance of alchemy from the book market did not mean its destruction. "It retreated into a concentrated position. Its still numerous friends wished to communicate with one another without exposing themselves to the scorn of opponents." Accordingly they gathered in secret groups, such as the so-called Hermetic Society, and publicized their activities only to the extent necessary to provide the instigation and opportunity for likeminded thinkers to join them.

²⁵ Karl Christoph Schmieder, *Geschichte der Alchemie* (1832), ed. Franz Strunz (Munich-Planegg: Barth-Verlang, 1927), 565.

Johann Heinrich Zedler, Großes Vollständiges Universal-Lexikon aller Wissenschafften und Künste, 64 vols (Halle/Leipzig: Zedler, 1732–50), vol. 1, cols 1065–8.

In sum, the first wave of alchemy in the strictest sense—belief in the transmutation of metals—covered roughly six centuries, rising from the twelfth-century rediscovery to its Baroque apex around 1600 and then tapering off again until its dismissal by most scientists at the time of the French Revolution. This exoteric or operative alchemy, which soon attracted charlatans who exploited the credulity of those eager for a quick fortune in gold, was deflected by Paracelsus into iatrochemy. At the same time, the translation of the Corpus Hermeticum into Latin introduced a spiritual or speculative element that was soon broadened by the inclusion of Christian, classical-mythological, and astrological aspects. As exoteric alchemy gradually gave way in the face of scientific progress, the esoteric side emerged perhaps even more strongly and continued to exert its influence on thinking and literature through the nineteenth and into the twentieth century. But during the heyday of operative alchemy its literary treatments were almost wholly negative and usually satirical.

THE FIRST WAVE: FRANCE AND ITALY

The earliest occurrence of alchemy, not yet including the figure of the alchemist, in a major European literary work took place in Le Roman de la rose by Guillaume de Lorris and Jean de Meun, by common agreement the most widely read poetic masterpiece of thirteenth-century French literature. The poem is not a romance in the sense familiar, say, from Chrétien de Troyes's twelfth-century verse narratives (for instance, Erec et Enide and Le Conte du Graal) or Wolfram von Eschenbach's Parzival (1210), which involve brilliant characterization and lively action. Here, rather, we are dealing essentially with a spiritual allegory describing the narrator's youthful initiation into love. The first part by Guillaume de Lorris (some 4,000 lines written c.1225-40) depicts a dream in which the young man falls in love with a rosebud in an allegorical Garden of Delight and ends with his exclusion. When Jean de Meun continued the poem some forty years later (roughly 18,000 lines written c.1270–80), that minimum action gives way, as the narrator tries to re-enter the garden, to a series of dialogues with, and discourses by, such allegorical figures as Reason, Wealth, Love, Nature, and others, which offer the author an opportunity to satirize the entire spectrum of his society and its institutions: the avarice and immorality of the priesthood, the arrogance of the nobility, the hypocritical practice of "courtoisie" or courtly love, and above all the lasciviousness of scheming women. In the process, as Ernst Robert Curtius shrewdly observed, sexus replaces the eros of the

earlier courtly epics as the rose becomes an obvious target of the narrator's sexual dreams.26

Among the many objects of his satire is, almost unavoidably, the newly fashionable practice of alchemy. Paradoxically, the eighty-four ambivalent lines that he devotes to the topic earned Jean de Meun the reputation of being himself an alchemist. The passage was excerpted and included in many books on alchemy, other alchemistic works were posthumously attributed to him, and many writers of the following centuries undertook elaborate alchemical analyses of his entire poem.²⁷ As late as 1832 one historian argued that, for Jean de Meun, alchemy was not an object of jokes and humor; "on the contrary, he portrays it as a venerable mystery." 28 Another called him "a firm believer in the art. . . . Poetry and alchymy were his delight, and priests and women were his abomination."29 Yet Jean's editors have shown with extensive quotation that Jean's few details are taken from such familiar sources as Albertus Magnus's De mineralibus and the Speculum naturale of Vincent de Beauvais (who himself was primarily an encyclopedist and not known as an alchemist).³⁰

The relevant passage (ll. 16,035–118) occurs within a longer discourse in which we learn that Nature, in her continuing struggle with Death, constantly recreates the species from any remaining model, just as the ideal form of the phoenix is constantly reborn from its own ashes. It is this act of (re)creation that art seeks to emulate. She watches Nature closely and imitates her "like monkeys" ("comme singes" [l. 16,001]—a typical example of the popular and enduring metaphor of art, or the artist, as monkey).³¹ Yet despite her most brilliant efforts Art can only transform existing shapes, but never actually bring her products to life. At this point alchemy enters the picture.

> Ou d'alkemie tant apreigne que touz metauz en couleur teigne, qu'el se porroit ainceis tuer que les especes transmuer,

²⁶ Ernst Robert Curtius, Europäische Literatur und Lateinisches Mittelalter, 2nd edn (Bern: Francke, 1954), 135.

²⁷ Pierre-Yves Badel, "Alchemical Readings of the Romance of the Rose," in: Rethinking the Romance of the Rose: Text, Image, Reception, ed. Kevin Brownlee and Sylvia Huot (Philadelphia: University of Pennsylvania Press, 1992), 262-85.

Schmieder, Geschichte der Alchemie, 163–4.
 Mackay, Memoirs, 159.

Le Roman de la rose, ed. Félix Lecoy (Paris: Champion, 1973), vol. 2, 298–9. I quote the text from vol. 2 of this edition. See also the notes in: The Romance of the Rose, trans. Charles Dahlberg, 3rd edn (Princeton, NJ: Princeton University Press, 1995), which refers to Lecoy's notes.

³¹ See Curtius, Europäische Literatur und Lateinisches Mittelalter, 522–3.

se tant ne fet qu'el les ramaine a leur matire prumeraine. (ll. 16,035–40) (From alchemy she may learn enough to tint all metals in color, yet she could kill herself before she could transmute the species, even if she did not reduce them to their prime matter.)

Here we recognize the key term *materia prima*, and a few lines later we learn that Art, even should she attain that first stage, would never succeed in making the "elixir" (l. 16,047: "quant el feroit son elixir").

Nevertheless, the passage continues, alchemy is a true art (l. 16,054: "alkimie est art veritable") because, even if it cannot create life as Nature does, it can achieve transformations that place matters into different species and deprive them of their primary species (ll. 16,064–5: "les et souz espieces estranges / et leur tost l'espiece prumiere"). Here the author uses the example of glass-blowing, in which the master craftsman creates glass from ferns through a simple process of purification (l. 16,069: "par depuracion legiere"). By analogy, one might accomplish the same thing with metals by removing their impurities and restoring them to pure forms (ll. 16085-6: "et tolir aus orz leur ordures / et metre les an fourmes pures"). For all metals, regardless of their terrestrial appearance, are born from sulphur and mercury (l. 16,093: "de souffre et de vif argent nessent"). Here Jean alludes to his unspecified written sources (l. 16,094: "si con li livre le confessent"). In fact, the following lines amount virtually to a rephrasing of a passage from Vincent de Beauvais. Any alchemist sophisticated enough to extract the "spirits" (l. 16,096: "esperiz") and cause them to enter the cleansed "bodies" (l. 16,099: "les cors") could do with metals as he chooses. This echoes Vincent, when he speaks of the "generation of spirits and bodies" ("generatio spirituum et corporum").32 Such "masters of alchemy" (l. 16,106: "cil qui d'alkimie sunt mestre") can even make pure gold of pure silver, but those who rely on "sophistry" (l. 16,116: "qui euvrent de sophisterie") will never match Nature.

While the knowledge expressed in these lines indicates a general familiarity with alchemy as well as a degree of credulity, there is nothing to imply that Jean de Meun was himself an alchemist, despite the claims of his followers. As others have noted, he restricts his discussion to that aspect of alchemy that was still central in the late Middle Ages: the transmutation of metals.³³

Quoted by Lecoy in his edition, 301.

³³ See, for instance, Gérard Paré, *Les Idées et les lettres au XIIIe siècle: Le Roman de la rose* (Montreal: Le Centre de Psychologie et de Pédagogie, 1947), 68–71.

But the inclusion of alchemy in this brilliant satirical encyclopedia of thirteenth-century learning suggests the popularity of the topic and the treatment it would receive in the coming centuries.

Dante has nothing to say about alchemy generally or the transmutation of metals. His only mention of the art occurs in canto 29 of the *Inferno*, where he assigns alchemists to the eighth circle of Hell—that almost innermost ring for which he coined the term Malebolge ("evil ditches")—along with frauds and perjurers of every stripe, from procurers and hypocrites by way of magicians and astrologers to thieves and impostors such as Gianni Schicchi, who is known to posterity as the roguish hero of Puccini's opera of that title.

At the end of canto 29 (ll. 73–139), Dante spots two men leaning weakly against each other, each covered with scabs at whose itching they claw furiously. Both turn out to be charlatans known widely and otherwise described in local chronicles.³⁴ One of them is introduced as a notorious alchemist from Arezzo (Griffolino), condemned by Minos to the Inferno for "the alchemy that I practiced in the world" (l. 119: "per l'alchìmia che nel mondo usai")—and not for the actual crime for which he was put to the stake by Alberto of Siena: for duping him into the belief that he could show him how to fly. The other figure is the shade of a Florentine named Capocchio, who "falsified metals with alchemy" (l. 137: "falsai li metalli con l'alchìmia") and for that crime was burned at Siena in 1293. Using the same common metaphor that Jean de Meun employed, he tells Dante in the last line of the canto "what a good ape of nature" he was (l. 139: "com'io fui di natura buona scimia").

In sum, in Dante's eyes, at least insofar as his poem attests, alchemy had no benign purposes; it was nothing but the fraudulent ruse of charlatans seeking to cheat their gullible victims—charlatans who, themselves diseases of society, were punished with such cruel afflictions as the sores and itching of Griffolino and Capocchio.

Like Dante, Petrarch (1304–74) had nothing but scorn for such occult practices as astrology and alchemy. When Archbishop Giovanni Visconti of Milan died in 1355, Petrarch's funeral oration was abruptly interrupted by the court astrologer, who insisted that, according to his horoscopes, the most auspicious hour had arrived for handing over the symbols of office. As Petrarch wrote years later in a letter, "Though I have no interest in such nonsense, I did not wish to stand out against the belief of the foolish

³⁴ See the editor's notes to *The Divine Comedy*, trans. Charles S. Singleton, Bollingen Series LXXX (Princeton, NJ: Princeton University Press, 1970), *Inferno 2: Commentary*, 535–43.

majority, and stopped speaking before I was halfway through my oration."³⁵

In his book Remedies for Fortune both Good and Bad (De remediis utriusque Fortunae, 1370), where he turned his keen intelligence and skeptical eve on many facets of contemporary life and society, Petrarch also addressed the question of alchemy (chapter 111: "De alchimia"). The dialogue between Spes (Hope) and Ratio (Reason) amounts to a tirade by Reason against alchemy and alchemists, prompted by Hope's repeated expression of his wish for success with alchemy ("Spero Alchimiae successum").36 Reason responds that alchemy never worked effectively for any man, and even when such a report was made, it was uttered by those for whom it was expedient to believe it. When Hope repeats his wish, Reason wonders what success he has in mind other than smoke, ashes, sweat, sighs, words, deceit, and shame—the only successes that alchemy can provide. True, some otherwise sensible men can be irrational in this regard, consumed by their vain desire for riches. All the same, Hope longs for the gold that has been promised by his alchemist ("promissum ab artifice aurum spero"). Reason warns that it is shameful and ignorant to believe what every artificer promises: "O turpis promissio, & stulta credulitas." Is it not enough to be content with the true metals that the earth brings forth and not to wish for other minerals created by counterfeiting? Whoever promises gold will simply run away with Hope's own gold. When Hope argues that the alchemist has promised him great things—"magna mihi promittit Alchimista"—Reason asks why, then, the alchemist has not performed for himself what he promises others. Hope insists that he has learned the art of alchemy and will be rich, but Reason responds, like Dante sending his alchemists to the eighth circle of fraudulence, that the art of which he speaks is nothing but the art of lying and deception ("Ars nempe, quam memoras, nullam esse, nisi mentiendi artem dicimus, ac fallendi"). If Hope insists on practicing alchemy, his house will soon be filled will strange guests—"sufflatores, deceptores, derisores" ("blowers of hot air, deceivers, mockers")—who will eat and drink him out of house and home, as well as marvelous implements: vessels, pots, basins, pans, glasses of stinking water, stills, and furnaces, along with strange herbs, outlandish salts, and sulphur. He will be left with nothing but the name of itinerant vendor ("circulatoris nomen"). As the dialogue ends, Hope has still not given up his desire. Reason turns

³⁵ Cited in Ernst Harch Wilkins, *Life of Petrarch* (Chicago: University of Chicago Press/Phoenix, 1963), 141–2.

³⁶ Francesco Petrarch, *De remediis utriusque Fortunae, libri duo* (Bern: Jean Le Prexu, 1600), vol. 1, 297–9.

away contemptuously: "semper rebus aliquid defuerit, dolis nihil" ("Something necessary will always be lacking, but never deceit").

THE SECOND WAVE: ENGLAND

Petrarch's English contemporary Geoffrey Chaucer (c.1345–1400) goes hardly beyond the scorn of Dante and Petrarch, the latter of whom he may have met during a royal mission to Florence in 1372/3, and the theory of Le Roman de la rose, to which his indebtedness has long been acknowledged.³⁷ But his treatment of alchemy in *The Canon's Yeoman's Tale* of his Canterbury Tales (1390-1400) is not only much more extensive; it constitutes the comic masterpiece of the late Middle Ages. The episode has been extensively treated in the secondary studies of Chaucer and of alchemy.³⁸ It is debated, for instance, whether Chaucer's keen interest in alchemy stems from the fact that he was once cheated by a charlatan or whether he was himself a practicing adept. ³⁹ Elias Ashmole includes the tale in his Theatrum chemicum Britannicum (1652) "to shew that Chaucer himselfe was a *Master* therein" and goes on in his notes to state that Chaucer, "ranked amongst the Hermetick Philosophers," was not only a "Iudicious Philosopher" but also "fully knew the Mistery."40 Do his references suggest that Chaucer was acquainted with the material from first-hand experience, 41 or are those details simply what Robertson calls "false wisdom"?⁴² What is the role of this tale and what is its relationship to the other tales? These are matters to be left to the Chaucer specialists. Our concern here is simply with the literary treatment of alchemists in the context of the times.

The Canon's Yeoman is introduced in a Prologue in which he initially appears to be a shill for his master, with whom he has just joined the group, boasting that the canon has such "subtilitee" (l. 620)⁴³—a word used several more times to characterize, with negative implications, the skill of

³⁷ D. W. Robertson, A Preface to Chaucer: Studies in Medieval Perspectives (Princeton, NJ: Princeton University Press, 1962), 104.

³⁸ See especially Stanton J. Linden, Darke Hierogliphicks: Alchemy in English Literature from Chaucer to the Renaissance (Lexington: University Press of Kentucky, 1996), 42-53 and passim, and the extensive bibliographical material in his notes.

³⁹ John Read, *The Alchemist in Life, Literature and Art* (London: Thomas Nelson,

^{1947), 29.}Theatrum chemicum Britannicum, reprint of the London edn (1652) with a new of Science no. 39 (New York: Johnson introduction by Allen G. Doug, .

Reprint Corporation, 1967), 467, 470.

Robertson, Preface to Chaucer, 259.

Alchomist 29.

Robertson, Preface to Chaucer, 259. introduction by Allen G. Debus, The Sources of Science, no. 39 (New York: Johnson

⁴³ Geoffrey Chaucer, Canterbury Tales, ed. John Matthews Manly (New York: Holt, 1928), 461-85.

alchemists (Il. 1091, 1247, 1371)—that he could pave the entire road to Canterbury with gold. When the Host wonders why, then, the Canon is dressed so poorly (l. 636: "sluttissh") and why he must live in the slum-like outskirts of town, the Yeoman replies that he has sometimes abused his own abilities and that he must also conceal his presence lest he be attacked. As for the Yeoman himself, his face is discolored because, in his seven years with the Canon, it has been his duty as a so-called puffer to work the bellows to keep the furnace hot. They borrow gold from many people with the promise of redoubling their fortune: "Yet it is fals" (l. 678). No matter how they hope and strive, the science is so far ahead of them that, for all their promises, it slips away so fast that it makes beggars of them.

"But that science is so fer us biforn We mowen nat, although we hadden sworn, It overtake; it slit awey so faste It wole us maken beggers atte laste." (ll. 680–3)

As the Yeoman unwittingly betrays their failures, the Canon comes up and reproaches him for his slander, but the Host, who is too sensible to be taken in by the Canon's "science," tells him to stop threatening his assistant. He When the Canon rides off "for verray sorwe and shame" (l. 702), the Yeoman confesses that he hopes never to encounter him again, for the Canon cheated him out of his money and his health: his formerly fresh, rosy complexion is now wan and of a leaden hue. "And yet for all my smert and all my grief, / For all my sorwe, labour, and meschief" (ll. 712–13) he finds himself unable to leave alchemy, "that slidynge science" (l. 732), so passionately is he addicted to it.

At this point the tale proper begins, which the Yeoman relates as a cautionary tale, so that others may beware and not be taken in by "oure elvysshe craft" (l. 751). First he recites the names of the materials they use and the procedures they employ—not, however, in any consistent manner but simply as a random list.

And bisye me to telle yow the names Of orpyment, 45 brent bones, iren squames, That into poudre grouden been ful smal; And in an erthen pot how put is al, And salt yput in, and also papeer, Biforn thise poudres that I speke of heer; And wel ycovered with a lampe of glas . . . (Il. 758–64)

Linden, Darke Hierogliphicks, 45, believes that the Host is simply naive, but his words and behavior suggest a bit more skepticism regarding the Canon and his alchemy.
Arsenic trisulphide, from Latin auripigmentum or "pigment of gold."

This stew was then subjected to "sublymyng, / And in amalgamyng and calcenyng / Of quyksilver, yclept mercurie crude" (ll. 770–2). Yet for all their orpiment and sublimed mercury "Noght helpeth us; oure labour is in veyn" (l. 777).

He adds dozens of further details pertaining to their craft even though he is a common, unlearned man ("lewed") and lists items in a helter-skelter manner: sundry earthenware and glass vessels, urinals (pear-shaped glasses), croslets (crucibles), sublimatories, cucurbits, and alembics; such ingredients as arsenic, sal armoniac, and brimstone, along with such herbs as valerian and lunary. Their lamps burned night and day as they worked, calcifying materials in their furnaces and albifying water, citrinizing silver, cementing and fermenting. Following this rather chaotic list of equipment, materials, and procedures, he leaps without transition to:

The foure spirites and the bodies sevene, By ordre as ofte I herde my lord hem nevene. (ll. 820–1)

For the four spirits (volatile substances) he names quicksilver (mercury), orpiment, salt, and brimstone (sulphur), and aligns the seven bodies (metals) with the seven planets in the traditional manner.

Yet whoever practices "this cursed craft" (l. 830) shall have no good of it. Whether monk or friar, priest or canon, even though he sit day and night at his books, "al is in veyn" (l. 843). The Yeoman adds a few more details that he had forgotten to list: acids, oils, ablutions, the mollification and induration of bodies. Ultimately, however, he advises everyone to give up the search for the philosopher's stone, also known as elixir. It would suffice if we had it; but he avows that "with al oure sleighte" (l. 867) we shall never succeed. The hope alone has made men give up everything they owned. (Here we recall Petrarch's dialogue of Hope and Reason.) That bittersweet art causes men to sell even the sheet with which they wrap themselves at night. They become so disreputable that others recognize them by their stench of brimstone that can be smelled a mile away; and they try to excuse their miserable clothing by saying that men would slay them for their science if they should be caught.

He relates, finally, how one of their experiments exploded—no doubt the work of the devil, he thinks:

Though that the feend noght in oure sighte hym shewe, I trowe he with us be, that ilke shrewe! (ll. 916–17)

Afterwards the apprentices cast blame: on the fire-making, on the blowing, on the improper tempering, on the wrong kind of wood. But the Canon states that the pot was simply cracked and that they should sweep up the residue on a canvas and sift it in a sieve for future reuse. We hear the

excuse offered time and time again by historical alchemists whose experiments failed: "Ther was defaute in somewhat, wel I woot" (l. 954). With that, the *prima pars* of the Yeoman's tale ends, and he goes on to the *pars secunda*.

Whereas the first part dealt with alchemy—its ingredients, its equipment, its procedures—the second focuses on alchemists and their frauds, as personified by a second Canon whose shrewdness—"His sleightes and his infinit falsnesse" (l. 976)—contrasts markedly with the clumsy efforts of the first: "In al this world of falshede nas his peer" (l. 979). Indeed, the fact that he is characterized with so much demonic imagery—"feend" (l. 984) and "cursed heyne" (l. 1319: "cursed wretch") and "feendly" (ll. 1158, 1303) with his "cursed sleighte" (l. 1227)—has led Chaucer scholars to conclude that he is a creature of the Devil, if not the Devil himself.⁴⁶

The entire episode concerns this Canon's successful plot to deceive an elderly London priest whose trust he initially wins by borrowing some gold and then returning it promptly on the third day. He promises to show the priest how he gets his gold by alchemy: by "mortifying" quicksilver in a crucible and adding "a poudre heer that coste me deere" (l. 1133). As the gullible priest concentrates on tending the fire, the Canon adds a bit of coal in which a piece of silver is concealed by a wax covering. When it melts in the fire and releases the silver, the priest is astonished at "this noble craft and this subtiltee" (l. 1247). Then the canon makes a second experiment, this time hiding a bit of silver in the end of a stick with which he stirs the coals—and with the same result: "this preest thus was bigiled ageyn" (l. 1284). Once more with a third experiment "the preest he made his ape" (l. 1313: we recognize the familiar simian image): this time by hiding the silver in his sleeve. Afterwards they have the silver resulting from the three experiments tested and found genuine by a goldsmith. "This sotted preest, who was gladder than he?" (l. 1341). He implores the Canon to sell him the secret, and of course the alchemist does so for the sum of forty pounds, swearing the priest to secrecy lest others who might learn of his "soutiltee" (l. 1371) would kill him out of envy and spite. Then "he wente his wey, and never the preest hym sy / After that day" (ll. 1381-2). But when the priest tried to duplicate the experiment, "byjaped and bigiled was he" (l. 1385).

During the entire episode the actual alchemical experiments are described in only the most general terms: quicksilver is warmed over a fire, and a powder is added. In contrast to the earlier episode the author's

⁴⁶ Linden, Darke Hierogliphicks, 48-50.

interest is focused wholly on the interaction between the clever alchemist and the gullible priest. The moral of the episode is simply:

Medleth namoore with that art, I mene; For if ye doon, youre thrift is goon ful clene. (ll. 1424–5)

At this point, to the presumable surprise of Chaucer's readers and with an unmediated shift from exoteric to esoteric, the Yeoman adds fifty-six lines to explain "what that the philosophres seyn in this mateere" (l. 1427). He cites "Arnold of the Newe Toun" (Arnoldus of Villanova) and the "father" of philosophy, Hermes (l. 1434). Here, for the first time a few metaphorical terms are introduced: that the dragon (mercury) can be slain (that is, undergo fixation) only in combination with his brother (brimstone/ sulphur), both of whom were born of Sol and Luna. But, he warns, only the philosophers can understand this speech, for it is "of the secree of secrees" (l. 1447). He refers to Plato, who told his disciple that the "privee stoon" was called Titanos or Magnasia—that is, "a water that is maad, I seve, / Of elementes foure" (ll. 1459-60)—but refused to confide the source of that water, for the philosophers were sworn to divulge it to no one, "Ne in no book it write, in no manere" (l. 1466). According to Plato, Christ decreed that the secret should be disclosed only "where it liketh to his deitee / Man for tenspire" (ll. 1469–70). Thus, the Yeoman concludes, if God does not want the philosophers to reveal how men should obtain the stone, then it is best to let it go.

Some scholars take these concluding lines to prove that Chaucer believed in a higher, divine alchemy in contrast to the devilish alchemy of the charlatans. 47 But since it is still the untutored Yeoman who in his confusion conflates Christianity and Greek philosophy, it is perhaps unwarranted to draw conclusions from his remarks about Chaucer's beliefs. Similarly, the Yeoman cites dozens of alchemical terms for equipment, materials, and procedures, but these occur in far too random a manner to justify any conclusions regarding Chaucer's actual experience of alchemy. And the brief lines about the four elements, the spirits, and their planetary names do not go beyond the common knowledge of the period. Indeed, Chaucer has less to say about esoteric alchemy than do many of his contemporaries. At most, I believe, The Canon's Yeoman's Tale can be cited to demonstrate a widespread skepticism around 1400 regarding alchemy and its practitioners, along with an equally widespread gullibility—and, of course, the literary brilliance of Chaucer's own narrative ability.

⁴⁷ Linden, *Darke Hierogliphicks*, 52.

Virtually contemporaneous with *The Canterbury Tales* is the *Confessio Amantis* (1390) by Chaucer's friend John Gower (1330–1408). The framework of the vast poem concerns a young man (Amans), who approaches Venus for advice on love. As She directs him to her confessor, who informs him with edifying stories taken from classical and medieval sources (including *The Canterbury Tales*) about the seven deadly sins and their remedies. At the end Venus sends the poet away again, telling him that he is too old for love. Gower's comments on alchemy occur in book 4, and while his 175 lines (2457–632) are far fewer than Chaucer's and do not constitute a comic narrative, they present an almost identical view of alchemy. In fact, Ashmole, who also includes the relevant passage in his *Theatrum chemicum Britannicum*, states that Gower was Chaucer's "*Master* in this *Science*."

The passage occurs in a section, "Discoverers and Inventors," sandwiched between music, sculpture, metallurgy and other crafts, and language and literature, where the confessor tells the lover that he should take heed of Ovid's works. The confessor begins with the definition of "Alconomie, / Wherof the Selver multeplie / Thei made and ek the gold also" (ll. 2459-61). Like Chaucer, he explains that matter consists "Of bodies sevene in special / With foure spiritz joynt withal" (ll. 2463-4) and goes on to associate the seven metals with their characteristic planets. Gold and silver, he continues, are the "tuo principal extremites" (l. 2489) toward which all other metals tend. Each metal must pass through seven stages before it is perfect: distillation, congelation, solution, descension, sublimation, calcination, and fixation. That produces "the parfit Elixir / Of thilke philosophres Ston" (ll. 2522–3) of which the philosophers write. He then cites the names of the three kinds of stone: lapis vegetabilis, which preserves the body from illness; lapis animalis, which protects the five senses; and "Minerall," which has the power of transformation. "It maketh multiplicacioun / Of gold, and the fixacioun / It causeth" (ll. 2573-5).

This was the case in former days when men were wise. But now, although men speak of the stone, they do not know how to make it. They spend fortunes:

Which bringeth in poverte and dette To hem that riche were afore: The lost is had, the lucre is lore, To gete a pound thei spenden fyve. (ll. 2588–91)

John Gower, *The English Works*, ed. G. C. Macaulay (London: Oxford University Press, 1900), vol. 1.
 Theatrum chemicum Britannicum, 470.

The craft can no longer thrive as it is practiced at present; it would be wiser to refuse it altogether. He concludes by listing the alchemists upon whom the craft was based. "Hermes was on the ferst of alle, / To whom this art is most applied" (ll. 2606–7), followed by the Arab Geber (Jabir ibn Hayyan), Ortolan (Hortulanus, presumably the fourteenth-century French writer Martin Lortholain), the Alexandrine Christian Morien (Morienus), and the Arab Avicen (Avicenna, or Abu ibn Sina), "which fond and wrot a gret partie / The practique of Alconomie" (ll. 2611–12). But their books are no longer understood. The authors of those Greek, Latin, Arabic, and Chaldean texts were the ones who first discovered everything of which he has just spoken; and for that reason "the Cronique of her lore / Schal stonde in pris for everemore" (ll. 2631–2).

We recognize here the aspects that Chaucer's Yeoman described: the four spirits and seven metals and the various stages of the *magnum opus*. Gower also draws on common encyclopedic knowledge of the times when he speaks of the three stones and their powers and the historic founders of the art. Like Chaucer, he warns against the addiction to alchemy and its promises, which nowadays simply plunge men into ruin. But Gower provides far less colorful detail than his friend Chaucer, and his discussion does not emerge naturally from a narrative but occurs as a lesson within a framework that serves, as in the *Roman de la rose*, as an excuse for disquisitions upon a variety of topics, of which alchemy is simply one among many.⁵⁰ "Morall Gower," as Chaucer labeled him in a dedicatory letter with his *Troylus and Cryseyde*,⁵¹ is concerned not with an entertaining fiction but, rather, with communicating information about the various subjects upon which he touches.

Gower, rather than Chaucer, provided the model for the principal alchemical works of the fifteenth century: they are not so much literary works that make use of alchemy for their various purposes, but alchemical works in literary form as reproduced in Ashmole's *Theatrum chemicum Britannicum*. The collection opens with Thomas Norton's *The Ordinall of Alchimy* (1477), which is dedicated to all "Lay-men" who seek by means of alchemy to win great riches, in order that they may "eschew great deceits." He proposes to accomplish this in seven chapters (10), beginning with one that teaches "What manner People may this *Science* reache." He goes on (chapter 2) to cite the "Joyes" and "paine" of alchemy and then (chapter 3) "the Matters of our Stone," which the Arabs call elixir. Chapter 4 explains the *magnum opus*, for which Norton uses the German term "grosse Werke" (presumably to rhyme with "Clerke" in the following line). Chapter 5 deals

See also Linden, Darke Hierogliphicks, 57–9.
 Theatrum chemicum Britannicum, 485.

then with "the subtill Werk" (using again the German term in conjunction with the following "Clerke") and the sixth with "Concord and love": that is, the correspondence between earthly nature and the heavenly spheres. Chapter 7 sets forth the powers of fire and heat—"*Totum consistit in ignis regimine*" (103)—and concludes with the warning "this precious *Stone*" will be found only by those who seek it devoutly (105).

Why soe noble a *Scyence*, as all Men this *Arte* call, Is here set out in *English* blunt and rude, For this is soe made to teach a Multitude Of rude people which delen with this Werkes, Ten Thousand *Laymen* against ten able *Clerks*: Whereby yearely greate Riches in this *Londe* Is lewdly lost, as Wisemen understonde; And manie men of Everie degree Yearely be brought to great Povertee. Cease *Laymen*, cease, be not in follie ever; Lewdnes to leave is beter late than never. (106)

Unlike Gower, Norton does not offer even the sketchiest of fictions as a vehicle for his teachings: his *Ordinall*, as the ecclesiastical title suggests, is simply a book of instructions. The same applies to the next item in Ashmole's compendium: *The Compound of Alchymie* (1471) by George Ripley, who is identified on the title page as a "Chanon" (like Chaucer's two alchemists).⁵² As he explains in the dedicatory "Epistle" to King Edward IV, he intends to present "Great Secretts which I in farre Countryes did lere" (109; a reference no doubt to his long sojourn in Rome). For "trewlie I have found / The perfect waye of most secrete *Alchimy*" (110). These secrets, he stresses, can be accomplished only with divine assistance:

How may be made *Elixirs* Red and Whyte, Playne unto your Hyghnes it shall declared be, And if it please you with easy expence and resbyte To help, I wyll them make by helpe of the Trinitie.

The "secrete of secretes," he continues, is to "Turne Erth to Water, and Water into Wynde, / Therof make Fire" (113).

We have an Heaven yncorruptible of the Quintessence, Ornate with Elements, Signes, Planetts, and Starrs bright, Which moisteth our Erthe by Suttile influence: And owt thereof a Secrete Sulphre hid from sight...(114)

⁵² See Jennifer M. Rampling, "The Catalogue of the Ripley Corpus: Alchemical Writings Attributed to George Ripley (d. ca. 1490)," *Ambix* 57 (2010): 125–201.

The text itself consists of twelve chapters or "gates" (hence its popular title: *Twelve Gates*), in each of which a stage of the alchemical process is discussed, beginning with calcination and solution and going by way of putrefaction and sublimation to projection. Unlike the epistle, which consists of alternately rhyming octets (ababbcbc), the twelve chapters use septets with the rhyme scheme ababbcc. Again, as with Norton's *Ordinall*, we are dealing simply with a straightforward manual of alchemy in poetic form and not with a literary work using alchemy as a theme or motif and alchemists as figures.

THE THIRD WAVE: GERMANY AND THE NETHERLANDS

Crossing the channel only two decades later, we find a wholly different tone in Sebastian Brant's *Ship of Fools* (*Das Narrenschyff ad Narragoniam*, 1494). In 110 short chapters Brant surveys the spectrum of folly packed into the ship sailing off to Narragonia ("the land of fools"). He invites his readers to find themselves among the passengers, confessing that he has already recognized his own folly. (The book begins with a chapter titled "Useless Books," where Brant identifies himself.) Each chapter is introduced by an appropriate woodcut and three rhyming tetrameters, as in number 102:

Man spüert wol in der alchemy Und inn des wynes artzeny Was falsch und bschiss uff erden sy.⁵³ (One senses in alchemy and in wine's medication how much falsehood and fraudulence there is on earth.)

The image (see Figure 2.1) shows three figures in an alchemical laboratory with an athanor and various vessels. One alchemist in a fool's cap is stirring the mixture while another, holding an alembic, looks on. Beside them, a famulus in fool's garb inserts an instrument into a barrel, presumably diluting or adding something to the wine.

The episode, entitled "Von falsch und beschiss" ("On Falsehood and Fraudulence"),⁵⁴ begins with the flat statement that there are many

⁵³ Sebastian Brant, *Das Narrenschiff: Nach der Erstausgabe (Basel 1494)*, ed. Manfred Lemmer, 4th edn (Tübingen: Niemeyer, 2004), 269–72.

⁵⁴ The term "Beschiss" has particularly unpleasant associations. Based on the root "scheissen" ("to shit"), "bescheissen" means to excrete on someone or something or,



Figure 2.1 Sebastian Brant, *Das Narrenschiff* (1494): "Von falsch und beschiss" (The Alchemists). Courtesy of Staatsbibliothek zu Berlin—Preußischer Kulturbesitz, Signatur: 302723.

charlatans and swindlers in the world, dealing in false love, false counsel, false friendship, false money. Cheats no longer leave wine pure but add saltpeter, sulphur, potash, milk, and various ingredients, causing pregnant women to have miscarriages and others to die. He recounts other kinds of cheating—in measures and weights, counterfeit money, the clergy: "Vil wölff gont yetz inn schäffen kleidt" (l. 48: "Many wolves now go about in sheep's clothing"). That leads him to "den grossen bschissz der alchemy" (50: "the great deception of alchemy"). Like Chaucer's Canon, alchemists pretend to create gold and silver from stirring rods in which it is hidden. Many a man who has peered too eagerly into the alchemist's vessels (l. 56: "der guckusz") have been driven into ruin. Already Aristotle asserted that "Die gstalt der ding wandeln sich nicht" (l. 64: "the shape of things doesn't change"). Yet they continue to present copper as gold and dye furs so badly that they lose all their hair.

Sellig on zweiffel ist der man Der sich vor falsch yetz hütten kan (ll. 85–6) (Blessed without doubt is the man who nowadays can protect himself against fraud)

—in a world, that is, where parents cheat their own children, the inn-keeper cheats his guests. All this "bschyssz," for which alchemists provide the chief model, simply prepares the way for the Antichrist.

Since Brant's *Ship of Fools* was the first work in German to become internationally popular—it was rapidly translated into most European languages—it was no doubt well known to Erasmus, who only fifteen years later published his own *Praise of Folly (Moriae encomium seu Laus stultitiae*, 1509). In that work the Dutch philosopher mentions alchemists only in passing, in a section on gamblers and fablers, between those who are so addicted to construction that they build themselves into poverty, and actual dice gamblers. Next to these, he says, are "those who keep on trying, by new and secret skills, to transmute the forms of things, and who ransack earth and sea for a certain fifth essence." Deceiving themselves, they persist in their fruitless endeavors until they have lost all their possessions—and then complain that life is too short. In this brief passage Erasmus does not even go so far as Brant: instead of presenting alchemists as charlatans, he focuses his attention on the fools who are taken in by alchemy's false promises.

more generally, to dirty something or to deceive someone. "Beschiss" or "Beschyss" is the noun that designates the process: an especially filthy deception.

⁵⁵ Desiderius Erasmus, *The Praise of Folly*, trans. Hoyt Hopewell Hudson (Princeton, NJ: Princeton University Press, 1941), 54–5, here 54.

But in his earlier Colloquies, written during the 1490s but not published until 1524, he deals more elaborately with fraudulent alchemists, notably in the dialogue between Philecous and Lalus entitled "Alcumistica." 56 (Another dialogue, entitled "Beggar Talk," concerns mainly the trick familiar at least since Chaucer's tale—of concealing silver in a coal specially hollowed out for the deception.) Here the two speakers are laughing at the tribulations of a mutual acquaintance. For all his other gifts, Lalus says, the wealthy Balbinus has one conspicuous blemish ("naevus" or "mole" on the body): an addiction to alchemy. Philecous replies that surely that is not simply a "blemish" but, rather, a major disease ("insignem morbum"). Lalus then recounts how Balbinus was cheated by a certain priest ("sacerdos quidam"), who—not unlike Chaucer's second Canon—approached him with a shrewd modesty and confessed that he had learned "the innermost core of all philosophy" ("totius Philosophiae medullam"): alchemy. His problem, however, was this: there are two paths to the goal of transmutation, a safe long one ("longatio") and a riskier short one ("curtatio"). Balbinus, excited at the prospect of great riches, assures the sly priest that time and expense are of no consequence, as long as they attain their goal.

The remainder of the story relates the various means by which the priest swindles Balbinus, squandering the money supposedly for equipment on whores and drink. He points out that it takes time to prepare the apparatus properly; that they require a more expensive charcoal; that they must send an offering to the Virgin at a nearby shrine; and so forth—each time, of course, receiving additional funds that he spends on his own vices. Then he returns one day and reports that the authorities have learned that they are practicing alchemy without royal permission ("absque Principis permissu"). Balbinus gives him money with which to bribe the officials. Finally, however, the priest, almost caught by the husband with whose wife he was having an affair, narrowly escapes through a small window. When Balbinus learns of the affair, the priest once again deceives him, saying that he escaped with his life only because the Virgin assisted him. At this point, a man who has known the charlatan for years exposes this "expert" ("artificem") to Balbinus. But Balbinus, instead of having him imprisoned, out of shame gives him additional money with the plea to go away and not to divulge the matter. The impostor gladly does so, knowing that he was in no danger in any case: his status as priest would save him from the scaffold, and the court would not want the expense of keeping him in jail.

⁵⁶ Colloquiorum Desiderii Erasmi Roterdami familiarum opus aureum (London, 1676), 216–22. See also *The Colloquies of Erasmus*, trans. Craig R. Thompson (Chicago: University of Chicago Press, 1965), 238–45.

Both Brant and Erasmus satirized alchemists and warned against their fraudulence but had nothing to say about alchemy as such. Another writer from those years, in contrast, focused entirely on the alchemist's training and career: Salomon Trismosin, allegedly the teacher of Paracelsus and principal author of the *Aureum vellus* or "Golden Fleece," which, in circulation from 1490 onward, was published in 1598 as the first part of the important collection *Eröffnete Geheimnisse des Steins der Weisen oder Schatzkammer der Alchemie* ("Secrets Unveiled of the Philosopher's Stone or Treasury of Alchemy"). Although Schmieder as late as 1832 still treats him as a historical figure—a German whose name may have been Pfeifer—and cites one of his procedures in detail, ⁵⁷ it is widely assumed that the name is legendary and that the writings attributed to him are by different hands.

One tract, however—the one that opens the *Aureum vellus*—is worth discussing in our context: not only because it offers a (perhaps fictional) life of an alchemist around 1500—"The Journeyman's Years of Salomon Trismosin" ("Wanderschafft Salomonis Trismosini")⁵⁸—but also because it provides, as we shall see, a model for another important work a century later. In this autobiographical account "Trismosin" relates how, as a young apprentice, he worked for a miner named Flocker, who was also an alchemist. Although Flocker revealed none of his secrets, Trismosin learned through observation how he took lead and added sulphur until it became fixed and then soft like wax. Adding silver to part of this molten lead, he blended them for half a day; when he separated the silver, it was now half gold. But he refused to confide the secret to his apprentice and soon thereafter fell down a mine shaft and died.

Having seen alchemy practiced by this miner, Trismosin set out in 1473 to find an artist ("Künstler") of alchemy and spent a year and a half learning various skills, but nothing of importance. Boarding everywhere with friends, he made his way first to Labach (in Austria) and then to a monastery in Milan, where he served as apprentice and heard lectures. After a year he traveled around Italy, coming finally to an Italian tradesman associated with a German-speaking Jew. These two, who made English tin look like silver, took him on for fourteen weeks as a servant (actually a puffer), who tended to the fire while they practiced their art, which he learned. Then he traveled to Venice with the Jew, who sold forty pounds of his silver to a Turkish merchant. While they were haggling, Trismosin took a bit of the silver to a goldsmith, who sent him to an assayer on Saint Mark's Place, who tested the silver and found it to be counterfeit.

⁵⁷ Schmieder, Geschichte der Alchemie, 249–54.

⁵⁸ Schatzkammer der Alchemie, 1–5. Also in Splendor solis: Alchemical Treatises of Solomon Trismosin, Adept and Teacher of Paracelsus, trans. J. K. (London: Kegan Paul, [n.d.]), 82–8.

Having seen the fraud ("den Falsch"), he did not return to the Jew, lest he get into trouble. Instead, he consulted the rector of a school in Venice, who sent him to a hospice, where strangers from every land were fed.

The next day, one of the assayer's apprentices approached him, and he admitted that he knew the art of making such "silver." They sent him to a "Centilon" or nobleman who kept a laboratory and needed a German laborant (that is, a lab assistant). He was immediately engaged by the head chemist, a German named Tauler, who took him to their elaborate laboratory in a mansion outside Venice, where each of the nine laborants had his own room and a cook for the whole staff. When Trismosin passed a test to demonstrate his ability, the nobleman praised him in corrupt Latin, rewarded him with twenty-nine crowns, and swore him to secrecy. Trismosin remained there for some time, learning various new operations, including a special process for a new tincture that he carried out in fifteen weeks with the instructions from a Greek manuscript. When the nobleman was drowned in a sea accident, the laboratory was closed by the family, and all the laborants but the chief chemist were paid off.

From Venice, Trismosin journeyed to an unnamed "better place," where books of Kabbalah and magic were entrusted to him, who translated them from Egyptian first into Greek and then Latin. There he became acquainted with the entire treasure of Egyptian lore and learned what tinctures the greatest heathen kings had at their disposal, wondering all the while that God entrusted such secrets to the heathens. After a time, having grasped the basic principle ("der grundt") of this art, he began to work on the best of tinctures (although all of them emerge from a single root). At the end he found a lovely red color more beautiful than any scarlet and more valuable than can be expressed. Through augmentation and with a single part he was able to transmute 1500 parts of silver into the finest gold. Whosoever wishes to concern himself with such great matters, he concludes, must pray frequently, call on God, give alms to the poor, and refrain from evil vices. Accordingly Trismosin has ordered his own disciples to inquire in the Orient and in Hungary for the secret of the Red Leo.

It is not surprising that alchemy was associated with the most notorious magus of those decades, the historical Georg or Jörg Faust (c.1480–1540). Astonishing, rather, is the fact that so little was made of that association at the time. (It was to become a central motif, as we shall see, in Goethe's *Faust*.) The abbot Johannes Trithemius, himself famous principally for his work on cryptography (*Steganographia*, published in 1606), wrote in a letter of 1507 that Faust was "the most perfect of all in alchemy" and

⁵⁹ Cited in Günther Mahal, "Faust und Alchemie," in his: Faust: Untersuchungen zu einem zeitlosen Thema (Neuried: ars una, 1998), 51–8, here 51.

allegedly died in an explosion resulting from an alchemical experiment. ⁶⁰ But the association was not reported by any of the many other contemporaries who mentioned him (for instance, Luther and Melanchthon), and history offers no further details. Nor does alchemy play much of a role in the popular folk book based on his legend, *Historia von D. Johann Fausten* (1587), where he practices astrology, conjurations, and magic of various sorts. But only one chapter (chapter 8), where the word "alchemy" is not mentioned, contains a scene in which the Devil manifests himself to Faust in various apparitions with alchemical associations: first as lion and dragon, then as a lovely peacock, next as a bull and ape, and finally as a heavy mist from which, as it dissipated, a sack of gold and another of silver appeared: a symbolic representation of the *magnum opus*. ⁶¹

TRANSITIONS: FRANCE AND GERMANY

Meanwhile in France a popular and controversial work had appeared that outdoes Chaucer, Brant, and Erasmus in outrageously exuberant ridicule of alchemists. Toward the end of book 3 of François Rabelais's Gargantua and Pantagruel, having consulted various authorities—classical works, a sibyl, Friar John, a theologian, a physician, a lawyer, and a philosopher for answers to Panurge's questions about marriage, Pantagruel and Panurge decide to visit the divine Bacbuc, Oracle of the Holy Bottle. Their sea journey takes them through book 4 and most of book 5 (published 1562-4) and many fantastic adventures before their ship runs aground and they are rescued by a vessel sailing from the kingdom of Quintessence. On board they recognize their old friend Henri Cotiral, who is also known as Cornelius Agrippa: an allusion to Heinrich Cornelius Agrippa von Nettesheim (1486–1535), a scholar and occultist whom Rabelais encountered in 1535 and who abused Rabelais's "diseased" works virulently in a letter to the king's physician. Rabelais takes his not-so-subtle revenge in the following chapters by ridiculing Agrippa's various occult beliefs.⁶²

Cotiral tells them how in Quintessence—the Aristotelian term appropriated by Paracelsus to designate the essence of the various substances—he obtained the ingredients necessary to compound the philosopher's stone. (These ingredients—ass's pizzle, cabbage stump, and a doctoral

Mahal, "Faust und Alchemie," 55.

⁶¹ Historia von D. Johann Faustus, ed. Stephan Füssel and Hans Joachim Kreutzer (Stuttgart: Reclam, 1988), 24–5. See Helen Watanabe-O'Kelly, "Saxony, Alchemy and Dr Faustus," in: *The Golden Egg: Alchemy in Art and Literature*, ed. Alexandra Lembert and Elmar Schenkel (Glienecke/Berlin: Galda und Wilch, 2002), 31–41.
62 N. Martin-Dupont, *François Rabelais* (Paris: Albin Michel, 1910), 280–1.

cap—set the tone for the riotously hilarious treatment of alchemy and other occult arts that is to follow.) When his vessel, filled with alchemists and other occultists from Quintessence, tows their boat from the sands, Pantagruel and Panurge want to reward them with kegs of wine but are prevented by two whales, which drench them with water. Panurge laughs that "this fine salt water will afford them nitre, borax and sal ammoniac in their alchemists' kitchen" (740).63

They then make their way to the kingdom of Quintessence (chapters 19-25), whose queen is Aristotle's goddaughter and, despite her 1800 years, still lovely. Named Entelechia by the philosopher, she speaks in a virtually unintelligible Aristotelian rhetoric and heals incurable illnesses for instance, leprosy—by playing "a tune appropriate to the disease" (743) on her organ, which is made of wood from purgative vegetations. (Agrippa argued, in his De occulta philosophia, that the most severe illnesses could be cured by music). 64 After dinner (chapter 21) they meet some of her alchemists, who treat more ordinary afflictions: for instance, by striking dropsy patients on the belly with an axe, by hanging a foxtail on a feverish patient's belt, by washing the root of an aching tooth with vinegar and drying it in the sun. Another alchemist transforms aged hags into lusty young women. Elsewhere officers whiten the skins of black Africans by rubbing their bellies with the bottom of a basket while others extract water from pumice stone by pulverizing it and changing its substance (the familiar practice of *calcinatio*). Panurge vomits when they witness an officer distilling human urine in a tubful of horse dung and Christian crap—a sacred distillation that lengthens the lives of kings and princes (an allusion to the well-known alchemical practices, attributed to Paracelsus among others, of using urine as an element and excrement for steady heating at a low temperature). Other alchemists argue about the three metaphysical propositions: the shadow of a well-hung ass, the smoke of a lantern, and whether goat's hair is or is not wool (an allusion to the many and often contradictory variants in alchemical tracts). By the time the party leaves the kingdom of Quintessence scarcely a single belief of Agrippa has been left unscourged.⁶⁵

Only two years later in Germany Hans Sachs devoted one of his poems to the topic: "The Story of Emperor Maximilian with the Alchemist" ("Die geschicht Keyser Maximiliani mit dem alchamisten," 1568).66

⁶³ Gargantua and Pantagruel, trans. Jacques Le Clercq (1936; New York: Modern Library, [n.d.]).

Martin-Dupont, François Rabelais, 284.
 Generally speaking, almost all the absurdities described in these chapters can be found in Agrippa's works. See the documentation in Martin-Dupont, *François Rabelais*, 279–307. 66 Hans Sachs, Dichtungen, ed. Karl Goedeke and Julius Tittmann, 3 vols (Leipzig: Brockhaus, 1883-5), vol. 2, 249-53.

The story, based on a legendary incident featuring the seventh-century alchemist Morienus (whose Liber de compositione alchemiae was the first alchemical text translated into Latin) and Sultan Khalid of Egypt, was allegedly the inspiration for Goethe's scene at the imperial court in *Faust II*. The emperor is approached at his court in Wels (Upper Austria) by a roughly clad alchemist who proposes to show him "right thoroughly the art of alchemy, of which I am a free master" ("Recht grüntlich kunst der alchamey, / der ich denn bin ein meyster frey"). The emperor, expressing his own interest in the art, gives him the specified measure of gold plus nine measures of copper, along with quicksilver, salt, sulphur, and the furnace, bellows, tongs, and other equipment the adept requires. After one month, during which the alchemist works in an isolated chamber, the emperor returns to find that the transformation is almost complete. The alchemist tells him to come back in three days, and when he does so he finds a golden cake of exactly ten measures, but the alchemist has disappeared, leaving nothing but a message on the gold:

O keyser Maximilian,
Wellicher dise kunst kan,
Sicht dich nochs römisch reich nit an,
Daß es dir solt zu gnaden gahn.
(O Emperor Maximilian,
Whoever masters this art
Cannot see, for you or the Roman empire,
That matters will turn out well.)

When Maximilian learns that the alchemist was a Venetian, he realizes that the message has been sent to him by an enemy of the Holy Roman Empire. When the poet next returns to Wels, the emperor has died.

THE FOURTH WAVE: GERMANY AND ENGLAND

Yet another wave of satires peaked around 1600, beginning with John Lyly's (1554–1606) pastoral comedy *Galathea* (1592). The alchemist and his two servants, Peter and Rafe, appear in several scenes that are almost wholly unrelated to the main plot surrounding the rescue of two lovely maidens meant to be sacrificed to Neptune. The reader quickly realizes that Lyly's language and character portrayal are indebted extensively to Chaucer's *Canon's Yeoman's Tale*. When we first see Peter (act 2, scene 3), who is black from his smoky labors, he is complaining about the miserable life he leads with his master in terms that themselves are a travesty of the art:

Nothing but blowing of bellows, beating of spirits, and scraping of crosslets. It is a very secret science, for none almost can understand the language of it: sublimation, almigation, calcination, rubification, incorporation, circination, cementation, albification, and fermentation, with as many terms unpossible to be uttered as the art to be compassed. $(51)^{67}$

As the astonished Rafe listens, he goes on to list the instruments: "crosslets, sublimatories, cucurbits, limbecks, decensors, vials, manual and mural, for imbibing conbibing, bellows mollifactive and indurative" along with some twenty metals. Rafe wonders how he might learn the alchemist's cunning and serve the master who "with one pound of gold will go near to pave ten acres of ground." (We are reminded of Chaucer's alchemist, who could allegedly pave the road to Canterbury with gold.) Peter warns him that he must first understand the terms, beginning with the four spirits. Rafe misunderstands the word "spirits" to mean devils, but Peter corrects him and lists the spirits, which Rafe continues to misunderstand. As for quicksilver, he remarks that "my silver is so quick that I have much ado to catch it," and he takes orpiment to be not a spirit "but a word to conjure a spirit." The dialogue continues in this humorous tone when the alchemist joins them and takes on Rafe as his assistant to replace Peter, who says that "My master is so ravished with his art that we many times go supperless to bed, for he will make gold of his bread" (57).

By the time of their next appearance (act 3, scene 3) Rafe has already learned his lesson and responds, when the alchemist tells him that he has not yet seen "the end of my art": "I would I had not known the beginning. Did not you promise me of my silver thimble to make a whole cupboard of plate, and that of a Spanish needle you would build a silver steeple?" (69). He, too, leaves the alchemist, saying: "An art, quoth you, that one multiplieth so much all day that he wanteth money to buy meat at night." In his final appearance (act 5, scene 1) Rafe tells his brother Robin in raucous terms that his master could indeed multiply. "Why, man, I saw a pretty wench come to his shop, where with puffing, blowing, and sweating, he so plied her that he multiplied her" (91). He explains that he made two of her one "by the philosopher's stone"—stones, he says (with obvious reference to the alchemist's testicles) that "lie in a privy cupboard."

Three years later Georg Rollenhagen published his *Froschmeuseler* (1595), an almost twenty-thousand-line poem in rhyming tetrameters based on the classical *Batrachomyomachia*. Rollenhagen (1542–1609), a theologian who was rector of the school at Magdeburg and a pastor at Saint Sebastian's

⁶⁷ John Lyly, Galatea, ed. George K. Hunter, and Midas, ed. David Bevington (Manchester: Manchester University Press, 2000).

church in that city, used the pseudo-Homeric animal epic as a vehicle for moral reflections on early German bourgeois society and culture.⁶⁸ The poem revolves around a war between the frogs and the mice, triggered by the death of Prince Bröseldieb, son of the mouse king, who is drowned when Bausback, the frog king, tries to carry him home across the lake but drops him into the water when he is frightened by a snake. Only the last of the three books deals with the war; the first two are filled mainly by conversations while Bröseldieb is enjoying a friendly visit among the frogs.

The chapters dealing with alchemy (chapters 15–17 of book 1) occur in a long section in which Bröseldieb is informing the frogs about the enemies of mice, and notably Murner, a lovely but licentious young woman whom God transformed into a cat as punishment for her sins: when a mouse creeps out from the altar on her wedding day, she takes it for a handsome young man and tries to embrace it—hence her hatred of mice. Subsequently she becomes the godmother of Reineke the fox, the two go hunting together, and Reineke relates many stories—among them one about an alchemistic gold beetle ("Goldkefer") who teaches Reineke how to make the philosopher's stone.

The entire narrative, which consists wholly of motifs familiar from other treatments, is consistently satirical because of its animal context. The gold beetle (in English, a rose beetle; but its German name carries the desired association with gold) was once, he relates, a goldsmith in Venice and then a monk in a mendicant order, where from an old brother he learned the secrets of nature and, above all, how to make gold from all metals. (Again we note, as in satires going back by way of Erasmus to Chaucer, the association of alchemists with representatives of the church.) As proof, he took a glass vessel from his sleeve into which he placed a bit of pure quicksilver and:

ein braun püluerlein Genant der Philosophen stein Und bey den Moren Elixier.⁶⁹ (4079–81) (a brown powder called the philosopher's stone and, among the Moors, elixir.)

The beetle told him that the powder was "the supreme soul of all metals" (l. 4099: "Die oberst Seel aller Metallen"), which has the power to heal all illnesses, to rejuvenate the old, and to cause plants to blossom and bear

⁶⁹ Georg Rollenhagen, *Froschmeuseler*, ed. Dietmar Peil (Frankfurt am Main: Deutscher Klassiker Verlag, 1989).

⁶⁸ See in this context Jan M. Ziolkowski, *Talking Animals: Medieval Latin Beast Poetry*, 750–1150 (Philadelphia: University of Pennsylvania Press, 1993).

fruit in the winter. Sure enough, the mercury disappeared, and in its place pure gold emerged, which Reineke had tested and which proved pure.

He approached Reineke, the gold beetle continued, because his old monk told him that Reineke's father knew the same secret, but that he could prepare the brown powder in a much shorter and less costly manner. (We hear echoes of Erasmus's *longatio* and *curtatio*.) Reineke replied that he knew nothing of such matters and that his father was long deceased. He wonders why, if gold can be made so easily, so few know how to do so. At that the gold beetle began to weep "as the crocodile weeps tears when he intends to eat someone" and promised to disclose all his knowledge if Reineke would only help. There are so few adepts, he explained, because over the centuries there has been so much opposition to alchemy: by Emperor Tiberius, who opposed glass-making; by Diocletian, who had the alchemical books in Egypt burned; and by more recent emperors and popes (alluding, for instance, to Henry IV of England and Pope John XXII).

Reineke swears that he knows nothing of alchemy but that he would share his entire fortune to learn the art. The beetle pledges him to secrecy lest he share the fate of "Daniel Beuthe" (actually David Beuther (1575–82), a gold assayer who, imprisoned for neglecting his work for alchemical experiment, chose suicide) or "Thurnheuser" (Leonhard Thurneysser (1530–86), who had to flee from the court of Brandenburg when his alchemical demonstrations turned out to be charlatanry). The beetle then cites many examples for the various metaphors and images used by alchemists to keep their art arcane: the planets, sun and moon, red man and green lion, dragon eating its tail, and others. If one adds gold's soul to another metal, he instructs, then the latter becomes pure gold—a transmutation the possibility of which Pythagoras taught and that Apuleius illustrated with his story of the golden ass.

If anything is to appear, then one must know its seed, which must be fed and warmed as in the mother's body. He gives several examples (glass, iron, eggs) and concludes:

Wenn man nun Gold wil wachsen lassen Braucht man hie der kunst gleicher massen. Vnd lest des Goldes samen fallen Jn allerley Ertz und Metallen Hilfft das mit fewr bald zu recht Was sonst die Natur langsam brecht. (ll. 4349–54) (If one wants to make gold grow, then one also needs art of the same kind here.

⁷⁰ See Peil's notes to his edition, 830.

And lets the gold's seed fall into all kinds of ores and metals,
Helps it with fire to accomplish what otherwise Nature brings about slowly.)

He then describes how to make the philosopher's stone (according to a fairly standard formula). One heats gold with quicksilver for forty days until the mercury has evaporated and only a black powder remains; the powder is distilled until a dampness emerges and is poured back seven times until, after 188 nights, it becomes silver-white, and then yellow and red. (We recognize the stages of *albedo*, *citredo*, and *rubedo*.) This is then allowed to "sweat" for forty-two days until, having attained a carbuncle-red color, it is now the philosopher's stone. This, in turn, will be even better if it is left in the vessel for 272 days (the length of a human pregnancy), and then the glass is shattered. A mere "loth" (about 10 grams) of this powder has the power to transform 350 loths of metal into pure gold.

The following chapter sketches a brief and quite haphazard history of alchemy based on contemporary theories of the biblical and mythological analogies that were soon to produce such works as Maier's Atalanta fugiens and Flamel's Le Livre de figures hieroglyphiques. Beginning with Archimedes, who first defined the difference between gold and silver (by size and weight), he recapitulates Raymundus Lullus's method of multiplying gold and stresses the importance of the alchemist's furnace. He assures Reineke that the ancient poets were describing alchemy when, for instance, Jason fetched the Golden Fleece (according to legend, the fleece had either been turned golden by alchemy or, conversely, bore inscribed on it the secrets of alchemy), when Hercules obtained the golden apples of the Hesperides, when Aeneas broke the branch that provided access to the underworld, and so forth. He lists such reputed alchemists as the Arabic Geber, Gilgilid (Gilgil of Sevilla), Morienus, the biblical Heber, along with Lullus, Nullus (for the rhyme?), and Theophrastus. Noah, Moses, and Solomon were all reputedly alchemists as well as more recent rulers in Italy and Germany. If only Reineke's father were still alive, he concludes, the process would not take nearly so long and one could make the elixir from lesser materials.

By this point (chapter 17) Reineke was so eager to learn the secret of alchemy that he took from his wife, children, and relatives all the gold he could find and constructed "ein musterlich distillier Hauß" (l. 4716: "a model distilling house") with all the necessary appurtenances. The gold beetle/monk/alchemist set to work—but no eating fare was too elegant for him, and Reineke and his wife even had to keep an eye on him when

he sat with their daughter (a typical allusion to the lechery of the clergy). After ten months he said that only three more days were needed before the gold would acquire the ruby's glitter. Reineke summoned the skeptical pastor to witness the successful outcome, but at the last minute, as all were sitting around the athanor, the vessel exploded, his wife fainted, the pastor ran out the door, and the alchemist lamented that he had never before failed. Then it occurs to him that he had failed to consult the astrologers, as the ancients instructed. And Reineke resolves to cooperate yet again:

Es wolt doch nicht helffen viel fluchen Jch must daran das letzt versuchen Wie der Spieler nicht ehe abließ Biß jhms der ledig Beutel hieß. (ll. 4813–16) (Much cursing served no purpose. I had to try yet again, As the gambler doesn't stop Until his empty purse tells him to.)

So they undertook the whole process once more, this time calculating carefully the day, hour, and minute for beginning. But again there was an explosion, and the iron vessel was blown out the chimney into the sea. This was enough for Reineke:

Jch sprach / der Teuffel wag es mehe.
Es ist geld vnd erbeit verlorn
Vnd gieng dauon in grossem zorn. (ll. 4850–2)
(I said, let the Devil dare it further.
Money and work have been lost
And [I] went away in great anger.)

Meanwhile the monk took his winnings and disappeared, "as though an evil spirit had led him" (l. 4855: "Als hett jhn ein böß Geist gefürt"). But Reineke caught his assistant, who explained the whole deception: how the monk had removed the gold and replaced it with *auripigmentum*, how he used a hollowed stirring rod with a bit of gold powder sealed within or concealed it in his sleeve; and other tricks familiar from *The Ship of Fools* and Erasmus's *Colloquies*. When his assistant asked him why he perjured himself, he answered:

Kinder solt man mit Zucker stellen Die Alten mit Eidschweren fellen. (ll. 4907–8) (Children you bring about with sweets, The oldtimers you win over with sworn oaths.) "That's how I made gold," Reineke ends, and is tormented by his wife, who makes fun of the Ship of Solomon in which his money sailed to India. The *lapis philosophicus*, he concludes, is ultimately a *spittaloficus* (ll. 4929–30: from the word "Spittal" or "hospital," alluding to the illnesses that frequently resulted from alchemical practices).

In the broader European context that includes Rabelais's hilarious adventures and Rollenhagen's equally outlandish verse epic, Ben Jonson's The Alchemist (1610) does not appear so unique as when it is considered within a specifically English context.⁷¹ Like the other two it ridicules alchemists and, especially, the gullibility of those who are willing to sacrifice everything for the promise of quick riches, while taking aim at the hypocrisy of contemporary society. But in Jonson's dramatic context we see this satirization not as a narrative but as stage action in various scenes that exemplify a self-gratifying desire for transformation of the individual through the magic of alchemy: the gullible clerk who wishes to become a great gambler; the tobacconist with dreams of triumph as a merchant; a rich knight who hopes to relieve the world of illness and poverty; an angry country bully who aspires to become a skillful duelist in words and sword and to marry off his sister to wealth; hypocritical Puritans who trade off the possessions of their poor to gain wealth scarcely a class of English society that goes unscathed by Jonson's satire, which has rightfully been called "a vehement and most successful attack on the atmosphere of imposture and fraud which prevailed in early Jacobean London"⁷²—a fully comparable match for Gargantua and Pantagruel and Froschmeuschel as indictments of their respective French and German societies.

The person to whom they turn is Subtle, a con artist who casts horoscopes, reads palms, sells charms, pimps for his female companion, and also works as the alchemist of the play's title. He and his whorish companion Dol have set up their practice in the London house of Lovewit, who has left town to avoid the plague and entrusted his affairs to his butler, Jeremy—a rogue who is known as Face. Face came upon Subtle and Dol eaking out a scarce living in the London suburbs with "conjuring, coz'ning, and your dozen of trades" (I.1.40).⁷³ With the agreement that

⁷¹ I cannot agree with Linden, *Darke Hierogliphicks*, in his otherwise insightful interpretation (118–31), when he calls the world of Jonson's comedy "richer, more varied, and infinitely more comic than any created before him" (131). More comic than Rabelais? More varied than Rollenhagen?

⁷² Read, *The Alchemist*, 39.

⁷³ Quoted by act, scene, and line from: Ben Jonson, *The Alchemist*, ed. Alvin B. Kernan (New Haven: Yale University Press, 1974).

they would share their spoils, he set them up in his master's house, giving Subtle:

credit for your coals, Your stills, your glasses, your materials, Built you a furnace, drew you customers, Advanced all your black arts...(I.1.42–5)

Whatever alchemy is practiced takes place off stage; we never see Subtle's laboratory although Lovewit, upon his return, finds in an adjoining room smoke-stained walls, "a few cracked pots, and glasses, and a furnace" (V.5.40). But the play, and notably acts 2 and 3, is filled with the rhetoric of the Art, which Jonson knew well from various sources he had studied: Paracelsus, George Ripley, Vincent of Beauvais, and Nicolas Flamel among others.⁷⁴ In the opening scene we meet Subtle, who, angered in his quarrel with Face, calls him a vermin "ta'en out of dung" and says that he:

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. (I.1.68–71)

That speech provides a representative example not only of Jonson's mastery of the alchemical terminology but also of his use of the theory of alchemy to describe the transformation of base human beings as well as base metals. As Linden puts it, *The Alchemist* is "a compendium of commonplace ideas, motifs, situations, and images derived from the traditions of alchemical writing and alchemical satire." After Dol soothes the quarreling twosome, who are sometimes said to have been inspired by the figures of Jonson's contemporaries, John Dee and Edward Kelley, they begin to defraud their various all-too-willing victims—initially by means other than alchemy.

The swindle of the clerk Dapper is accomplished by seeming conjurations involving the Queen of Faery, and the young tobacconist Drugger is satisfied by chiromancy when he inquires how to locate the doors and

 $^{^{74}\,}$ Edgar Hill Duncan, "Jonson's Alchemist and the Literature of Alchemy," PMLA 61 (1946): 699–710.

⁷⁵ Linden, *Darke Hierogliphicks*, 119. See also Read, *The Alchemist*, 40, who calls it "one of the best and most accurate repositories of the ideas and vocabulary of seventeenth-century alchemy."

⁷⁶ Réad, *The Alchemist*, 47. The association is vigorously denied by Linden, *Darke Hierogliphicks*, 317 n. 16. For a balanced appraisal see Kernan's Appendix II, 243–4, to his edition of *The Alchemist*.

shelves of his shop. After those two successes Face reminds Subtle, the "smoky persecutor of nature," that:

something's to be done
Beside your beech-coal, and your cor'sive waters,
Your crosslets, crucibles, and cucurbites.
You must have stuff brought home to you to work on! (I.3.100–3)

It is only in the second act with the entrance of Sir Epicure Mammon that alchemy becomes central. He has been supporting Subtle's experiments for some time, we gather, and has come today to witness the final stage of the magnum opus that he has funded: "This night I'll change / All that is metal in my house to gold" (II.1.29-30) and, moreover, intends to buy up all the lead of local plumbers for further transformations. He hopes to use the stone, "the perfect ruby, which we call elixir" (II.1.48), not only to advance his own sexual exploits but also to cure the sick, rejuvenate the elderly, and "fright the plague / Out o' the kingdom in three months" (II.1.69-70). He tries to convince his skeptical friend Surly, himself a clever "gamester," that the Art has its roots in venerable figures of antiquity: Moses and his sister, Solomon, and even Adam, who wrote in German on cedar board. He offers further proof in such familiar legends as Jason and the Golden Fleece, the Midas touch, and the apples of the Hesperian garden (motifs that we have encountered in earlier writings). Face promises him that in only three hours he will see the "projection" (the addition of the reddish powder of the stone to the base matter to be transformed). Face, nicknamed "Lungs" for his function as the alchemist's puffer, assures him that the material has already displayed "your several colors, sir, / Of the pale citron, the green lion, the crow, / The peacock's tail, the plumèd swan" even, finally, the red sanguis agni (II.2.25-8). Then Subtle comes in and informs Mammon that they have "a med'cine of the triple soul, / The glorified spirit" (II.3.30-1). He instructs Face to turn down the heat in the aludels (condensation pots), to infuse vinegar, and leave the substance "closed in balneo" (in a warm sand bath). All this pretentious alchemistic jargon provokes the cynical Surly to exclaim, "What a brave language here is! next to canting!" (II.3.42), while Mammon dreams of founding colleges, building hospitals, and marrying young virgins.

Then Subtle begins to prepare Mammon for the inevitable failure (II.3.55ff.) because the "complexion" of the material is not perfect, and he worries that Mammon's piety is not firm. But he intends to take additional measures. He talks of "feces there calcined" from which he won "the salt of mercury," but it yields only "ground black" and not the perfect crow's-head black. Then "the retort brake, / And what was saved was put into the pelican, / And signed with Hermes' seal" (II.3.77–9). As Mammon hands

over even more money, Surly sneers that he's being obviously "cozened." When Mammon becomes impatient, Subtle warns him not to be hasty:

I exalt our med'cine By hanging him in *balneo vaporoso*, And giving him solution; then congeal him; And then dissolve him; then again congeal him. For look, how oft I iterate the work, So many times I add unto his virtue. (II.3.102–7)

As the scene continues we hear more alchemistic rhetoric—not for the purpose of explaining the art in any rational manner but simply in order to impress the gullible Mammon. Subtle explains the generative theory underlying alchemy. Even the earth does not breed perfect gold instantly, he reminds us, but only slowly. The elementary matter, deprived of moisture, becomes stone or, retaining more "humid fatness," turns to sulphur. "Nature doth first beget th'imperfect; then / Proceeds She to the perfect" (II.3.158–9). While Mammon is impressed, Surly still regards alchemy as "a pretty kind of game, / Somewhat like ticks o' the cards, to cheat a man / With charming" (II.3.180–2). He recites dozens of alchemical terms upon which no adepts appear to agree, but Subtle replies that the terms are used intentionally "to obscure their art."

When Mammon has departed, the Puritan Deacon Ananias announces himself as "a faithful brother," which Subtle willfully misunderstands to mean a fellow alchemist, asking him if he is:

A Lullianist; a Ripley; *Filius artis*? Can you sublime and dulcify? Calcine? Know you the sapor pontic? Sapor styptic? Or what is homogene, or heterogene? (II.5.8–11)

Once again the scene with Mammon is essentially repeated. Subtle, still intent on impressing through sheer pseudo-erudition, instructs Face to "name the vexations, and the martyrizations / Of metals in the work," and Face responds with the familiar list of stages in the *magnum opus*:

Sir, putrefaction, Solution, ablution, sublimation, Cohobation, calcination, ceration, and Fixation. (II.5.21–4)

Ananias has come to notify Subtle that the Brethren are unwilling to pay any more money until they see some results, especially since they heard that at Heidelberg an alchemist created a stone much more economically from an egg and a bit of metal shavings. In a fury, Subtle sends him away, saying that their experiment—"the aqueity, / Terreity, and sulphureity" (II.5.84–5)—will coalesce again and spoil unless they come back within the hour with his payment.

When Ananias (act 3) returns with his pastor, Tribulation Wholesome, he still has his doubts about Subtle, but Tribulation wishes to further their holy cause. Subtle tells them that they arrived just in time to prevent everything from being reduced to cinders. When Tribulation says that the gold will go to propagate a good cause, Subtle expresses his own wish to help "for charity and conscience' sake" (III.2.117)—provided they've brought enough money—but that it will take more time:

How's the moon now? Eight, nine, ten, days hence, He will be silver potate; then three days Before he citronize: some fifteen days The magisterium will be perfected. (III.2.127–30)

When the two Puritans go back to consult the Brethren, Mammon returns (act 4) to witness the projection of his stone. As he waits, he meets Dol, now dressed as a fine lady, and takes her off into the garden. Subtle, detecting a problem with their Great Work, attributes it to Mammon's "unchaste purpose" with the woman. Sure enough, Face rushes in to report that:

All the works

Are flown *in fumo*, every glass is burst. Furnace and all rent down, as if a bolt Of thunder had been driven through the house. Retorts, receivers, pelicans, bolt-heads, All struck in shivers! (IV.5.65–70)

At this point, for all practical purposes, the exoteric alchemical motif has ended, and we hear little more about it as, in act 5, the various dupes arrive at the house, only to find that Subtle and Dol have flown, albeit without their accumulated loot, while Face remains behind as the faithful butler of Lovewit, the master of the house, to benefit from the profits of the deceivers ultimately deceived. As for the esoteric message, Jonson appears to hold what Alvin Kernan calls "a conservative conception of the inescapable slowness and limits on the possibility of change and the dependence of any change in man on improvement of his moral nature." The hopes of the various figures—frauds and defrauded alike!—for a rapid change in their fortunes and their characters are all disappointed. Indeed, the only figure who benefits from all these deceptions is the one who had no part in them: Lovewit, who returns from the country to discover in his cellars an

⁷⁷ Kernan, "Introduction," in: Jonson, *The Alchemist*, 15.

unexpected fortune and a new wife (the wealthy widowed sister of the young lout from the country).

A PARADOXICAL POSTLUDE

One of the most famous alchemical works in its day was the Chymical Wedding of Christian Rosencreutz (Chymische Hochzeit: Christiani Rosencreutz, 1616). We know today that the work was a spoof written in 1605 by a student of theology in Tübingen named Johann Valentin Andreae (1586–1654), whose many writings prove that he was contemptuous of the alchemists and charlatans who had duped his susceptible father.⁷⁸ In the eulogy to his mother, for instance, he speaks of "the deceivers who tried to sell [his father] various products of their arts" ("impostores, qui varias artes venditabant") and of "a worthless mob of alchemists injurious to our family" ("inutilem chymicorum, & rei familiari noxiam turbam").⁷⁹ In light of this early disdain we should approach the *Chymical* Wedding of Christian Rosencreutz with considerable caution. In his vita he calls the work a *ludibrium*—a "jest" or "fantasy" written when he was only nineteen years old-and expresses his astonishment that it should have been taken seriously: evidence, he concludes of "the inanity of the curious" ("inanitatem curiosorum").80 The interpretations have continued unabated into the present.

The notoriously difficult text, incorporating many literary allusions and autobiographical details, has been widely interpreted.⁸¹ "Chymical wedding," we already know, is a technical term for a stage in the alchemistic process to produce the philosopher's stone: the chemical coagulation of

⁷⁸ See Wilhelm Hossbach, *Johann Valentin Andrea und sein Zeitalter* (Berlin: Riemer, 1819); and Martin Brecht, *Johann Valentin Andreae 1586–1654: Eine Biographie* (Göttingen: Vandenhoeck & Ruprecht, 2008).

⁷⁹ Johann Valentin Andreae, *Gesammelte Schriften*, ed. Wilhelm Schmidt-Biggemann (Stuttgart: Frommann-Holzboog, 1995), vol. 2, 54 and 62.

⁸⁰ I have not had access to the Latin original, which is quoted extensively in the various biographical works: here John W. Montgomery, *Cross and Crucible: Johann Valentin Andreae, Phoenix of the Theologians* (The Hague: Nijhoff, 1973), 37, who renders *ludibrium* as "fantasy." See Vickers, "Frances Yates and the Writing of History," *Journal of Modern History* 51 (1979): 287–316, here 292–6, for an insightful discussion of *ludibrium* and of Andreae's critique of the Rosicrucians.

⁸¹ See, for instance, R. Kienast, Johann Valentin Andreae und die vier echten Rosenkreutzer-Schriften (Leipzig: Mayer & Müller, 1926), 37–98; Richard van Dülmen, Die Utopie einer christlichen Gesellschaft: Johann Valentin Andreae (1585–1654), part 1 (Stuttgart: Frommann-Holzboog, 1978), 64–73; and Stanley W. Beeler, The Invisible College: A Study of the Three Original Rosicrucian Texts (New York: AMS Press, 1991), 73–88.

material in the conjunction of sulphur and quicksilver that symbolizes the conjunction of sun and moon, mind and soul. So from the title page on we understand that the wedding described in the fiction will represent an alchemical process either literally or symbolically or both. The colon preceding his name in the original German title makes it clear that it does not involve the wedding *of* Christian Rosencreutz but a work by him about a wedding he attends.⁸²

Rosencreutz's lengthy account covers a period of seven days. (The number seven, representing the usual seven stages of the alchemical process, constitutes an important structural element in the story).⁸³ The first-person narrator is an elderly hermit, whose age is repeatedly mentioned in the course of the narrative, setting him apart from most other figures. On the Thursday before Easter in the year 1459 (a date that we learn only later) he receives an invitation, signed by Sponsus et Sponsa (the two betrothed) and delivered by a lovely messenger, to a wedding that is to take place in the immediate future. Following a dream involving a rope to salvation let down seven times from heaven (the Hermetic correspondence of above and below?) Christian sets out the next day (II) and after various adventures reaches the palace, where at the first gate he hands over his invitation and introduces himself as "the Brother of the Rosy Red Cross" (Rosencreutz means "rosy cross"). Proceeding through two more gates, he is given new shoes, groomed by barbers, and joins others invitees, who are welcomed by a lovely virgin who introduces herself as their "President."

On day III the young woman, whose name, as we learn from a numerical conundrum, is Alchimia (74),84 orders the group, ranging from kings and emperors to charlatans and lowly hermits, to undergo a test of worthiness: each one is weighed in a golden Scale of Virtue with up to seven weights: a test that most—including vainglorious kings and pretentious alchemists who boast that they can manufacture the healing

⁸² I cite the text in my own translation from: Joh. Valentin Andreae, Fama Fraternitatis (1614) Confessio Fraternitatis (1615) Chymische Hochzeit: Christiani Rosencreutz. Anno 1459 (1616), ed. Richard van Dülmen (Stuttgart: Calwer Verlag, 1973). English translations of all three works are available in: A Christian Rosenkreutz Anthology, ed. Paul M. Allen (Blauvelt, NY: Rudolf Steiner Publications, 1968), which reproduces the classic 1690 version of The Chymical Wedding by Ezechiel Foxcroft and the 1652 versions of The Fame and Confession of the Fraternity of the Rosie Cross by Thomas Vaughan. A more readable version of The Chemical Wedding of Christian Rosenkreutz has been published by Joscelyn Godwin, Magnum Opus Hermetic Sourceworks, no. 18 (Grand Rapids, MI: Phanes, 1991).

⁸³ On the "sevenfold architecture" of the work see especially McLean's commentary in Godwin's translation of *Chemical Wedding*, 107–57.

⁸⁴ Kienast, *Rosenkreutzer-Schriften*, 64–5. "Alchimia" also appears as a lovely young woman in the illustrations for Leonhard Thurneisser's *Quinta essentia* (1574), a work that Andreae may well have known.

stone—fail. They are sent away while Christian and a few others who pass are admitted into the Order of the Golden Fleece and Lion. (We have encountered the Golden Fleece as a familiar alchemical symbol several times already.) The next morning (IV) their virgin guide leads the group up 365 steps to a room where they meet three royal couples—an old king with a young queen, a middle-aged black king with an aged spouse, and two young ones—with whom they dine and watch the performance of a play with seven acts. (The action of the play roughly symbolizes the action of the novel itself.) Afterwards, in a bloody wedding act, the three royal couples, now dressed entirely in black, are beheaded by a black executioner (obvious the nigredo stage of the magnum opus) and, with their blood separately bottled, placed in coffins while their Moorish executioner's head is put into a small casket. Alchimia tells the astonished guests that it is their responsibility to revive the kings and queens through their alchemy. That night Christian sees seven ships with the six royal coffins and the seventh chest sail away across the sea.

The next morning (V) Christian explores forbidden parts of the palace, where in an underground mausoleum he finds a grave with the perfectly preserved body of Venus. Because he dares to admire her naked beauty Cupid pricks his hand with his arrow—a fateful gesture because it signifies Christian's earthly-human side and makes it later impossible for him to attain the highest realm of perfection and condemns him to remain on earth. After a false burial of the six coffins at the palace, Alchimia conducts the alchemists, accompanied by seven virgins, in seven ships across the sea to an island with the Tower of Olympus.

The sixth day is filled with a series of procedures that are supposed to bring the kings and queens back to life. As the alchemists gradually ascend the first six floors of the tower, they produce at each stage a product in the life-restoring process: an essence of stones and plants; a distillation brewed from the Moor's head and the bodies of the six kings and queens; and an egg generated from that distillation, which they place in a great copper vessel which bears the inscription:

QUOD

Ignis: Aer: Aqua: Terra: SANCTIS REGUM ET REGINARUM NOSTR. Cineribus. Eripere non putuerunt. Fidelis Chymicorum Turba IN HANC URNAM Contulit. (191)

(What

Fire, Air, Water, Earth From the sacred ashes of our kings and queens were unable to extract, the faithful band of alchemists gathered in this urn.)

A magical bird emerges from the heated egg, which, after it is fed the blood collected earlier from the decapitated bodies, first turns black and behaves wildly and then, more tamely, is bathed and undergoes a variety of color changes. The bathwater is heated until it is transformed into a blue stone, which is powdered and rubbed into the skin of the bird, which is now wholly blue with a white head. (We recognize here a wildly exaggerated description of the alchemical sequence of colors.)

Then the bird is decapitated, incinerated, and its ashes collected.

At this point Christian and three others are singled out and conducted up through the seventh level to an attic room with seven domes, where under the supervision of a wise old man they mix the bird's ashes with the specially prepared essence of stones and plants into a dough, which they pour into two small molds and bake in an oven. Opening the cooling molds, they discover two tiny homunculi made of human flesh. When they sprinkle the forms with drops of the bird's blood, they quickly grow to normal human size. Then in a mystical ceremony the still lifeless bodies are covered with cloth, surrounded with blinding lights, and have wreathed trumpets placed in their mouths.

During this entire process Christian alone realizes that his companions are being deceived by an illusion: they believe that their alchemy and fire from the wreathed trumpets have revivified the young king and queen when, in fact, Christian alone saw a "bright stream of fire" (115: "ein hellen Fewrstriemen") from heaven shoot through an opening in the ceiling and into the lifeless bodies. When the bodies come to life, they are clothed in royal garb and accompanied back down the stairs.

On the last day the alchemists are informed by their mistress Alchimia that they have now been elevated to Knights of the Golden Stone. In a vast fleet the alchemists sail back to the palace with the royal entourage, where Christian, in deference to his long gray beard and venerable age, is seated next to the young king. When they reach the first gate the elderly gate-keeper, once a famous astrologer, hands the king a petition asking to be relieved of his duties. It turns out that he too, like Christian, had once viewed the naked Venus and had thus been condemned to guard the gate until another sinner volunteered to relieve him. At a great banquet a page

⁸⁵ This is no doubt meant as an allusion to the so-called "Hermetic Bird" or "Bird of Hermes," as described in a poem by George Ripley in the *Theatrum chemicum Britannicum*, 376–7: "When all his Fethers be agon, / He standeth still there as a stone; / Here is now both White and Red, / And also the Stone to quicken the dead."

reads aloud the five articles governing the conduct of the new Knights of the Golden Stone and Christian signs the book, providing for the first time his full name and the date of 1459 (thus locating the action of the account 150 years in the past). At this point the king tells Christian that he knows that Christian succumbed to the beauty of Venus and must guard the gate until another sinner comes to relieve him—something that will not happen before the birth of the king's future son. After the others have taken their leave, Christian is led with two other elderly gentlemen, the old man from the tower and the king's astrologer, into a splendid chamber with three beds and . . . At this point the work breaks off and ends with the brief notation of the alleged editor that two pages are missing from the manuscript and that Christian, who had feared he must remain as guardian of the palace gate, has returned home.

Obviously the work with its multiple sevens, its ceremonies of deaths and rebirths, and its Order of the Golden Stone, amounts to a satire on alchemy and alchemists.⁸⁶ Christian is a detached observer when the false alchemists fail their test in the Scales of Virtue and when the various alchemistic procedures are conducted on the sixth day; and it is suggested that the revivification of the young king and queen, if not an act of God, is an illusion produced with various magician's tricks. But the satirical intention was lost upon many contemporary readers, who took the work as a serious tract providing the basis for the Order of Rosicrucians. It was this text that first provided the full name of Christian Rosencreutz, reputedly the founder of the order. (The name itself has been persuasively explained as an allusion to the heraldic shield of the Andreae family, which bears a red X-shaped St Andrew's Cross with four roses in the interstices.) When Christian sets out he is wearing a white linen cloak strapped crosswise with a blood-red band and a hat sporting four red roses. And the text includes at one point an encrypted date, 1378, which was subsequently reputed to be the birth date of Christian Rosencreutz, making him eighty-one years old.

The work, now generally accepted as a fiction,⁸⁷ was long regarded by many Rosicrucians as a true account of an episode from the life of a

⁸⁶ For a detailed day-by-day commentary on the alchemistic details of the narrative see the edition by Bastiaan Baan: Johann Valentin Andreä, *Die Chymische Hochzeit des Christian Rosencreutz*, trans. Agnes Dom-Lauwers (Stuttgart: Urachhaus, 2001); and McLean's commentary to Godwin's translation.

⁸⁷ For an appreciation of Andreae as an important writer of the early Baroque, a role generally ignored in literary histories, see Christoph Brecht, "Johann Valentin Andreae: Zum literarischen Profil eines deutschen Schriftstellers im frühen 17. Jahrhundert," in: Martin Brecht, *Andreae*, 313–48.

"historical" Christian Rosencreutz. 88 As to why Andreae waited ten years to publish this youthful jeu d'esprit, various reasons have been advanced: that it was submitted to the publisher without his knowledge and even against his wishes; that, at the beginning of his professional ecclesiastical career, he published it to repudiate the two "Rosicrucian Manifestos," which had been wrongly attributed to him and which, he feared, might damage him professionally; that, by portraying Rosencreutz as a "Christian Everyman" skeptical of alchemistic nonsense, he published it in an effort to "christianize" the Rosicrucian movement. 89

It is unnecessary for our purposes at this point (see Chapter 7) to consider the Fama, one of the two "manifestos" that discuss the (utterly fictional) founding of the "order." Written around 1610, several years after Andreae composed his Chymical Wedding, it emerged presumably as a collaborative project from the group of his Tübingen friends and describes the life of Brother Christian Rosencreutz (mentioned only as "Fr. C. R."), ending with a general invitation to its readers to join the movement he founded. While the Fama contains no specific mention of alchemy, it is implied that C. R., when he went to the Near East, learned Arabic and studied the secret knowledge of the scholars there. However, its form suggests that the author was acquainted with the brief autobiography of Salomon Trismosin, which had been first published only a few years earlier in Basel as the opening piece in the famous alchemical tract Aureum vellum (1598), for they are the two most notable and influential "autobiographies" of reputedly famous alchemists. As for the Chymical Wedding, while it lost much of its significance for alchemy, it became and has remained—increasingly important as one of the central texts of the growing Order of Rosicrucians.

With the major exception, then, of Salomon Trismosin's "autobiography" virtually all the depictions of alchemists from Dante to the *Chymical Wedding* are negative. At this point, while alchemists did not

⁸⁸ It should be mentioned that Rudolf Steiner and his anthroposophic followers take the work quite seriously as "gates into the spiritual world" and "genuine spiritual experience." See Steiner's essay "The Chymical Wedding of Christian Rosenkreutz" (1917–18) in: *A Christian Rosenkreutz Anthology*, ed. Paul M. Allen (Blauvelt, NY: Rudolf Steiner Publications, 1968), 19–59.

Montgomery, *Cross and Crucible*, 228. For a sense of the disagreements among those who take the work seriously see Adam McLean's contemptuous rejection in his introduction and commentary to Godwin's translation of *The Chemical Wedding*, esp. 107–10: of Montgomery's "appalling attempt" to explain its Lutheran orthodoxy; of Steiner's "vague waffling" in his "disappointing attempts" to align its ideas with his anthroposophy; of the equally "uncompromising" and "slavish" adherence of other anthroposophists to Steiner's "idiosyncratic views"; and of the "convolutions" of Frances Yates's allegorically historical interpretation. The path to the Palace is indeed treacherous terrain.

wholly disappear from literature, they lost the fascination that they had exercised for over three centuries on literary satirists. In the seventeenth and eighteenth centuries alchemy—not alchemists—appeared primarily as metaphor in poetic works. 90 The loss of interest even among satirists is due to at least several factors, both social and intellectual. Most immediately, the Thirty Years War (1618-48) on the continent and, in England, the Civil Wars (1642-6, 1648-51) and Restoration forced upon writers new subjects and upon the emerging bourgeois public more urgent concerns. Significantly, in his mock-heroic epic Hudibras (1663-78), in which he satirized almost every other manifestation of the occult, Samuel Butler hardly felt it worth his while to go after alchemists. The conspicuous lack of success of alchemical experiments, coupled with the growing contempt for charlatans in an increasingly rationalistic-realistic society, spurred little curiosity about the art. More generally, the critical attitude of scientists, who were moving toward a modern conception of chemistry, gradually destroyed the basis for any belief, even theoretically, in the promises of alchemy. To be sure, the Art did not immediately lose its supporters, as we noted in the first section of this chapter. But with the gradual loss of public relevance alchemists lost their appeal for satirists. When they re-emerged as a literary object almost two centuries later, it was under entirely new auspices.

⁹⁰ For the situation in England see Linden, *Darke Hierogliphicks*, 193–223.

Romanticizations, or Cauda Pavonis

METAPHORICAL TRANSITIONS

After the satires of Jonson and Andreae the figure of the alchemist virtually disappeared from literature, if not from life, for almost two centuries. But the Art itself, thanks to its widespread cultural familiarity, remained a common motif in literature, as in Shakespeare's sonnet 33:

Full many a glorious morning have I seen Flatter the mountain-tops with sovereign eye, Kissing with golden face the meadows green, Gilding pale streams with heavenly alchemy

where the term, awakening no associations with mysterious adepts in their hidden laboratories, simply underscores the glories of a sunny morning.¹

In *Paradise Lost* Milton alludes several times to the geological theory underlying alchemy. In book 1 (ll. 670ff.) Satan sends his minions to a volcanic hill that "Shone with a glossy scurf, undoubted sign / That in his womb was hid metallic ore, / The work of Sulphur"—the familiar agent of transformation. Opening "a spacious wound" in the mound, the crew digs out "ribs of gold" with which they construct Pandemonium, their capitol. When Satan flies to earth in book 2 (ll. 588ff.) he lands in a place radiant with metals both silver and gold and with precious stones, including

a stone besides, Imagined rather oft than elsewhere seen, That stone, or like to that, which here below Philosophers in vain so long have sought; In vain, though by their powerful art they bind Volatile Hermes, and call up unbound

¹ See Charles Nicholl, *The Chemical Theatre* (London: Routledge and Kegan Paul, 1980), 154–225, for an "alchemical reconstruction" of *King Lear*; Nicholl deals exclusively with English literature *c*.1600, including Jonson and Donne (119–35).

In various shapes old Proteus from the sea, Drained through a limbec to his native form.

Following this reference to the philosopher's stone and to the Hermetic processes whereby mercury is fixed and seawater distilled in an alembic, he goes on to describe the natural process whereby the sun, the archalchemist, through heat mixed with the moisture of the earth, produces the earth's treasures:

What wonder then if fields and regions here Breathe forth elixir pure, and rivers run Potable gold, when with one virtuous touch The arch-chemic sun, so far from us remote, Produces, with terrestrial humor mixed, Here in the dark so many precious things Of color glorious and effect so rare?

In book 5 (ll. 433ff.), when Raphael sits down to dine with Adam and Eve, "with keen dispatch / Of real hunger, and concoctive heat / To transsubstantiate," Milton uses images from alchemy to explain how a spiritual being can digest:

what redounds transpires
Through spirits with ease; nor wonder; if by fire
Of sooty coal the empiric alchemist
Can turn, or holds it possible to turn
Metals of drossiest ore to perfect gold,
As from the mine.

Again, alchemy provides nothing but images to illustrate the narrative, and we note the poet's qualification of his statement that the alchemist can transmute by adding: "or holds it possible."

One of the most prolific manipulators of the metaphor was John Donne (1571–1631), who uses it in both a negative and positive sense. In "The Sunne Rising," for instance, he defines the sheer ecstasy of lying in bed with his beloved:

Princes doe but play us; compar'd to this, Al honors mimique; All wealth alchimie²

where "alchimie" suggests nothing more than a poor imitation of the real thing. In "Loves Alchymie" the image retains its negative connotation, but here it is reversed to define the lover's sense that, failing to find "that

² I cite the text from *The Complete Poetry and Selected Prose of John Donne*, ed. Charles M. Coffin (New York: Modern Library, 2001), 11, 31, 34–5, 49, 247.

hidden mysterie," he has obtained no more than the stenches that emerge from the alchemist's egg-shaped flasks:

Oh. 'tis imposture all:

And as no chymique yet th'Elixar got,
But glorifies his pregnant pot,
If by the way to him befall

Some odiferous thing, or medicinall,
So, lovers dreame a rich and long delight,
But get a winter-seeming summers night.

Generally, however, as Stanton J. Linden has astutely observed, the alchemical image in metaphysical poetry is used "in such a way that only its root meaning of *change and transformation* and its *energizing potential* are initially present and visible; that is, rid of its narrowly satiric conventional associations, it is at first emotionally and intellectually 'neutral.'"³ In "A Nocturnall upon S. Lucies Day," for instance, the poet tells those who would be lovers to consider his example, for "by loves limbecke"

I am every dead thing,
In whom love wrought new Alchimie.
For his art did expresse
A quintessence even from nothingnesse,
From dull privations, and leane emptinesse.

Yet, it should be stressed, alchemy provides only one set of images in a poem that otherwise draws on several other sources for its imagery. In "The Dissolution" the poet takes the initial stages of the *magnum opus*—the dissolution of the matter into its *materia prima*—to describe the death of the beloved.

Shee'is dead; And all which die
To their first Elements resolve;
And wee were mutuall Elements to us,
And made of one another.

In "Resurrection, Imperfect" Donne uses the Christian analogy of the *magnum opus* to designate Christ's death and resurrection. Between crucifixion and resurrection, he imagines, the savior causes his body to undergo the transformation from gold to the elixir. In the crypt it is first reduced to a mineral, which then emerges as the tincture that can transmute other lesser metals and even create life:

Whose body having walk'd on earth, and now Hasting to Heaven, would, that he might allow

³ Stanton J. Linden, *Darke Hierogliphicks: Alchemy in English Literature from Chaucer to the Restoration* (Lexington: University Press of Kentucky, 1996), 155.

Himselfe unto all stations, and fill all, For these three daies become a minerall; Hee was all gold when he lay downe, but rose All tincture, and doth not alone dispose Leaden and iron wills to good, but is Of power to make even sinfull flesh like his.

The same Christianizing use of alchemical images may be found in other poetry of the period, both English and German. Henry Vaughan (1621–95), for instance, as twin brother of the alchemist Thomas Vaughan, was quite familiar with the theory of alchemy, as we know from his poem *The Chemist's Key* (1657), which is based on Heinrich Nolle's *De generatione rerum naturalium* (1613). Alchemy, he assures us, is not for the charlatans but only for the devout:

The greedy cheat with impure hand may not Attempt this art, nor is it ever got By the unlearned and rude; . . .

. . .

Vaughan, Complete Poems, 151-3.

But the sage, pious man, who still adores And loves his Maker, and his love implores, Whoever joys to search the secret cause And series of his works, their love and laws, Let him draw near, and joining will with strength, Study this Art in all her depth and length.⁴

Like Donne, Vaughan uses alchemical metaphors to explain the miracle of resurrection, as in "Resurrection and Immortality." In this dialogue "Body" wonders if providence will "keep his covenant even with our dust." "Soul" assures the "poor, querulous handful" that "no thing can to *Nothing* fall" but returns like the phoenix:

For a preserving spirit doth still pass
Untainted through this mass,
Which doth resolve, produce, and ripen all
That to it fall; . . .
but when time's restless wave
Their substance doth deprave
And the more noble *Essence* finds his house
Sickly, and loose,
He, ever young, doth wing
Unto that spring,
And *source* of spirits, where he takes his lot

⁴ Henry Vaughan, *The Complete Poems*, ed. Alan Rudrum (Harmondsworth: Penguin, 1976), 429.

Till time no more shall rot His passive cottage; . . .

But Vaughan's poems tend to be more generally Hermetic in their images than specifically alchemical.⁶ In sum, it is not surprising that we find such a wide range of allusions to alchemy generally in English literature since, as Schmieder observed in his history: "If Britannia were contesting with Gaul and Germania, as did formerly the three jealous goddesses, for the Golden Apple, then Paris would surely grant her the prize because she has certainly made the most important contributions to the history of alchemy."⁷

Moving across the Channel, we find precisely the same exploitation of alchemical metaphors in the work of religious poets for whom the notion of alchemical transmutations provided a viable model for universal renewal and redemption—even a mystical transformation that might take place in this world.⁸ Indeed, the standard work on the language of German Pietism calls alchemy "perhaps the most widespread complex of images serving as a metaphor for purification of the soul." In her volume devoted to the passion of Jesus (*Des Allerheiligst- und Allerheilsamsten Leidens und Sterbens Jesu Christi...*, 1683) the Protestant mystic Catharina Regina von Greiffenberg (1633–94) appeals to Jesus in alchemical terms, much as Donne does:

Wann ich auch bin längst gestorben /
lebe doch dein Lob in mir.

Wann der Leib im Grab verdorben /
blüh erst deine ehr herfür.

Aus der asch wachs eine blum /
nemlich Jesu Lob und ruhm.

Meines leibs verwesne erden /
müß ein glori-garten werden.¹⁰

(When I too have long been dead, may your praise live yet in me. When the body has rotted in the grave, may then your honor blossom forth. From the ashes may grow a flower

⁶ See Linden, *Darke Hierogliphiks*, 224–46.

⁷ Karl Schmieder, Geschichte der Alchemie (1832), ed. Franz Strunz (Munich–Planegg: Barth, 1927), 571.

⁸ See Burkhard Dohm, *Poetische Alchemie. Öffnung zur Sinnlichkeit in der Hohelied*und Bibeldichtung von der protestantischen Barockmystik bis zum Pietismus (Tübingen: Niemeyer, 2000), 1–18, here 15.

⁹ August Langen, *Der Wortschatz des deutschen Pietismus*, 2nd edn (Tübingen: Niemeyer, 1968), 71. It includes several examples not cited here (71–5).

¹⁰ Greiffenberg, *Sämtliche Werke*, 10 vols, ed. Martin Bircher and Friedhelm Kemp (rpt. Millwood, NY: Kraus, 1983), vol. 9, 174–6 (= 4, Betrachtung).

Namely Jesus' praise and glory.

My body's decomposed earth
must become a garden of glory.)

As Burkhard Dohm puts it: "In the Paracelsan–Hermetic tradition, the vegetable life-form of a flower arises through 'putrefactio' from its ashes as the product of the body's incineration." (Greiffenberg regards flowers as God's incorporation on earth.)

Virtually the same image is used by the Pietist poet Christian Friedrich Richter (1675–1711) in his poem "Mein Freund zerschmeltzt aus liebe' in seinem Blut" ("My friend [Jesus] melts out of love in his blood"), in which the death of Christ is said to drive away the poet's death and to provide a way to Paradise:¹²

Nun wird mein gold im leiden rein gefeget: der ofen ist das creutz; der test das hertz; die schlacke ist, was sich in gliedern reget; der schmeltzer ist mein freund; die glut der schmertz. Muß gleich das gold durchs feuer gehen, so bleibt es doch verklärt in seinem tiegel stehn. (Now my gold is swept clean in suffering:

the oven is the cross; the proof my heart; the cinders are what moves in my limbs; the smelter is my friend; the heat is pain.

The gold must go directly through the fire, then it will remain transfigured in its crucible.)

One scholar explains that "After this purification the lyrical I is purified and reborn because it has regained its original golden nature as a result of the grace won by the crucifixion and with the blood of Jesus as a fiery transforming agent in an alchemistic process." 13

The last strophe essentially repeats the same alchemical analogy.

Mein Gott! entzünd in mir des creutzes flamme, laß dessen glut des geistes gold durchgehn, und stärcke mich in dem erwürgten Lamme, daß ich verklärt im tiegel bleibe stehen.

Wenn gleich das fleisch sich kläglich stellt, gnug, daß der neue mensch im creutz den sieg erhält.

¹¹ Dohm, Poetische Alchimie, 57.

¹² Quoted from Agnes Köneke Hansen, "Alchemistisches Erlösungsdenken und göttliche Harmonie," in: *Text & Kontext: Jahrbuch für Germanistische Literaturforschung in Skandinavien* 30 (2008): 71–111, here 72–3.
¹³ Hansen, "Alchemistisches Erlösungsdenken," 90–1.

(My God, ignite in me the flame of the cross, let its heat penetrate the spirit's gold, and strengthen me in the strangled lamb, so that I remain transfigured in the crucible. Even if the flesh appears wretched, enough, if the new man obtains victory in the cross.)

In the American colonies, meanwhile, influences from Germany¹⁴ and England combined to inspire several generations of alchemists, from John Winthrop (1606–76), the "Hermes Christianus" of America, to the physician Samuel Danforth (1696–1777).¹⁵ While practicing alchemists were rare, the tradition of alchemical images inspired the poets, and most prominently the Puritan divine and physician Edward Taylor (1642–1729).¹⁶ Taylor, who emigrated from England at age sixteen, had nothing but contempt for run-of-the-mill alchemists:

The Boasting Spagyrist (Insipid Phlegm, Whose Words out strut the Sky) vaunts he hath rife The Water, Tincture, Lozenge, Gold, and Gem, Of Life itselfe. (*Meditation* 1.9)¹⁷

But he stood in awe of "God Chymist," who distils from the Rose of Sharon a "Rosy Oyle" as a "Balm for Conscience" as well as a "Cordiall" that "ease doth Heart burns Causd by Sin" (*Meditation* 1.4). It was God the Alchemist who "by thy gracious Chymistry" made cordials/elixirs from Christ's "Carkass" with which to liberate mankind from death: "To free from Death makst Death a remedy" (*Meditation* 1.34). The poet prays for the transmutation of his own soul by a clearly alchemical process:

But if thy Altars Coale enfire my heart,
With this Blesst Life my Soule will be thy Sparke.
I'm Common matter: Lord thine Altar make mee.
Then sanctify thine Altar with thy blood:
I'll offer on't my heart to thee. (Oh! take mee)
And let thy fire Calcine mine Altars Wood,
Then let thy Spirit breath, as Bellows, blow
That this new kindled Life may flame and glow. (*Poems*, 249)

Julius F. Sachse, The German Pietists of Provincial Pennsylvania, 1694–1708 (1895; rpt. New York: AMS, 1970).
 Cotton Mather, cited by Randall A. Clack, The Marriage of Heaven and Earth:

¹⁵ Cotton Mather, cited by Randall A. Clack, *The Marriage of Heaven and Earth: Alchemical Regeneration in the Works of Taylor, Poe, Hawthorne, and Fuller* (Westport, CT: Greenwood, 2000), 7, and 41–7.

Clack, Marriage of Heaven and Earth, 13–39.

¹⁷ Cited by series and number from: *The Poems of Edward Taylor*, ed. Donald E. Stanford (New Haven, CT: Yale University Press, 1960).

Again, we recognize images familiar from the English religious and German Pietist tradition. Indeed, it is no exaggeration to say that one cannot fully appreciate Taylor's poetry without some familiarity with the basic alchemical tropes. But, like his English and German contemporaries, Taylor portrays no earthly alchemists—only the divine Chymist.

It is unnecessary for our purposes to cite further examples, of which many might be adduced, ¹⁸ for they essentially illustrate the same point. Although the alchemist disappears from the literature of the period, the religious poetry of the seventeenth and early eighteenth centuries frequently adapts alchemical images for metaphorical purposes, and notably to illustrate by analogy to the creation of the philosopher's stone in the *magnum opus* the resurrection of the faithful through their belief in Christ. The *magnum opus* of alchemy, in sum, has been wholly cleansed of its negative and satirical associations and spiritualized as a symbol for the sublimating power of Christ.

THE RE-EMERGENT ALCHEMIST IN ENGLAND

When the alchemist reappeared in literary works of the late eighteenth and early nineteenth centuries, it was simply as one among various manifest-ations of the occult, and not a leading one, ¹⁹ that attracted writers—and readers!—of the period who were dismayed by the rapid rationalization of the world and society. ²⁰ A culminating example of this trend was William Godwin's (1756–1836) late work, *Lives of the Necromancers, or An Account of the Most Eminent Persons in Successive Ages Who Have Claimed for Themselves, or to Whom Has Been Imputed by Others, the Exercise of Magical Power* (London, 1834), where alchemy is cited only after divination, augury, chiromancy, astrology, sorcery, and various other occult practices. The main purpose of his book, Godwin stated in the opening sentence of his preface, was "to exhibit a fair delineation of the credulity of the human mind" (v)—as a "salutary lesson" presumably for those of his contemporaries who were still credulous enough to give credence to such practices. In

See Dohm, Poetische Alchemie, passim; and Linden, Darke Hierogliphicks, 154–92, 224–59, for many more examples.
 Ann B. Tracy, The Gothic Novel, 1790–1830: Plot Summaries and Index of Motifs

¹⁹ Ann B. Tracy, *The Gothic Novel, 1790–1830: Plot Summaries and Index of Motifs* (Lexington: University Press of Kentucky, 1981), determines that only three out of 208 novels include alchemy or alchemists.
²⁰ See Claus Priesner, *Grenzwelten: Schamanen, Magie und Geisterseher* (Hamburg:

See Claus Priesner, *Grenzwelten: Schamanen, Magie und Geisterseher* (Hamburg: Merus, 2008); and his "Alchemie im Zeitalter der Aufklärung: Geheimgesellschaften und Adeptengeheimnisse," *Archiv für Kulturgeschichte* 13 (2011): 385–414.

the few pages devoted to the art itself (29–32) it is defined as "the craft... of converting the inferior metals into gold, to which was usually joined the *elixir vitae* or universal medicine, having the quality of renewing the youth of man, and causing him to live for ever." Listing Solomon, Pythagoras, and Hermes among its "distinguished votaries," Godwin mentions its transmission to more recent times by the "Arabians." The art has been "pursued by multitudes," who were constantly baffled when on the verge of success. A brief paragraph hints at the process: ingredients, heat, color, and so forth. The fact that even the minutest error could cause the experiment to fail provided artful imposters with excuses for the miscarriage. "The most flourishing pretenders to the art boasted that they had also a familiar intercourse with certain spirits of supernatural power." Among the many biographical sketches that follow he portrays such representatives as Michael Scott, Albertus Magnus, Roger Bacon, Raymond Lull, Arnold of Villeneuve, Cornelius Agrippa, Paracelsus, and Doctor Dee.

The aspect of alchemy that most fascinated Godwin was its alleged power as elixir to prolong life. Forty years earlier, in the first edition of his Enquiry concerning Political Justice (1793), he had included speculations about the possibility of human immortality—speculations omitted in the second edition lest they detract from the more soberly political argument of his work.²¹ It was this same interest that drew him around that time to a work entitled Hermippus redivivus, or The Sage's Triumph Over Old Age and the Grave. Wherein a method is laid down for prolonging the life and vigour of man. The work, loosely translated into English by John Campbell (London, 1744), was based on a medical satire (in Latin) by the German physician Johann Heinrich Cohausen (1665–1750), a humorous account of the life of the Greek comic Hermippus, who was allegedly kept alive to the age of 115 by constantly inhaling the breath of young maidens.²² The narrator supports the theory by reporting an alleged conversation between the French physician and traveler Sieur Paul Lucas (1664-1737), and a Middle Eastern dervish, who assured him that the philosopher's stone "is not a chimerical Science... but a Thing solid and sound" and that, by its means, some happy Mortals "had extended their Days to such a Length, as to go with Decrepitness, that must attend such an excessive Age, into another State."23

²¹ See Siobhan Ni Chonailla, "Why may not man one day be immortal?': Population, Perfectibility, and the Immortality Question in Godwin's *Political Justice*," *History of European Ideas* 33 (2007): 25–39.

²² See Anne Marie Roos, "Johann Heinrich Cohausen (1665–1750), Salt Iatrochemistry, and Theories of Longevity in his Satire, *Hermippus Redivivus* (1742)," *Medical History* 51 (2007): 181–200.

Johann Heinrich Cohausen, Hermippus redivivus (London, 1744), 100-1.

A passage in that satire, Godwin tells us in the preface to *St Leon: A Tale of the Sixteenth Century* (1799), "suggested the first hint of the present performance." He goes on to remark (in words close to those in *Lives of the Necromancers*) that "the philosopher's stone, the art of transmuting metals into gold, and the *elixir vitae*, which was to restore youth, and make him that possessed it immortal; formed a principal object of the studies of the curious for centuries." But Godwin's purpose is quite different from that of earlier writers, who invariably took the figure of the alchemist as an object of satire. Godwin focuses instead on the misery into which the attributes of the stone can plunge its possessor and on the lack of social understanding for those who try to use its power for positive ends. He hopes, "by kindling [the reader's] sensibility, and harmonising his soul... to render him more prompt in the service of strangers and the public" (52).

The novel is related in form to other works of the recently popular English Gothic romances and translated German Bundesromane (novels about secret societies): Friedrich Schiller's The Ghost-Seer (Der Geisterseher, 1789), Carl Grosse's The Genius (Der Genius, 1791-5), Ann Radcliffe's The Mysteries of Udolpho (1794), M. G. Lewis's The Monk (1796), and others.²⁵ In a Europe torn apart by the political wars of Francis I and Charles V in Italy as well as the religious turmoil of Protestants and Catholics in Germany along with Turks and Christians in Hungary, it recounts the unremitting series of calamities that destroy the life of Reginald de St Leon, scion of a distinguished French family. Following a privileged youth; military distinction in the Battle of Pavia (1524/5), which wins him the favor of the king; and, released by their deaths from the watchful eyes of older advisers, "two years in habits of life and a mode of expense extremely injurious to my patrimony" (80), he marries Marguerite de Damville: an idealized portrait of Godwin's own recently deceased wife, Mary Wollstonecraft. For ten years on his country estate he is blissfully happy with Marguerite and their children, a son and three daughters. When he takes his son to Paris, ostensibly to provide him with the best possible education, he falls into his old ways and manages to gamble away his entire fortune.

From this point on (chapters 6–47) his story amounts to a downward spiral. With the faithful Marguerite and family he moves to Switzerland,

²⁴ William Godwin, *St Leon: A Tale of the Sixteenth Century*, ed. William D. Brewer (Togonto: Broadview, 2006), 50.

²⁵ On the form and motifs of the *Bundesroman* see especially Marianne Thalmann, *Der Trivialroman des 18. Jahrhunderts und der romantische Roman: Ein Beitrag zur Entwicklungsgeschichte der Geheimbundmystik* (Berlin: Ebering, 1923).

where they establish themselves on a small rural property, which is destroyed by a terrific storm. Unable, as non-citizens, to get support from the government, they are expelled and move to a village near Constance in southern Germany, where St Leon supports his family as a gardener at the episcopal palace. When he falls ill the bishop refuses to help, but St Leon manages to recover a bit of money from his property in Switzerland. Then, in 1544, an emaciated stranger arrives at their habitation who, pursued by the Inquisition, proposes to share a great secret with St Leon on the condition that he pledge that he will never reveal to his wife, children, or any human being what he learns. Initially St Leon resists on the grounds that he has never failed to share everything with his wife. But later, when the stranger is on the point of death, he agrees and learns "two principal particulars; the art of multiplying gold, and the power of living for ever" (185). Using his new power to become wealthy again, he moves his family into Constance but must lie to his wife and children about the source of the money—lies that cause his son to leave the family, when his father is accused of dishonorable behavior, and bring about the reproaches of his wife. Jailed in Constance by the Protestants on moral grounds, he appeals to the French representative for help but gets none.

Eventually he bribes the jail keeper for his release and flees to Italy, to a village near Pisa, where he practices "chemistry" in the hope that his "secret operations might become a valuable subsidiary to the pursuits of my future life" (267). His black servant Hector unwittingly betrays his secrets to his girlfriend, who repeats them to another suitor who, out of jealousy, spreads rumors about the family. The shamed Hector leaves, and St Leon tries to appease the villagers inflamed by the rumors, but they burn his house. The family flees again, this time to Barcelona, where Marguerite dies. Having sent his daughters to France under the care of a guardian, he is spied upon and then arrested by the Inquisition for necromancy and spends twelve years in prison. Barely escaping the autoda-fé of 1559 in Valladolid, he finds himself rejuvenated and made immortal by the power of the stranger's secret. Visiting his daughters in the guise of an Armenian (suggested by the Armenian in Schiller's Ghost-Seer?), he learns that the oldest daughter died of despair when her fiance's father prohibited their marriage on the grounds that her own father was disreputable.

He then goes to Hungary, where he seeks with his wealth and a new identity to stimulate the shattered economy by building and agriculture, ²⁶ but again base motives are attributed to him. He is taken in by a new

²⁶ In this connection see Yota Batsaki, "From Alchemy to Experiment: The Political Economy of Experience in William Godwin's St Leon: A Tale of the Sixteenth Century," in

friend, the misanthropic Bethlem Gabor (whose name is borrowed from Gabriel Bethlen or Bethlen Gabor, the anti-Habsburg Calvinist prince of Transylvania), who soon and apparently without motivation turns against him, imprisons him in his castle, and then cheats him of the huge ransom paid through his secret powers. Gabor dies when his castle is besieged by Christian armies under the leadership of St Leon's son, Charles, who after so many years fails to recognize his father in his rejuvenated condition. They become friends, but the friendship is ruined when Charles becomes (without cause) jealous of his father's friendship with his beloved Pandora. He challenges St Leon to a duel, but St Leon, rather than run the risk of killing his own son, leaves yet again, and the novel ends almost precipitately.

Although the entire plot is predicated upon St Leon's possession of the alchemical secrets of transmutation and immortality, we learn astonishingly little about alchemy or alchemists. In fact, on at least two occasions alchemists are mentioned negatively. Once, we learn, a "pretended alchemist in France had obtained a certain sum of money of me, and demanded more" (172). Later, when Marguerite is dismayed by his refusal to share his secret with her, she tells him that she has guessed it. "The stranger who died your guest was in possession of the philosopher's stone, and he has bequeathed to you his discovery" (225). But she goes on to state that "an adept and an alchemist is a low character" (227). Otherwise we hear very little about the means through which St Leon acquires his wealth and immortality.

St Leon confides in the opening paragraph of his first-person narrative, written years after the fact, that he is a living instance of "the great secret of nature, the *magnum opus*, in its two grand and inseparable branches, the art of multiplying gold, and of defying the inroads of infirmity and death" (53). For he has in his possession "the choice of being as wealthy as I please, and the gift of immortal life." So we know from the outset that we are reading the autobiography of an alchemist. But when his wife is dying, he is unable to save her because "the elixir might not, or rather could not, be imbibed by any other than an adept" (230). We have already noted that, in the village near Pisa, St Leon dedicated his intervals "to chemistry and the operations of natural magic," which, to conceal them from his wife, he hid in a grotto near their house. He confides to a friend in Pisa that "I indulged freely in the study of chemistry, and was of those persons, ordinarily accounted visionaries, who amused themselves with the expectation of finding the philosopher's stone" (285). When he is

Fictions of Knowledge: Fact, Evidence, Doubt, ed. Yota Batsaki et al. (New York: Palgrave Macmillan, 2012), 174–92.

jailed by the Inquisition, an informer tries cunningly to win a confession by talking "miscellaneously and digressively of wizards and their familiars, of possessions and demons, of charms, spells, talismans and incantation, even of the *elixir vitae* and the philosopher's stone" (325). And when he is imprisoned by Gabor, who demands a huge ransom, Gabor inspects his chest to discover that it contained no gold, but "crucibles, minerals, chemical preparations, and the tools of an artist. You are possessed of the grand arcanum, the philosopher's stone" (402). Later his son reproaches him with winning his beloved's affection with magical incantations. "You are said to be a magician, a dealer in the unhallowed secrets of alchymy and the *elixir vitae*" (446). Beyond this there is nothing about the actual practice of alchemy and no satire of the alchemist per se. Instead St Leon exposes the downside of unexplained wealth and examines the negative implications of the immortality whose possibility he had proposed only six years earlier in his *Political Justice*. We have come a long way indeed from Ben Jonson's Alchemist. But Godwin's novel, despite satires and negative reviews for its alleged anti-Christian views, ²⁷ sold quite well and, in particular, influenced two younger successors.

Percy Bysshe Shelley's St Irvyne, or The Rosicrucian: A Romance (1811), published anonymously by "A Gentleman of the University of Oxford," is clearly indebted to Godwin's novel for the mysterious Ginotti, an alchemist cursed, like St Leon, by the gift of immortality. To the extent that he drifts in and out of the hero's life in various guises, revealing finally that he has been in control of that life from the beginning and—presumably as an emissary of the Rosicrucians, although that society plays no role in the novel itself—guiding the hero's way in life throughout, the novel also belongs to the popular genre of the German Bundesroman. The hero, Wolfstein, heir of a wealthy German potentate, has been forced to leave home for unspecified reasons and ends up in the Swiss Alps, where he joins a group of mountain bandits. When they capture Megalena di Metastasio, the daughter of an Italian count, he falls in love and rescues her by poisoning the chieftain. With the assistance of Ginotti, who demands of him an oath for future protection, he escapes with her to Genoa. There his passion gradually cools and, again like St Leon, he gambles heavily and is on the point of losing everything when, suddenly, a stranger appears at the gambling table: Ginotti. Mystified, he follows him, but Ginotti warns him not to inquire:

"Long have I marked you as the only man who now exists, worthy, and appreciating the value of what I have in store for you. Inscrutable are my

²⁷ See Brewer's introduction to St Leon, 35–6.

intentions; seek not, therefore, to develope them: time will do it in a far more complete manner. You shall not now know the motive for my, to you unaccountable actions: strive not, therefore, to unravel them." (213)²⁸

Soon thereafter a lovely Genoan named Olympia falls in love with Wolfstein and, going to his palace, offers herself to him. Rejected, she swears vengeance while the jealous Megalena demands her death. When Wolfstein goes to Olympia's palazzo to kill her, he finds himself unable to do so; but she stabs herself. Because he will be accused of her murder, Wolfstein and Megalena leave Genoa and arrive at a dark and desolate castle in Bohemia, where the love between the couple soon degenerates into disgust and contempt. Then Ginotti arrives at the castle and reveals to Wolfstein "that every event in your life has not only been known to me, but has occurred under my particular machinations" (256). Ginotti asks him to listen as he finally reveals his secret. He tells Wolfstein about his youthful studies of "metaphysical calculations" and his skepticism about the existence of a First Cause (271). As a student in Salamanca, depressed by the death of a fellow student, he was contemplating suicide when he was suddenly overwhelmed by a lovely vision and belief in the existence of "a superior and beneficent *Spirit*" (272). But his vision was interrupted by a phantasm displaying a hideous countenance and, at the same time, signs of the lovely vision. "Ever, from that day, did a deep-corroding melancholy usurp the throne of my soul. At last, during the course of my philosophical inquiries, I ascertained the method by which man might exist for ever, and it was connected with my dream" (275). He tells Wolfstein that he paid a dear price for his knowledge, which he may communicate to one man alone and then forgo his own claim to it. Wolfstein swears an oath that is not revealed, whereupon Ginotti tells him to take:

"—— and —— and ——; mix them according to the directions which this book will communicate to you. Seek, at midnight, the ruined abbey near the castle of St. Irvyne, in France; and there—I need say no more—there you will meet with me."

Wolfstein hastens to St Irvyne, where in the gloomy vaults of the chateau he discovers the body of Megalena. When Ginotti arrives, he says that he is "blasted to endless torment" and asks Wolfstein if he will deny his Creator. Wolfstein protests that he will agree to anything but that. Suddenly lightning flashes, a voice howls that Ginotti is doomed to eternal life, and his frame "mouldered to a gigantic skeleton, yet two pale and ghastly flames glared in his eyeless sockets" (298) while Wolfstein expires

²⁸ Percy Bysshe Shelley, *The Prose Works*, 4 vols, ed. Harry Buxton Forman (London: Reeves and Turner, 1880), here vol. 1.

over him: "over him had the power of hell no influence." But Ginotti is condemned to "a dateless and hopeless eternity of horror."

This story is interrupted from time to time by a seemingly unrelated narrative beginning at the chateau of St Irvvne, where Eloise departs to accompany her sick mother to Geneva. On the way they are assisted by a group of mountain bandits (the same band with which Wolfstein was associated), whose leader impresses her with his "superhuman loveliness" (238). When they reach Geneva, her mother soon dies, and Eloise receives a note asking her to meet her mysterious friend from the mountains. He introduces himself to her as Frederic de Nempere but refuses to return with her to St Irvyne, inviting her instead to stay with him at his country house near Geneva, where he gradually succeeds in luring her "from the paths of virtue" (264). Then Nempere, having succeeded in his seduction of Eloise, loses heavily at gambling and offers her in payment to the English Chevalier Montfort. Montfort takes her to his house, where she meets the Irishman Fitzeustace, with whom she gradually falls in love. When Montfort rushes back to London—apparently because he has killed Nempere— Eloise and Fitzeustache get married and, returning to England, "tasted that happiness, which love and innocence alone can give. Prejudice may triumph for a while, but virtue will be eventually the conqueror" (295).

A brief concluding paragraph tells us that Ginotti was also Nempere and that Eloise is Wolfstein's sister: so both were tempted by the same "Rosicrucian." "Let then the memory of these victims to hell and malice live in the remembrance of those who can pity the wanderings of error" (298).

Despite its confused and improbable narrative, we recognize the novel's indebtedness to Godwin's earlier work and the genre of the *Bundesroman*. To be sure, Ginotti with his seductions and corruptions of the siblings is a much nastier figure than St Leon with his ultimately beneficent dream of helping humanity, yet both represent the melancholy alchemist, who is condemned to an eternity that he is fated never to enjoy.

Shelley returned briefly to the figure of the alchemist, albeit as a curiously ambivalent metaphor, in his poem "Alastor; or the Spirit of Solitude" (1815). In an early passage the poet writes:

in lone and silent hours,
When night makes a weird sound of its own stillness,
Like an inspired and desperate alchymist
Staking his very life on some dark hope,
Have I mixed awful talk and asking looks
With my most innocent love...(ll. 29–34)²⁹

²⁹ Shelley, *Poetical Works*, ed. Thomas Hutchinson, new edn by G. M. Matthews (London: Oxford University Press, 1970), 14–31.

Then following this negative image we find, in the concluding lines of the long poem, a positive metaphor reminiscent of the golden dawn in Shakespeare's sonnet:

O, for Medea's wondrous alchemy, Which wheresoe'er it fell made the earth gleam With bright flowers, and the wintry boughs exhale From vernal blooms fresh fragrance! (ll. 672–5)

Shelley's wife and Godwin's daughter, Mary, paid tribute to her father in the dedication to her novel Frankenstein, or The Modern Prometheus (1818) and in its early pages. Her hero, Victor Frankenstein, whose last name echoes that of Wolfstein and whose birthplace, Geneva, reminds us of Eloise's adventures, tells us that "natural philosophy is the genius that has regulated my fate" and goes on to explain his "predilection for that science" (67).³⁰ At age thirteen, he reports, he became enthusiastic about the works of Cornelius Agrippa, even though his father urged him not to waste his time upon such "sad trash" (68). But since his father did not take the trouble to explain to him that the chimerical principles of Agrippa had been entirely exploded by "a modern system of science," the youth did not reject Agrippa but, instead, procured his whole works as well as those of Paracelsus and Albertus Magnus, whose "wild fancies" he studied "with delight" (68).31 Since he had not attended lectures at the schools of Geneva, his "dreams were therefore undisturbed by reality; and I entered with the greatest diligence into the search of the philosopher's stone and the elixir of life" (69). He did not seek wealth but rather, like Godwin's St Leon, the glory if he could banish disease and "render man invulnerable to any but a violent death."

Two years later, at age fifteen, he witnessed a terrible thunderstorm where lightning completely shattered a lovely old oak tree. Astonished by the catastrophe, he asked his father about lightning and heard for the first time about the power of electricity. His father constructed a small electrical machine and showed his son a kite that drew fluid from the clouds. "This last stroke completed the overthrow of Cornelius Agrippa, Albertus Magnus, and Paracelsus, who had so long reigned the lords of my imagination." But it was only later, at the university of Ingolstadt in

³² Hans-Werner Schütt, "Romantik und Alchemie," *Germanisch-Romanische Monatsschrift* 53 (2003): 439–46, suggests (444) that "electricity is something like the 'philosopher's stone' of the romantic sense of nature"—a statement that may have a certain general metaphorical value but that lacks any strict one-to-one relevance.

Mary Wollstonecraft Shelley, Frankenstein, or The Modern Prometheus: The 1818 Version, ed. D. L. Macdonald and Kathleen Scherf (Peterborough, ON: Broadview, 1994).
Christa Habich, "Frankenstein und die 'alten Magier': Albertus Magnus, Agrippa von Nettesheim und Paracelsus," in: Pharmazie in Geschichte und Gegenwart, ed. Christoph Friedrich and Joachim Telle (Stuttgart: Wissenschaftliche Verlagsgesellschaft, 2009), 183–200.

Bavaria (which was disenfranchised in 1800 by Napoleon), that he began to pursue the systematic study of modern science. When he told his professor of natural philosophy that he had read only the early alchemists, the professor, astonished that he had wasted his time studying "such nonsense" (75), gave him a list of books on natural philosophy (that is, science) and advised him to attend lectures on the principles of that subject as well as chemistry. Rather than the immortality and power sought by the masters of alchemy, "I was required to exchange chimeras of boundless grandeur for realities of little worth" (75).

His professor of chemistry taught that "the ancient teacher of this science promised impossibilities, and performed nothing. The modern masters promise very little; they know that metals cannot be transmuted and that the elixir of life is a chimera" (76). But modern scientists, achieving miracles with their microscopes and crucibles, have penetrated the wonders of the heavens as well as the circulation of the blood and the composition of air. Moreover, this professor did not disparage Agrippa and Paracelsus with the same contempt as his colleague: "These were men to whose indefatigable zeal modern philosophers were indebted for most of the foundations of their knowledge"—a view that anticipates the opinion of recent historians of science.³³

That conversation marked the beginning of Frankenstein's studies in modern science and, particularly, chemistry: the studies that soon led to his successful effort to create human life: not as Paracelsus suggested, by creating a homunculus from human sperm, but by enlivening a monstrous body with the modern means of electricity—a technique, as Shelley wrote in his preface to his wife's novel, "supposed by Dr. Darwin, and some of the physiological writers of Germany, as not of impossible occurrence." ³⁴

Mary Shelley's novel, in sum, shows us a wholly different view of alchemy. While the older alchemists are not rejected by their modern successor with contemptuous dismissal but praised for their achievements, their methods are replaced by the discoveries of modern science. Frankenstein's education, in other words, exemplifies the historical shift from alchemy to chemistry that took place in the course of the seventeenth and eighteenth centuries in the persons of such scientists as Boyle and Newton.³⁵ It is unnecessary for our purposes to say more about Mary Shelley's famous work because, once the shift has taken place, alchemy

³³ See, for instance, William Newman and Lawrence Principe, *Alchemy Tried in the Fire:* Starkey, Boyle, and the Fate of Helmontian Chymistry (Chicago: University of Chicago Press, 2002).

³⁴ Shelley, "Preface," in: *Frankenstein*, 47. See in this connection Theodore Ziolkowski, "Science, Frankenstein, and Myth," *Sewanee Review* 89 (1981): 34–56.

³⁵ Joachim Schumer, "Historical Roots of the 'Mad Scientist': Chemists in Nineteenth-Century Literature," *Ambix* 53 (2006): 99–127, even suggests (119) that "Victor's

plays no further role in the novel. It should be noted, however, that Victor Frankenstein is no happier with the results of his science than were the alchemists with their art.

Godwin's daughter and son-in-law were not the only fans of alchemy in early nineteenth-century Britain. In his first major work, *The Lay of the Last Minstrel* (1805), Sir Walter Scott (1771–1832) introduced alchemy and a legendary alchemist in an important capacity. When her husband is killed in a dispute between clans, the lady of Branksome Hall prepares to take revenge with the secret powers handed down by her alchemist father.

Of noble race the Ladye came;
Her father was a clerk of fame,
Of Bethune's line of Picardie:
He learned the art, that none may name,
In Padua, far beyond the sea.
Men said, he changed his mortal frame
By feat of magic mystery;
For when, in studious mood, he paced
St. Andrew's cloistered hall,
His form no darkening shadow traced
Upon the sunny wall! (canto 1, stanza 11)³⁶

She sends Sir William of Deloraine to Melrose Abbey to recover a magic document destined to avail the clan when in need—a book written by none other than the legendary alchemist Michael Scott (1175–1232), whom Dante, coupling him in the *Inferno* with the soothsayer Tiresias, his daughter the prophetess Manto, and others, condemns as one "che veramente / de le magiche frode seppe 'l gioco" (XX: 116–17; "who truly knew the game of magic frauds"). At the abbey the aged monk tells Deloraine that, as a Crusader knight in "Paynim countries," he once met "the wonderous Michael Scott; / A wizard of such dreaded fame," on his deathbed in Spain, where he was associated with what Walter Scott calls "the necromantic university" of Salamanca.³⁷

I swore to bury his Mighty Book, That never mortal might therein look; And never to tell where it was hid, Save at his chief of Branksome's need: And when that need was past and o'er, Again the volume to restore. (canto 2, stanza 15)

ambition at various ages reflects periods of the history of science of the corresponding centuries, if one multiplies his age by a hundred."

Walter Scott, *The Lay of the Last Minstrel* (London: John Sharpe, 1809).
 In his "Notes to Canto Second," in *Lay of the Last Minstrel*, 257.

They open the wizard's tomb, and he lies before their eyes as though he had just only died, holding in his left hand his Book of Might. The terrified Deloraine grabs the book, bound in iron, from the dead man's hand and, as fiendish voices echo through the cloisters, leaves the abbot praying to the Virgin and St John for forgiveness for their deed.

We hear nothing further about alchemists in the course of the poem, but the book causes mischief when, on their return, Deloraine is wounded by Lord Cranstoun and the book falls into the hands of his Goblin-Page, who opens it and learns a single spell that "Could make a ladye seem a knight" or "youth seem age, and age seem youth" (canto 3, stanza 9). He kidnaps the lady's young son and enters the castle in his shape, causing much annoyance with his pranks. Despite the turmoil caused by "the sly urchin page's" deceits—including the major event when, with his assistance, Cranstoun assumes the shape of the wounded Deloraine and defeats in a duel the enemy of the house—we hear no more about the book itself until the end, when all the tensions have been resolved. Then the lady of Branksome Hall learns how Cranstoun's page stole the book from the wounded Deloraine and how, by means of magic ("by help of gramarye") he entered her castle to carry out his mischief.

Cared not the Ladye to betray
Her mystic arts in view of day;
But well she thought, ere midnight came,
Of that strange Page the pride to tame,
From his foul hands the Book to save,
And send it back to Michael's grave. (canto 5, stanza 27)

Soon thereafter, at the final ceremony of reunion, a flash of lightning strikes the hall, and when the roar ended "The elvish Dwarf was seen no more" (canto 6, stanza 25). None of the guests was more dismayed than Deloraine, whose "blood did freeze, his brain did burn," as he said that he had seen:

A shape with amice wrapped around, With a wrought Spanish baldric bound, Like pilgrim from beyond the sea; And knew—but how it mattered not— It was the wizard, Michael Scott!

The gathered crowd was astonished to hear the "wondrous tale," but no one said a word:

Till noble Angus silence broke; And he a solemn sacred plight Did to St Bride of Douglas make, That he a pilgrimage would take To Melrose Abbey, for the sake Of Michael's restless sprite. (canto 6, stanza 27)

The entire plot, then, depends upon the magic of the legendary alchemist Michael Scott, who, though he does not actually appear, hovers over the whole like a *spiritus rector*.

Alchemists and other practitioners of the occult appear at least briefly in several of Scott's later novels. In *Kenilworth* (1821) the villainous Richard Varney maintains, in the subterranean passages of his country house, the laboratory of the alchemist Doctor Alasco, "one of the Abbots of Abingdon, who had a turn for the occult sciences." There, "like other fools of the period, he spent much precious time, and money besides, in the pursuit of the grand arcanum." When Varney enters, "the chemist appeared, with his eyes bleared with the heat and vapours of the stove or alembic over which he brooded, and the interior of his cell displayed the confused assemblage of heterogeneous substances and extraordinary implements belonging to his profession." In this case Varney wants nothing more than a potion that will cause his prisoner, Amy Robsart, to fall ill long enough for him to carry out the devious plot of the novel. Afterwards Doctor Alasco justifies himself with a familiar Christianizing reason:

"Whatever this bold and profligate railer may say of the mighty science, in which, by Heaven's blessing, I have advanced so far, that I would not call the wisest of living artists my better or my teacher—I say, howsoever yonder reprobate may scoff at things too holy to be apprehended by men merely of carnal and evil thoughts, yet believe, that the city beheld by St John, in that bright vision of the Christian Apocalypse, that New Jerusalem, of which all Christian men hope to partake, sets forth typically the discovery of the GRAND SECRET, whereby the most precious and perfect of nature's works are elicited out of her basest and most crude productions..."

Otherwise, however, the alchemist plays no major role in this or any other of Scott's novels. (Alchemy is not even mentioned in Robert Browning's narrative poem *Paracelsus* (1835), which is concerned with the protagonist's search for truth generally.)

Before leaving England one further work deserves our attention: *Fazio: A Tragedy* (1818) by the Very Reverend Henry Hart Milman (1791–1868), the distinguished historian, biographer, dramatist, poet, translator, and Oxford professor of poetry. The young graduate's first play, based on a story that appeared in the Annual Register for 1795 and which from 1815 until mid-century was frequently performed in England

³⁸ Sir Walter Scott, Kenilworth (London: Dent, 1910), chapter 22, esp. pp. 264–70.

and the United States,³⁹ is less about alchemy than about the behavior of a society corrupted by wealth: an aspiring parish priest's reflections on the morality of his times. In fact, we see Fazio as an alchemist only in the first scene, where in his Florentine laboratory "O'er boiling skellets, crucibles and stills" he is concocting drugs and elixirs (2).40 His wife, Bianca, the true heroine of the work, enters to chide him for what he regards as "wondrous alchymy" but she despises as "my rival, your mistress." But Fazio is obsessed with winning "that precious liquor, whose transmuting dew / Makes true black iron stand forth brilliant gold." In the course of their conversation the topic turns to the Marchesa Aldabella, whom Fazio once loved and Bianca regards as "a proud loose wanton" (5). After she leaves, Fazio is startled by a noise at the door: it is his neighbor, the miserly Bartolo, who has been stabbed by robbers seeking his gold. When he dies, Fazio reflects: "Philosophy! Philosophy! thou'rt lame / And tortoise-paced to my fleet desires! / I scent a shorter path to fame and riches" (8). Taking the miser's keys and removing his body from the house, he rationalizes his actions with the thought that, since Bartolo has no kinsmen, he is robbing no one but the state. When he returns with a sack of treasure, he shows it to Bianca and, promising her a new life with feasts and grandeur, destroys his alchemical stills—and thus ends his career as an alchemist.

In act 2 we see Fazio two months later as a wealthy man fawned upon by the three sycophants he meets on the street, who hail him as the "sovereign prince of alchymists" (13) and seek his favor in their various capacities (panegyrist, fashion designer, rhapsodist). He visits Aldabella, who, now that he is fantastically rich, claims that she has always loved him but had to obey her uncle in turning him away in the past. Bianca is still jealous of Aldabella, whom Fazio promises to visit one last time to cut off the relationship. But Aldabella lies, telling him she is going into a convent if he rejects her. As the act ends, they go off scene together, calling for wine.

Bianca, who has lain awake all night waiting for her husband's return, is reluctant to believe the servant who tells her that Fazio has spent the night in Aldabella's palace. When he informs her that the duke, having returned from a trip, is suspicious about the circumstances surrounding Bartolino's disappearance, she sees another way to win back her husband. She goes to the ducal palace, where one senator has already "doubted / His vaunted manufactory of gold" (39), and notifies the duke where Bartolino's body has been hidden. Confirming her story, the authorities arrest Fazio and

See the author's later "Prefatory Observations," in: H. H. Milman, *Poetical Works*, vol. 3 (London: John Murray, 1840), 118–20.
 H. H. Milman, *Fazio: A Tragedy* (London: John Murray, 1818).

condemn him to death. Bianca is dismayed: she swears that her husband is incapable of murder. But the duke informs her that robbery also demands the death penalty. She pleads to him with no avail.

When she visits Fazio in prison, they try to think of their past joys but then worry about the fate of their two young children. Seeking to prove his innocence, she is first spurned by two of the three sycophants; only the rhapsodist visits him in his cell to console him with song. Then she approaches the hated Aldabella and offers to surrender her husband to her if only the other will use her influence to save his life; but the self-serving noblewoman declines, ashamed to be known as "a poor robber's paramour" (52) and refusing to stoop "to the sordid sweepings of a prison" (54). These experiences prove to Bianca that "All tales of human goodness" are lies (55). She decides to kill her two children to prevent them from being "more sinners for the Devil to prey upon" (56) but is unable to go through with it.

Back in prison, Fazio tells the singer Philario not to trust gold: "tis venemous, 'tis viperous" (60)—the "yellow pestilence" that has destroyed him and corrupted humanity. When Bianca arrives and the guards lead him off to his execution, she swears to join him in death. But first she returns to the ducal palace, where she reproaches the duke and his entire society for its "Fine laws! Rare laws! most equitable laws" (65), which execute men for robbery but not women for stealing a wife's husband. When the duke learns of Aldabella's behavior, he condemns her to the convent for her "high-born baseness" (67). Asking the duke to protect her children, Bianca then dies. In the end the duke places virtue over the law but not before a corrupt society, in its worship of gold, has destroyed several lives. Again we see that the alchemist serves only as trigger for the actions that constitute the true social—moral action of the play.

At this point it is not inappropriate to offer an American example, Washington Irving's story "The Student of Salamanca" (1822), which opens with an epigraph about alchemy from Lyly's *Gallathea* (= *Galatea*). Written shortly after Irving was introduced to German literature by Walter Scott in 1817, the story had a great success in Germany and was made into a three-act romantic opera by Louis Spohr (*Der Alchymist*, 1829/30). The romantic love-adventure features Antonio de Castros, a student of Salamanca. (We note again the occurrence of Salamanca, as in Scott's *Lay of the Last Minstrel*.) Studying in the library at Grenada (*sic*! for "Granada"), he becomes interested in an intensely concentrating older man who repulses his approaches. Following him to an isolated tower outside Grenada, he sees the man's lovely daughter, is fascinated by her, and spies on the place. Soon, seeing an elegant man serenading the

girl, he thinks it is her lover. But Don Ambrosio turns out to be a Giovannesque figure: he seduces women, but is frustrated by his lack of success with Inez.

One night, as Antonio is watching, an explosion takes place in the tower. He rushes in and rescues the older man, Felix de Vasquez, who turns out to be an alchemist. He "found himself in an antique vaulted chamber, furnished with furnace, and various chemical apparatus. A shattered retort lay on the stone floor; a quantity of combustibles, nearly consumed, with various half-burnt books and papers, were sending up an expiring flame, and filling the chamber with stifling smoke" (134). 41 Don Felix believes he is close to the moment "when he should obtain not merely the major lunaria, but likewise the tinctura solaris, the means of multiplying gold, and of prolonging existence" (160). Befriended by father and daughter, Antonio still doesn't understand her relationship with Don Ambrosio, but one night he rescues Inez when Don Ambrosio climbs through a window and tries to rape her. Then Antonio and Inez are separately kidnapped: he by his family and Inez by Don Ambrosio; Felix is seized by the Inquisition and accused of necromancy and demonology. Escaping with the help of a gypsy woman who was seduced and discarded by Don Ambrosio earlier, Inez rushes to save her father who is being led to an auto-da-fé as guilty. Suddenly Antonio turns up as nobleman; kidnapped by his own father and taken home to Valencia, he has persuaded his family of his true love for Inez and her worth. In a duel he defeats Don Ambrosio, who confesses his false accusation of Don Felix and then retreats into a monastery. Antonio and Inez marry, and their father continues practicing his alchemy in the garden of their palace until his death.

In this highly readable story with its lively action alchemy plays only a secondary role: Antonio is interested and helps Felix mainly in order to get close to Inez. But Felix's defense at his inquisition (164–9) reveals the extent of Irving's knowledge of alchemy. After hearing the accusations against him:

He repelled with scorn the aspersions cast upon alchymy by the ignorant and vulgar. He affirmed it to be the mother of all art and science, citing the opinions of Paracelsus, Sandivogius [sic!], Raymond Lully, and others, in support of his assertions. He maintained that it was pure and innocent, and honourable both in its purposes and means. What were its objects? The perpetuation of life and youth, and the production of gold. "The elixir vitae," said he, "is no charmed potion, but merely a concentration of those elements of vitality which nature has scattered through her works. The philosophers'

⁴¹ Washington Irving, "The Student of Salamanca," in *Bracebridge Hall, or The Humorists* (London: Murray, 1822).

stone, or tincture, or powder, as it is variously called, is no necromantic talisman, but consists simply of those particles which gold contains within itself for its reproduction."42

And so he continues for two more pages, ending his paean with the exclamation, "Oh celestial alchymy!"

LITERARY ALCHEMY IN GERMANY

The last half of the eighteenth century witnessed in Germany and Austria a notable surge in the popularity of alchemy. In his cultural history of alchemy Hermann Kopp states that, in the seventeenth and eighteenth centuries, Germany had more alchemists than any other country. 43 Bibliographies cite a number of often anonymous and locally performed theatrical works poking fun at alchemy in the traditional manner: Die Chymie (Leipzig in 1771), Die Goldmacher (Bayreuth in 1772), A. G. Meissner's operetta Der Alchymist (Leipzig in 1778), Der zu Grunde gerichtete Adept (Freiberg in 1788), and K. G. Miersch's Die Ordensbrüder, oder der Stein der Weisen (Berlin in 1793). 44 An equal number of pot-boiling novels was published, 45 although sometimes the titles are misleading. Christoph Martin Wieland's story "The Philosopher's Stone" ("Der Stein der Weisen," 1786), for instance, despite its subtitle as an "encore" to Nicolas Flamel ("Als Zugabe zu Nikolas Flamel"), has nothing to do with alchemy or alchemists. 46 Involving curious adaptations of Apuleius (the hero is transformed into an ass) and Ovid's Midas (in a dream everything he touches turns to gold), the fantasy revolves around a young king in an anachronistically pre-alchemical and legendary Cornwall (he is the grandson of the King Mark in the legend of Tristan and Isolde) who is deceived by a clever con artist who dresses up as a Egyptian adept and, claiming to initiate the king into the Hermetic mysteries of the Thrice-Great Hermes, assures him that the philosopher's stone can be created only from the finest jewels with a few drops of oil distilled from thickened sunbeams.

⁴² Bracebridge Hall, 166–7.

⁴³ Hermann Kopp, Die Alchemie in älterer und neuerer Zeit: Ein Beitrag zur Kulturgeschichte, 2 vols (1886; rpt. Hildesheim: Georg Olms, 1962), vol. 2, 191.

44 Kopp, *Alchemie*, vol. 1, 258–60, here 259.

Kopp, Alchemie, vol. 2, 246–9. See also Joachim Telle's bibliography in his article "Alchemie II," in: Theologische Realenzyklopädie, ed. Gerhard Krause and Gerhard Müller (Berlin: De Gruyter, 1979), vol. 2, 224-7.

⁴⁶ C. M. Wieland, Sämmtliche Werke (Leipzig: Göschen, 1797; rpt. Hamburg, 1984), vol. 30, 274-338.

Nevertheless, the plays and fictions exemplify a widespread interest sparked by various factors: not only by a bourgeois lust for gold and a proto-Romantic reaction against excessive rationalism, as evident in the emergence of such secret societies as the Rosicrucians and the strange Order of the Gold and Rosy Cross (a mystical-spiritualistic offshoot of the Freemasons), but also, as we noted earlier, by the Pietist fondness for alchemical images linking heaven and earth. In his history of alchemy Karl Christoph Schmieder relates various anecdotes from cities between Berlin and Vienna, including one involving Frederick the Great of Prussia, whose later contempt for alchemy was allegedly provoked in 1751 when he was cheated out of several gold ducats by a female alchemist and her two lovely daughters.⁴⁷ Only two years later the city of Mannheim issued a decree prohibiting alchemical laboratories in private homes because of the danger of fires and because the waste of materials was harmful to the economy. 48 A three-volume collection of alchemical texts, Neue Alchymistische Bibliothek (1772-5), published by F. J. W. Schröder, professor of chemistry at the University of Marburg, explained the procedures for interested readers. And Sigmund Heinrich Güldenfalk, a public official in Hesse-Darmstadt, assembled a volume of more than a hundred "true transmutation stories" documenting the transformation of metals into gold or silver (Sammlung von mehr als hundert wahrhaften Transmutationsgeschichten, oder Beispiele von Verwandlung der Metalle in Gold oder Silber, 1784). What matters here is not the historical validity of such stories but, rather, the popularity of the genre, which suggests the eagerness of at least a segment of the public to believe.

Against this background it becomes easier to understand why the young Johann Wolfgang von Goethe (1749-1832), at a time of personal susceptibility, turned to alchemy. Anyone who knew Goethe's views only from the passage "Alchymisten" in his history of the theory of color (Geschichte der Farbenlehre, 1810) might wonder at that early enthusiasm. 49 He concedes there that the poetic aspect of alchemy has produced "very pleasant meditations," a veritable "fairytale built upon a suitable natural basis." But he opens with a broad condemnation of alchemists, among whom are found "few original minds but many imitators" who take their refuge in mystery-mongering ("Geheimniskrämerei"): "hence

vol. 14, 78-9.

⁴⁷ Schmieder, Geschichte der Alchemie, 547–58, here 547–8.

⁴⁸ Ronald Gray, Goethe the Alchemist: A Study of Alchemical Symbolism in Goethe's Literary and Scientific Works (Cambridge: Cambridge University Press, 1952), 4.

49 Goethes Werke, Hamburger Ausgabe, 14 vols (Hamburg: Christian Wegner, 1960),

the monotony of all these writings." But forty years earlier the circumstances were wholly different.

Various reasons have been proposed for the illness that caused Goethe after three years at the University of Leipzig to curtail his studies and return home without a degree: the symptoms point to diseases ranging from respiratory to venereal, from lymph glands to digestion.⁵⁰ In any case, shortly after his nineteenth birthday (August 28, 1768) Goethe reached home in Frankfurt am Main, where he remained for a year and a half until resuming his studies in Strassburg. At home, recovering slowly from his sickness, whether psychological or physical, the young poet had to rely for company mainly on his sister, his mother, and her circle of religiously disposed friends because his father, disappointed and annoyed that his sickly—and, in his opinion, hypochondriac—son had returned home without his law degree, largely ignored him.

Chief among his mother's friends, as Goethe recounts in book 8 of his autobiography, Dichtung und Wahrheit,51 was her cousin, Fräulein Susanna Katharina von Klettenberg (1723-74)—herself the niece of a notorious alchemist executed for his deceptions⁵²—whose conversations and letters later provided the model and material for the "Confessions of a Beautiful Soul" that constitute the sixth book of his novel Wilhelm Meister's Apprenticeship (Wilhelm Meisters Lehrjahre, 1795-6). Devoutly religious and of a Pietist disposition, she introduced Goethe to the Opus mago-cabbalisticum et theosophicum (1735) by the theosophical alchemist Georg von Welling, director of mines in several German states. This work, regarded by enlightened contemporaries as a potpourri of absurd fantasies, was held in high regard in Pietist circles because its ideas were heavily influenced by the thought of Jakob Böhme.⁵³ Because the author always obscures and qualifies his statements, Fräulein von Klettenberg was eager to have a fellow reader to help her disentangle the work. "My principal effort with regard to this book was to note the dark references where the author points from one passage to another and promises to reveal what he is concealing, and to indicate in the margins the page numbers of these passages that were supposed to clarify reciprocally" (342). Here, as he wrote this passage years later, Goethe's skepticism is quite clear: the only

⁵⁰ On the symptoms and diagnostic possibilities see: Richard Friedenthal, *Goethe: His* Life and Times, trans. John Nowell (1965; New Brunswick, NJ: Transaction, 2010), 59-60; and Karl Otto Conrady, Goethe: Leben und Werk, 2 vols (1982; Frankfurt am Main: Fischer Taschenbuch, 1992), 84.

⁵¹ Goethes Werke, vol. 9, 338–44. 52 Karin Figala, "Goethe," in: Alchemie: Lexikon, 154–7, here 155.

Julian Paulus, "Welling, Georg von, Montanist u. Alchemist," in: Alchemie: Lexikon, 371-2.

benefit, "apart from working one's way into a certain terminology and applying it as one wished, was that one thought one was at least saying something, if not understanding it."

In addition to Welling, Goethe and his female co-lectors (including Goethe's mother) applied themselves (without specifying titles) to the works of such authorities as Paracelsus; the fictive Basilius Valentinus (to whom numerous alchemical tracts were ascribed); the Flemish Paracelsan physician Johannes van Helmont (1579-1644); the English alchemist and iatrochemist George Starkey (1628-65); and the anonymous Aurea catena Homeri (1723), which presents a pansophical theory of nature based on alchemical principles. As the three of them spent the long winter evenings of 1768-9 in this pleasant reading and discussion, Goethe's health suddenly took a turn for the worse: his digestive system became so inflamed that there was serious concern for his life. Goethe's mother appealed to their physician, Dr Johann Friedrich Metz—"a puzzling, sly-looking, friendly-spoken and otherwise enigmatic man"—who enjoyed the confidence of pious circles because he believed that the health/ salvation ("Heil") of the body was closely tied to that of the soul. But he also had "certain mystical chemical-alchemical" tendencies and prepared—secretly because it was illegal for doctors to concoct their own medicaments—a certain digestive salt that he applied only in the most serious cases. Swaved by his mother's appeal for his "Universalmedizin," Metz hurried home late one night and returned with a small glass of a crystallized dry salt, which, dissolved in water, was swallowed by the patient and had, Goethe reported, a decidedly alkaline taste. The mysterious medicament produced an almost immediate improvement.

Encouraged by this experience—as he puts it in his autobiography, "it required only a slight stimulus to inoculate me, too, with this illness"—Goethe did not restrict himself to the theoretical study of alchemy but turned to the actual practice of the Art. Fräulein von Klettenberg had already, in her large house, set up a small wind furnace (one fired by natural drafts rather than bellows) and acquired flasks and retorts of a modest size. With this equipment and the instructions (however vague!) of Welling, she sought to produce the panacea "Luftsalz" ("air salt," according to the Paracelsan theory stating that the three elements—salt, sulphur, and mercury—are components found in everything). To achieve this she applied alkalis to iron because alkalis dissolve on contact with air and, combining with other elements, ultimately produce an excellent "Mittelsalz" ("neutral salt").

Fascinated by these experiments, Goethe after his recovery set up a small laboratory in an attic room in his father's house: a small wind furnace with a sand bath. "Now strange ingredients of the macrocosm

and microcosm were treated in a secret curious manner, and one sought above all to produce neutral salts in a manner unheard of." Goethe also was fascinated by "Liquor silicum" (a silicic fluid) obtained by melting pure quartz gravel with a large portion of soda, thereby creating a transparent glassy surface which melts on contact with air into a lovely clear liquid.⁵⁴ What matters here is not the chemistry as such but Goethe's experience: "Whoever has once done this himself and seen it with his own eyes will perhaps not criticize those who believe in virgin earth ['Jungfräuliche Erde,' another term for *materia prima*] and in the possibility of bringing about further effects upon and through it" (344). He concludes his description of his alchemical experiments with the statement: "No matter how weird and disconnected these operations were, I still learned a great deal in the process." It should be stressed that Goethe was at no point interested in the transmutation of metals into gold but only in the iatrochemical aspects of alchemy as well as its Hermetic theory.

Although Goethe began to turn away from alchemy and toward the understanding of modern chemistry—or, rather, to seek to reconcile his alchemical experience with modern theories—it was by no means a sudden and absolute rejection. We gain a sense of the extent to which the processes and vocabulary of alchemy were shaping Goethe's imagination when we read, in a letter of January 17, 1769, to his boyhood friend Ernst Theodor Langer: "Much has happened with me; I have suffered and am now free again; this calcination was quite useful for my soul."55 And the imagery of alchemy and, more broadly, Hermetics continued to color his writing and thinking. A year and a half later he reported to Fräulein von Klettenberg (in a letter of August 8, 1770) that "Chymie" was still his secret love although he did not have much contact with pious circles in Strassburg. But after he met the theologian Johann Gottfried Herder (1744–1803)—an acquaintance that he calls "the most significant event [of his period in Strassburg] and one that was to have the most important consequences for me"56—he confesses that "most of all I concealed from Herder my mystic-kabbalistic chemistry and everything related to it, even though I was still clandestinely occupied with the attempt to develop it more consistently than had been transmitted to me" (414). Some fifteen years later he was still reading alchemical works with interest, as he

⁵⁴ For a description of this process in terms of modern chemistry see the notes to *Dichtung und Wahrheit*, 722–3. For further chemical detail see Helmut Gebelein, "Alchemy and Chemistry in the World of Goethe: Lecture with Experiments," in: *The Golden Egg: Alchemy in Art and Literature*, ed. Alexandra Lembert et al. (Glienicke/Berlin: Galda und Wilch, 2002), 9–29.

⁵⁵ Cited by Conrady, Goethe, 86.

Dichtung und Wahrheit (book 10), in: Goethes Werke, vol. 9, 402.

reported to Frau von Stein on June 28, 1786, following his perusal of Andreae's *Chymical Wedding*. "I have read Christian Rosenkreuz's [sic!] Wedding to the end; it will make a lovely fairy tale when it is reborn at an opportune time; in its old skin it is not to be enjoyed."

In sum, even though Goethe, like Victor Frankenstein several decades later, began to shift from alchemy to more modern science, the experiences of those years immediately before and after 1770 left a profound impression on his mind and imagination. It is of course an oversimplification to speak without reservation of "Goethe the alchemist," and Ronald Gray makes it clear in his book of that title, beginning with its subtitle, that he is interested not in Goethe's practice of alchemy but, rather, in the influence on his thought of the religious and philosophical beliefs he derived from his early study of alchemy.⁵⁷ Alchemy continued to the end to color his mind and imagination, and not only in such scientific works as his studies of the metamorphosis of plants or theory of colors. Gray demonstrates persuasively that in Goethe's fairy tale (Märchen, 1795) many of the images—the youth and the lily-maiden, who become king and queen; the three kings of gold, silver, and bronze; and others—may be interpreted alchemically in a manner not inconsistent with other readings of the Märchen (e.g. a topographical reading specific to the topography of Jena and Goethe's ongoing discussion with Schiller about the latter's theory of play).⁵⁸ Similarly the very title of his novel *Elective Affinities* (Wahlverwandtschaften, 1809) points to the frequently analyzed symbolic parallels between the chemical and the social-moral relationships portrayed in the novel.⁵⁹

At the same time, Goethe is one of the few major writers of world literature who actually had direct experience with alchemy—who was indeed for at least a few years of his life a practicing alchemist. So it is hardly surprising that the figure of the alchemist plays a major role in two key passages of his masterpiece, *Faust*. Goethe makes it clear that Faust himself is no alchemist. Faust begins his famous opening monologue—in a setting familiar from Rembrandt's famous etching of Faust in his study, with which Goethe was familiar (see Figure 3.1)⁶⁰—with the lament that

⁵⁷ See Gray, Goethe the Alchemist, passim.

Theodore Ziolkowski, *Das Wunderjahr in Jena: Geist und Gesellschaft 1794/95* (Stuttgart: Klett-Cotta, 1998), 262–75. For a survey of other readings see Erich Trunz's notes in: *Goethes Werke*, Hamburger Ausgabe, vol. 6 (Hamburg: Wegner, 1951), 607–18.

⁵⁹ See Jeremy Adler, Eine fast magische Anziehungskraft. Goethes "Wahlverwandtschaften" und die Chemie seiner Zeit (Munich: Beck, 1987).

⁶⁰ Art historians reject the idea that the scholar portrayed here is Faust—an attribution it received only in the mid-eighteenth century—but the etching is most popularly known under that title. It was reproduced (in reverse) as frontispiece in the 1790 publication of Goethe's *Faust ein Fragment*.

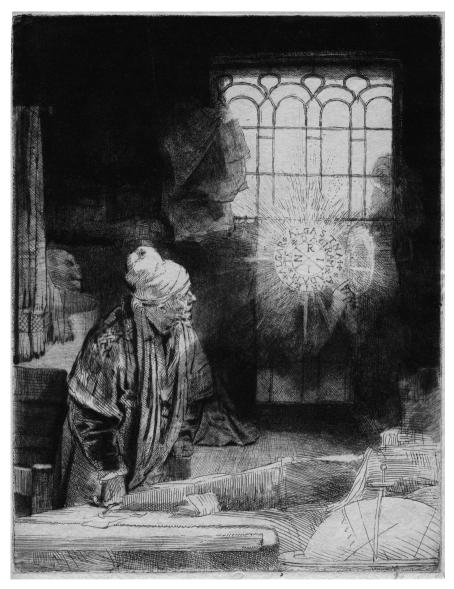


Figure 3.1 Rembrandt Harmenszoon van Rijn, *A Scholar in his Study* ('Faust') (*c*.1652). Photographic credit: The Pierpont Morgan Library, New York. Permission of The Pierpont Morgan Library, New York. RvR 363.

he has diligently studied and exhausted the knowledge of the traditional four faculties but finds himself no smarter than he was before.

Habe nun, ach! Philosophie,
Juristerei und Medizin,
Und leider auch Theologie
Durchaus studiert, mit heißem Bemühn.
Da steh' ich nun, ich armer Tor,
Und bin so klug als wie zuvor! (ll. 354–9)
(Now, alas, I've studied philosophy,
law and medicine,
and—to my regret—even theology,
thoroughly and with eager effort.
Here I stand, poor fool,
And am no smarter than before.)

For that reason he has turned to magic in the effort to learn the secrets of nature through the power and words of a spirit:

Drum hab' ich mich der Magie ergeben, Ob mir durch Geistes Kraft und Mund Nicht manch Geheimnis würde kund. (ll. 377–9) (So I've turned to magic, Whether through the power and speech of intellect Many a secret might be revealed to me.)

He specifically does not mention alchemy. And although in that same scene he is inspired by the sign of the macrocosm that he finds in a volume of Nostradamus—a hint at the Hermetic counterpart of macro- and microcosm, of heaven and earth—it is not by alchemy but by necromancy that he summons up the Earth Spirit, whose fiery countenance he cannot sustain.

The next morning, following his near-suicide, he goes strolling through the Easter festivities beyond the town gate with his teaching assistant Wagner, who is impressed when a crowd of peasants surround Faust to thank him for all that he and his father did years before to save them from the plague. But it is for Faust a bittersweet memory. He tells Wagner about his father, who was in fact an alchemist and, with "the company of adepts," enclosed himself in his "black kitchen" and, following endless formulas, caused reluctant components to congeal (ll. 1040–1; "nach unendlichen Rezepten, / Das Widrige zusammengoß"). Following this clear depiction of the alchemist in his laboratory, Faust goes on to describe in familiar alchemical terms—the wedding of reddish mercuric oxide and whitish hydrochloric acid through a series of distillations in order to produce the *cauda pavonis* of the life-saving medicament:

Das ward ein roter Leu, ein kühner Freier, Im lauen Bad der Lilie vermählt, Und beide dann mit offnem Flammenfeuer Aus einem Brautgemach ins andere gequält. (ll. 1042–5) (There a red lion, a bold suitor, was wed to the lily in the lukewarm bath, and both then, with an open fire of flames, tormented from one bridal chamber into another.)

But Faust expresses his own skeptical dismay about the results of the alchemy:

Erschien darauf mit bunten Farben Die junge Königin im Glas, Hier war die Arznenei, die Patienten starben, Und niemand fragte: wer genas? (ll. 1046–9) (If then with variegated colors the young queen appeared in the glass, here was the medicament: the patients died, and no one asked: who was healed?)

With their "hellish concoctions" ("mit höllischen Latwergen"), he continues, he and his father raged more disastrously than the plague in the mountains and valleys. He himself, he admits, administered poison to thousands who died away, and now he must experience how the barefaced murderers are praised. In contrast to Faust's gloom, Wagner is impressed and praises his teacher for learning to practice "conscientiously and faithfully" the art he was taught. "If you as a man increase knowledge, then your son can attain a higher goal." As we shall see, Wagner imagines himself as that "son" who will appropriate the alchemy that Faust disdains. Beyond this brief scene, and despite the occasional alchemical metaphor, we hear no more about alchemists in the first part of *Faust* (1808).

In Faust II (1832), which takes place several years later, Wagner himself has now replaced his former master as "first in the learned world" (l. 6644) and occupies Faust's former "Laboratorium," which is described in the stage directions as medieval in appearance with "extensive ungainly ['unbehülflich'] apparatuses for fantastic purposes." There, as his own assistant ("Famulus") tells Mephistopheles, Wagner has been busy for months with his "great work" ("großes Werk" or magnum opus) and, from his labors at the furnace, "looks like a charcoal-burner, blackened from his ears to his nose, his eyes red from blowing at the fire" (ll. 6675–9). When Mephistopheles enters the laboratory—the rejuvenated Faust is still in a coma resulting from an explosion at the end of act 1—he finds Wagner at his

hearth contemplating a flask glowing within from something like a live coal or the most splendid red jewel:

Schon in der innersten Phiole Erglüht es wie lebendige Kohle, Ja wie der herrlichste Karfunkel. (ll. 6824–6)

When Mephistopheles inquires, Wagner welcomes him "to the star of the hour" and reports that a magnificent work is almost complete: "Es wird ein Mensch gemacht" (l. 6835: "A human being is being made").

When Goethe first mentioned this scene in 1826, he had a somewhat different scenario in mind: both Faust and Mephistopheles visit Wagner in his laboratory, where he is jubilant because "a tiny chemical person" ("ein chemisch Menschlein") has just been created, which immediately shatters its flask and emerges as a lively and well-shaped dwarf.⁶¹ By the time he wrote the scene his vision had changed somewhat: the "tiny chemical person" is now, using the alchemical term, called "Homunculus."62 Rather than shattering his glass enclosure, he remains within it for the entire scene as well as the succeeding "Classical Walpurgnis Night" until, to liberate himself and gain physical form for his pure spirit, he breaks his glass against Galatea's shell-covered throne and unites his flame with the watery element. For the present, however, he remains within his flask and with his spiritual powers—in his 1826 sketch Goethe said that his mind contained "a general historical world calendar" so that he knew at every moment everything that had happened since the creation of Adam—hovers over the sleeping Faust and reports his dreams.

What matters in the present context is not Homunculus's role in the drama but, rather, the method of his creation. For, as Wagner reports in technical terms, he is a wholly alchemical product:

wenn wir aus viel hundert Stoffen
Durch Mischung—denn auf Mischung kommt es an—
Den Menschenstoff gemächlich komponieren,
In einen Kolben verlutieren
Und ihn gehörig kohobieren,
So ist das Werk im stillen abgetan. (ll. 6849–54)

⁶¹ "Zweiter Entwurf zu einer Ankündigung der 'Helena,'" *Goethes Werke*, vol. 3, 438–44, here 440.

⁶² The term *homunculus* goes back to such early (third-century) alchemists as Zosimos, from whom it was appropriated by Arabic alchemists (notably Geber). The notion of creating a human being from human sperm, urine, or blood was eagerly popularized by early European alchemists, including Arnoldus of Villanova, Agrippa von Nettesheim, and Paracelsus.

(If from many hundred materials and by mixing—for mixing is the important thing—we leisurely compose the human material, seal it in a flask and repeatedly distill it, then the work is done in all stillness.)

As he sees his work take place he gloats that he has dared to achieve through reason what has otherwise been regarded as nature's secret: to crystallize artificially what nature normally achieves by organic means.

> Und was sie sonst organisieren ließ, Das lassen wir kristallisieren. (ll.6859–60)

As they look on, the glass, becoming dark and then bright, displays the different colors familiar from the *magnum opus*. Finally the tiny creature moves and even speaks, using its first words to greet not Wagner but Mephistopheles, whom it addresses as "Väterchen" ("little father," as though Mephistopheles were his creator) and "Herr Vetter" ("Mr Cousin"), acknowledging their kinship—both factors that qualify the role of Wagner's alchemy.

It is generally acknowledged that Goethe was making use in this scene of the process he knew from the writings of Paracelsus, and specifically his work *De natura rerum* (1572). There Paracelsus discusses the creation of a human being in vitro by enclosing human sperm in a sealed vessel, where it undergoes *putrefactio* for forty days until it shows signs of life and is then nourished for forty weeks until it becomes "a living human child." (For that reason Homunculus remains within his flask rather than shattering it immediately.) The notion of "crystallization" stems from Goethe's acquaintance with contemporary scientific theories, but the marriage of Homunculus with Galatea—a unification of the elements fire and water and of the opposing male and female principles—is pure alchemy.

Essentially, then, we are dealing here with another alchemist: the spiritual grandson, so to speak, of Faust's father since Faust himself rejected his father's alchemy. It is worth noting that Goethe introduced this element into the legend, which, as we saw, was not present in the original *Volksbuch* of the historical Faust. Again a negative note is attached to the art: the alchemy or iatrochemy of the father killed more people than it healed; and in the creation of Homunculus it is unspecified to what extent the devilish presence of Mephistopheles was necessary for the

⁶³ The relevant passages from Paracelsus are quoted by Albrecht Schöne in his commentary to *Faust*; in *Sämtliche Werke*, vol. 7/2 (Frankfurt am Main: Deutscher Klassiker Verlag, 1994), 504–5.

success of the operation—to what extent, in short, the magnum opus was a work of the devil. So the one-time alchemist has turned into a skeptic regarding alchemists, if not the theory of alchemy, which continue to pervade his thought and works. As Ronald Grav concludes his study of the theme, Goethe "took over from the alchemists intact their symbolical pattern, and used it throughout his life in a multiplicity of forms."64 But "against this confidence in the wisdom of the alchemists must be set Goethe's profound mistrust and dislike of their methods and conclusions."65

The alchemical image of the spirit in a flask has a surprising presence in German literature of the Romantic age even before its appearance in *Faust* II (1832).66 The most familiar, thanks to C. G. Jung's essay,67 is no doubt the Grimms' fairy tale "The Spirit in the Bottle" ("Der Geist im Glas," no. 99 in Kinder- und Hausmärchen, 1815). A poor woodcutter has worked hard to send his gifted son to the university, but when his money runs out, the son returns home to help his father with his work. One day, as they take their noontime break, the son goes looking for birds' nests. Near a huge oak he suddenly hears a voice asking to be freed. Searching among the roots, he discovers a glass jar in which a small froglike creature is jumping around. When he takes off the top, a spirit leaps out, grows in a few seconds to gigantic size, calls itself "the almighty Mercurius," and threatens to break the young man's neck. The clever student doesn't resist directly but says that the monster must first prove that it is in fact identical with the spirit that emerged from the jar. In proof the spirit contracts again and crawls back into the jar, whereupon the student clamps the top back on and tosses the jar back among the tree roots. Now the spirit begs the youth to free him again, promising him this time a rich reward: a small bit of cloth that will heal all wounds and transform iron into silver. (Here we recognize, of course, the elixir/philosopher's stone.) The father is annoyed at first because his son's borrowed ax has been changed into a weak metal (silver), which immediately breaks when used. But when his son sells the silver ax for a small fortune he is overjoyed; the son returns to the university where, by means of the magical cloth, he soon becomes the most renowned physician of his day. Here we find a clear instance of the philosopher's stone and the alchemical spirit/mercury in a flask, but there is no indication concerning the alchemist who put him there.⁶⁸

Gray, Goethe the Alchemist, 256.
 Gray, Goethe the Alchemist, 257.
 See Theodore Ziolkowski, "Pirandello und Goethe: Die hermetische Beziehung," Germanisch-Romanische Monatsschrift 62 (2012): 175–87.

⁶⁷ "The Spirit in the Bottle," from *The Spirit Mercurius*, in: C. G. Jung, *Alchemical Studies*, trans. R. F. C. Hull (Princeton, NJ: Princeton University Press, 1967), 193–8.

⁶⁸ Another of the Grimms' tales, "Rumpelstilzchen," has been read as alchemical because the miller's daughter transmutes straw into gold by spinning. See Karen Pinkus,

In E. T. A. Hoffmann's best-known story, The Golden Pot (Der goldne Topf, 1814), in contrast, we find both the image and the alchemist. The plot of the story takes place simultaneously on two levels (like the exoteric and esoteric alchemical process): on the realistic level of everyday life in Dresden of 1812 the student Anselmus copies hieroglyphic and other exotic manuscripts for the mysterious Archivarius Lindhorst; at the same time, on the metaphorical level Anselmus constantly reads into those daily experiences a higher poetic sense. The contrast between reality and poetry finally becomes so unbearable that it drives him into another life in the otherworldly dimension of Atlantis or, according to some exegetes, into suicide. 69 At the conclusion the Archivarius enters the author's attic room and consoles him with the thought: "Is Anselmus's bliss anything but life in poetry, to which the sacred harmony of all beings reveals itself as the most profound secret of nature?" (374).70

The lengthy story is filled with images based on alchemy:⁷¹ on the poetic level, Serpentina's account of her father's fall from the kingdom of Atlantis involves King Phosphorus and his beloved Fire Lily in what amounts to a "chymical wedding"; her father is Salamander, the spirit of fire, and his daughters are the golden serpents; and so forth. 72 But there is no evidence to suggest that Hoffmann, like Goethe, ever had any practical experience with alchemy, apart perhaps from a glance into someone's laboratory, or that he had studied it systematically.⁷³ Consequently the depiction of alchemy and the alchemist is indirect and inconsistent. The manuscripts that Lindhorst gives Anselmus to copy are Arabic—a language suggesting alchemical tracts. The golden pot of the title is on the realistic level a simple flower pot in the Archivarius's house; but on the metaphorical level it reflects "in a thousand glittering reflexes all sorts of figures on its gleamingly polished gold"—gold that suggests, of course, the goal of the alchemist. On one occasion when an acquaintance has no fire for his pipe, Lindhorst simply snaps his fingers and sparks emerge that

Alchemical Mercury: A Theory of Ambivalence (Stanford, CA: Stanford University Press, 2010), 104–14. Pinkus interprets the tale as "a model of reading, alchemically, an economic relation between the feminine and the production of gold through a transformation of base materials" (114).

⁶⁹ See James M. McGlathery, "'Bald dein Fall ins Ehebett'? A New Reading of Hoffmann's Goldner Topf," Germanic Review 53 (1978): 106–14, here 113 n. 13.

To E. T. A. Hoffmann, Poetische Werke (Berlin: Aufbau, 1958), vol. 1.

⁷¹ Detlev Kremer, "Alchemie und Kabbala: Hermetische Referenzen im *Goldnen Topf*," E. T. A. Hoffmann-Jahrbuch 2 (1994): 36-56.

⁷² See Aniela Jaffé, *Bilder und Symbole aus E. T. A. Hoffmanns Märchen "Der Goldne Topf,*" in: C. G. Jung, Gestaltungen des Unbewußten (Zürich: Rascher, 1950), 237-616.

⁷³ Kurt Stiasny, E. T. A. Hoffmann und die Alchemie (Aachen: Shaker, 1997), 22-9, here 22.

light the pipe. "Look at the chemical trick," is his friend's reaction (344). He tells Anselmus that his copying duties constitute a "Lehrzeit" (326: "apprenticeship"), after which he will comprehend "the wonders of the golden pot and be happy evermore"—that he too, in other words, will become an adept initiated into the secret of transmuting objects into gold.

The incident involving the glass enclosure occurs one day when Anselmus, distracted from his responsibilities by thoughts of the outside world and his eventual marriage with the all too earthly Veronika, drops a spot of ink on the manuscript he is copying. This annoys the Archivarius/ Salamander so greatly that, in punishment, he sticks Anselmus "into a well-sealed crystal glass" on the shelf of his library (354)—a clear alchemist's trick. There Anselmus notices three similarly englassed pupils from a Dresden school as well as two apprentices, with whom from their perches on the shelf he witnesses an epic battle between the Salamander and his enemies. But when he complains about their circumstances, the others laugh at him and point out that they are actually all standing on the Elbe Bridge in Dresden, where Anselmus is gazing into the water. The whole episode can be explained on the realistic level simply as the consequence of a drunken punch party that results in broken bottles and glasses. But on the poetic level the bottle symbolizes the still prevailing entrapment of Anselmus in everyday reality. He is freed from his glass captivity when the Archivarius realizes that Anselmus was not responsible for his mistake but "a hostile principle that sought to penetrate destructively into your soul and to separate you from your true nature" (361). The whole episode clearly belongs to the realm of alchemy, exemplifying the vas hermeticum that contains the sublimated spirit of humanity.

While similar uses of alchemy occur frequently in Hoffmann's works,⁷⁴ the figure of the alchemist rarely occurs: notably in his story "The Sandman" ("Der Sandmann," 1816), which attracted from Sigmund Freud in his essay "Das Unheimliche" (1919) the same kind of attention that Jung gave to "The Spirit in the Bottle." This story is familiar to opera-lovers from Jacques Offenbach's Tales of Hoffmann (Les Contes d'Hoffmann, 1881), where it provides the plot for act 1: Hoffmann falls in love with an automaton created by the scientist-inventor Spalanzani and his associate, the glasses-maker Coppélius, believing—he alone among all the participants because of magical glasses provided to him by Coppélius—that she is a living woman. At the end, following Olympia's

⁷⁴ See Stiasny, *Hoffmann und die Alchemie*.
⁷⁵ "The Uncanny," in: Sigmund Freud, *The Standard Edition of the Complete Psychological Works*, trans. Alix Strachey, vol. 17 (London: Hogarth, 1953–74), 218–53.

dance and aria, his glasses break and he realizes the truth while Coppélius, enraged at Spalanzani, tears the automaton to pieces.

In Hoffmann's story⁷⁶ this episode is the second of three parts, but it enables us retrospectively to understand the action of the first part. Nathanael writes from the university to his friend Lothar that he has had an eerie experience: he was approached by a barometer merchant who reminded him of a frightful figure from his childhood, the lawyer Coppelius who sometimes dined with the family. (The name Coppelius, like its Italian equivalent Coppola, goes back to the stems *coppo* or *coppa*, meaning "cup" or "jar"; the Italian word *coppellare* designates the alchemical process of purifying silver from a mixture and *coppella* is the alchemist's melting pot).⁷⁷ But on certain evenings, which his mother found disturbing, the children were sent to bed early on the pretext that "the sandman" was coming. Promptly at nine o'clock on those evenings Nathanael heard heavy steps on the stairs and then sensed in the house "a fine, peculiar-smelling steam" (374).

One night he worked up his courage to spy on the two and learned that the "sandman" was none other than Coppelius, who exhorted his father "Up!—to work" (377). The two men, dressed in long black smocks, were laboring at a small furnace that burned with a blue flame while all kinds of strange equipment stood around. Coppelius manipulated a set of glowing red tongs with which he retrieved brightly sparkling masses from the thick smoke, which he then hammered. The boy thought that he saw human faces all around, but without eyes, and heard Coppelius crying out for eyes. Terrified, the boy burst out of his hiding place and was seized by Coppelius, who threatened to tear out his eyes until his father interceded: "Master! Master! leave my Nathanael's eyes!" (378). The boy fainted, and awoke later to his mother's attentions. Meanwhile, Coppelius disappeared from the city for a year or more. What the boy witnessed, in any case, was clearly an alchemistic process in which Coppelius served as the adept ("Master") and the father as his assistant or puffer.

Then one night his father announced, over his mother's objections, that Coppelius was coming one last time. At midnight Nathanael heard a terrible explosion that shook the whole house. Smoke was pouring from his father's room, where his father lay dead before the furnace with his face burned black and horribly disfigured. Once again Coppelius disappeared,

⁷⁶ Poetische Werke, vol. 2, 371–412.

⁷⁷ Ulrich Hohoff, ed., *Der Sandmann: Textkritik, Edition, Kommentar* (Berlin: De Gruyter, 1988), 239.

⁷⁸ On the significance of eyes and vision in this tale see Hohoff (ed.), *Der Sandmann*, 277–98.

but now, years later, Nathanael reports in his letter that the barometer salesman is none other than that Coppelius, who now calls himself Coppola.

Lothar's sister, Nathanael's beloved, reads the letter and assures Nathanael in her calm, rational manner that the secret terrors of which he wrote are purely imagined and have nothing to do with reality. She concludes that the nocturnal activities of the two men were nothing but secret alchemistic experiments of which his mother disapproved because of the unnecessary waste of money and because, "as is always the case with such laborants, your father's mind, wholly obsessed with the deceptive impulse for lofty wisdom, became estranged from his family" (382). Furthermore, the apothecary she consulted confirmed that such deadly explosions were easily possible during such chemical experiments. She pleads with him to put Coppelius and Coppola out of his mind and to be assured that they have no power over him.

At this point the story switches back to the Olimpia episode, but we now conclude in retrospect that Nathanael's father and Coppelius were engaged in the alchemical attempt to create a living being, a homunculus. 79 Indeed, the two episodes display conspicuous parallels: in both cases Coppelius/Coppola is working with another collaborator, this time a natural scientist (named for the renowned Italian scientist Lazzaro Spallanzani, 1729-99), to create a creature—here an automaton rather than a homunculus. Again the attempt ends with a calamity: not an explosion but a big fight between the two men in the professor's workroom, which with its "flasks, retorts, bottles, glass cylinders" (406)—clearly resembles an alchemist's laboratory. (Nathanael had earlier described Spalanzani in a letter to Lothar as appearing like "Cagliostro, as he is drawn by Chodowiecki for some Berlin journal" (385).) In both cases Coppelius/ Coppola is responsible for making the eyes of the creature. And both episodes cause Nathanael's collapse—this time into a madness from which he only gradually seems to recover.

The story ends with an epilogue in which Nathanael, now back at home and seemingly recovered, ascends with Klara the lofty tower of the city hall. From there, peering down through a small telescope obtained from Coppola, Nathanael sees a figure that he takes to be none other than the lawyer Coppelius. Screaming like an animal, he reverts into his earlier madness and, taking Klara to be a doll like Olimpia, tries to hurl her from the tower. Failing to do so, Nathanael casts himself down and lies dead on the pavement below while Coppelius once again disappears. Although the

⁷⁹ Pinkus, *Alchemical Mercury*, 115–36, ends her essentially Freudian interpretation of the story with an allusion to the homunculus in Goethe's *Faust*.

story contains far fewer alchemical images than *The Golden Pot*, its use of the figure of the alchemist is more explicit and central.

In contrast, in his story "Ignaz Denner" (1816) the evil Denner is the son of the Neapolitan Doktor Trabacchio, who is rumored to be "an alchymist" but whose potions and poisons turn out to be of a supernatural-satanic nature—not alchemical. (His principal panacea, for instance, is concocted from the heart blood of a child who is nine weeks, nine months, or nine years old.) A similar conflation of the occult is evident in the story "The Elemental Spirit" ("Der Elementargeist," 1822), in which the mysterious Major O'Malley has studied a wild assortment of mystical sources, ranging from Lactantius and Justinus Martyr by way of Hermes Trismegistus to Paracelsus, Fludd, and the Kabbalists Joseph and Philo. Promising to show the narrator, Victor, which elemental spirit is wooing for his affections, he first explains the nature of sylphs, undines, salmanders, and gnomes, reads his horoscope, and promises to reveals what the Jewish Kabbalists call his teraphim. Then he conducts him into his laboratory, which held all sorts of equipment for alchemistic experiments. There, taking a tube of blood from Victor's chest, he pours it along with another vial of a blood-like fluid onto a gleaming metal mirror heating over the hearth. As Victor peers into the fire, the metal mirror is suddenly transformed into a tiny figurine, which the Major calls his teraphim: a salamander. Here again, while Major O'Malley is vaguely alchemistic, his process involves elements from a variety of different mystical beliefs—elemental spirits, astrology, Kabbalism, as well as pseudoalchemical elements that can be found in none of the familiar sources. For Hoffmann, alchemy and the alchemist are simply factors to be used at random for atmospheric purposes.

In three cases, then—Faust, "The Spirit in the Bottle," and The Golden *Pot*—we encounter the alchemical motif of a spirit in a glass. In each case, of course, the signification is different: Goethe's Homunculus represents pure spirit striving for union with matter; in the fairy tale Mercurius exemplifies a vengeful spirit; and Hoffmann uses the image to suggest that Anselmus is earthly matter still in a preliminary stage of the magnum opus, not yet having achieved sublimation. In both Faust and The Golden Pot as well as "The Sandman" we find explicit figures of the alchemist. In Faust and "The Sandman" the alchemists are criticized for their presumption in tampering with human life. (This criticism differs sharply from the earlier satirization of alchemist-frauds claiming to transmute metals into gold.) In The Golden Pot, in contrast, Hoffmann uses alchemy as a metaphor for a higher poetic reality toward which Anselmus aspires. While the fairy tale has no alchemist as such, the presence of the philosopher's stone suggests that it was an alchemist who recently enclosed the spirit Mercurius in the glass. This remarkable occurrence of alchemists and a conspicuous alchemical motif in post-Napoleonic and late-Romantic Germany indicates an ambivalence in the authors' views of a society turning to the occult in reaction against the rationalism of the eighteenth century—a reaction reflected in Hegel's intense interest in Hermeticism during his late years in Berlin (1818–31).⁸⁰ The aging Goethe warned against excesses that he knew from his own youth; Hoffmann invites the reader to join him in his search for a higher poetic reality as an escape from the present; and the Grimms happily play to the public's expectations.

⁸⁰ Glenn Alexander Magee, *Hegel and the Hermetic Tradition* (Ithaca, NY: Cornell University Press, 2001), 247–57. Magee illustrates Hegel's use of alchemical ideas and images in his philosophical works (209–13).

Mid-Century Adaptations, or Albedo

THE SITUATION IN FRANCE

By a symptomatic coincidence, Schmieder's history of alchemy (Geschichte der Alchemie, 1832) appeared in the year of Goethe's death. Karl Christoph Schmieder (1778-1850), professor and director of the Realschule (high school for science and mathematics) in Kassel, was a historian of science and not interested in literary alchemists. The names of Goethe and Hoffmann, not to mention the British writers, do not occur in his more than six hundred pages. But his classic work, which surveys the history of alchemy from the Egyptians, by way of the Greeks and Arabs, to Western Europe from the thirteenth century to 1800, provides information on scores of historical practitioners of the art, including the legendary ones. In his conclusion Schmieder remarks that the last true adept of modern times (Friedrich Sehfeld) lived in Maria Theresia's mid-eighteenth-century Austria. But he doesn't believe that the art died out with Sehfeld, projecting, on the basis of historical frequencies, that he was succeeded at least by two adepts who preferred to remain clandestine and anonymous because of the prevailing contempt of alchemy. It does not occur to Schmieder that other successors might have taken their refuge in literature, as we saw in the preceding chapter.

Schmieder, whose work was the product of thirty years of study, during which he developed from a rationalist skeptic into a true believer, constitutes a compendium of knowledge about alchemists as known in 1832. As such, it marks the end of a period of development that includes the literary romanticization of alchemy during a period when many adherents of German *Naturphilosophie* included alchemy within the broad range of their Hermetic interests. The decades following Goethe's death and the publication of *Faust II* in 1832 saw considerable literary activity but no new developments concerning alchemy. What we find, rather, is the

¹ Karl Christoph Schmieder, *Geschichte der Alchemie*, ed. Franz Strunz (Munich–Planegg: Barth, 1927).

inclusion—often almost de rigueur, it seems—of alchemists in literary works of the next thirty years. Their "Art" is rarely central to the main story, and it uses essentially the models familiar from the earlier romanticized works, as in Ludwig Bechstein's *Die Geheimnisse eines Wundermannes* ("The Secrets of a Miracle Man," 1856).

Bechstein (1801-60), an apothecary by profession, was a popular and prolific writer best known for his collections of fairy tales (Deutsches Märchenbuch, 1845) and sagas (Deutsches Sagenbuch, 1853). His late novel, which takes place in Germany during the Napoleonic era, concerns the complicated family history—with the illegitimate births and concealed parentage typical of Gothic novels—of a noted professor at the university of Helmstedt (suspended in 1807 by King Jérome, Napoleon's brother). Much of the novel, in which Goethe, the classicist Friedrich August Wolf, and other contemporary figures appear, consists of the professor's lengthy disquisitions about his various collections (paintings, jewels, books, and others) and about people he has known, including the alchemist Sehfeld—the man whom Schmieder had recently presented as the last modern adept.² Although he is regarded as the "miracle man" for the various feats he performs—for instance, with his magical clock or with his coat that changes colors during table conversations—the professor is himself no alchemist. But he titillates his guests (3.50-6) with his stories about alchemists: for instance, a certain Jesse in Hamburg (2.153-64), whose laboratory is described along with his instruction of his grandson and adept, Benjamin, who inherited his purple tincture of the philosopher's stone. But when the professor finishes his story, his listeners, more eager than satisfied, realize that:

not a single word about the actual making of gold had fallen, and yet everything suggested that Jesse was a gold-maker, that his nephew Abraham, as well as Salomon Teelsu, had known the same secret, that both had passed it along to their sons, and that the narrator, whose wonderful and hidden life-paths had brought him personally close to those heirs, had been indoctrinated by them into all the secrets of the spagyric art and wisdom. (2.164)

On another occasion (3.50–6) he shows his guests a purple tincture in a glass secured with a Hermetic seal that he claims to have obtained from an earlier alchemist, but the transmutational properties of the "Goldpurpur" are never tested. When he dies, the professor gives the glass to his illegitimate son, who is unable to use it because he doesn't know the proper procedures. But his ownership of the glass and his frustrated attempts to

² Ludwig Bechstein, *Die Geheimnisse eines Wundermannes*, 3 vols (Leipzig: Einhorn, 1956), vol. 3, 59–64.

obtain gold with it ultimately ruin the son's life and cause his death. Typically, as we shall see, alchemy is introduced simply to lend color and mystery to an otherwise wholly realistic historical novel and to provide the author with grounds for cultural criticism. As the narrator remarks at one point (2.110):

As so often occurred [at social gatherings] the conversation turned to the arts of the adept, for the more what in those days was called Enlightenment established itself, all the more reason, even among the educated, continued in the bonds of darkness and self-conscious superstition. And unfortunately things have not changed or gotten better in the sixty years since then. While on the one hand the natural sciences—that is, many practitioners of them—try from inner conviction to entice others into the ways of the atheism that they pursue because the nature of divinity seems to them something altogether different from what the belief in revelation teaches, mystical irrationality seeks to derange humankind wholly and tries to clear the way for a tyranny in matters of faith, compared to which, should they be able to gain as much power as they would like, the Inquisition, the torturing and burning of witches, would be only trivialities.

This tendency, here evident in a German novel, is displayed even more widely and clearly in French historical plays and novels, where the influence of Goethe and Hoffmann was immediate and powerful and where Nicolas Flamel is almost ritually invoked as the guiding spirit of French alchemists.³ In Victor Hugo's novel *The Hunchback of Notre Dame (Notre-*Dame de Paris—1482, 1831), for instance, the archdeacon Claude Frollo, having like Goethe's Faust exhausted in his studies the four faculties (book 4, chapter 4), turns to alchemy: Nicolas Flamel is mentioned several times in the course of the novel. In the tower of Notre Dame the archdeacon sets up a secret workroom from which strange red lights are emitted, caused apparently by the bellows of his furnace. When his ne'er-do-well younger brother visits him there (book 6, chapter 4), looking not for the philosopher's stone (which is said to be hidden in the porch of the cathedral or in the cellar of Flamel's house) but simply money for a good meal, the laboratory is described as being exactly like Rembrandt's engraving of the magus: a large table covered with compasses, alembics, glass jars filled with liquids, and thick manuscripts. But the theme is not continued and developed. We learn that Frollo's passion for Esmeralda destroys his interest in "hollow science" (book 7, chapter 4), and jealousy corrupts his previously devout soul, which had led him among other things to save

³ See Fernand Baldensperger, *Goethe en France: Étude de littérature comparée* (Paris: Hachette, 1904); and Elizabeth Teichmann, *La Fortune d'Hoffmann en France* (Geneva: Droz, 1961).

Quasimodo as a child and to install him as bell-ringer of Notre Dame, turning him instead into the villain of the ultimately tragic plot. Sorcery and witchcraft play a more significant part than alchemy in the plot, leading to the false accusation and condemnation of Esmeralda.

The topic attracted other contemporaries. The five-act verse drama L'Alchimiste (1839), written by Alexandre Dumas (père) with the unacknowledged collaboration of his friend Gérard de Nerval, enjoyed a certain success as an opera in German (1840), Italian (1853), and French (1855, 1858). A radical adaptation of Milman's popular Fazio (see chapter 3), it manages to turn the English tragedy into a melodrama with a happy ending. (Indeed, Milman was interested to "trace its alteration in passing through a mind thoroughly imbued with the spirit of the modern French school," where "the interest was reversed, and all the sympathies were excited towards the person who was not the wife".4) The alchemist Fasio—who sees himself as a spiritual heir of Nicolas Flamel, "mon maître vénéré" (392), as we learn early in the play⁵—practices his craft in sixteenthcentury Florence in the basement of a house owned by the old miser Grimaldi, much to the distress of his wife, Francesca, who worries (like Milman's Blanca) that "this cursed gold" (393: "cet or infâme") is destroying his soul and who calls his equipment "instruments of temptation invented by hell" (443: "instruments tentateurs inventés par l'enfer"). As Fasio is trying to assure her that he is only a few days away from transmuting lead into gold (391)—on the next day, the numerologically significant twenty-first of the month (3×7) and at a full moon—Grimaldi, branding him an "accursed alchemist whom Lucifer claims" (404: "Alchimiste maudit, que Lucifer réclame"), is worried about the security of his property and his gold and threatens to evict him. As Fasio pleads for three more days, an explosion rocks the laboratory where he has left the sulphur too close to the flames. When he goes down to measure the extent of the damage, he finds a secret passage connecting his laboratory with the sanctuary where Grimaldi keeps his gold. There, from concealment, he witnesses a quarrel between Grimaldi and his nephew, in the course of which the old miser is killed. Permitting himself to be bribed for silence by a large share of the old man's gold, Fasio lets people believe that his sudden wealth resulted from his alchemical successes, and he is hailed as the "mighty alchemist whose art today makes gold just as God does" (427: "Alchimiste puissant dont l'art fait aujourd'hui / De l'or ainsi que Dieu").

⁴ "Prefatory Observations," in: Milman, *Poetical Works*, vol. 3 (London: John Murray, 1870), 120.

⁵ Théâtre complet d'Alex. Dumas, 15 vols (Paris: Calman Lévy, 1863–74), 4:389–470.

His wife, alarmed at Fasio's change of character resulting from his new wealth and jealous of the woman who pursues him, betrays the source of his gold to the chief authority ("le Podestat"). When the official discovers Grimaldi's body, Fasio is arrested for his murder. His wife's pleas of his innocence to the magistrates are rejected until, shortly before his execution, the remorseful nephew confesses and turns himself in, assuring Fasio that a flask of poison in his pocket will save him from the scaffold. In the last lines Fasio finally learns what a treasure he has in his wife's ardent yet modest soul. God may have refused him the gold he sought but gave him in its place "this diamond fallen from your celestial jewel-case" (470: "Ce diamant tombé de ton écrin céleste").

Again, then, alchemy is a factor but not a theme: his obsession, which causes Fasio's failure to appreciate his wife's worth, is responsible for the explosion and is used as a fraudulent justification for his sudden wealth; but apart from the passing allusion to Flamel we hear nothing about alchemy itself, whether esoteric or exoteric; and we see Fasio's laboratory with its furnace and instruments, but no alchemical activity, only at the beginning of act 4 when Francesca exposes Fasio's secret to the Podestat. As in Milman's version, alchemy functions simply as a trigger for the author's social criticism.

In Dumas's novel Mémoires d'un médecin: Joseph Balsamo (1846–8), set in the France of Louis XV, the principal figure, Balsamo—otherwise known as Cagliostro—is an alchemist who learned his craft from his adept-mentor Althotas. But alchemy plays a surprisingly minor part less, say, than hypnotism, telepathic visions, magnetic currents, and the like—in the lengthy novel, which revolves around political machinations, court intrigues, and family scandals, and includes in principal roles Richelieu, Jean-Jacques Rousseau, Jean-Paul Marat, Marie Antoinette, and many other historical figures. Alchemists are represented in the person of Althotas, Balsamo's revered master, who travels around Europe in a huge carriage, which contains a laboratory complete with furnace, bellows, and tongs as well as the usual crucibles, vials, charcoal, and so forth (volume 1, chapter 2: "Althotas").6 When we first meet him, the aged alchemist is in a bad mood because the rocking carriage has caused him to spill a quart of his elixir into the fire—an elixir that lacks for its perfection only one leaf from an unknown plant. Without the elixir he will be dead (after his second half-century) in only three months. In the meantime, he sustains himself by sipping spoonfuls of the still imperfect elixir. Despite

⁶ I refer to the three-volume edition, *Memoirs of a Physician*, trans. anon (Boston: Little, Brown, 1904).

that failure he is capable of making diamonds from vitrified carbon—a chemical rather than an alchemical process.

In a later episode Balsamo, by promising gold to pay his huge debts, bribes the Cardinal de Rohan to vouch for him when he seeks to retrieve his wife, Lorenza, from the Carmelite convent in which she has sought refuge (volume 2, chapter 7). When the cardinal visits him the following day to collect his gold, Balsamo leads him into his laboratory (chapter 14: "Gold") with its immense furnace. Putting on a protective garb of asbestos, Balsamo raises the cover to expose four crucibles containing metals of various colors that represent different stages of the process, as he explains. When the first crucible attains a white heat, he pours the metal into two molds while murmuring solemn incantations. When they cool, each turns out to be filled with large lumps of solid gold. Repeating the process with the other crucibles, Balsamo heightens the mystery by telling the astonished cardinal that he once experienced the perils of a broken crucible while experimenting four hundred years earlier with none other than Nicolas Flamel. When the cardinal goes off happily with his gold, utterly convinced of the alchemy by what he has seen with his own eyes, Balsamo carefully saves the cardinal's receipt so that he will be able to prove to his "brethren" how he used the gold they provided—that is, his fellow conspirators in the revolutionary plot to overthrow the monarchy: a brotherhood described in the introductory chapter and involving among its chiefs such figures as the Swedish Emmanuel Swedenborg, the Swiss Johann Caspar Lavater, the American John Paul Jones, and representatives of democratic voices in other lands.

In sum, despite his powers as a hypnotist Balsamo's "alchemy" is a total fraud based on the same kind of deception as that used by Chaucer's Canon: gold—here a vast quantity rather than a tiny piece—already hidden in the crucibles. Indeed, although he has spent many hours in his own laboratory, he later confesses to his wife, Lorenza (volume 3, chapter 29: "Love"), that he has renounced those "vain endeavors" and, in proof, shows her his furnace with its extinguished fire, the cold crucibles, and all the other instruments of his "expiring alchemy." She, in turn, reminds him that the various stories concerning the successful transmutations of lead into gold amount to nothing but clever juggling and substitution—precisely what Balsamo did earlier in his deception of Cardinal de Rohan.

In the following chapter (volume 2, chapter 15: "The Elixir of Life") Balsamo visits the apartment of the aged alchemist, who is still searching desperately for the elixir, surrounded by the writings of Alphonse X, Raymond Lull, Peter of Toledo, Albertus Magnus, and other alchemists. He lacks only a single ingredient, he tells Balsamo, to perfect his

formula: the last three drops of the arterial blood of an infant. He disparages Balsamo's Enlightenment dream of a world in which all men will be equal, arguing that men can be equal only when they are immortal—a belief that Balsamo, for his part, regards as a chimera. That prompts Althotas to deliver a paean to the goal of alchemy since the days of Homer: alchemy, which has always in its loftiest (esoteric) form sought the highest good, human happiness. The dispute continues as Balsamo points out that Althotas's elixir depends upon a crime: the murder of an infant; but the alchemist calculates in rebuttal the millions of lives that could be saved through his elixir. When Balsamo finally departs, subdued by his master's genius and apparently effective medicaments, he has still not committed himself to the crime of killing an infant.

We hear nothing further about Althotas for some time. Several months later (volume 3, chapter 17: "What Althotas Wanted to Complete His Elixir") the alchemist in his wheelchair reminds Balsamo that in one week he will be a hundred years old and, if he is to live, needs the blood of a child or virgin maiden. When Balsamo fails to help him, Althotas kills his wife, Lorenza (chapter 31: "Blood"), whom he believes still to be a virgin, and perfects his elixir, which immediately seems to improve his spirits. But when Balsamo learns what has happened, he tells Althotas that the murder was in vain: Lorenza was not a virgin. At those words Althotas drops his phial of elixir, which shatters on the floor. In his anger the old alchemist burns his manuscripts and books so that Balsamo may not benefit from his invaluable inheritance and then is himself consumed by the flames as Balsamo looks on with a sardonic smile. In the last analysis, then, alchemy turns out to be a fraud both in its capacity to transform metals into gold and in its promise to prolong life. The alchemists, at least in that art and for all their indebtedness to Nicolas Flamel, are as unsuccessful as Fasio in L'Alchimiste.

Honoré de Balzac (1799–1850) was the genius of obsessions. Many of the most memorable figures in his novels are driven by idées fixes that amount to manias: the miserliness of old Grandet (in *Eugénie Grandet*, 1833) or the irrepressible sexual urges of Baron Hulot (in *La Cousine Bette*, 1846). The same obsessiveness characterizes the alchemist Balthazar Claes in *The Quest of the Absolute (La recherche de l'absolu*, serially in 1834). Yet alchemy plays next to no role in the novel, which is basically a family chronicle depicting the successive martyrdoms of Claes's devoted wife and daughter and the decline and ultimate recovery of a great family. For the purposes of the plot the obsession with alchemy that drives Claes to financial ruin and personal tragedy might equally well have been, say, the addiction to gambling that motivates Dostoevsky's Alexei Ivanovich (in *The Gambler*, 1867) or, for that matter, the author himself; the

frustrating quest for the solution to Fermat's theorem, which drove generations of mathematicians to distraction until its solution in 1995; the search for the "breakthrough" to a new and loftier post-romantic music that compels Thomas Mann's Adrian Leverkühn to make his pact with the Devil (*Doktor Faustus*, 1947); or the urge to paint the perfect portrait that consumes Balzac's own Frenhofer (in *Le Chef-d'oeuvre inconnu*, 1831)—and that a century later compelled Pablo Picasso in his commission to illustrate Balzac's story.

The novel—magnificent in its description of time and place (Napoleonic and post-Napoleonic Flanders) and character (not only the obsessed Claes but also his devoted wife and, above all, his daughter)—begins in 1812 when Claes's wife, Josephine (Pepita), has sunk into a profound depression because she does not understand the mysterious preoccupations that, for the past three years, have ruined what was for some fifteen years a blissfully happy marriage representing the prosperous union of two wealthy families. When she presses him to explain, he reminds her of the visit in 1809 by a Polish gentleman who discovered that Claes, himself formerly a student of Lavoisier's, shared his interest in chemistry. But modern chemistry, the visitor observed, while scoffing at alchemy, has left much to be accomplished. He told Claes that his own experiments had led him to believe in the existence of the Absolute: one element common to all substances—that is, what has traditionally been called the philosopher's stone. (We noted a similar move from chemistry to alchemy in the actual life of their German contemporary Schmieder.) To support this belief he cited alchemists from Hermes Trismegistus and Pythagoras to the present. It is this obsession that, ever since that fateful visit, has distracted Claes from his usual attentions to his family.

In his pursuit of the Absolute—that is, to pay for the equipment and supplies that he requires—Claes mortgages his extensive properties and gradually sells off the family silver, priceless paintings, and even the tulips from the garden, not to mention his wife's diamonds. Pepita, who loves him with an almost religious fervor and (like Milman's Blanca) is more jealous of his science than she would be of another woman, persuades her husband to give up his alchemy so that his children will not be utterly bereft. When inevitably and despite her pleas he returns to his "science," she falls deathly ill (in 1814–15) and arranges with her lawyer to put aside at least her own family property for her children.

When she dies (in 1816), she leaves her nineteen-year-old and highly capable daughter Marguerite in charge of her father and siblings. Within a year Claes's grief abates and he returns to his "science," plunging the family ever more into debt. At this point Marguerite's character asserts itself: she obtains a position for her father in Brittany as tax collector and

sends him off with his devoted famulus, Lemulquinier, while she remains in Douai and, leasing the properties left by her mother, gradually reestablishes the family prosperity: she pays off her father's huge debts and even manages to buy back the family silver and paintings. When she and her siblings are married in a joint ceremony, her father—ever new debts paid off!—is brought back home, and everyone is happy for a time. Then Marguerite goes to Spain with her husband to attend to some family inheritances. During her two-year absence Claes manages to sell everything again, to run up debts, and to become the laughing stock of the town, branded contemptuously as "The Alchemist." Once again Marguerite pays off his bills and re-establishes the family's good name. In 1832 Claes dies, glimpsing in his dying moments the solution to the great enigma but unable in death to leave to posterity the key.

While the family is undergoing this distress, complicated by the love affairs of Marguerite and her sister, we hear constantly about Claes's genius, in which his wife and daughter never cease to believe, and vague ruminations about the Absolute. Only once, however, when Marguerite visits her father's rooms to try to discuss urgent business, do we get a glimpse of his laboratory, where the flasks and retorts are complemented by an air pump, a powerful lens, and a voltaic battery. (As in Mary Shelley's Frankenstein, electricity has been added to the tools of the modern alchemist.) When he explains that he is waiting for sunlight so that he can focus solar rays on metals in a perfect vacuum and at the same time expose them to electrical currents, she exclaims that he should keep the metals to pay his bills rather than reducing them to gas, and concludes that her father is mad. Later, when Claes is sent off to Brittany, he takes sad leave of his laboratory, where he hopes that a combination of carbon and sulphur will decompose and then crystallize into a diamond—which apparently it has done when he returns home years later. (There is also the suggestion that it was a misplaced diamond.) Otherwise we hear little of the alchemy that he practices; the alchemist himself is depicted initially as a figure of genius and grandeur who is gradually reduced to ignominy and ridicule. He differs from Dumas's Fasio only to the extent that, like Balsamo, he is driven by noble ambition and not by the lust for gold.⁷

⁷ Robert Marteau, *La Récolte de la rosée: La Tradition alchimique dans la littérature* (Paris: Belin, 1995), 168–72, suggests that Balzac was influenced by the curious little tract *Hermès dévoilé* (1832), written by the pseudonymous Cyliani, who claimed after thirty-seven years of labor to have discovered the philosopher's stone and wished to reveal the secret while warning aspiring adepts that the way is thorny and often frustrating.

AN AUSTRIAN DRAMATIZATION

Friedrich Halm (pseudonym for Eligius Franz Joseph Freiherr von Münch-Bellinghausen, 1806–71), while largely unknown today, was widely regarded in his own day as perhaps the greatest master of the Austrian stage, even effacing his contemporary Franz Grillparzer. As a nobleman enjoying financial security, he was contemptuous of what he considered the avarice and ostentation that, he felt, characterized the nouveau riche of post-Napoleonic Austria, and this social criticism shows up clearly in his plays.

His early verse tragedy *Der Adept* (first performed in 1836), which went from mixed reviews to stage success,⁸ displays clear echoes of Goethe, Balzac, and other predecessors. The first act, set in Cologne, Germany, opens in Werner Holm's laboratory, which might well have been inspired by Faust's study—or Rembrandt's etching: a Gothic vault, illuminated by a hanging lamp, with shelves and cupboards containing old parchments, crucibles, boxes, skulls, and other alchemical equipment.⁹ At the furnace the famulus, Heinrich Hartneid—whose name suggests envy ("Neid")—tends to glass and metal retorts over a charcoal fire while the alchemist himself sits brooding at a table.

Holm, like Balzac's Claes or Godwin's St Leon, is not pursuing gold for its own sake but, rather, in order to improve the world:

Nicht zu Alltäglichem bin ich geboren; Ich fühl's, zum Heil der Welt bin ich erkoren, Erlösend Armut von dem Drang der Not. (ll. 155–7) (I wasn't born for the commonplace; I am chosen, I feel, for the salvation of the world, delivering poverty from the pressures of need.)

But for this purpose he requires gold, "Thou right of the weak, power of the strong, / thou master of the earth, one and all, gold" (ll. 42–3: "Du Recht des Schwachen, der Gewalt'gen Macht, / Du Herr der Erde, eins und alles, Gold!"). In the process, however, he has annoyed his goldgreedy famulus, who complains (like Chaucer's Yeoman) that he has been working for the alchemist for three years, has given him money, and taken on the mortgage of his house, and for what?

 $^{^8}$ Rudolf Fürst, "Friedrich Halms Leben und Werke," in: Friedrich Halms Werke, 4 vols, ed. Rudolf Fürst (Berlin: Bong, [n.d.]), vol. 1, xxxi. 9 Werke, vol. 1, 127–94.

Ihr habt mir eitel Blendwerk vorgegaukelt Vom Werk der Sonne, 10 von der Goldtinktur. Schon an drei Jahre zieht Ihre mich herum; Arbeit vollauf; wir schmelzen, sublimieren, Wir mischen, scheiden, rösten, laborieren; Wo aber bleibt das Gold? (ll. 97–102)

(You have conjured vain deceptions before me about the work of the sun, about tincture of gold. For three years you've dragged me around; nothing but work; we melt, sublimate, we mix, dissolve, roast, labor away; but where's the gold?)

Then his wife, Agnes, comes in and complains (like the wives of Fasio and Claes) that he has become estranged from his family: when she compares him with the image of his former self, she no longer recognizes him. Meanwhile the entire family is "hovering on the brink of ruin" (l. 305: "Wir schweben all' am Rande des Verderbens"): her entire dowery is gone, the creditors are clamoring for their due, and they are about to be evicted. When she adds that the children have nothing to eat, he says only that she should sell the "vain splendor" around her neck: a silver necklace given to her by her dying mother. In anger and despair she tears the chain from her neck and hurls it onto the hearth, where it shatters one of the glass retorts from which a purple-reddish flame flares up. Then she rushes out of the room, and Hartneid remarks, dismayed, that the work of years has been destroyed. But Holm, who has been looking at the fragments with scarcely concealed excitement, sends him out of the laboratory. After consulting a book that proclaims that purple is the sign of success, he rushes to a cupboard and retrieves a small vial containing a fluid that he pours over the fragments of the retort. When the steam has dissipated, he inspects the mixture and proclaims that the battle is over, the spirit has won (l. 389: "Es ruht der Kampf! Der Geist hat überwunden"): the "ignoble" elements have disappeared, leaving only a pure purplish powder freed of everything earthly. He tosses a few grains of the powder—the philosopher's stone into a smoking crucible and, after a few moments, finds that the material has been transmuted into gold. Jubilant, he exclaims that now the earth is his, the world at his feet (l. 426: "Die Erde mein! Die Welt zu meinen Füßen!"). Placing the powder in a golden capsule, he leaves the laboratory, and, as it turns out, his house in Cologne as well as his wife and family.

¹⁰ We are told later (ll. 861–62) that "Werk der Sonne" is "the art of transforming contemptible ore into noble gold through separation, mixture, precipitation" ("Die Kunst, durch Scheidung, Mischung, Zeitigung / Verächtlich Erz in edles Gold zu wandeln").

Hartneid, who has been secretly observing him, is left behind, furious, because he has been deceived and cheated out of what he regards as his just reward.

At this point, for all practical purposes, the alchemical section of the drama is over. The next four acts, as in Dumas's *L'Alchimiste* and Halm's *Der Adept*, display the shift in Holm's character and the gradual decline of his fortune and hopes. Act 2 finds him in Italy, where he has established himself as a wealthy Russian named Borisoff, hoping to carry out his plans of bettering humanity (not unlike St Leon in Hungary). During a grand masked ball at his luxurious villa he informs the duke that he plans to establish a hospital for the poor and elderly and to found a university to rival that of Bologna. The duke is envious, saying that Borisoff was simply using his wealth to carry out the duke's own dreams. Am I still the duke? he wonders. "My ermine has become fool's garb. The drunken mob follows the new deity and kneels jubilantly before the stranger:"

Zum Narrenkleide ward mein Hermelin.— Dem neuen Gotte folgt die trunkne Menge Und kniet jauchzend vor dem Fremdling hin. (ll. 765–7)

Hartneid, appearing in disguise, reveals that Borisoff actually acquired his wealth through alchemy, whereupon Don Manuel, who has felt insulted and was made suspicious by the newcomer's high-handed ways, conspires with Donna Lucretia to entrap Holm.

In the third act it becomes clear to what an extent Holm has been corrupted by his ability to make gold. At the nearby villa of Lucretia, who is conniving to bring him down, he boasts that "the world is mine! I am master of the earth; for whatever breathes is the slave of gold!" (ll. 1095–6: "Die Welt ist mein! Ich bin der Herr der Erde; / Denn was da atmet, ist des Goldes Knecht!"). When Lucretia, having dulled his senses with wine, leaves the room, he begins to have doubts, reflecting that he had originally dreamed of a different kind of bliss and had chosen other paths. "But I let loose the reins of desires; intoxicatingly, wild frenzy carried me along" (ll. 1182-3: "Ich aber ließ den Zügel den Begierden; / Berauschend riß mich wüster Taumel hin"). Is it too late to return to the path he left, he wonders: to the ideals of moderation, limitation, privation (l. 1188: "Zum Maße, zur Beschränkung, zum Entbehren")? When Hartneid appears and demands to have the secret, Werner refuses indignantly, saying that Hartneid wants nothing but gold—that he will give him gold but not the secret. "The sanctuary of knowledge may be opened only for the elect, and gold's holy source streams forth only for the worthy spirit who lives for mankind:"

Des Wissens Heiligtum, Es darf nur Auserwählten sich erschließen, Des Goldes heil'ger Quell sich nur ergießen Dem würd'gen Geist, der für die Menschheit lebt. (ll. 1258–61)

Hartneid tells him that he must give up the secret: that he has been betrayed by Lucretia, who lulled him while armed men led by Don Manuel gathered outside. He tries to subdue Holm with his dagger, but Holm wrests it away and stabs him. When the armed men enter, he distracts them by tossing a handful of gold among them and escapes.

The last two acts take place on a mountaintop in Switzerland, where Holm has fled and is taken in by the shepherd Ruodi and his sister Ännele. There he encounters his wife, Agnes, who following his departure from Cologne took refuge there with her two young sons, who have died. When Holm promises to restore their past happiness through gold and to transfigure the exhausted Agnes (l. 1712: "Glanz soll dich verklären!"), she tells him feverishly not to use that ominous word: "Gold was the demon that shattered your happiness!" (l. 1717: "Gold war der Dämon, der dein Glück zertrümmert!"). When they learn that a band of men in the valley is searching for Holm as a murderer, Holm gives Ruodi a purse of gold to protect them. As Ännele leads them into hiding higher up the mountain, Manuel appears and observes Ruodi counting his gold.

In the last act Agnes has died, and Ännele reproaches her brother, who has been corrupted by gold, for taking money from Manuel to betray Holm. But first he tries to pressure Holm for more gold, even though Holm warns him that "Gold is destruction, gold is decline" (l. 1975: "Gold ist Verderben, Gold ist Untergang!") and rejects his offer. As Ruodi goes off to betray him, Holm attains his final insight: "Limitation holds the earth's shape together; the eternal rule of nature is moderation" (l. 2021: "Beschränkung hält der Erde Bau zusammen; / Die ew'ge Regel der Natur heißt Maß"). He curses gold as "the idol of my times" (l. 2059: "du Abgott meiner Zeit"), takes the capsule hidden on his chest, and strews the magical powder (the philosopher's stone) in the air. When Manuel approaches with his armed guard and demands the secret, Holm stabs himself over his wife's grave, and Manuel's men, opening the capsule, discover that it is empty. As the play ends, the half-mad Manuel rants that Satan should have Holm's soul.

Again, then, the figure of the alchemist is used to exemplify, first, the obsession with the great secret of nature (here the power to make gold rather than simply "the Absolute," as in Balzac's novel), and then the social devastation caused by the world's failure to appreciate his good works (as in *St Leon*) and the psychological transmutation as the alchemist becomes obsessed with his own power. The drama turns into a powerful indictment of a society corrupted at every level—from the duke down to

the alpine shepherd—by the lust for gold: that is, wealth in any form. The only innocents are the two women: Agnes, whose happy marriage was ruined and who dies; and Ännele, who decides to emigrate and to do penance for her brother's guilt.

AMERICAN VARIATIONS

Given Edgar Allan Poe's (1809–49) fascination with the occult, it is hardly surprising that his stories contain a number of alchemical images symbolizing the young America where, it was widely believed, in contrast to the stultifying conservatism of old Europe, personal and political renewal was possible. In his stories, accordingly, we find many alchemical tropes signifying death and regeneration ("Ligeia"), the alchemical garden ("Eleonora," "The Gold-Bug"), and the inner transformation of the self generally. ¹¹ Randall A. Clack points out that, while it is difficult to determine exact sources for Poe's knowledge of alchemy, he would probably have been familiar with stories surrounding the earlier New England alchemists as well as numerous works on alchemy in bookstores from Boston to Baltimore. Yet despite the prevalence of alchemical tropes in his works, the figure of the alchemist rarely appears, most notably in his hoax "Von Kempelen and His Discovery" (1849), a wicked parody of a scientific paper as well as a critical comment on the California Gold Rush, which had begun a year earlier.

Citing various (fictive) discussions of Von Kempelen's discovery—the fame of which is taken for granted—including his refutation of the claim by another that he had made the same discovery earlier and his criticism of mistranslations from the German by others, the unnamed narrator goes on to say a few words about the man, whom he claims to have known casually. He notes that Von Kempelen was born in Utica, New York, of a family from Germany, and was connected somehow with [Johann Nepomuk] Maelzel, the impresario of the chess-playing automaton. (At this point the fictive editor appends a note stating that the inventor of that automaton was actually a Von Kempelen). ¹³

¹¹ See Randall A. Clack, *The Marriage of Heaven and Earth: Alchemical Regeneration in the Works of Taylor, Poe, Hawthorne, and Fuller* (Westport, CT: Greenwood, 2000), 49–82; and also Barton Levi St Armand, "Poe's Sober Mystification: The Uses of Alchemy in 'The Gold-Bug,'" *Poe Studies* 4 (1971): 1–7.

¹² Edgar Allan Poe, *The Selected Poetry and Prose*, ed. T. O. Mabbott (New York: Modern Library, 1951), 337–43.

¹³ Wolfgang von Kempelen (1734–1804), born in Pressburg, was in fact the inventor of the so-called "Schachtürke" ("chess-playing Turk") as well as a talking machine and other remarkable creations.

The narrator specifies that he met "the now immortal Von Kempelen" (341) only once, in Providence, Rhode Island, before he departed for Bremen, where he was first reported to have made his great discovery. There, suspicious of his sudden wealth, the police kept watch on his activities and finally traced him to "a garret in an old house of seven stories," where they caught him, they thought, in the act of counterfeiting. (We recall the alchemical significance of the number seven, which also occurs prominently in "The Gold-Bug," from earlier mentions, e.g. *The Chymical Wedding*.) In his attic they found, along with various chemical equipment:

a very small furnace, with a glowing fire in it, and on the fire a kind of duplicate crucible—two crucibles connected by a tube. One of these crucibles was nearly full of *lead* in a state of fusion, but not reaching up to the aperture of the tube, which was close to the brim. The other crucible had some liquid in it, which, as the officers entered, seemed to be furiously dissipating in vapor. (341)

When they seized him, Von Kempelen with his asbestos gloves threw the crucibles with their contents on the floor. In their further search of the premises the police found nothing suspicious apart from a paper parcel containing "a mixture of antimony and some *unknown substance*," which they have so far not succeeded in analyzing. In his bedroom they discovered, along with some silver and gold coins, a trunk filled with what they took to be brass, but what turned out to be pure virgin gold. It emerges that Von Kempelen had "actually realized, in spirit and in effect, if not to the letter, the old chimera of the philosopher's stone" (342).

The story ends with a dig at the California Gold Rush. Although Von Kempelen has hitherto refused to share the secret of his discovery, the very suspicion that the markets might be flooded with gold has diminished the value of gold, which will soon be "of no greater value than lead" and will no doubt affect the intentions of those planning to move to California. "In Europe, as yet, the most noticeable results have been a rise of two hundred per cent. in the price of lead, and nearly twenty-five per cent. in that of silver" (343).

Despite the liveliness of his brief account of Von Kempelen's laboratory and his activity there, Poe in this story is interested less in the alchemist than in the economic implications of his alleged discovery. "It remains to be seen," he writes, "whether this momentous discovery itself (*momentous* under any circumstances) will be of service or disservice to mankind at large" (340). Earlier writers, from Godwin to Balzac, had made similar intimations, but Poe's question appears in retrospect especially timely in view of the recent publication of *The Communist Manifesto* (1848) and the contemporary economic studies of Marx and Engels.

Like Poe, Nathaniel Hawthorne (1804-64) makes frequent use of alchemical tropes while introducing more alchemists into his fiction than

does Poe. In "The Great Carbuncle" (1837, in *Twice-Told Tales*) we hear about Doctor Cacaphodel, himself "shaped somewhat like a crucible," who had "wilted and dried himself into a mummy by continually stooping over charcoal furnaces, and inhaling unwholesome fumes during his research in chemistry and alchemy" (928). ¹⁴ In *The Scarlet Letter* (1850) Roger Chillingworth, visiting Hester in her prison cell, tells her of "my old studies in alchemy," which have made him a better physician than many with medical degrees (126). He gives her a potion made from "a recipe that an Indian taught me, in requital of some lessons of my own, that were as old as Paracelsus" (127). And he tells her that he shall seek the man whose name she conceals—the father of her child—"as I have sought truth in books; as I have sought gold in alchemy" (128). ¹⁵

The clearest example occurs in "Dr Heidegger's Experiment" (1837, in Twice-Told Tales). In the straightforward plot of the short tale¹⁶ Dr Heidegger has invited "four venerable friends" to his study, where he requests their assistance in an experiment. Taking a withered rose from an old volume, he tosses it into a cut-glass vase filled with fluid. Initially the flower simply lies on the surface, but soon a change is apparent: the petals stir, the stalk and foliage become green, and soon the rose looks as fresh again as when it was given to Heidegger fifty-five years earlier. The guests are astonished when Heidegger explains that the water was sent to him by a friend from the famous Fountain of Youth in southern Florida. Now he invites his elderly friends—three men and a woman—to test the effect on human beings. They sip the liquid from four champagne glasses and, almost immediately, display "a sudden glow of cheerful sunshine" on their countenances (948). As they drink a second glass, their eyes grow clear, and they appear to be "three gentlemen of middle age, and a woman, hardly beyond her buxom prime." Consuming a third glass, they seem to find themselves in "the happy prime of youth." Yet as they dance with lively energy, "the tall mirror is said to have reflected the figures of the three old, gray, withered grandsires, ridiculously contending for the skinny ugliness of a shrivelled grandam" (950). Their energetic dance overturns the table with the vase, which is shattered, and its contents are splashed across the floor. As they collect themselves, Heidegger points out that the rose has faded. Soon the guests themselves feel a strange chill as they age again. From his experiment Heidegger has resolved that he would not drink of the fountain, even should its "delirium" last for years rather than

¹⁴ Nathaniel Hawthorne, *The Complete Novels and Selected Tales*, ed. Norman Holmes Pearson (New York: Modern Library, 1965).

For other examples see Clack, Marriage of Heaven and Earth, 83–4.
 Complete Novels and Selected Tales, 945–52.

moments. But the three old-timers have learned a different lesson and resolve to make a pilgrimage to Florida and "quaff at morning, noon, and night, from the Fountain of Youth" (951).

In a note attached to a later edition (1860) Hawthorne observed that an English reviewer accused him of plagiarizing the idea of his story from a chapter in a novel by Alexandre Dumas: 17 presumably, though it is not mentioned, the Mémoires d'un médecin, where Althotas is obsessed with finding an elixir of eternal youth. Denying the charge, Hawthorne was even so bold as to suggest that Dumas got the idea from an earlier published version of his own story. The debate is pointless because, for centuries, one of the two principal goals of the philosopher's stone was to create an elixir of youth: the common source, presumably, for both authors. In any case, Dr Heidegger is not described in terms of a traditional alchemist: his library is filled with gigantic folios and black-letter quartos in addition to a bust of Hippocrates, a skeleton, and a mirror from which the spirits of his deceased patients were rumored to live and peer forth. While we see no laboratory equipment, we know that Dr Heidegger carries out experiments because, half a century earlier, his fiancée died after swallowing one of his prescriptions. And it is a kind of alchemical experiment that he carries out on his four friends.

A clearer case occurs in "The Birthmark" (in Mosses from an Old Manse, 1846), which begins by characterizing Aylmer as "a man of science" whose passion for his subject, like that of Claes, Fasio, Holm, and others we have encountered, is so obsessive that it outweighs his love, when finally he "cleared his fine countenance from the furnace smoke" and gets married (1021). He is soon troubled by the birthmark that mars his lovely wife's face: a tiny hand-shaped mark on her left cheek. While several Hawthorne scholars believe that the reddish mark suggests rubedo, the stage of perfection in the magnum opus, 18 Aylmer regards it as "the visible mark of earthly imperfection" (1021).

After a time, she is persuaded by her husband to let him remove the mark. Conducting her into apartments near his laboratory, where he is assisted by a famulus whose shaggy appearance suggests pure physicality in contrast to Aylmer's own spirituality, he relates to her the history of "the long dynasty of the alchemists, who spent so many ages in quest of the universal solvent by which the golden principle might be elicited from all things vile and base" (1027). He hints that he has it in his power to

Complete Novels and Selected Tales, 951–2.
 Clack, Marriage of Heaven and Earth, 97. It is perhaps going too far, however, to claim that her name, Georgiana, suggests the alchemical marriage of male and female and its product, the hermaphodite.

concoct an elixir that would prolong life, but that it would produce a discord in nature and be cursed by humankind. After days and hours of further work in his laboratory, he shows her "a small crystal globe containing a gold-colored liquid"—the elixir of life (1027). As she awaits the results of his work, Georgiana pores over the volumes in his library: the works of Albertus Magnus, Cornelius Agrippa, Paracelsus, and other noted alchemists. His laboratory, when she seeks him out there, displays all the features of a traditional alchemist's lair.

The first thing that struck her eyes was the furnace, that hot and feverish worker, with the intense glow of its fire, which by the quantities of soot clustered above it seemed to have been burning for ages. There was a distilling apparatus in full operation. Around the room were retorts, tubes, cylinders, crucibles, and other apparatus of chemical research. An electrical machine stood ready for immediate use. (1029)

At last, bringing "a crystal goblet containing a liquor colorless as water, but bright enough to be the draught of immortality" (1031), he tells her that the experiment has been perfect and that the draught cannot fail to remove the blemish. Drinking the liquid, she hands back the goblet and immediately falls asleep. As he sits observing her and recording every symptom in his notebook, the birthmark begins to lose its color and distinctness. Ecstatic with his success, he wakes his wife, who smiles as she gazes into the mirror. Then, as he assures her that her beauty is now perfect, she reveals that, for all his lofty aims and pure intentions, he has failed: for she is dying. "As the last crimson tint of the birthmark—that sole token of human imperfection—faded from her cheek, the parting breath of the now perfect woman passed into the atmosphere, and her soul, lingering a moment near her husband, took its heavenward flight" (1032). The story concludes with Hawthorne's melancholy judgment that "Thus ever does the gross fatality of earth exult in its invariable triumph over the immortal essence which, in this dim sphere of half development, demands the completeness of a higher state" (1033). As so often before, the obsession of the alchemist leads to the destruction of those around him and to his own ultimate dismay, even though at one point his moral understanding enabled him to realize what trouble the elixir of eternal vouth could evoke.

In sum, then, the French, German, and American writers of the transitional period tend to exploit the same motifs in their depiction of the alchemist, but at no point do they go beyond the treatment of the alchemist that we observed in the writings of the earlier Romantics, and especially Godwin. The alchemist's obsession serves primarily as a catalyst for the social action of the plot.

A TRANSITIONAL SUMMA

In the preface to her remarkable work, *A Suggestive Inquiry into the Hermetic Mystery* (1850), Mary Anne Atwood remarked that, at midcentury, alchemy was regarded by most as "a vain chimera" and would be wholly forgotten "but that it serves the occasion of the novelist to strike the chords of human sympathy for an interval into unison with the responsive mystery within" —an allusion, no doubt, to Balzac, Dumas, Hawthorne, and other writers mentioned in this chapter. Atwood (1817–1910) was the daughter of the reclusive scholar Thomas South, who devoted his life to the study of spiritual life as reflected in metaphysical and occult thought from the mysteries of antiquity to the alchemical philosophy of the Middle Ages and Renaissance. ²⁰ To this end he was more than ably assisted by his gifted daughter—his *filia mystica*, as it were—with whom he initially experimented in mesmerism and other psychic phenomena.

After publishing a small tract entitled Early Magnetism, in its Higher Relations to Humanity as Veiled in the Poets and Prophets (1846), presumably composed jointly, they shifted their focus to alchemy and soon decided that their new findings should be made available to a broader public: his in the form of an epic poem and hers as an expository monograph. In 1850 she completed her lengthy work before her father had finished his poem. Since he felt no need to approve or edit his daughter's work, it was published anonymously without his prior perusal and some one hundred copies distributed to libraries and other purchasers. Almost immediately, however, when they contemplated the published work, they both had doubts, believing that it revealed too much to an unappreciative public not yet sufficiently prepared, intellectually or morally, for their esoteric insights. So Mr South bought up the remaining copies of the work, which he and his daughter burned, along with the manuscript of his own still incomplete poem, in a literary auto-da-fé on the lawn of their house in Hampshire. South died soon thereafter, and in 1859 Mary Anne married the Reverend Alban Thomas Atwood. After her own death her work was republished under her married name.

Although the more general acquaintance with her work began only after its republication in 1918, the few remaining copies were well enough

¹⁹ M. A. Atwood, Hermetic Philosophy and Alchemy: A Suggestive Inquiry into "The Hermetic Mystery" with a Dissertation on the More Celebrated of the Alchemical Philosophers, revised edn ed. Walter Leslie Wilmshurst (New York: Julian Press, 1960), xvi.

²⁰ See Wilmshurst's introduction to his edition, 1–64, esp. 1–16.

known to devotees that Atwood could be reasonably designated as one of "the two most seminal figures in the history of the 'spiritual' interpretation of alchemy."²¹ For Atwood, "Alchemy is philosophy; it is the philosophy, the seeking out of THE SOPHIA in the mind."22 Accordingly, she had little interest in the "pseudo-Alchemists [who] dreamed of gold, and impossible transformations, and worked with sulphur, mercury, and salt of the mines, torturing all species, dead and living, in vain, without rightly divining the true Identity of nature" (144). Taking the various alchemical formulas literally, they had no understanding of the mystical theory underlying the Art. For that reason the "receipts" of such medieval and Renaissance alchemists as Geber, Basil (Basilius Valentinus), and Johann Rudolf Glauber, "though at variance with all common-sense probability, have been the means of surrounding many a literal soul with stills, coals, and furnaces, in hope by such lifeless instruments to sublime the Spirit of nature; or by salt, sulphur and mercury, or the three combined with antimony to extract the form of gold" (70).

Alcott argued, in contrast, that "the fundamental possibility and principle of transmutation [is] not of species, but of their Universal Subject of first matter" (75). This Universal Subject, she continues, is "the alleged foundation of the whole Hermetic experiment." Accordingly she proposes in her book "to persuade the studious that the Art of Alchemy... was a true Art; and that the Stone of Philosophers is not a chimera, as it has been represented in the world to be; but the wonderful offspring of a Vital Experiment into Nature, the true foundation of Ancient Wisdom and her supernatural fruit" (xix), even though the subject may elicit "the world's ridicule."

After a lengthy preliminary history of "distinguished and genuine" alchemists (62) from the Egyptians down to Jakob Böhme, Thomas Vaughan (Eugenius Philalethes), and Paracelsus, Alcott notes that the Art is now preserved solely in the archives. "To declare a man an Alchemist in the present day would be to brand him as insane" (63). But however modern critics may regard alchemy—"whether as the acme of human folly, or contrariwise, as the recondite perfection of wisdom and causal science" (63)—it would be overly hasty to assume that earlier practitioners were mere dupes. Since the modern world is ignorant of the genuine

²¹ Lawrence M. Principe and William R. Newman, "Some Problems with the Historiography of Alchemy," in: Secrets of Nature: Astrology and Alchemy in Early Modern Europe, ed. William R. Newman and Anthony Grafton (Cambridge, MA: MIT Press, 2001), 385–431, here 389. The other figure cited is Ethan Allen Hitchcock, whose work will be discussed in Chapter 5.
²² From a notebook of Atwood; cited by Wilmshurst in the introduction to his edition, 1.

doctrines of alchemy, she proposes a studious examination of their writing in order to enable interested persons to make a reasoned judgment.

Following a careful consideration of theories of transmutation—with extensive quotations from medieval Hermeticists—and the Golden Treatise of Hermes Trismegistus (part 1), she goes on to survey the roots of alchemy in the ancient mysteries (part 2) and to unfold "the laws and vital conditions of the Hermetic experiment" from such sources as the Greek ontologists and the Kabbalists. This section (part 3) concludes with a survey of the "mental requisites" necessary for masters and students of the Hermetic art. The final section (part 4) discusses the "vital purification" (that is, the magnum opus) through which "the inbred evil of life" is eradicated and the Spirit is "induced to yield up her light." This involves, first, the "Trinitarian" or threefold order of operation corresponding to the three kingdoms of nature and the "three degrees through which the Spirit passes from conception to manifestation" (481). It requires, secondly, the Six Keys of Eudoxus (that is, the six stages of the magnum opus). She concludes that "some may consider we have opened too much, others too little of a mystery irrelevant to the common understanding of mankind" (559)—a statement anticipating the decision to burn the printed copies of her work. "Life is the nucleus of the whole Hermetic Mystery, and the Key thereof is Light; the golden ore of which, likewise, we have lavishly shown" (560). While it may still seem murky to some, she warns, those "who understand the language of the philosophers, will understand their Art." She has opened the way, but the individual must decide whether or not to undertake it. "Let him search into the enigmas, peruse the fables, and consider the parables and maxims of the wise Adepts," for all tend to a single discovery: the recovery of lost wisdom and the way into "those antiquated abodes of Light."

Alcott's major work amounts to a summa exemplifying the state of alchemy, at least among occultists, at mid-century. At the same time, it represents—in sharp contrast to Schmieder's history only two decades earlier—a distinct shift of emphasis away from the alchemist and back toward alchemy, from the exoteric to the esoteric, from the operative to the speculative, from matter to spirit. "Man... is the true laboratory of the Hermetic art; his life the subject, the grand distillatory, the thing distilling and the thing distilled, and Self-Knowledge the root of all Alchemical tradition" (162). This, as we shall see, is characteristic of the decades to follow—the decades during which her work became virtually a cult classic and her life, as we shall see, the subject of literary treatment.

Poeticizations, or Fermentatio

THE TURN TO SPIRITUALISM

The second half of the nineteenth century witnessed a conspicuous wave of spirituality and the occult that swept across Europe and the United States. This phenomenon resulted in large measure from the crisis of religious faith produced by such factors as the higher criticism of the Bible, which tended to humanize the figure of Jesus, notably in the biographies of David Friedrich Strauss (1835) and Ernest Renan (1863); the geological findings that undermined the traditional Old Testament version of the Creation; and the philological determination that Hebrew was not the original language in which God spoke to man. People searching for beliefs to satisfy their spiritual yearnings did not find them in the philosophical positivism, scientific materialism, and literary naturalism that dominated the intellectual and cultural scene of the era. Many turned, therefore, to spirituality and the occult in forms exemplified by various figures and movements whose teachings often embraced alchemy without, however, focusing on it centrally.

In addition to the writings of Mary Anne Atwood, which we considered in the preceding chapter, a leading figure was Eliphas Lévi (pseudonym for Alphonse-Louis Constant, 1810–75), whose *Dogme et rituel de la haute magie* (1856) and *Histoire de la magie* (1860), covering a wide range of occult practices from Kabbalah to Tarot, were influential not only in France but also in England, thanks to their translation by A. E. Waite (*Transcendental Magic, its Doctrine and Ritual*, 1896; *History of Magic*, 1913).² Spiritualism—the belief that communication with the spirits of the dead is possible through "mediums"—began in the 1840s in the United States and soon moved to Europe where it was practiced as "spiritism."

² See Paul Chacornac, *Eliphas Lévi: Rénovateur de l'occultisme en France (1810–1875)* (Paris: Chacornac Frères, 1926).

¹ Theodore Ziolkowski, *Modes of Faith: Secular Surrogates for Lost Religious Belief* (Chicago: University of Chicago Press, 2007), 11–12.

³ See Ruth Brandon, *The Spiritualists: The Passion for the Occult in the Nineteenth and Twentieth Centuries* (New York: Knopf, 1983).

The Theosophical Society, founded in New York in 1875 by Helena Blavatsky (1831–91) and Henry Steel Olcott (1832–1907) to prepare a "universal brotherhood of humanity" spiritually through such works as her Isis Unveiled (1877) and The Secret Doctrine (1888) for the new "World Teacher" or "torch-bearer of Truth," a rapidly spread across the world, from Europe to its headquarters in India. An exemplary presentation of the society's use of alchemy is evident in Chemie und Alchemie, an undated lecture by Dr Franz Hartmann published around the turn of the century in a series entitled "Geheimwissenschaftliche Vorträge" ("Lectures on Occult Sciences") of the Theosophical Central Bookshop.⁵ Hartmann (1838-1912), a trained pharmacologist, had an adventurous life, which led him in 1865 after studies in Munich to the United States (as a ship's doctor), where he completed his studies, worked as an ophthalmologist, and became an American citizen. Having read Blavatsky's Isis Unveiled in connection with his own research on parapsychology and religion, he corresponded with her and, in 1883, sailed from San Francisco to India, where he soon converted to Buddhism and became acquainted with Blavatsky, Olcott, and the teachings of theosophy. In 1885 he returned to Germany and began a career as a prolific writer and lecturer in the service of the Theosophical Society.

Following introductory pages on the general principles of alchemy notably the seven basic principles (named for the planets) and the four elements plus a fifth called "ether," Hartmann introduces Blavatsky's idea that "man is a whole formed from a material, objective body, a living rational soul (subjective power), and an immortal spirit (the spark of divinity)" (18). Beginning with the thesis that "the highest alchemy" has as its "final purpose the ennoblement of humankind and of all nature" (25), he maintains that the seven stages of the alchemical process describe that process of ennoblement: mortification (killing the passions), sublimation (elevating the soul), dissolution (from all that ties humankind to earth), animation (the enlivening of the soul through divine grace), purification (from all that is not sacred and immortal), fixation (of the divine will within human will), and transmutation (of man from animality into a divine existence). "Metals are the passions that have been bestowed upon us by nature for the purpose of making from them the 'gold of virtue and wisdom'" (28).

⁴ Helena Blavatsky, *The Key to Theosophy* (London: Theosophical Publishing Company, 1889), 306–7.

⁵ Franz Hartmann, *Chemie und Alchemie* (Leipzig: Theosophische Central-Buchhandlung, [n.d.]).

In England Robert Wentworth Little (1840-78) established in 1865 the Societas Rosicruciana in Anglia two decades before the Hermetic Order of the Golden Dawn emerged from among its members—an organization regarded by one of its recent adepts as "the sole depository of magical knowledge, the only Occult Order of any real worth that the West in our time has known." In France, Gérard Encausse (1865–1916), known by his esoteric pseudonym Papus and author of numerous works on magic and occultism, established the Kabbalistic Order of the Rose-Croix (1888), the very name of which suggests its amalgamation of esoteric ideas. These initiatives were continued before World War I by such figures as Aleister Crowley (1875-1947), who after breaking with the Golden Dawn founded his own magical society, the Argenteum Astrum (Silver Star), based on principles outlined in his series of Holy Books of Thelema; Rudolf Steiner (1861–1925), whose anthroposophy sought to obtain access to the spiritual realm through the development of a supersensory consciousness; and Arthur E. Waite (1857–1942), who is known not only for his many writings and translations on esoteric topics but also for his design of the popular and widely used Rider-Waite Tarot deck.

While these movements often included alchemy within their sphere of occult interests, it was not usually chief among their concerns, with the exception of Franz Hartmann and US general Ethan Allen Hitchcock (1798–1870). Hitchcock, a career army officer who, after service as commandant of cadets at West Point and in the Seminole War and the Mexican-American War, resigned in 1855 for reasons of health. Recommissioned during the Civil War, he served President Lincoln as chairman of the War Board and, until his retirement in 1867, as Commissary-General of Prisoners. During those early years of retirement he wrote the first of several works that he composed on a variety of subjects ranging from religion and philosophy to Renaissance poetry. His Remarks upon Alchemy and Alchemists (1857), as the title suggests, is not a systematic history or analysis but, rather, a well-informed essayistic reflection on what Hitchcock regarded as the essentially religious philosophy underlying alchemy and based on his collection of over two hundred works on alchemy and Hermetic philosophy (124).7

His point of view—essentially the shift from exoteric to esoteric—is summed up by the detailed subtitle: "A Method of Discovering the True

⁶ Israel Regardie, What You Should Know about the Golden Dawn (Phoenix, AZ: New Falcon, 1993), 8.

⁷ Ethan Allen Hitchcock, *Remarks on Alchemy and the Alchemists* (Boston: Crosby, Nichols, 1857).

Nature of Hermetic Philosophy: and Showing that the Search after the Philosopher's Stone Had Not for Its Object the Discovery of an Agent for the Transmutation of Metal: Being Also an Attempt to Rescue from Undeserved Opprobrium the Reputation of a Class of Extraordinary Thinkers in Past Ages." Alchemy, Hitchcock believes, has been "universally misconceived" (iii). Transmutation, in his view, symbolizes man's "transformation from evil to good, or his passage from a state of nature to a state of grace" (iv). The true alchemists were "religious men," the "Reformers of their time" (viii). Indeed, "the whole subject of Alchemy is Man" (73), who is symbolized by the metals, planets, and other objects mentioned in alchemical works. In the course of his remarks Hitchcock discusses and cites an impressively wide range of alchemists and philosophers, including literary works from Chaucer to Goethe, whom he regards as a "cunning alchemist" (181). He argues that Chaucer, sympathetic to true alchemy, sought with his Canon's Yeoman's Tale to correct the errors of some alchemists, as did Jean de Meun in the Roman de la rose, which he characterizes as "a collection of Alchemical Tracts" (154). Alchemy, he ends, "has passed away, never to return.... but the questions about which the Alchemists employed themselves have not passed away, and never shall pass away."

Once alchemy had again obtruded into the public consciousness, the systematic knowledge during these years was advanced by scholars in several countries who were not themselves alchemists or advocates of the Art. Marcelin Berthelot (1827–1907) was a French chemist and historian of science, whose distinction in his field won him a chair at the Collège de France as well as membership in the Académie des Sciences and, later, positions as minister of public education and beaux-arts and then minister of foreign affairs. Among his many works we find such rigorously scholarly studies as Les Origines de l'alchimie (1885) and the three-volume Collection des anciens alchimistes grecs (1887–8). Those who desired a more accessible introduction to his results could peruse his entry "Alchimie" in the first volume of the twenty-eight-volume Grande Encyclopédie des sciences, des lettres et des arts that he edited (Paris, 1886-1902). There (on pages 11–24) he sketches (I) the ancient sources for the history of alchemy; (II) "les maîtres partout célèbres et oecuméniques" from Plato to Paracelsus; (III) metallurgy as practiced in Egypt; (IV) theories of alchemy, beginning with the four elements; and (V) the Arabian alchemists. Alluding to the "idées des richesses immenses" theoretically acquirable with the philosopher's stone as opening the field to all sorts of charlatanry, he concedes that "no one can affirm that the fabrication of reputedly simple bodies is a priori impossible" (23). But the known facts of modern science have made the opinions of alchemists more and more remote. He concludes his survey with the comment that ignorance of basic facts about the weight and composition of the elements made it impossible until the end of the eighteenth century for a positive science to be constituted. "The new notion will demonstrate the inanity of the dreams of the ancient operators, an inanity that their inability to establish any actual deed of transmutation had already made long suspect" (24).

In Germany, meanwhile, his contemporary Hermann Kopp (1817–92), professor of chemistry at Heidelberg and a distinguished historian of his field (Geschichte der Chemie, 4 vols, 1843–7), published the two volumes of his Alchemy in Past and Present: A Contribution to Cultural History (Die Alchemie in älterer und neuerer Zeit: Ein Beitrag zur Culturgeschichte, 1886), tracing the history of the Art from the Middle Ages to his own present. As a scientist, Kopp declared that "one has heard nothing to the effect that anyone of the alchemists still working in our century has succeeded in the Great Work of his art" and that, despite a few wellfinanced efforts in England and France, the belief in alchemy was at present much less than at the end of the eighteenth century.8 It is the sober conclusion of his book that "Alchemists, formerly respected from above and below, sought by the nobility, and often distinguished by elevation of class or in some other form of honor: they now, if they're honest, beg for support or, if they are convinced of the untruth of their promises, undertake the path of crime while fearful of the police."9

All this activity, both by occultists and by scientists, brought alchemy to a new stage of public awareness in Europe and the United States. At the same time, we note a pronounced shift of emphasis: the alchemist becomes an image for the artist of the spirit, as manifest first in the poet. This analogy is not entirely new, of course. Already in his untitled poem "Kenne Dich Selbst" (1798) the Romantic poet Novalis (Friedrich von Hardenberg, 1772–1801) had praised as "fortunate the one who has become wise and no longer broods over the world—who has sought within himself the stone of eternal wisdom" ("Glücklich, wer weise geworden und nicht die Welt mehr durchgrübelt, / Wer von sich selber den Stein ewiger Weisheit begehrt"):10

Nur der vernünftige Mensch ist der echte Adept—er verwandelt Alles in Leben und Gold—braucht Elixiere nicht mehr.

⁸ Hermann Kopp, *Die Alchemie in älterer und neuerer Zeit: Ein Beitrag zur Kulturgeschichte*, 2 vols (Hildesheim: Georg Olms, 1962), vol. 2, 194–5.

⁹ Kopp, *Alchemie*, vol. 2, 203.

¹⁰ Novalis, *Schriften*, ed. Paul Kluckhohn and Richard Samuel, 2nd edn, 4 vols (Darmstadt: Wissenschaftliche Buchgesellschaft, 1960), vol. 1, 403–4.

In ihm dampfet der heilige Kolben—der König ist in ihm— Delphos auch, und er faßt endlich das: Kenne dich selbst. (Only the rational person is the true adept—he transforms Everything into life and gold—no longer needs elixirs. Within him steams the sacred flask—the King is within him— Delphi too, and he finally grasps: Know thyself.)

But now the isolated case becomes the rule.

THE POETS

Hermann Kopp observed that, although Germany had the larger number of advocates in the seventeenth and eighteenth centuries, at the present mid-century "the number of enthusiasts ['Liebhaber'] of the Hermetic Art and of those paying tribute through its practice appears to be greatest in France"11—a view confirmed by more recent scholars. 12 As indication he cites (without naming Berthelot) the recent publication of alchemical writings, as well as reports about the presence of practicing adepts in that country. In fact, La Paix for January 19, 1883 estimated that Paris alone currently housed fifty thousand alchemists. 13 However that may be, it seems to be borne out by the frequent occurrence of alchemical images and alchemists in French literature of the later nineteenth century, where initially the poets take priority over the novelists and dramatists. (As hitherto, we shall not deal with the broader topic of imagery, which all too often amounts to rather loose references to spiritual weddings, color sequences, and sublimations, but shall restrict ourselves to the actual figure of the alchemist.)

A conspicuous difference vis-à-vis earlier poetry is evident in Les Fleurs du mal (1857) of Charles Baudelaire (1821–67). The opening poem, the renowned "Au lecteur," signals the poet's familiarity with Hermetic lore when we read that it is none other than Satan Trismégiste who lulls our enchanted spirit on the pillow of evil.

> Sur l'oreiller du mal c'est Satan Trismégiste Qui berce longuement notre esprit enchanté.14

¹¹ Kopp, *Alchemie*, vol. 2, 191.
12 Joachim Telle, "Alchemie II," in: *Theologische Realenzyklopädie*, ed. Gerhard Krause and Gerhard Müller (Berlin: De Gruyter, 1978), vol. 2, 199–227, here 206.

¹³ Sue Prideaux, Strindberg: A Life (New Haven, CT: Yale University Press, 2012), 212.

Charles Baudelaire, *Les Fleurs du mal* (Paris: Garnier, 1961), 5.

The effect of this satanic Hermes is made specifically evident in the poem "Alchimie de la douleur" (83), which exemplifies Baudelaire's concept of the poet as alchemist. While one poet illuminates nature with his ardor, another projects his grief into it.

L'un t'éclaire avec son ardeur, L'autre en toi met son deuil, Nature!

Apostrophizing the "unknown Hermes" who assists and intimidates him, Baudelaire says that the deity has made him the equal of Midas, "the saddest of alchemists" (because, famously, everything he touched was transmuted into gold—even the very food he tried to eat):

Hermès inconnu qui m'assistes Et qui toujours m'intimidas, Tu me rends l'égal de Midas, Le plus triste des alchimistes.

This Hermes has also given him a gift—the inverted gift of changing gold into iron and paradise into hell:

Par toi je change l'or en fer Et le paradis en enfer.

With this sonnet Baudelaire epitomizes his "spleen," the sense of despair in the first section of the volume ("Spleen et idéal") that causes him in these poems to transmute lofty ideals into their opposite, beauty into ugliness. It might be noted that precisely the same inversion occurred earlier in a poem by Poe, whom Baudelaire admired and translated. In his "Romance" (1831), namely, the poet finds that "by strange alchemy of brain / His pleasures always turned to pain." ¹⁵

The same Hermetic image occurs in the draft of an "Épilogue" for the second edition of *Les Fleurs du mal* (219–20), but here, paradoxically, the meaning is reversed. The poet addresses not Hermes or Satan but "angels dressed in gold, purple, and hyacinth" ("Anges revêtus d'or, de pourpre et d'hyacinthe") who are witnesses to the fact that he has done his duty as a perfect (al)chemist and sacred soul: he has extracted the essence of each thing; he has been given filth and made gold of it:

O vous, soyez témoins que j'ai fait mon devoir Comme un parfait chimiste et comme une âme sainte. Car j'ai de chaque chose extrait la quintessence, Tu m'as donné ta boue et j'en ai fait de l'or.

¹⁵ Edgar Allan Poe, *Selected Poetry and Prose*, ed. T. O. Mabbott (New York: Modern Library 1951), 17.

What matters in our context is not so much the shift from negative to positive, which concerns Baudelaire scholars, but rather the historical move from earlier uses of the alchemist as a spiritual searcher to the appropriation of the figure to exemplify the poet, who transmutes reality into the higher form of art.

A similar shift is evident in the work of Arthur Rimbaud (1854–91), who is known to have been interested not only in occult philosophy generally but in alchemy specifically. While he never practiced alchemy, he studied the occult as a teenager at home in Charleville: both "black alchemy" ("la noire alchimie" or laboratory alchemy) and the "holy studies" ("les saintes études," or its Hermetic-philosophical aspect), as he designates them in his poem "Les Soeurs de charité" (1871). The "sisters of charity" refer to the various females he has encountered progressively in his young life: Womankind generally; the Muse and Justice (who are always depicted as female); then Alchemy and Hermetics; and finally Death, the true sister of charity—a sequence indicating that the study of alchemy came later in his spiritual education.

This interest shows up clearly in his early poem "Voyelles," which follows directly after "Les Soeurs de charité" and is regarded by some critics as a hoax or mere curiosity. 18 (We might pause here to note that Rimbaud's association of sounds with colors is no weirder than Des Esseintes's perceived correspondence of flavors with sounds in chapter 4 of Huysmans's A rebours, 1884.) It can be reasonably argued that the first three vowels with which the poem begins—"A noir, E blanc, I rouge, U vert, O bleu" (75)—represent the basic steps in the alchemical process: nigredo, albedo, and rubedo-processes with which Rimbaud would have been familiar from even the most rudimentary exposure to alchemy. Enid Starkie goes on to suggest that, according to certain sources, the red turns to green when the experiment has not fully succeeded, and then to blue before reverting to the initial black. 19 In that case the sonnet would represent symbolically the totality implicit in the alphabet from Alpha to Omega. (In the last line Rimbaud speaks of "Omega, the violet ray of His Eyes".) Whether or not we want to accept the full alchemical

¹⁶ It is unnecessary for our purposes to engage in the debate among Rimbaud scholars about the extent of his reading. See, for instance, Enid Starkie, *Arthur Rimbaud* (Norfolk, CT: New Directions, 1961), 161–2; and Robert Greer Cohn, *The Poetry of Rimbaud* (Princeton, NJ: Princeton University Press, 1973), 124.

¹⁷ Cited according to Arthur Rimbaud, *Oeuvres poétiques*, ed. Michel Décaudin (Paris: Garnier-Flammarion, 1964), 772–4.

⁸ Cohn, The Poetry of Rimbaud, 126-33.

¹⁹ Starkie, *Arthur Rimbaud*, 165–7. Cohn, *The Poetry of Rimbaud*, 126–33, ignores any possible alchemical associations and reads the poem mainly from the standpoint of sound frequencies of the vowels.

interpretation, it seems clear that Rimbaud intended the initial Hermetic association since the eleventh line of the sonnet speaks of "the wrinkles that alchemy imprints on the large studious brows" ("des rides / Que l'alchimie imprime aux grands fronts studieux")—the studious brow, that is, of the poetic alchemist.

The association was confirmed two years later in the section of *Une Saison en enfer* (1873) entitled "Délires II: Alchimie du verbe" (130–2), which is introduced as "the history of one of my follies" ("L'histoire d'une de mes folies"). Rimbaud claims there that his invention of "the color of the vowels" was simply a study in which he sought to note down the inexpressible. What he now termed, looking back, "this poetic debris" ("vieillerie") had a large part in his "alchemy of the word." In his effort to explain his "magical sophisms" through "the hallucination of words," he ended "by finding the disorder of my spirit sacred" ("Je finis par trouver sacré le désordre de mon esprit"). What matters is the fact that in all of these tropes, as for Baudelaire, the alchemist has become an embodiment of the artist, who transmutes base reality—including vowels, the sounds of language—into art.

It was not only in France that the new aesthetic association asserted itself. During those same years across the Channel the young Gerard Manley Hopkins (1844–89), in a moment of self-questioning despondency, saw himself as "The Alchemist in the City" (1865), contrasting his own failures to create (gold/poetry) with the successes of more practically oriented contemporaries:

They do not waste their meted hours, But men and masters plan and build: I see the crowning of their towers, And happy promises fulfill'd.²⁰

He reflects that he too, should he have unlimited time at his disposal ("could [I] count on prediluvian age"), might achieve equal triumphs.

But now before the pot can glow With not to be discover'd gold, At length the bellows shall not blow, The furnace shall at last be cold.

His alchemy shall bring forth no elixir "to heal / The incapable and cumbrous shame" that afflicts him when he senses his own powerlessness vis-à-vis active achievers. Brooding over his "thankless lore"—"that lore /

²⁰ Gerard Manley Hopkins, *The Poetical Works*, ed. Norman H. Mackenzie (Oxford: Clarendon, 1990), 75–6.

That holds no promise of success"—he longs for a place outside the city in the wilderness where:

There on a long and squarèd height After the sunset I would lie, And pierce the yellow waxen light With free long looking, ere I die.

Here again, then, the poet identifies himself with the alchemist and his poetry with alchemy—but, as in the cases of Baudelaire and Rimbaud, an alchemy that has failed: a lore that brings no success (Hopkins), converts gold back into filth (Baudelaire), or constitutes simply one of the "follies" of his youth (Rimbaud). A close German analogy to Hopkins's poem is evident forty years later in Rilke's poem "Der Alchimist" (1907). Rainer Maria Rilke (1875-1926) was born and spent most of his youth in Prague, which during the reign of Rudolf II (1576-1612) became a Mecca for alchemists and which still today features Alchemy Tours as a tourist attraction, including the famous Golden Lane near the Hradschin, known in legend (albeit wrongly) as Street of the Alchemists. (Rudolf's alchemists were in reality lodged in the castle.) So although Rilke never practiced alchemy, he was exposed at least indirectly to alchemical lore, and his sonnet features the alchemist, not his art. Here, with a derisive smile ("verlächelnd"), the alchemist shoves aside the retort that still emits a "half-stilled" smoke.

> Seltsam verlächelnd schob der Laborant den Kolben fort, der halbberuhigt rauchte.²¹

Now he understands what he needs to complete the "very illustrious object" ("der sehr erlauchte Gegenstand") that was being created there: time. Like Hopkins's "prediluvian ages," he requires millennia ("Jahrtausende") for himself and his crucible if he is to achieve any success. With this sobering realization he gives up his dream of attaining the "the enormous thing" ("Das Ungeheuere") to which he had aspired and which now returns "to God" on a more modest scale. Meanwhile, the adept, babbling like a drunkard, clings to "the chunk of gold that he possessed" ("den Brocken Gold, den er besaß").

A similar treatment characterizes the dramatic "conjuration" ("Geisterbeschwörung") by the radically individualistic and controversial dramatist Frank Wedekind (1864–1918). Wedekind, who moved from the naturalism of his early *Spring's Awakening (Frühlings Erwachen*, 1891) to later

²¹ Rainer Maria Rilke, *Sämtliche Werke*, ed. Ernst Zinn, 6 vols (Wiesbaden: Insel, 1955–66), vol. 1, 576–7.

more expressionistically colored works, wrote his reflective blank-verse drama *Der Stein der Weisen* (1909) from a desire, as he puts it in a preface responding to the critical reaction to two of his plays, "to sit in judgment over myself."²² What resulted, he writes, is a kind of "self-mirroring" ("Selbstbespiegelung") in which he portrays himself according to the cast list as the legendary "Basilius Valentinus, a necromancer." But his necromancer is first and foremost an alchemist—like the Basilius Valentinus of Yeats's "Rosa Alchemica," whose alleged "Keys" the narrator follows in his alchemical search for essences. In his castle, the cellars of which are filled with heaps of gold (6), he possesses the philosopher's stone, which protects its owner against poison, shots, stabs, fevers, and other ailments (65) as well as "the grand elixir, the Red Lion" (31).

Once again, then, we encounter the alchemist as a surrogate for the poet.²³ Basil, as he reveals himself in a series of dialogues—with his boyhood friend, the Dominican monk Pater Porphyrion, as well as four allegorical figures: his famulus, a wandering student, a fool, and the apparition of a female spirit (the last four roles all to be played by a single actress)—has spent his life searching for happiness and has found nothing but chasms and abysses (9: "nichts als Schlünde, als Abgründe"). In contrast to the rapacious eagerness of his famulus for the wealth and power his secrets might bring, he has concluded that "human happiness lies in the middle between boredom and exhaustion":

Denn in der Mitte zwischen Langeweile und Übermüdung liegt der Menschen Glück. (10)

He spurns the appeals of the Dominican, who hopes to lure him back to the church; he rejects the pleas of the student, who craves the elixir simply in order to maintain his youthful sexual vigor; he repels the Lamia who tries to seduce him and requests the "magical girdle" that will keep her eternally young and attractive to men. He finally presents the stone to the fool, who fastens it to his cap and shoots Basil with the magical crossbow, which kills without arrows, because of his lack of humor:

Schon Tausende, denen die Welt den Humor verdorben, sind jählings an Humorlosigkeit gestorben. (75)

²² Frank Wedekind, Der Stein der Weisen: Eine Geisterbeschwörung (Berlin: Paul Cassirer, 1909), vi.

²³ I disagree strongly with Christine Maillard, "Alchemie in Theorie und Literatur (1890–1935)," in: *Literatur und Wissen(schaften), 1890–1935*, ed. Christine Maillard and Michael Titzmann (Stuttgart: Metzler, 2002), 165–91, who views the piece as being "in the tradition of ridicule initiated by Ben Jonson's *The Alchemist*" and regards Wedekind's Basil as "a scurrilous figure" (178).

(Thousands whose humor the world has destroyed have suddenly died from humorlessness.)

Refusing the Dominican's final plea for his repentance, he dies, saying that "we know who God is, and because we know it, we seal it within ourselves" (77: "Wer Gott ist, wissen wir. Und weil wir's wissen,/verschließen wir's in uns").

As the play ends, the famulus wonders which of the visitors carried off the stone but rejoices because he has inherited Basil's castle with its wealth and lands. "Thank heavens, now the whole spiritual nonsense is at an end!" (82: "Himmelsakrament, / jetzt hat der ganze Geisterspuk ein End!"). The conclusion appears to justify Basil's initial statement about happiness. If the philosopher's stone, the writer's art, has afforded its practitioner no ultimate satisfaction, it brings out the worst in those who lust after its powers. The play amounts to a sobering insight into the artist and a cynical commentary on those around him: from the friend who regrets his departure from his earlier realism by way of younger colleagues who envy his success for the wrong reasons to the adulating women and the critics who trash his works with the hope of enjoying some reflected glory.

For none of these poets does their identification with the alchemist bring any ultimate satisfaction: the philosopher's stone, the elixir, remains, like poetry itself, an ideal to be sought but never achieved.

SURVIVING TRADITIONALISTS

Despite the general poeticization of alchemy, alchemists continued to enter literary works, mainly historical, in their traditional romanticizing roles. In the title poem of Christina Rossetti's *The Prince's Progress* (1866), for instance, an alchemist represents one stage in the prince's progress in a timeless realm through the world—from his "world-end palace" (l. 13) across mountains and rivers until, loitering along the way, he finally reaches the rich and lovely "royal land" (l. 451) where now his destined bride lies dead with hair now silvery and brows now white.²⁴ In "a lifeless land, a loveless land" (l. 133) in "a yawn-mouthed cave" (l. 169):

An old, old mortal, cramped and double, Was peering into a seething-pot, In a world of trouble. (ll. 178–80)

²⁴ Christina Rossetti, *The Complete Poems*, ed. R. W. Crump (Baton Rouge: Louisiana State University Press, 1979), 95–110.

When he asks the "old father" if "a weary traveller" may lodge with him, he replies:

"Work for wage is a bargain fit:
If there's aught of mine that you seek
You must work for it.

"Buried alive from light and air
This year is the hundredth year,
I feed my fire with a sleepless care,

Watching my potion wane or wax:
Elixir of Life is simmering there,
And but one thing lacks." (ll. 196–204)

If the prince is willing to wield the bellows that are too heavy for the alchemist's aged hands, then he may have whatever of the elixir the old man (like the alchemist Althotas in Dumas's novel) does not require for his own life. The prince "plied the bellow in hopeful mood," thinking that he and his beloved will enjoy eternal life:

The pot began to bubble and boil; The old man cast in essence and oil, He stirred all up with a triple coil Of gold and silver and iron wire, Dredged in a pinch of virgin soil, And fed the fire. (Il. 223–8)

But the concoction still lacks an essential ingredient. When the old man dies in his hundredth year, his dead finger dips into the broth, causing the steam to become rosy red and providing the last element. Filling a phial with the precious "draught of Life" (l. 257), the prince rushes off to drink it together with his bride. But further accidents and adventures delay him, and by the time he arrives his bride is dead and unable to benefit from the elixir. Here the alchemist's elixir provides the symbol for whatever passion drives men, like Balzac's Claes, to neglect love and commitment until it is too late. Rossetti's prince resembles the famulus and the wandering student who approach Wedekind's necromancer for his secret. But the alchemist himself has no real role, introspective or other.

In the sublime confusions of *Axël* (1890) by Villiers de l'Isle-Adam (1838–89) alchemy represents simply one among the various occult enthusiasms that the hero explores under the tutelage of his Rosicrucian Master Janus until, at the end, he joins his cousin and ideal beloved Sara, who has escaped the convent ("The Religious World" of part 1) in a suicide pact to leave behind what they regard as the tawdry realm of reality where, according to the most renowned line of the play, their servants will do their living for them (672: "Vivre? les serviteurs feront cela

pour nous").²⁵ When his uncle, the no-nonsense realist Commander Kaspar d'Auërsperg, visits his nephew in his secluded Black Forest castle, he inspects the library and decides that Axël was falling prey to "Hermeticism, Kabbalism, and the tales of witches' sabbath" and worries that "these murky superstitions" ("ces superstitions épaisses") will be the vice of Germany for a long time to come (577). Later he berates his nephew for wasting his time in the futile study of "the pseudo-science of Hermeticism" (598: "la prétendue Science-hermétique"). It's all right to "play at medievalism" but not "to carry the travesty to the point of renewing the puffers of the *magnum opus* by dint of retorts and alembics ['matras à tubulures'] to dream of the alloy of mercury and sulphur." The liquid gold at the bottom of the crucible, he states, is actually Axël's youth. He urges his nephew to leave his manor and return to the real life of "The Tragic World" (part 2).

In the following section ("The Occult World") the commander's spiritual opponent, Master Janus, tries to teach Axël that the goal of alchemy is not to transmute metals like Hermes Trismegistus or to discover "the magistery of the sun through which one governs the elements; the elixir of long life, like Raymond Lull; the powder of projection, like the Cosmopolite—the philosopher's stone" (636). The goal, rather, is to "spiritualize vour body: sublimate vourself" (635: "Spiritualise ton corps: sublime toi"). At the end, having independently rejected "Light, Hope, and Life" in the worlds respectively of religion and the occult, Axël and Sara in their joint suicide enter "the world of love" ("Le Monde Passionel") and "the exile of heaven," realizing that their dreams of perfection could never be realized in actuality and that the transports of their love would inevitably die away, leaving them prisoners of a sordid world, where reality can never match the perfection of the spiritual union they have achieved. In this famous symbolist drama, in sum, alchemy represents the occult generally as one of the stages through which the hero must pass—and exhaust—before rejecting life and the occult, but we hear nothing about the Art itself except in the scoffing words of the commander.26

Beyond Rossetti's poem and L'Isle-Adam's drama, alchemists show up in various historical works. In *Micah Clarke* (1894), for instance, by Arthur Conan Doyle (1859–1930), the twenty-one-year-old Clarke is

²⁵ Villiers de l'Isle-Adam, *Oeuvres complètes*, ed. Alan Raitt and Pierre-Georges Castex (Paris: Gallimard, 1986), 531–677. See Edmund Wilson, *Axel's Castle: A Study in the Imaginative Literature of 1870–1930* (1931; New York: Scribner's, 1959), 259–64.

²⁶ Bettina L Knapp, *Theatre and Alchemy* (Detroit: Wayne State University Press, 1980), 137–55, says nothing about the actual alchemy within the play; instead she analyzes the four acts as representing the alchemical stages *fixatio–separatio–solutio–sublimatio*.

going to join the Protestant dissidents during the ill-fated Monmouth Rebellion of 1685. Along the way alchemy is mentioned a few times. His older companion Decimius Saxon tells how, during his travels in Germany, he lost his iron brazier in an experiment performed by an alchemist named Gervinus or Gervanus. Another companion, citing alchemists from Trismegistus through Albertus Magnus, Aquinas, Raymond Lullius, Basil Valentine, and Paracelsus, says that not one has left more than a cloud of words behind him. "Alchemy, transmutation of metals, and the like have been set aside by true science" (82).²⁷ Later (103–4) they are taken in by Sir Jacob Clancing, an alchemist with a chest full of gold. As they enter he is stirring "an evil-smelling pot" with "a yellow, turbid fluid" to which he adds "a handful of whitish powder," causing it to seethe and clarify the fluid. Pouring it off into a bottle, he empties the brownish sediment onto a sheet of paper. Clancing tells them that metal can be transmuted, "but only slowly and in order, small pieces at a time, and with much expenditure of work and patience. For a man to enrich himself at it he must labour hard and long; yet in the end I will not deny that he may compass it" (110). But we learn nothing further, and after Clarke and his companions leave the alchemist the theme is not mentioned again or developed further. He serves simply as representative background color for the seventeenth century.

Similarly the American H. P. Lovecraft's (1890–1937) early—perhaps earliest—story, "The Alchemist," is set in a vague nineteenth century when the now ninety-year-old Antoine, "last of the unhappy and accursed Counts de C—" (308), sits among the ruins of his ancestral chateau and ponders the fate of his family, which since the thirteenth century has limited the life span of its titleholders to thirty-two years. ²⁸ As he approached that fateful age, he writes, he learned from an elderly servant the origin of the curse: an early ancestor mistakenly killed the sinister sorcerer and alchemist Michel Mauvais, or Michel the Evil, who, "reputed wise in the terrible secrets of Black Magic and Alchemy," sought "such things as the Philosopher's Stone and the Elixir of Eternal Life" (320). His son, Charles le Sorcier, cursed the family:

May ne'er a noble of thy murd'rous line Survive to reach a greater age than thine! (311)

Then he threw a phial of colorless liquid at his father's slayer, who died that night. When only a week before his own fatal hour Antoine is exploring the lower depths of the chateau he discovers a vault with an

A. Conan Doyle, *Micah Clarke* (1894; New York: Harper & Brothers, 1922).
 H. P. Lovecraft, *Dagon and Other Macabre, Tales*, ed. August Derleth (Sauk City, WI: Arkham House, 1965), 308–16.

alchemist's laboratory and an immense pile of gold, where he meets a man clad in medieval garb, with long hair and beard, and inhumanly wicked eyes filled with hatred. It turns out to be none other than Charles le Sorcier, who discovered the elixir of eternal life and returns each generation to kill the family heir at age thirty-two. As the alchemist raises his phial of poison, Antoine manages to kill him with a fiery torch and thereby extinguish the ancestral curse. Again, then, the alchemist serves no higher spiritualizing or aestheticizing purpose but merely fulfills a supernatural role in a story by a master of the macabre and horror while still in his teens and susceptible to the influences of the day.

In his second novel, *The Jews of Zirndorf* (Die Juden von Zirndorf, 1897), which was highly praised by literary colleagues from Arthur Schnitzler and Hugo von Hofmannsthal to Stefan Zweig, Jakob Wassermann (1873-1934) used the figure of an alchemist much as did Rossetti and Conan Doyle, even though his action is set in the present of the mid-1880s in Germany. The prelude depicts the ecstasy that pervaded the Jewish community in seventeenth-century Fürth at the news of the false messiah Sabbatai Zevi, and prompts them to undertake a short-lived exodus to Jerusalem. When they hear of the prophet's conversion to Islam, they turn back, but some settle in a new village outside Fürth, which they call Ziondorf (Zion Village), a name gradually Germanized into Zirndorf. Previously, however, a young Jewish girl has used the hysteria of those days to rationalize her illegitimate pregnancy (by a Christian student), proclaiming it a virgin birth and herself the bride of the messiah. Her infant son becomes the ancestor of the future messianic figure whose story is told in the main section.

The novel proper belongs to the category of the *Bildungsroman*, or novel of personal development—an association suggested by the hero's name with its explicit reminiscence of C. M. Wieland's early example of the genre, *Die Geschichte des Agathon* (1766–7). Here the emphasis lies on the hero's moral and religious emancipation and involves extensive criticism of German anti-Semitism (as well as an expression of Wassermann's own problematic Jewish self-hatred) and of religion generally, both Christian and Jewish. The seventeen-year-old Agathon Geyer, a descendant of that earlier illegitimate infant, kills a vicious anti-Semite, who is described as being "the model of the Germanic type" (77: "das Urbild des Germanen") and "Germanicness personified" (90: "das personifizierte Germanentum") and who, having almost drowned Agathon, later bound and beat him.²⁹ Agathon feels no guilt for his deed: "He felt himself

²⁹ In my own translation from: Jakob Wassermann, *Die Juden von Zirndorf*, ed. Gunnar Ochs (Cadolzburg: Ars Vivendi, 1995).

purified and enhanced by it; it was as if his hands had been unbound for free use.... He felt himself subjected to no earthly authority, but also to none of those divine powers that he had previously venerated" (192). He is expelled from his school for writing a paper critical of teachers who stuff their students with dead lore and ignore their souls as well as nature. At the same time he disclaims his Judaism, an action that dismays his father, to whom he reveals "the new strange spirit that is coming" (194). Around this time, moreover, he begins to show signs of unusual powers: he heals by his touch, he cares for neglected children, his presence cheers the inconsolable—powers that cause Christians as well as Jews in the village to regard him with awe. Moving to Nürnberg, he acquires the reputation of a kind of messiah among the peasants and common folk for incidents that are not narrated. We are told only that the newspapers print a reporter's "remarkable reports and clichés" concerning Agathon Geyer (218). The culminating incident (chapter 14) involves an alchemist named Baldewin Estrich, who lives in an ancient building that seems to belong to another century. There in his large kitchen Estrich has spent years "experimenting, analyzing, cooking thickish fluids in retorts, heating even odder bodies to a white heat over strange-colored flames" in his effort to make gold (218). But it is not to become wealthy that Estrich practices his art: "He believed that he could make men happy through nothing more than gold; he believed that he could bring them peace if he could still the most fervent desire that filled them, or rather, if he could provide them with so much of what they desired that the excess would make them indifferent" (220).

Again, then, as in Godwin's *St Leon*, we find the alchemist with noble ideals; and again it all misfires. For twenty-nine years he has tried unsuccessfully to attain his goal and is on the threshold of success, requiring only one final experiment, but he lacks the money for the necessary equipment. Then a young man with whom he becomes accidentally acquainted begins to follow his experiments with fascination and gives him the needed five thousand marks. As Estrich sits that evening before his apparatus, dreaming of the future, he notices a whitish mixture simmering in one of his vessels. He places it over a flame, pours in some acid, adds a knife-bladeful of violet powder, and seals it hermetically. Extinguishing the flame, he places the pot into water to cool it suddenly. When he then opens the vessel, he finds the matter inside unaltered except for the fact that the color has changed from pure white into a brownish yellow: the experiment has failed.

Dejected, he now regards all his apparatus and materials as hostile. Finding the room filled with a terrible stench, he starts to toss some fluid on the furnace to dampen it, but the glass slips from his hand and shatters

on the coals. Estrich opens the window and sits for two hours in discouragement. Then he notices among the coals in the furnace "a large, weakly glittering object" (223). Distrustful of his own impressions, he finally fetches the object from the coals, inspects it closely, and cries out in excitement: "'Gold!' The longing of the Middle Ages was stilled. The dream of the modern researcher has been fulfilled through the hand of a blind man, who now sat on the throne of the world and called humanity his servant" (223). Weeping from happiness, Estrich collapses and then rushes out into the quiet night. But soon he returns to his house, where he gathers all his money in cash and gold coin and hurries to the poor quarters of the town, where, in keeping with his romantic dreams, he distributes it to the poor and homeless. When they follow him back home he hands out the five thousand marks from his friend, but those who had received gold are even more insatiable than the others. Because the mob has grown so large and unruly, the police appear. The rabble begins to vandalize the houses with cries of "Blood! Revenge! Death!" (225) and, shouting anti-Semitic curses, to destroy the shops. Gradually the swarm moves toward the center of town, where they threaten to desecrate the church. Suddenly a shape appears before them with outspread arms— Agathon Geyer—and a terrific bolt of lightning illuminates the sky and sets fire to the church. When the police consider shooting Agathon, the mob gathers around him, and their anger gradually subsides. At that moment, as he watches the distorted faces gazing up at him, Agathon has a vision. Telling them to let the church burn, he sees himself as "the father of a new, free, goldless race" (229). Seizing a burning strip from the altar, he holds it like a torch, leads the crowd from the church, and soon disappears again. The novel now moves hastily and vaguely toward its conclusion. After a chapter involving a plan to liberate the captive King Ludwig II of Bavaria, Agathon returns to Zirndorf with a friend of his youth and her illegitimate child "to wait" for an unspecified future because mankind is still not "ripe" or mature enough to fulfill their dreams (274).

We hear nothing further about the alchemist, who was nowhere mentioned earlier in the novel. Clearly, his figure was introduced—and the extensive although fanciful description of his experiments was given—simply in order to provide a motivation for the mob scene, which enables Agathon to assume his role as a modern messiah. Alchemy as such is not a theme or even a motif in the novel. And the author leaves it unclear whether or not Estrich actually produced any gold. In his feverish excitement he believes the shiny piece of metal to be gold. But what he distributes to the poor is his own money in bills and coins—not freshly transmuted gold.

MANIFESTATIONS OF THE RELIGIOUS SPIRIT

Toward the fin-de-siècle a subtle change begins to take place in views of alchemy. Rather than art specifically, it begins to symbolize a more generally religious spirit of which the artist now becomes the spokesman.

Joris-Karl Huysmans's (1848–1907) monument of Decadence, Against the Grain (A rebours, 1884), appeared while his friend Villiers de l'Isle-Adam was writing Axël (initially published in installments in 1885), but alchemy does not belong to the narcissistic elegance with which Des Esseintes has surrounded himself.³⁰ In *Down There* or, as sometimes translated, The Damned (Là-Bas, 1891), in contrast, the Art moves to center stage on two temporal levels: the Parisian present of Durtal, and the fifteenth century of the heretic and pedophile Gilles de Rais, about whom he is writing a book. Durtal's closest friend, the physician des Hermies, is modeled after the figure of Huysmans's own friend Michel de Lézinier, a mathematician and alchemist who was called upon to reconstitute an authentic alchemist's laboratory in the Galérie des Arts Libéraux for the Exposition of 1889³¹ and who served as a source for Huysmans just as des Hermies does for Durtal in the almost wholly actionless novel, which with the major exception of the black mass that Durtal witnesses toward the end—consists entirely of conversations among the few characters.

A man of prodigious erudition, des Hermies is familiar with the most ancient volumes as well as the most recent discoveries. Acquainted also with the oddest assortment of offbeat characters, he has plumbed the depths of the most diverse and alien sciences. "One encountered him only in the company of astrologers and kabbalists, of demonographers and alchemists, of theologians and inventors" (24).³² Des Hermies informs Durtal "that more than forty alchemical furnaces were at present ignited in France and that in Hannover, in Bavaria, the adepts were even more numerous" (81). Another acquaintance, the astrologer Gévingey, tells them that the three portals to Notre Dame known commonly as the doors of Judgment, of the Virgin, and of Saint Anne or Saint Marcel, in

³⁰ I am referring to the actual practice of alchemy—not to the symbolic alchemy seen by some critics in Des Esseintes's enemas and anal auto-eroticism: Robert Ziegler, "From Body Magic to 'Divine Alchemy': Anality and Sublimation in J.-K. Huysmans," *Orbis Litterarum* 44 (1989): 312–26.

³¹ Michel de Lézinier, Autor de Huysmans: Promenades et souvenirs (Paris: Delpeuch, 1928); and Jean Jacquinot, Huysmans et le médicine (Paris: Chez Durtal, 1951). See Robert Stockhammer, Zaubertexte: Die Wiederkehr der Magie und die Literatur, 1880–1945 (Berlin: Akademie Verlag, 2000), 162–4.

In my own translation from J.-K. Huysmans, Là-Bas (Paris: Plon, 1961).

reality represent "la Mystique, l'Astrologie et l'Alchimie," the three great sciences of the Middle Ages (126). Durtal also knows the writings of Eliphas Lévi (75) and Berthelot (80). Here, then, alchemy belongs prominently to the larger realm of the occult and supernatural that, for Durtal and his circle, has replaced orthodox religion; and alchemy, as we have seen, occupies a central role in his thought—not least because he must deal with it on a day-to-day basis in his studies of the fifteenth-century heretic and pedophile Gilles de Rais. But other than in the earlier works we have considered, alchemy is not a surrogate for art nor the alchemist for the artist. Here it amounts virtually to a religion. Gévingey believes that spiritism has accomplished an extranatural revolution equal to the terrestrial revolution of 1789: "It has violated the threshold of the unknown, broken down the doors of the sanctuary" (129). To deny that the supernatural exists, concludes des Hermies, whether Christian or not, is "to dabble in the trough of materialism, in the stupid vat of the freethinkers" (275). He believes that "all the theosophers, all the occultists and kabbalists of the present hour know absolutely nothing" (127). In the last analysis, des Hermies is convinced that "for two miscreants of our sort, we hold opinions singularly pious"—a view that Durtal seconds with the statement that "conversations that do not deal with religion or art are base and useless!" (189).

Surrounded by alchemy in the present, Durtal immerses himself in the subject for the purposes of his book on Gilles de Rais. Unlike other biographers, who present the magicians and occultists of the age as "vulgar parasites" (50), Durtal believes that they were "the patricians of the mind" ("patriciens de l'esprit") of the age and that Gilles, given his natural tendency toward mysticism, was intelligent enough to understand them. Durtal has determined what Gilles knew by the time he undertook his own quest for the *grand oeuvre*: the writings of Albertus Magnus, of Arnoldus de Villanova, of Raymond Lullus as well as the manuscripts of Nicolas Flamel, which were then in circulation (74). Gilles was willing to undertake his alchemical experiments despite the edicts of Charles V and the papal bull of John XXII, which was still in effect. For his research Durtal also used the *Asch-Mézareph* of Abraham and Nicolas Flamel as translated and edited by Eliphas Lévi, who explained the meaning of the various symbols.

Durtal recapitulates such basic questions as the transmutation of metals through the agency of the philosophical stone: mercury, also known as the Green Lion, the serpent, the milk of the Virgin, and pontic water (75). He learns that, at that time, the Hermetic center of France was Paris, "where the alchemists met under the vaults of Notre Dame and studied the hieroglyphs of the charnel house of the Innocents and the portal of

St Jacques de la Boucherie, on which Nicolas Flamel, before his death, had described in kabbalistic emblems the preparation of the famous stone" (76). Disappointed by several traveling charlatans, Gilles felt that he would never obtain from the devil the secret of the "sovereign magistery" (78), when suddenly the master of Florentine magic, François Prélati, appeared at his castle and assured him that, "if it pleased Satan, they would finally find that powder that would heap them with riches and render them almost immortal" (80). (At this point Durtal, ruminating over their "singular science," reminds himself that even Berthelot—in his Encyclopédie article—declared that "no one can affirm that the fabrication of the reputedly simple bodies is a priori impossible.") The novel goes on to describe at length the medieval alchemistic practices. But when the experiments inevitably failed and the alchemists "abandoned their ineffectual furnaces" (151), Gilles consoled himself with the unspeakable debaucheries and depravities that led ultimately to his arrest.

Durtal begins to believe that, "in order to depict well the satanism of the Middle Ages, it would be necessary to put oneself into that milieu" (195) because "the state of soul is essentially identical, and if the operations differ, the goal is the same." It is at this point that he persuades Mme Chantelouve to take him along to the celebration of a black mass in modern Paris, which shocks and disgusts him. When the novel ends, Durtal has brought his own work to a conclusion, depicting the conversion of Gilles de Rais before his execution for heresy, sodomy, and other crimes against church and society. Durtal's own parallel experience of satanism, alchemy, the black mass, and other occult practices has not yet brought about his own conversion, which takes place in Huysmans's sequel, En route (1895). While the novel provides a panorama of the occult, and notably alchemy and alchemists, of the 1880s, unlike the earlier works it takes alchemy as an image not for art but for religion—or rather, its inversion into satanism. As the work ends, Durtal and his friends are in despair about the future. "This century absolutely scoffs at Christ in glory; it contaminates the supernatural and vomits on the Beyond" (283).

Given this atmosphere, it is no wonder that August Strindberg (1849–1912) chose to live in Paris for a few years in the mid-1890s, where he dedicated himself seriously to alchemy, about which he published numerous articles in professional journals—so seriously, indeed, that his (second) wife left him and he had to be hospitalized for dermatological problems resulting from his experiments. Although his alchemy left no imprint on his plays, he recorded the apparent successes—he believed (wrongly) that he had succeeded in producing specks of gold

on paper—as well as the despair of those years in his *Occult Diary* (published 1977) and the fictionalized autobiography *Inferno* (1897).³³

It is no secret that William Butler Yeats (1865–1939) was obsessed with magic and the occult. As he confessed in his essay "Magic" (1901), "I believe in the practice and philosophy of what we have agreed to call magic, in what I must call the evocation of spirits, though I do not know what they are..."34 Personally acquainted with Mme Blavatsky, A. E. Waite, and other prominent occultists of the day, for years he participated actively in the Order of the Golden Dawn, which he joined in 1890 after being expelled from the Theosophical Society.³⁵ Alchemy constituted one of the many sources for doctrines and ceremonies of the order along with theosophy, Kabbalah, Freemasonry, and Rosicrucianism. In order to advance through the various grades of the order, the disciple had to pass examinations demonstrating knowledge of "the names of the alchemical principles" as well as the meaning of various technical terms (cucurbit, alembic, athanor, etc.). To this end Yeats studied the principal texts as he knew them from Waite's Lives of Alchemystical Philosophers (1888).³⁶ In addition, the library of the Inner Order of the Golden Dawn, to which Yeats was admitted in 1893, contained many works on alchemy.³⁷ In "The Body of the Father Christian Rosencrux" (1895) he used the legendary account from the Fama, according to which the founder's body was buried for 120 years before being rediscovered by his followers, to exemplify his hopeful belief "that this age of criticism is about to pass, and an age of imagination, of emotion, of moods, of revelation, about to come in its place; for certainly belief in a supersensual world is at hand again."38 Accordingly it is no surprise to detect in his poetry numerous images and ideas borrowed from alchemy: notably ideas regarding transformation and the mystical marriage.³⁹

Yet the figure of the alchemist occurs rarely—not in a poem but notably in the visionary prose work that Yeats composed and published initially in 1896: "Rosa Alchemica" (in its present revised form in *The Secret Rose*,

³³ F. L. Lucas, "Introduction," in: August Strindberg, *Inferno*, trans. Mary Sandbach (London: Hutchinson, 1962), 13–20; and Prideaux, *Strindberg*, 199–232.

W. B. Yeats, Essays and Introductions (New York: Macmillan/Collier, 1986), 28.
 See Richard Ellmann, Yeats: The Man and the Masks (1948; New York: Norton, 1979), 94–100; the elaborate notes to: W. B. Yeats, Mythologies, ed. Warwick Gould and Deirdre Toomey (New York: Palgrave Macmillan, 2005), 379 n. 27; William T. Gorski, Yeats and Alchemy (Albany: State University of New York Press, 1996), 14–24; and Regardie, What You Should Know about the Golden Dawn, 70–93.

Mythologies, 369 n. 4.
 Mythologies, 387 n. 53.
 Yeats, Essays and Introductions, 196–7, here 197.

Yeats, Essays and Introductions, 196–7, here 197. See Gorski, Yeats and Alchemy.

1897).⁴⁰ The story's title refers to a work that the unnamed narrator allegedly published ten years earlier, in which he discovered:

that their doctrine was not merely chemical fantasy, but a philosophy they applied to the world, to the elements and to man himself; and that they sought to fashion gold out of common metals merely as part of a universal transmutation of all things into some divine and imperishable substance; and this enabled me to make my little book a fanciful reverie over the transmutation of life into art, and a cry of measureless desire for a world made wholly of essences. (177)⁴¹

With these words the narrator, reporting on events a decade earlier, introduces himself to us as a spiritual alchemist similar to the poets we have discussed above. In his elegantly accoutered house, where Huysmans's aesthete Des Esseintes would have felt quite at home, he had gathered bronze statues of all the gods "because I believed in none" but held himself apart, "indissoluble, a mirror of polished steel" (178)—a passive surface, as William T. Gorski perceptively notes, incapable of creation. 42 He also has "a set of alchemical apparatus," complete with alembic and athanor, that had allegedly belonged to Raymond Lully (178). There he follows the Keys of Basilius Valentinus in his "search for an essence which would dissolve all mortal things"; for he has learned that "all must be dissolved before the divine substance, material gold or immaterial ecstasy, awake." Having dissolved the mortal world—that is, having left behind and excluded the ordinariness of everyday life—he now lives amid the "immortal essences" represented by the incense, paintings, and books that fill his house: "but had obtained no miraculous ecstasy." The peacock curtain covering the door to his aesthetically furnished apartments suggests the alchemical cauda pavonis and hints that, despite the realm he has created for himself, the narrator's spiritual magnum opus has stalled at a penultimate stage without attaining perfection. This view is confirmed by the despair in his voice when he gazes out his window and cries out "for the birth of that elaborate spiritual beauty which could alone uplift souls weighted with so many dreams" (179).

At this point his friend Michael Robartes reappears after many years and urges the narrator to become an initiate of his Order of the Alchemical Rose. Robartes points out that, although the narrator has shut himself away from the world and, in the form of his antique statues, gathered gods and goddesses about himself, he has not submitted to them. Men must

⁴⁰ Gorski, *Yeats and Alchemy*, 75–106, offers the most exhaustive analysis of the story. For details see also the notes to: Yeats, *Mythologies*, 366–99.

⁴¹ Quoted here and below from: Yeats, *Mythologies*, 177–91.

Gorski, Yeats and Alchemy, 80.

forget the bustle and noise of this world and time and seek, instead, "a mystical union with the multitude who govern this world and time" (180). As Robartes continues to speak, disclosing that the divinities have not disappeared, that "they are always making and unmaking humanity" (181), the narrator falls into a dreamlike trance in which he sees such figures as Hamlet, Faust, Lear, Beatrice, and Aphrodite. But arousing himself angrily, he tells Robartes that "your ideas and fantasies are but the illusions that creep like maggots into civilisations when they begin to decline, and into minds when they begin to decay" and that a man is great only "insofar as he can make his mind reflect everything with indifferent precision like a mirror" (182). Dropping the alembic that he has seized as a weapon, he hears a voice crying: "The mirror is broken into numberless pieces." Once his merely reflective grasp on reality is symbolically shattered and his formerly intact self melts away, he seems to rise in spirit through companies of lovely beings "more certain than thought" and then into a state of sublime solitude in which "all things that had ever lived seemed to come and dwell in my heart." When he recovers from his vision, he tells Robartes: "I will go wherever you will and do whatever you bid me, for I have been with eternal things" (183).

Robartes accompanies him to the order's temple, which was built "between the pure multitude by the waves and the impure multitude of men" (a site that sounds very much like Hopkins's vision of a place between the city and "the houseless shore"). Following a train ride to the western shore, they walk to an ancient-looking edifice housing the Temple of the Alchemical Rose (184), which features "one of the most exhaustive alchemical libraries I have ever seen" (185), ranging from Morienus and Avicenna to Lully and Flamel. There he is given a handsome book illustrated "after the manner of the Splendor Solis" and describing, in terms based clearly on the Rosicrucian Fama, the founding of the order by six students of Celtic descent, its principles, and symbols (186-7). When he has mastered the substance of the book and learned the steps of a magical dance, Robartes robes him and leads him through a hall with symbolically colored mosaics of the deities into a circular room with an immense mosaic rose on the ceiling and introduces him with the words: "The perfect gold has come from the athanor" (188). Following a dance of figures with Grecian and Egyptian faces, the narrator joins in a dance with "an immortal august woman" who was "more or less than human, and who was drinking up my soul" (190). He faints and, after a time, awakens to find Robartes and the other dancers asleep in robes disordered from their ecstatic dances. Suddenly he becomes aware of an angry crowd outside, and as they break in he rushes out another door and escapes. When he looks back, he sees that the mob has destroyed the temple, where Robartes and his friends suffer "their tragic end" that is mentioned in the story's opening sentence. Now, years later, when the narrator recalls the "voices of exultation and lamentation" that he heard in the temple, he is sometimes tempted by that "indefinite world, which has but half lost its mastery over my heart and my intellect" (191). At such moments he clutches the rosary around his neck and rejects the demon who is constantly "deceiving our intellects with subtlety and flattering our hearts with beauty."

Yeats's luminous story amounts to a rejection of magic—at least, those alchemical aspects of it that are exemplified by the Order of the Alchemical Rose, its temple, its library, its ceremonies, and its teachings—that offered illusory surrogates if he were prepared to sacrifice the reality of religion and life.

In most of these poems, plays, and novels—apart, that is, from those historical fictions in which an alchemist in a secondary role appears in a traditional romanticized form—the alchemist and his art have been poeticized in a manner quite distinct from the earlier romanticizations: the alchemist is identified with the poet himself, who transmutes reality—sometimes inversely—into art. Later, in the works of Huysmans and Yeats, alchemy becomes a symbol for the religious spirit as manifested in the occult, and the alchemist its spokesman. But this transformation of the alchemist, which was suitable for an age seeking in art or elsewhere surrogates for a lost religious faith, was calcinated or pulverized or otherwise spoiled by the heat of World War I, and the residue was something completely different.

Spiritualizations, or Rubedo

THEORETICAL REVIVALS

On the eve of World War I Herbert Silberer published his Hidden Symbolism of Alchemy and the Occult Arts (Probleme der Mystik und ihrer Symbolik, 1914). First applying Freud's theories to alchemy, the work went on to anticipate Jung's later psychoanalytical analysis of the Art. Silberer (1882–1923) was as unlikely an exponent as had been, over fifty years earlier, General Ethan Allen Hitchcock. The son of a successful Viennese businessman, he was trained as a sportsman as well as an experienced balloonist, about which he published a volume illustrated with photographs taken from on high. 1 But the introspective Silberer also wrote an early essay on hallucinations and their analysis ("Bericht über eine Methode, gewisse symbolische Halluzinations-Erscheinungen hervorzurufen und zu beobachten," 1909) which so favorably impressed Freud, whom the twenty-five-year-old respectfully approached, that he recommended it to Jung for publication in his yearbook. For more than ten years Silberer, as an independent scholar, was a member of the Psychoanalytical Association (Psychoanalytische Vereinigung) surrounding Freud, but, because of his association with such apostates as Jung and Wilhelm Stekel, was gradually excluded from the group. In 1922 at the age of forty, partly as a result of Freud's critical rejection of his lecture on dreams, Silberer committed suicide.

Silberer's *Hidden Symbolism of Alchemy* begins with the text of a parable—"A Golden Tractate on the Philosophical Stone"—penned in 1625 by an anonymous Rosicrucian, whose fairy-tale plot he first subjects to a psychoanalytical analysis in Freudian terms: the narrator is actually phantasizing the elimination of his father and the seduction of his mother, with whom he conceives himself and enjoys her love while still in her womb; he satisfies his infantile curiosity by observing the process of

¹ Bernd Nitzschke, "Herbert Silberer: Skizze zu seinem Leben und Werk," in: Herbert Silberer, *Probleme der Mystik und ihrer Symbolik*, new edition (Sinzheim: AAGW, 1997), 7–21. http://www.werkblatt.at/nitzschke/text/silberer.htm (rtd10.14.12)

conception from without.² At that point Silberer moves on (73–93) to an alchemistic interpretation of the same parable, which he argues is closer to the author's intentions than the psychoanalytic one, which referred to the unconscious:

Now we have the conscious purpose before us and proceed with the author's approval, whereas before we were working, as it were, against his approval and derived things from his spiritual product that his conscious being would probably scarcely concede, if we had him alive before us—unless, that is, we instructed him and convinced him of the significance of psychoanalysis. (78)

This analysis proves that "what initially appeared to be a bold conjecture—patricide, incest with the mother, the reading of red blood and white bones as man and woman, the fecal material as matter for conception, the prison as uterus: all that turns out to be favorite images among the alchemistic writers" (89). He then introduces Paracelsus, as author of the notion of the conception of a human being by artificial means, and conjectures that the whole parable culminates in the production of a homunculus. (Paracelsus, as we shall see, becomes an enormously popular figure for writers *entre deux guerres*.) Silberer later explains that the Freudian term "sublimation" occurs with precisely the same significance among the Hermetics. "In the containers where the mystical act of cultivation ['Erziehungsarbeit'] is carried out, that is, in the human being, materials are sublimated; speaking psychologically, that means that the urges ['Triebe'] are supposed to be refined and raised from their baseness to a higher niveau" (163).

Following the section on alchemy Silberer devotes a chapter to "the Hermetic Art" (94–110), which begins with the statement that "everyone who concerns himself intensively with alchemistic literature must be struck by the religious seriousness that prevails especially in the writings of the more significant authors" (94). Citing Ethan Allen Hitchcock, he states that the American deserves "the credit for having rediscovered the meaning of alchemy that transcends the chemical and the physical" (97). Not that the Hermetic philosophers pursue speculative theology: "they let the content of the religious teaching become pure experience" (105). From this he concludes that the parable with which he began must also be interpreted as "a mystical guide" (110). He goes on to discuss the connection to Rosicrucianism and Freemasonry (110–33), concluding that the parable "contains a message ['Belehrung'] in the sense of the

² I refer to the photographic reproduction of the first edition (Vienna, 1914) as published in: *Probleme der Mystik und ihrer Symbolik*, 2nd edn (Darmstadt: Wissenschaftliche Buchgesellschaft, 1961), here 73.

higher alchemy" (133). In the second "synthetic" part of his book he brings together the various interpretations covered in the first "analytical" part, resolving that "the symbols are the inalterable, the individual meanings are the colorful, the variable" (256), expressing to each reader his own truth. More importantly, however, his reference to Hitchcock establishes a clear link to the earlier spiritualistic interpretation of alchemy.

Silberer was not the first writer to detect a connection between a Rosicrucian alchemistic parable and modern ideas—in this case not Freud but physical chemistry. In his tract *Twice Dead (Zweimal gestorben*, 1912) the Rosicrucian Ferdinand Maack (1861–1930), who understood Rosicrucianism wholly from an alchemical standpoint, greeted Marie Curie's discovery of radium and radioactivity as "an expression of elemental transformation. Mme Curie could hardly express herself more alchemistically!" The point here is not to pass judgment on the validity of such analogies to psychoanalysis or physical chemistry but, rather, to note the fact of the analogies as representative of a new tendency to understand and justify alchemy within a contemporary context.

These developments, interrupted by World War I, were resumed immediately afterwards, for example in Edmund von Lippmann's book on the origins and spread of alchemy (Entstehung und Ausbreitung der Alchemie, 1919). Lippmann (1857–1940), a trained chemist and director of one of Germany's largest sugar refineries in Halle, pursued the history of science as a passionate avocation. A no-nonsense scientist, he begins by stating his agreement with Hermann Kopp (see Chapter 5) that the history of alchemy is "the history of an error"—"one of the most remarkable in the entire realm of cultural development" (v).4 His substantial work amounts in no small measure to a correction of Berthelot, whose works, though praised in Germany as well as France, "lack, either fully or to any satisfactory degree, fundamental knowledge of the relevant sources acquired at first hand as well as the entire literature that comes into question for the assessment of the treated questions" (647). With this in mind, Lippmann surveys the antique remnants of alchemistic writings, the sources of their theories, the relationship between chemistry and alchemy, and alchemy in the Orient. He devotes only about fifty pages to "Alchemy in the Occident," ending with a glance (511–13) at alchemy from the late eighteenth century to the present. What matters here, however, is not so

³ I have not seen Maack's work (Leipzig, 1912), which I cite from the quotation in Robert Stockhammer, *Zaubertexte: Die Wiederkehr der Magie und die Literatur*, 1880–1945 (Berlin: Akademie Verlag, 2000), 165.

⁴ Edmund O. von Lippmann, *Entstehung und Ausbreitung der Alchemie* (Berlin: Julius Springer, 1919).

much his historical overview or the perhaps nationalistically motivated attack on Berthelot as, rather, the entire focus of the book, which is indicated in the subtitle: "A Contribution to Cultural History." Alchemy has moved definitively from the operative to the speculative, from the sciences into the humanities.

In this context "Fulcanelli" also deserves mention: the pseudonymous name for the author of a handsomely illustrated and influential work on alchemical symbols in the great cathedrals of France that was published in 1926.5 The author notes that, with few exceptions, cathedrals are built in the shape of a Latin cross. "But the cross is the alchemical hieroglyph for the crucible"—from Low Latin *crucibulum*, which in turn stems from *crux* (59). Then he points out that the central of the three roses ornamenting the grand porch of the cathedrals was called *rota* or "wheel"; and "the wheel is the alchemical hieroglyph for the time necessary for the coction of the philosophical matter and, accordingly, for the coction itself" (65). He goes on to cite examples from Paris, Amiens, Bourges, and Hendaye, including the frequent depictions of the Virgin, and concludes that "the cathedral appears to us to be based on the science of alchemy" (90). The dedicated alchemist ends his work with the observation that "the mysterious Science requires much accuracy, exactitude, perspicacity in the observation of facts, a healthy spirit logical and balanced, a lively imagination without exaltation, a heart ardent and pure" (224). Through a constant exercise of these faculties and through meditation the neophyte will progress by degrees to knowledge, power, and boldness. But should he succeed, then the adept must forever be silent—the ancient admonition of the occult.

That same year saw the appearance of an authoritative new edition of the *Tabula smaragdina* by Julius Ruska (1867–1949), an adjunct professor of Near Eastern Studies at the University of Heidelberg and the founder of its Institute for the History of Science. Ruska presented his work, as the subtitle indicates, specifically as "a contribution to the history of Hermetic literature." (Ruska had already published a two-volume study, *Arabische Alchemisten*, in 1924, and in 1931 he added an edition of the famous *Turba philosophorum*—this time specifically as "a contribution to the history of alchemy.") It was Ruska's achievement to publish for the first time the Arabic original of the *Tabula*, which had hitherto been known

⁶ Julius Ruska, *Tabula smaragdina: Ein Beitrag zur Geschichte der hermetischen Literatur*, Arbeiten aus dem Institut für Geschichte der Naturwissenschaft, 16 (Heidelberg: Carl

Winter's Universitätsbuchhandlung, 1926).

⁵ Fulcanelli, Le Mystère des cathédrales et l'interpretation ésotérique des symboles hermétiques du grand oeuvre (Paris: Jean Schemit, 1926). Some authorities believe that the entire work was composed by E. Canseliet, who wrote the preface; others suggest Julien Champagne, who illustrated it; and further possibilities have been proposed.

only in its Latin translation, and to demonstrate that the work was not based, as had been generally assumed, on an earlier Greek text but, rather, emerged from the Hermetic literature of the Islamic cultural world. While the first three quarters of the work deal with the Arabic text and its sources in Greek–Egyptian chemistry, the last section traces the influence of the Latin text in the Western world from Albertus Magnus down to the most recent historians of alchemy. Regarding the *Tabula* as a powerful cultural document, whose "Faustian urge" still motivates humanity, Ruska believes that only poets and visionaries are capable of reconciling the tensions addressed there. Accordingly he ends with a quotation as Goethe's Faust in his study contemplates the sign of the macrocosm: "Wie alles sich zum Ganzen webt, / Eins in dem andern wirkt und lebt!" ("How everything is woven into a whole, each at work and alive in the other"). Ruska's entire approach was calculated to move the *Tabula smaragdina* into the center of German cultural consciousness during a period newly obsessed with the occult.

Other translations and editions appeared. In 1925 a translation of Thomas Aquinas's "Treatise on the Philosopher's Stone" (Abhandlung über den Stein der Weisen) was published by Gustav Meyrink (1868-1932), the Austrian novelist of the occult who is best known today for his novel Der Golem (1915). The forty-page introduction, in which Meyrink shows himself to be a well-informed and balanced historian of alchemy, begins with a defense of Aquinas's sometimes contested authorship of the text.⁷ Regarding the secretive and highly allegorical language of alchemical writings, Meyrink points out that the Bible is composed symbolically, as well as the Kabbalah, the prescriptions of yoga, the Edda, and many other holy writings (xxvi). The authors of those works shared the assumption that whoever lacks the intuition needed to discover the secret is not worthy of knowing it. As for the possibility that they actually created gold, Meyrink cites a number of examples and leaves it up to the reader to decide for himself. Regarding the frequency with which the alchemists specify human or animal excrement for their materia prima, he suggests that it refers to old and hardened matter found in ancient cloacas (xxx). He reports that, when he took such a piece from an old pit in Prague and heated it in a retort, it underwent the color changes—black, white, peacock, and so forth—described in the classic texts. And he reminds the reader that the alchemists did not claim to create gold from such matter only a metallic elixir or panacea (xxxiii). Meyrink concludes his remarks by saying that he did not intend "to break a lance for alchemy." But his translation and introduction provide further indication of the popularity

⁷ Thomas von Aquino, Abhandlung über den Stein der Weisen, trans. and ed. Gustav Meyrink (Leipzig: Otto Wilhelm Barth, 1925), vii–xlvii.

of the subject (and, as we shall see, background information for his alchemistic novel discussed later in this chapter).

In 1930, to take a non-German example, André Breton brought out his Second Manifesto of Surrealism, in which he deals at length with Rimbaud's theory of "alchemy of the word." Breton justifies Surrealism's indebtedness to Une Saison en enfer through a comparison with Nicolas Flamel, whose genius was no less great because he had been preceded and aided by the works of Abraham the Jew and Hermes Trismegistus. But he goes on to suggest a more striking parallel:

I would appreciate your noting the remarkable analogy, insofar as their goals are concerned, between the Surrealist efforts and those of the alchemists: the philosopher's stone is nothing more or less than that which was to enable man's imagination to take a stunning revenge on all things... to the attempt to liberate once and for all the imagination by the "long, immense, reasoned derangement of the senses," and all the rest. (174–5)

C. G. Jung, to whose works we shall return later in this chapter, uses a similar analogy to describe Joyce's Ulysses in the peroration to his essay "'Ulvsses': A Monologue" (1932). "O Ulvsses, you are truly a devotional book for the object-besotted, object-ridden white man! You are a spiritual exercise, an ascetic discipline, an agonizing ritual, an arcane procedure, eighteen alchemical alembics piled on top on one another, where amid acids, poisonous fumes, and fire and ice, the homunculus of a new, universal consciousness is distilled!"9

What matters for our purposes is simply the fact that, during the 1920s, alchemy was resurrected as a subject worthy of broad cultural consideration: one that lent itself to the interpretation of literature as well as architecture and art and one that could also be seen in connection with the most advanced ideas in psychology and science. Much of this is evident in the literary works of the period.

POETICAL ALCHEMISTS

The figure of the alchemist occurs prominently in poems by two major American poets whose works embrace the period under discussion. In 1912, Ezra Pound (1885-1972) concluded his collection Ripostes with

⁸ André Breton, *Manifestoes of Surrealism*, trans. Richard Seaver and Helen R. Lane (Ann

Arbor: University of Michigan, 1972), 117–87, here 173–6.

""(Ulysses': A Monologue," in: C. G. Jung, *The Spirit in Man, Art, and Literature*, trans. R. F. C. Hull, Bollingen Series XX/15 (Princeton, NJ: Princeton University Press, 1971), 107–34, here 131–2.

"The Alchemist." In this poem, subtitled "Chant for the Transmutation of Metals," the alchemist prays for "the red gold of the maple," "the burnished nature of fire," the "silver of the leaf" along with other ingredients of nature to "rain flakes of gold on the water" and to "guard this alembic" and "quiet this metal." Here the alchemist, as in the works of the French fin de siècle, clearly represents the poet, who is summoning precisely the same qualities and colors to create the metal of his poem in the alembic of his imagination.

Three decades later his lifelong friend/love and protegée Hilda Doolittle ("H. D.," 1886–1961) opened her late collection, Tribute to the Angels (1945), with a poem identifying Hermes Trismegistus as "patron of alchemists" but also as the sponsor of "orators, thieves and poets," 11 and urging poets in his name to "plunder" the fragments of antiquity that "the new-church spat upon." H. D.'s poetry includes frequent references to alchemy, as for instance in the late poems of *Hermetic Definition*, in which she essentially provides her own psychic portrait (as suggested by the acronym of the title) with reference to Hermetic lore from a variety of classical and occult sources. She alludes, for instance, by way of Robert Ambelain's Dans l'ombre des cathédrales (1939), to her discovery of the view familiar from Fulcanelli and Huysmans back to Nicolas Flamel: that the three portals of Notre Dame depict "Astrologie, Alchimie, Magie," 12 Elsewhere, in an analogy that would hardly have been pleasing to Freud with his intense scorn for alchemy, she writes that, during her period of analysis, "we retreat from the so-called sciences and go backward or go forward into alchemy" 13 and even refers to "the Professor" as the "alchemist[e] si remarkable."14 Yet in the poetry of both Pound and H. D., while alchemy provides recurrent imagery, 15 the figure of the alchemist otherwise hardly occurs. In general, the alchemist is found mainly in fiction of the years entre deux guerres and not in the poetry, which abounds in often vague Hermetic images.

We do note one notable exception in the work of a poet who in his aesthetic conservatism could hardly be more unlike the radically modernist

Ezra Pound, Personae: The Collected Shorter Poems (New York: New Directions, 1971), 75–6.

¹¹ H. D., *Collected Poems, 1912–1944*, ed. Louis L. Martz (New York: New Directions, 1983), 547–8.

¹² H. D., *Hermetic Definition*, ed. Norman Holmes Pearson (New York: New Directions, 1972), 41.

H. D., Tribute to Freud, ed. Norman Holmes Pearson (Boston: Godine, 1974), 145.
 Timothy Materer, Modernist Alchemy: Poetry and the Occult (Ithaca: Cornell University Press, 1995), 100.
 Materer, Modernist Alchemy, 49–70 and 87–105.

Pound and H. D.: *Alchemy: A Symphonic Poem* (1920) by Robert Hillyer. Hillyer (1895–1961), perhaps best known for his role in the so-called Bollingen scandal, when, as a retired Harvard professor of poetry, he urged the sponsors in two strong articles to retract the prize that had been awarded to Ezra Pound. When he wrote *Alchemy*, his second volume of poetry, the young Harvard graduate had only recently returned from his service with the ambulance corps in World War I. The "symphonic poem," consisting of four cantos embraced by a prelude and coda, begins when the poet emerges from his "dreary house" and, like Hopkins's "alchemist in the city," leaves the city behind to stand alone "on shores uncharted and unknown" (17). ¹⁶ There, like the young student in the Grimms' fairy tale,

I beheld the Stone. It lay half-hidden, trodden underfoot, With dead leaves heaped upon it like a shroud, Clasped intricately in the tangled root Of a tree that another storm had overthrown. (18)

The poet knows instantly that he was not the first to find it and that others will come after him:

Plato beheld it when the Age of Gold Flowered beneath his touch; Exalting it against the skies he saw Faces that blinded him with awe...(18)

Leaving the stone "Half-hidden in the untransmuted earth," Plato hastened to the city to report on "the radiant meadows / Where dwell the Immortal Forms by whom are cast / These flat, distorted phantoms" (19). But, distracted by their lives among the shades, "few heard and none believed."

Then Epicurus came and, finding the stone, "touched the world around him into gold" (20). Discarding the stone without envisioning Plato's "gilded vistas," he exhorted men to stop propitiating the gods and to enjoy a wisdom that frees the spirit from fears of death or dreams of the future. But even as Epicurus spoke in his garden, smoke blew across the world to another garden where Jesus walked along:

He found the Stone, and turned away again, Trembling that beauty was so rife with pain, Nor touched the sky to gold, nor touched the earth, But gave them both to darkness where abide Those that make war against our mortal mirth— (21)

saying "God is Love."

¹⁶ Robert Hillyer, Alchemy: A Symphonic Poem (New York: Brentano's, 1920).

The poet makes his own appeal for a belief unknown to Plato or Epicurus:

O write new Gospels in another tongue Unknown to Mystic or to Pantheist, How Love the Alchemist divinely came Out of the nether blackness and the mist

. .

And hid the Stone of Beauty to transmute The barren plains to garden gold with fruit, To change the filthy city into gold...(22)

Later the poet thanks the "gentle guardian of the Stone, / That thou hast led me to this dazzling zone" (42). For he now understands that the key to happiness lies within himself:

In thee there dwelled the mighty Alchemist, Love, who is bounded by no living wall; Thou art gone hence, but still I am his thrall, And surely know that from those lips I kissed I drew the secret wisdom that shall call The dead to meet at life's eventual tryst, When from brief beauty, all things that exist Shall rise into the light perpetual. (42)

The poem concludes with a celebration of the "Spark of ascending light, from thee I learned / Love's alchemy and purifying hate" (44).

Hillyer's poem is closer in style to Christina Rossetti's than to the more radically modern works of Rimbaud or Rilke, but what is of relevance again is his adaptation of the alchemist to exemplify such figures of wisdom as Plato, Epicurus, and Jesus—and the poet himself, who has learned his own lesson from Love the Alchemist.

Otherwise we must turn mainly to German and Austrian novelists of the 1920s who, through an odd conjunction of personal and cultural circumstances, were as profoundly obsessed with the figure of the alchemist as were French writers of the fin de siècle. The first decade of the new century saw a multitude of collections of tales of the fantastic and occult such as Hans Heinz Ewers's *Das Grauen* ("The Horror," 1908) and *Die Besessenen* ("The Possessed," 1909), followed after 1910 by a series of fantastic novels of which the most famous was Gustav Meyrink's tale of the Prague ghetto, *Der Golem* (1915), 17 but none of which involved

¹⁷ See Marianne Wünsch, "Bergengruens 'Das Gesetz des Atum' oder die Ambiguität des Phantastischen zwischen Okkultismus und Psychologie" (1947), in: Werner Bergengruen, *Das Gesetz des Atum* (1923; rpt. Frankfurt am Main: Suhrkamp Taschenbuch, 1987), 223–39, here 223–4.

alchemy. The wave then continued throughout the decade following World War I, now—thanks to the influence of the works of Silberer, Lippmann, Ruska, and others mentioned above—introducing frequently the figure of the alchemist. Munich, moreover, witnessed the activities of the influential Alexander Freiherr von Bernus (1880-1965), a theosophist, anthroposophist, and alchemist who wrote several works on alchemy (for instance, Alchymie und Heilkunst, 1936) and edited the journal Das Reich, where he published an edition of Die Chymische Hochzeit Christiani Rosenkreutz (1916–17), and his own Goldmachen: Wahre alchymistische Begebenheiten ("Making Gold: True Alchymistic Incidents," 1936), in which he chronicled the lives of such prominent alchemists as Edward Kelley, Michael Sendivogius, and the Greek Laskaris. Bernus was acquainted not only with fellow alchemist Meyrink but also most of the leading literary figures of his time (Hermann Hesse, Stefan Zweig, Rudolf Steiner, among others). 18 Others, notably in early National Socialist circles and including prominently General Erich Ludendorff, succumbed in the mid-1920s to the frauds of the notorious alchemist Franz Seraph Tausend (1884-1942).¹⁹

FICTIONAL ALCHEMISTS IN GERMANY

While Thomas Mann's *The Magic Mountain* (*Der Zauberberg*, 1924) features no alchemist, one of Hans Castorp's two spiritual guides, the Jewish Jesuit Naphtha, corrects his pupil's naive misconception that alchemy was simply "gold-making, Philosopher's Stone, Aurum potabile" (705).²⁰

"Yes, popularly speaking. By a more learned understanding it is purification, transmutation and ennobling of matter, transsubstantiation, and in every case to something higher. So enhancement—the *lapis philosophorum*, the male–female product of sulfur and mercury, the *res bina*, the two-sexed *prima materia* was nothing more and nothing less than the principle of enhancement, of driving higher through external influences—magical pedagogy, if you like." (7)

¹⁸ Theodor Harmsen, *Der magische Schriftsteller Gustav Meyrink: Seine Freunde und sein Werk* (Amsterdam: In de Pelikaan, 2009), 172–3.

¹⁹ See Franz Wegener, *Der Alchemist Franz Tausend: Alchemie und Nationalsozialismus* (Gladbeck: KFWR, 2006).

²⁰ Quoted in my own translation from vol. 3 in: Thomas Mann, *Gesammelte Werke in zwölf Bänden* (Frankfurt am Main: Fischer, 1960).

Naphta goes on to explain that the grave is "a symbol of alchemical transmutation": "the place of decomposition. It is the quintessence of all Hermetics, nothing other than the container, the well-preserved crystal retort in which matter is forced toward its final transformation and purification" (706). Clarifying for the perplexed Hans Castorp the term "Hermetics," he informs him that alchemy is central to Freemasonry, which in later centuries led many seeking spirits to their goal and that "the alchemistic wisdom of the Master Mason is fulfilled in the mystery of transformation" (707).

Beyond this central discourse, alchemy and alchemists play no further role in the novel. But fifteen years later, in his "Introduction to *The Magic Mountain*" for students at Princeton University (1939) Mann introduced the notion of "alchemistic enhancement" ("alchemistische Steigerung") to describe Hans Castorp's development in the "feverish Hermetics" of his seven years on the Magic Mountain²¹—a remark that has encouraged some scholars to look more generally for Hermetic or alchemistic motifs and images in the novel.²²

Several of Mann's contemporaries were clearly obsessed with the figure of the alchemist. Werner Bergengruen (1892–1964) is known primarily as the author of historical novels and novellas—his greatest success was "The Grand Tyrant and the Court" (*Der Großtyrann und das Gericht*, 1935), set in Renaissance Italy—permeated with a sense of conservative Christian values.²³ This attitude is already evident in his first novel, "The Law of Atum" (*Das Gesetz des Atum*, 1923), but its supernatural subject matter, utterly uncharacteristic of the author's principal works, is attributable largely to the young writer's succumbing to the spirit of the times²⁴ and to the literary influence of the German Romantic writers to whom he was devoted. (In 1939 he published a monograph on E. T. A. Hoffmann.) The same influence marks the organization of the novel, which is divided into twelve "night watches," an arrangement familiar from the twelve "vigils" of Hoffmann's *The Golden Pot* as well as the archetypically

 [&]quot;Einführung in den 'Zauberberg': Für Studenten der Universität Princeton," in: Gesammelte Werke, vol. 11, 602–17, here 610, 612.
 See, for instance, David Meakin, Hermetic Fictions: Alchemy and Irony in the Novel

²² See, for instance, David Meakin, *Hermetic Fictions: Alchemy and Irony in the Novel* (Keele, Staffordshire: Keele University Press, 1995), 94–102; and Stockhammer, *Zaubertexte*, 175–8.

²³ Hans Bänziger, "Werner Bergengruen," in: *Christliche Dichter der Gegenwart: Beiträge zur europäischen Literatur*, ed. Hermann Friedmann and Otto Mann (Heidelberg: Wolfgang Rothe, 1955), 345–58.

²⁴ Wünsch, "Bergengruens 'Das Gesetz des Atum,'" 223. See also Christine Maillard, "Die Alchemie in Theorie und Literatur (1890–1935): Das sonderbar anhaltende Fortleben einer 'unzeitgemäßen' Wissensform," in: *Literatur und Wissen(schaften), 1890–1935*, ed. Christine Maillard and Michael Titzmann (Stuttgart: Metzler, 2002), 165–91, here 181–3.

Romantic *Nachtwachen* (1805), attributed to "Bonaventura" (but now known to have been written by August Klingemann).

The action, which takes place initially (night watches 2-4) in the Latvian district of Courland (Bergengruen's Baltic homeland) and then in the German university town of Marburg during the later nineteenth century, is the first-person account by Nikolai Laurentius of events that occurred during his later student years. When his story begins Laurentius, after eight lackluster semesters, has abandoned his study of law at the University of Jena and returned home to Riga and nearby Tukums (German Tuckum), where, his parents long deceased, he stays with his uncle and mentor Heinrich, known familiarly as "Henri le Beau," a former colonel in Napoleon's army. The first hint of the alchemistic theme is signaled by the etchings that Laurentius for the first time notices on the walls of his uncle's house: portraying Raymond Lullus, Paracelsus, and Valentin Andreae. On his first evening in Tukums he meets all the figures who will play a role in the action: his uncle is entertaining Professor Reepschläger from Marburg with his wife, Beate, her sister Sabine, and his boyhood friend Percy Horngreve, and they are being served by the young Russian peasant Prochor. Already here the future entanglements are anticipated: Laurentius is immediately captivated by the professor's much vounger wife, Beate, while Percy is obsessed with the slightly deformed and, as it turns out, jealous and malicious Sabine.

In the fourth "night watch," which opens with an epigraph from the Tabula smaragdina, 25 the occult elements are introduced, beginning with Prochor, whose powers with a divining rod enable him to find a five-ruble piece that Uncle Henri had lost. His uncle is not surprised by the incident, explaining to his mystified nephew that connections exist between man and the element of gold—"connections whose nature is not explained and not explainable with the means of today's exact sciences" (59). He adds that alchemy and "chemiatrics" have always known about the association and that the writings of the Rosicrucians suggest it too. When Laurentius expresses his astonishment at his uncle's casual mention of such topics as divining rods, Rosicrucianism, and alchemy, his uncle interrupts. "'Did I mention alchemy?' he asked smiling. 'One shouldn't do that'" (60). He goes on to call it a shame that we must today laboriously seek after the grand knowledge that, a few hundred years ago, was still passed along in an unbroken living continuity from one generation to the next. Laurentius is infected by his uncle's obvious enthusiasm as he explains that all the occult methods—magnetism, mysticism, occultism, Kabbalah, Rosicrucianism,

²⁵ Werner Bergengruen, *Das Gesetz des Atum* (Frankfurt am Main: Suhrkamp Taschenbuch, 1987), 52.

alchemy, astrology, magic in all its forms—are unified in their search for the same single goal: to find the truth and wisdom lying behind superficial appearances (63). He tells Laurentius that it is this search that binds him to Professor Reepschläger and urges his nephew to continue his studies at Marburg with the professor.

Eager to follow that advice, largely because of his infatuation with the professor's wife, Laurentius goes to Marburg, where the action continues (night watches 5–11). The love story leads through a series of confusions to a duel in which Laurentius unintentionally kills his friend Percy. He is incarcerated for two years, during which time he studies Egyptian language and culture—"Was not Egypt the land of origin for alchemy?" (120)—and then emerges to learn that Sabine has committed suicide and that Beate has been murdered by the professor, who, while claiming that she has been sent to Switzerland for treatment in a sanatorium, actually keeps her embalmed body in their bedroom for necrophilic devotion.

At the same time, another clearly supernatural aspect is developed. It turns out that Uncle Henri and the professor are engaged in solving a mystery: a series of deaths in Poland and Russia in which the victim's body, dead from suffocation and traumatic injury, was discovered miles away from where he had last been seen only a short time earlier. Laurentius gets caught up by the puzzle and, after careful geographical calculations, reckons that the bodies were always found exactly fifty-two kilometers from where they had been seen only minutes earlier and always with their boots missing. Figuring that fifty-two kilometers amount to seven (German) miles, he realizes that they are dealing with the seven league boots famous in German folklore and literature from one of the most beloved Romantic tales, Adelbert von Chamisso's "Peter Schlemihl's Strange Story" (Peter Schlemihls wundersame Geschichte, 1814). He recalls the central theory of alchemy: that nature strives always toward perfection and that art must take over where nature stops. (In that connection he draws the same analogy between alchemy and radiology that Ferdinand Maack had made some ten years earlier.)

He applies that reasoning to determine the nature of "the absolutely perfect boot, the boot that constituted the purest expression of the idea of the boot" (117). It would have to be light and indestructible, show no signs of wear, and always fit comfortably on every foot. After all, he reasoned, "alchemy wishes not only to transmute base metals into gold. The great elixir, the philosopher's stone, improves, ennobles, completes everything that is brought into contact with it" (118). That must be the secret of these boots. But the unsuspecting victims, putting on the boots, were killed by the very first step, which instantly conveyed them seven

miles under immense pressure that caused suffocation and bodily injury. When Laurentius explains his theory to the professor, he realizes that they are pursuing wholly different goals: he seeks understanding of the mysterious power alive in the boots, but the professor disagrees, saying coolly that "it's not a question of knowledge but of power. Whoever has the boots and understands how to use them would have to be the mightiest man in the world" (115). Beate, while deprecating her ability to grasp alchemy, also understands that the ancient alchemists were "very pious men" who stressed that God's grace was essential in order to achieve the ultimate goal (125).

When his uncle dies, he sends Prochor to Marburg to deliver a last message to his nephew, along with a package containing those very boots that he and the professor have been hunting for years by offering rewards to local officials in Poland and Russia. After Laurentius establishes their genuineness by trying them on and feeling their energy but taking great care not to take a single step in them, he delivers them to the professor with the idea of using them to take vengeance on him for the death of Beate. He had learned from his uncle that modern alchemy may use the findings and techniques of modern science, and during his prison term he designed according to modern scientific principles an insulated and reinforced outfit for the wearer of the boots so that an experiment might be made without danger: one step hither and then another back to the starting point. But when the professor eagerly volunteers for the first experiment, Laurentius tampers with the air pressure in such a manner that the professor soars away and is never seen again.

When he then visits the embalmed corpse of his beloved Beate, he sees in her room the statue of the Egyptian god Atum and prays to him as the sun god but also as the god of life and death—a god known to him from his Egyptian studies also as Osiris, Thoth, and Hermes Trismegistus. When the god speaks, he tells him his law (of the novel's title): "He who takes must give. Who destroys must build. And whose hand has ripped a hole in the chain of phenomena, his heart's blood and life power must fill the gap" (220). The victim becomes the murderer, and the murderer turns into the victim. Because Laurentius tore the professor out of the chain of phenomena, he must now replace him. "That is the law of Atum the Great, whom no one excels" (220).

At that point the narrative ends, and the twelfth "night watch" finds Laurentius, years later, having passed through courts, mental institutions, and scrutiny of various sorts, now living in the professor's house where Beate died. But when he looks in the mirror, he sees the face of Reepschläger, and people on the street call him "Herr Professor" (221).

"Hell is mightier than Heaven" (222) is the concluding sentence.²⁶ Although the novel depicts no alchemist's laboratory—the closest we come is an extensive list of the alchemical texts in his uncle's library—both Uncle Heinrich and Laurentius may be called alchemists in the higher or esoteric sense: their goal, in contrast to the professor's, is knowledge of the unity underlying all being, and Laurentius uses his knowledge of alchemical theory to establish the secret of the boots. The use of alchemical principles to rationalize the supernatural distinguishes this novel from virtually all the others that we have treated.

In a subsequent novel, in contrast, Bergengruen introduced the figure of an actual alchemist. "The Great Alkahest" (Das große Alkahest, 1926; later reissued under the title Der Starost) is a historical social novel set, once again, in Latvian Courland and in St Petersburg during the reign of Catherine the Great and narrated in leisurely psychological detail. The starost of the revised title, Josias von Karp, is a nobleman bitterly opposed to the Russian-supported Duke of Biron and still loyal to the former Saxon rulers. His son Christian is engaged to Agathe, the beautiful and independent-minded daughter of a neighboring family, but on one of his visits to the ducal capital at Mitau (present-day Jelgava) he falls in love with a middling French actress, Suzon. With the support of the duke, who is eager to alienate Christian from his father, the two of them go off to St Petersburg, where she is supposed to embark on an operatic career. The career never materializes, Christian eventually falls heavily into debt and is socially ostracized, and the duke withdraws his sponsorship.

At home, meanwhile, the starost is infuriated and first wishes to disclaim his son, but Agathe expresses her willingness to have him back. Their efforts to return him fail until, several years later, the couple is discovered by a friend of the father, living in poverty in Lisbon. Promising to return, Christian sails to Hamburg, where he simply takes the promised funds and then disappears again—presumably to be reunited with Suzon. His mother dies of grief, but the father recovers and, unreconciled with the ruling duke, survives for three more decades while Agathe, alienated from her father by his remarriage, moves to an estate inherited from her mother and has a successful life as its mistress and manager.

What does an alchemist have to do with this essentially family drama? The intermediary or factorum in the various efforts to get Christian back home is Stanislaus Przegorski, the son and grandson of alchemists, who is

²⁶ According to Marianne Wünsch's ingenious Freudian reading the novel is "an Oedipal psychodrama" in which the professor is father and "Über-Ich," who through his death dominates Laurentius the son, while the boots represent "the symbolic sexual goal" (238)—an interpretation that I do not find persuasive.

introduced in a lengthy chapter entitled "Solve et coagula."²⁷ His grandfather was a local Courland gentleman, who—like St Leon, Claes, and other figures we have encountered—dragged his family into ruin through his alchemical pursuits. His son-in-law, an impoverished Polish nobleman arriving as one of many itinerant alchemists who preyed on the old man, married his daughter and, following his death, continued the experiments with his son, Stanislaus. The latter, growing up as a Catholic with a mystical devotion to the Black Virgin of Czestochowa, becomes a passionate alchemist, "incessantly calling on God's grace and that of his virgin mother," his spiritual materia prima:

he still doesn't search for the secret of producing the stone itself; he desires only to find the vinegar of the wise men, the *Acidum universale*, the great alkahest, the agent that quickly and basically separates the formed substances, the means of dissolution that puts *chaos regeneratum* in place of the cosmos and from which the adept, completing God's creation plan, causes the new cosmos to arise and its quintessence and image: the *lapis philosophorum*. (63)

His prayers and experiments are described at length, but he is constantly frustrated because, in the absence of a decent education, his Latin is often inadequate for his purposes. On one occasion, for instance, he rushes into his laboratory and opens the *Speculum alchymiae* of Arnoldus von Villanova. "There was not a minute to waste! But then he came across a word whose expression, whose comprehension caused him difficulties" (73).

In order to pay for the expensive apparatus, metals, chemicals, books, and tutors that he requires, he undertakes unspecified assignments for various wealthy patrons, which through shrewdness and resourcefulness he always manages to fulfill to their satisfaction. In between, he hastens back to his house and his disreputable servants, where he prays to the Mother of God for her help in discovering "the great elixir, the red tincture, which makes lead into gold, the sick into healthy, the decomposable and mortal into indecomposable and immortal" (134–5).

It is in this capacity as factotum that he is approached separately by Christian's father and Agathe, whom he secretly loves, for his assistance in getting Christian back from St Petersburg. He undertakes the assignment but has to report failure because Christian and Suzon are still too closely protected by the duke's people. Some time later, when they have left Russia, he traces them to Lisbon and informs the father, who tries through his friend, the ambassador to Portugal, to obtain their return—again unsuccessfully. At the end, when Przegorski is on his deathbed while

²⁷ Werner Bergengruen, Das große Alkahest (Berlin: Wegweiser-Verlag, 1926), 54–96.

Christian's father and Agathe are thriving in the independence of spirit that they have gradually discovered, he realizes that it was his accomplishment after all. Old Von Karp is no longer torn apart by his "earthly small and earthly weak paternal happiness and worry and longing. Shells and slags have fallen away from him." And Agathe "grows and is restored; she has found her own law, her nature, and he, Przegorski, helped her to do so. It is his achievement, his achievement!" (357). He himself has risen from a meaningless quotidian existence, and "the spark, fallen from the starry mantle of the Virgin, glows within him." In his dying moments he recognizes in the blood flowing from his wounds "the red tincture that makes the incomplete whole, that makes age youthful, the infirm healthy, and the transitory and decomposable intransitory and indecomposable. He himself is it: He, the spiritual stone, the heavenly ruby, God's most noble gift, God himself" (358). With his last breath he exclaims: "Lord God, Solve! Dissolve radicaliter!" (358). Here again, then, exoteric or operative alchemy, while described in passing, plays no real role in the plot, but the entire development is exposed in the last pages, at least in the mind of the dving alchemist, as spiritual alchemy. The central characters themselves, the starost and Agathe, by having their values shaken to the core and then rediscovering themselves, exemplify the psychological process of solve et coagula.

The oddest case by any standard concerns the well-known novel The Angel of the Western Window (Der Engel vom westlichen Fenster, 1927) by—by whom? Attributed on its title page and since its publication to Gustav Meyrink, whom we have already encountered as the author of *The* Golem and translator of Thomas Aquinas, it is now known to have been written wholly or in large measure by his friend, Friedrich Alfred Schmid Noerr (1877-1969), a sometime lecturer of philosophy at Heidelberg (1910-18) and a colleague there of Karl Jaspers, Max Weber, and Rudolf Steiner. The pair had already collaborated on an earlier publication, Goldmachergeschichten (1925), a collection of three tales about historical alchemists: the monk Laskaris, Friedrich Sehfeld, and Michael Sendivogius. In fact, the stories were written by Schmid Noerr, who was engaged by Meyrink when he felt himself too ill to fulfill the contract for the 5000mark advance he had received from a publisher. Schmid Noerr quickly patched together the stories on the basis of an 1872 anonymously issued collection "Gold-maker Stories" enhanced by information taken from Schmieder's history of alchemy. This concoction—labeled plagiarism by some reviewers—was then published under Meyrink's better-known name.²⁸

²⁸ See in this connection the recent biographies by Hartmut Binder, *Gustav Meyrink: Ein Leben im Bann der Magie* (Prague: Vitalis, 2009), 642–3; and Harmsen, *Der magische Schriftsteller*, 171.

At first glance one wonders why Meyrink considered it necessary to engage in this charade. As we saw earlier, the introduction to his translation of Thomas Aguinas demonstrates his familiarity with the history of alchemy and its chief works, many of which he possessed in his own library. Although he later distanced himself from secret societies, during his early years in Prague (1890-1900) he had contact with numerous occultists from various secret groups and read such occult journals as Sphinx and the Zentralblatt für Okkultismus.²⁹ Moreover, in an account entitled "How I Sought to Make Gold" (1928), Meyrink claimed that he himself had undertaken alchemical experiments some thirty-five years earlier in Prague—experiments with hardened excrement recovered from the ancient cloacas which resulted in an explosion in his retort.³⁰ And his unpublished works contain the outline of a late novel to be called "The Alchemist's House" (Das Haus des Alchemisten). However, Meyrink also recognized, as he wrote in an essay on immortality ("Unsterblichkeit") that "true alchemy" never sought to create gold: "its goal was to give humankind a unique kind of immortality."31

Meyrink's health had been steadily declining for several years; he was discouraged by critical reviews as well as growing Nazi attacks on him as a Jewish writer; and his financial situation was weak. So when a publisher offered him 15,000 marks for a new novel, he approached his friend Schmid Noerr and suggested that they proceed under the same arrangement as with the three tales of alchemists that had recently appeared;³² and the contract clearly specifies that the royalties were to be equally divided. In addition, the evidence provided by Schmid Noerr leaves no doubt that, apart from a few brief passages and occasional editorial corrections, he alone planned and wrote *The Angel of the Western Window*.³³

The circumstances of its composition no doubt contributed to the confusions of the bewildering novel. A semi-historical thriller in a conspicuously occult context, the work takes place on two temporal levels. As the first-person account begins, the narrator, Baron Müller, has just received a packet of material transmitted by a recently deceased cousin in England. The material is found to be "diaries" of John Dee, who eventually turns out to have been a remote ancestor of Baron Müller.³⁴

²⁹ Harmsen, Der magische Schriftsteller, 74–5.

Harmsen, Der magische Schriftsteller, 170–1.

Quoted in Harmsen, Der magische Schriftsteller, 168.

³² Binder, Gustav Meyrink, 645.

Binder, Gustav Meyrink, 643–54; and Harmsen, Der magische Schriftsteller, 178–89.
 Meyrink and Schmid Noerr were both familiar with Carl Kiesewetter's monograph

John Dee, ein Spiritist des 16. Jahrhunderts: Kulturgeschichtliche Studie (1893). See Harmsen, Der magische Schriftsteller, 189–90.

The first half of the novel consists largely of those diaries, interspersed with brief references to Müller's life and friends in Vienna of the 1920s. Dee relates at leisurely length the first thirty years of his career: his imprisonment in the Tower by Edward VI (he was actually imprisoned by Queen Mary) and his release on the order of the young Elizabeth, who forged the king's signature; his loving obsession with the later Queen Elizabeth and horoscopes that he cast for her; his visit to Emperor Maximilian in Hungary and his dealings with various Rosicrucians; his illness in Nancy; and so forth.

As Müller reads the various documents he comes to identify increasingly with Dee, so that in the second half of the book he recounts Dee's later life—his association with Edward Kelley, their visit to Emperor Rudolf, the death of his beloved wife, Jane, and so forth—as though he had experienced it himself. At the same time, Müller's life in modern Vienna seems to parallel with eerie precision Dee's own: Müller and his acquaintances appear to him as reincarnations of figures from Dee's life and his struggle with the evil Black Isaïs (Isis), the enemy of his entire family extending back through John Dee to such rulers as Roderick the Great of Wales and Hoël Dhat the Good. At the end he manages what Dee never accomplished: to defeat Black Isaïs and to keep the magical family icon, an ancient sword, out of her hands. But in the process his house catches fire-or is destroyed by an explosion in which Müller apparently perishes. In any case, in the mystical last chapter Müller/Dee is accepted into the Rosicrucian-like brotherhood of the Rose: those through whom "all power from the realm of eternal life flows" (436) but who are themselves "only a weak reflection of eternal life" (437)³⁵ invisible to earthly mortals but able to see and influence life on earth. In the tower that houses the mystical order he is given a laboratory complete with alchemistic equipment, but at the same time it seems to be "a reflection of the world" (433), as things boil, glow, steam, and change color while "wisdom of the retorts and furnaces keeps them under control." "This is your field of work," he is told; "much gold for which you longed may arise; but gold—which is the sun. Whoever increases light is one of the most noble among the brethren."

This confusing plot is a vehicle for Meyrink/Schmid Noerr's interest in the occult generally. There is discussion of Tibetan "sexual magic," of the Baphomet of the Knights Templar (the original title of the work), of the Kabbalah, of conjured apparitions of spirits and ghosts, and much else. The "Angel of the Western Window," which Dee conjures in hope of

³⁵ Gustav Meyrink, Der Engel vom Westlichen Fenster (Leipzig: Gretlein, 1927).

obtaining from him the secret of the philosopher's stone (180-9), turns out to be nothing but "an echo" (433)—"the sum of the questions, the knowledge, and the magical power that lay hidden within you and which you did not suspect was yours." It was called the angel of the "Western Window" because "the West is the green realm of the dead past." But, despite Dee and his reputation, we hear little about alchemy as such. A few experiments are mentioned—with the gravish powder of healing and the reddish powder that transmutes base metals to gold—but no detailed account of the actual practice is given. At one point, concluding that immortality is nothing but memory, Dee decides to take "the magical path of writing" and to immortalize his life in his diaries (167). But then it occurs to him that there is another way: "the alchemization of this body and this soul so that both may achieve immortality in this present time" (167). As Müller/Dee learns at the end of the book, "alchemy" is ultimately spiritual and its gold is the light of knowledge. So once again, despite the disorienting twists and turns of the novel, alchemy ultimately emerges in the spiritualized form characteristic of the period; the modern writer is not interested in the actual practice of exoteric alchemy.³⁶

The following year saw the appearance of *Baphomet* (1928), designated by its subtitle as "An Alchemical Novel," by the Austrian occult novelist Franz Spunda (1890–1963). Earlier his first novel, Devachan (1921), specified as "A Magical Novel," had included a scene that causes it to be cited sometimes in our context: the transmutation of base metals into gold. But that transmutation is accomplished not by alchemy, which is never mentioned, but by a magical being named Rmoahal: an "amorphous mass" constituting the primal matter discovered in Africa by a European scientist and explorer and brought back to Vienna with its magical powers. It releases "huge vitality and ragingly procreative sexual urges" and is able "to change the structure of the elements and allow their latent energy to become active."37 With these powers the discoverer, Elvers, establishes in Vienna an enclosed precinct called Devachan, where an enfeebled European population can come to revive its sexual energies, and with his gold he revitalizes the city's decrepit economy. But it turns out—and here we become aware of Spunda's proto-Nazi sympathies—that the entire project is part of Rmoahal's plan to enslave the white race which, weakened by "lust and the brutal greed for possessions" (194), soon loses control as Africans and Asians move in, resisted only by the Knights Templar and

³⁶ Meakin, *Hermetic Fictions*, 138–44, suggests that the novel shows an underlying movement from dissolution or *nigredo* (Dee's youthful escapes) to a mystical *coniunctio* beyond sexuality (Müller's experiences in the Golden *Rose*).

³⁷ Franz Spunda, *Devachan: Ein magischer Roman* (Vienna: Strache, 1921), 119, 155.

Rosicrucians. Finally Rmoahal is defeated and buried in his mountain in Madagascar by the monk Irenäus, who has left his monastery with a sense of great mission. The far-fetched plot, which despite its transmutations has nothing to do with alchemy or alchemists, is at the same time a symptom of the interest in the occult that swept across Europe in the years immediately after World War I.

Baphomet (1928), in contrast, is indeed "an alchemistic novel," in which transmutations and healings take place along with a catalogue of interpretations of alchemy from the most varied standpoints.³⁸ The title refers to the goat-headed satanic deity allegedly worshiped by the Knights Templar, an association exploited by Spunda (67) with his explanation of the name as an acronymic inversion from the words: Templum omnium hominum, pacis abbas (Tem.O.H.P.Ab). (This derivation was in fact invented by Eliphas Lévi in his Dogme et rituel de la Haute Magie (1861) in opposition to its widely accepted derivation as a bastardization of the name Mahomet: another form of Mohammed.) According to Professor Bolza, the Christian intellectual of the novel, Baphomet has come to Europe—specifically to the castle in Avignon where the Ark of the Covenant and the seven-armed candelabra of Jerusalem were brought by the Templars from his original home in the Temple of the Knights Templar in Palestine—as a symptom of the decline of the West (271–4). The present head of the Templars, Ephrem, agrees, saving that "the sign of the goat-ram will gradually drive out the cross, just as the cult of the Templars, the restoration of the Ark of the Convenant, and the sevenarmed candelabra will cause the light of alchemy to blaze up again" (215).

Alchemy is defined in various ways. According to Bolza, its clearest Christian exponent, "Man is not a finished product: he must recapitulate within himself through experience the entire history of creation, separating light from darkness. This art of separation ['Scheidekunst'] is the essence of alchemy" (66). When the world was divided by the appearance of Jesus Christ into good and evil, "the knowledge of the Lapis, which is based on an interchange of good and evil, was lost. Alchemy forfeited every justification since, from now on, what mattered was exclusively spiritual gold and the light of Christ and no longer its earthly symbols, sun and gold" (151). His friend, Monsignore d'Arnoult from the Vatican, explains further that "the crucifixion of Christ is an alchemical process, the dissolution whose result is a new coagulation or, literally translated, religio" (281). Rabbi Mordechai puts the same thought into his own terms. "The distinction between good and evil is inherent in every heart.

³⁸ Franz Spunda, *Baphomet: Ein alchimistischer Roman* (Munich: Arbeitsgemeinschaft für Kultur und Aufbau, 1928).

For that reason alchemy had to destroy itself because man no longer has the power to separate good from the evil with which it is bound. Alchemy is the art of separating, the art of recognizing evil, even when it appears in the mask of good" (298). When Vincente loses his way for a time and is tempted by the women of the Templars, Monsignore d'Agnoult tells him:

In alchemy they call the stage in which you now find yourself the peacock's tail. The most important step has already taken place, the solution and fixation of the divine light in man follows, but there once again the baphometic urges stir themselves and conjure up a seeming victory glittering in many colors, which seeks to deceive the curious sense with an already achieved happy end. The man who is caught up only in the sensual can then no longer restrain his urges, he grasps after slippery appearances—which dissolve like a Fata Morgana and leave behind a gray precipitate. Instead of enticing glory a death's head, *caput mortuum*, grins at him. (210)

There are many more reflections of this sort on the part of the Christian apologetes: notably, Professor Bolza, Monsignore d'Agnoult, and Vincente himself. In the final pages the two lovers "have found the inner stone that transforms everything that approaches them into gold and light" (315).

While the Christian and Jewish interpretations of alchemy are purely spiritual, the Templars, obsessed with obtaining the *lapis* and elixir solely for the money and power they represent, waste no time on speculation. We also learn that the elixir, in the hands of a good adept, can heal but, if proffered by one corrupted by Baphomet, it kills.

The plot within which these ruminations take place—including a history of the Templars and alchemistic readings of Plato and Dante along with recapitulations of the story of Petrarch and Laura in Avignon and "astral dreams" according to a theory of the "astral soul" (247) reminiscent of Jung's archetypes—amounts to a thriller after the formula repeated three quarters of a century later by Dan Brown in *The Da Vinci Code* and other currently popular works.³⁹ It revolves around a struggle in contemporary Europe, against backgrounds shifting from Florence to Avignon and Naples, between the Church and an offshoot of the Knights Templar (also known as the Luciferians) to seize control of capsules containing the *lapis philosophorum* and the *elixir vitae* that have suddenly turned up.

Young Vincente Lascari is traveling to Florence from his hometown in Alpine Italy to settle an unexpected inheritance of which he and his brother have been notified. It turns out that they are the heirs of the

³⁹ See Theodore Ziolkowski, *Lure of the Arcane: The Literature of Cult and Conspiracy* (Baltimore: Johns Hopkins University Press, 2013).

Marchese Laskaris, a descendant of the famous seventeenth-century Greek alchemist, the archimandrite Laskaris (who was one of the three alchemists featured in Meyrink/Schmid Noerr's 1925 Goldmachergeschichten). As Vincente discovers, when he takes possession of the house, it contains an alchemical laboratory with the usual athanor, balneum Mariae, alembic, and other standard equipment (167) as well as, hidden away separately in a cross and in a goat's head, vials of the red tincture of lapis philosophorum and drops of the *elixir vitae*. With the help of a Greek alchemist named Leftini—the marchese's famulus and actually, as a member of the Templars, his murderer—Vincenti eagerly attempts a transmutation. The first attempt ends in an explosion because they add too much of the tincture to the lead. The second produces a message inscribed in gold letters on the lead: they need to add more materia prima to the tincture in order to restore its power. When Vincente discovers Leftini's role as a spy for the Templars, he first threatens him with the police, only to learn that the Templars are too powerful to be intimidated. On the advice of his (corrupted) lawyer, Vincente agrees to a compromise: to share the tincture, whereafter each will go his own way. A third experiment succeeds: Vincente adds a pinch of tincture while Leftini pours in a few drops of the (unnamed) materia prima in his possession. Afterwards the lawyer steals some of Leftini's tincture and takes it for advice to an alchemist in Naples, the Rabbi Mordechai. He goes mad and dies as a result of new experiments (presumably because of his bad character), while the good rabbi succeeds in creating gold, of which he is robbed. He then joins forces with Leftini, who has disavowed the Templars after discovering that the elixir actually kills those he tries to heal.

This alchemical plot is driven by the complicated love affair between Vincente and Mafalda, a young woman he meets on the train to Florence on her way to enter the cloister of Santa Teresa. The cloister, it appears, has been corrupted by the Templars, who have turned the nuns to the worship of Baphomet. In their effort to pressure Vincente, the Templars—namely Ephrem, the Chevalier Brettigny, and the women who accompany them—try to win Mafalda into their service and, then, to turn her against Vincente. Eventually she resists and flees to Avignon, where, in the second half of the novel, the coteries from both sides reappear.

The action moves back and forth until, finally, Vincente and Mafalda reconcile their various misunderstandings, get married, and go to Naples, where they toss the fatal capsules of *lapis* and *elixir* into the destructive fires of Mount Vesuvius—the primal fire ("Urfeuer") from whence they came (316). Vincente gives up his claim to the estate of his ancestors in Florence, which has burned to the ground, and resolves to make a new

start (with the help of powerful friends in the Vatican!). Back in Avignon, meanwhile, the Monsignore d'Arnoult reports that, in his confrontation with the Templars at their convention—and with the sudden assistance of his superior, Monk Irenäus from *Devachan*—Ephrem died in a fire caused by a bit of the elixir that he obtained from Leftini, and Brettigny was rendered harmless. But the Templars still exist: "Baphomet cannot be exterminated. He is eternal as long as human beings still walk the earth in flesh and blood" (316). Baphomet, in other words, represents the all-too-human sexual temptation that caused Vincente for a short time to forget Mafalda for the lure of sensual pleasure in the arms of the temptresses of the Templars.

In Spunda's interesting and readable novel the various alchemists are pawns in the struggle between good and evil as represented in religion by the Church and the Templars but in a more general spiritual sense by human character. As Vincente realizes upon his first exposure to the secrets of nature as revealed in the alchemical writings, and before his temptation by the lure of gold and the senses: "Everything that the old books said was to be understood only as a metaphor and, as the solution to all concealed knowledge, rests in his heart" (49).

Robert Stockhammer suggests that, in fiction of the 1930s, the role of the alchemist is taken over by that of the atomic physicist, proposing as his example the novel Atomgewicht 500 ("Atomic Weight 500," 1935) by the prolific science-fiction author Hans Dominik. 40 The suggestion is intriguing and, in some senses, persuasive. Dominik's physicist bears the telling name Dr Wandel ("change"), and in his engineering laboratory with its autoclave, in place of an athanor, Wandel dissolves the atomic structure of uranium (solve) and adds to it four helium atoms (coagula) to achieve a mighty source of power. The novel, which offers absolutely no love interest, deals mainly with the competition between two American firms, "Dupont" and "United Chemical," for Wandel and his invention and, as in many alchemistic works, with the resistance of traditional science to his ideas. At the end Wandel, holding the German patents, returns home to Germany with his Claes-like dream of enabling "a new, happier age. . . . From thousands of sources the new energy will pour over the land, multiplying the harvests, fertilizing barren soil, opening new possibilities of life"41—with no hint of atomic bombs. But in order to make his case, Stockhammer has to bring his own imagination to bear on the text, seeing "peacock's tail" when the materials change color, "chaos" or nigredo when it explodes, and albedo in the glow of the process. The text

⁴⁰ Stockhammer, Zaubertexte, 183.

⁴¹ Hans Dominik, *Atomgewicht 500* (1935; rpt. Munich: Heyne, 1986), 238.

itself does not offer a single word about alchemists or alchemy; the association, however plausible the analogy between scientist and alchemist, must be in the eye of the beholder.

German writers held no monopoly on the subject of alchemy or, for that matter, John Dee. A novel about Dr Dee was published in 1933 by Marjorie Bowen (pseudonym for Mrs Gabrielle Margaret Long née Campbell, 1885–1952), who in the course of her long career and under various pseudonyms produced over 150 volumes of horror stories, historical romances, and other popularizing works. In I Dwelt in High Places (1933) she is interested not so much in history or alchemy as in personal psychological relationships: the love triangle involving John Dee, his wife Jane, and Edward Kelley. The novel, set against a carefully researched biographical and historical background⁴² and involving only actual historical figures, covers the five years from Kelley's appearance at Dee's house in Mortlake to the collapse of their association in Bohemia, when Dee and his wife return to Mortlake, leaving Kelley in Prague. The author is concerned primarily with the complex relationships among the three principals: the fifty-five-year-old Dee, "a sincere and pious Christian" without worldly desires (31) who has not benefited financially from his renown as a learned man and who, for all his intellectual brilliance, is utterly naive in his personal relationships, failing to realize that the lofty personages who court him are interested solely in the promise of gold; his beautiful and perceptive wife, Jane, thirty years his junior, who despite a loveless marriage remains intensely loyal to the husband she admires and respects; and Kelley, designated repeatedly and depicted clearly as a "cozener and cheat" (79) and concealing his mangled ears (from being pilloried for earlier frauds) under a skullcap and elaborate hairdos, whose alleged visionary abilities—fake abilities displayed with considerable theatrical skill—fascinate Dee and for whom despite her clear-sighted distrust Jane conceives, and resists, a passionate attraction.

In the course of the readable narrative we witness Dee's disappointment at the lack of financial or other support by Queen Elizabeth and the other lofty personages who court him; his blind fascination with Kelley's abilities as a skryer or spirit medium; their travel, with wives, children, and servants, to Cracow, Prague, and Count Rosenberg's castle in Bohemia; the gradual inversion of their relationship as the conniving Kelley wins the

⁴² See the "Historical Note" appended to *I Dwelt in High Places* (London: Collins, 1933), 246–56. The best and most extensive biography of Kelley was published recently by Michael Wilding, "A Biography of Edward Kelley, the English Alchemist and Associate of Dr. John Dee," in: *The Mystical Metal of Gold: Essays on Alchemy and Renaissance Culture*, ed. Stanton J. Linden (New York: AMS Press, 2007), 35–89.

support of the rich and powerful; and their final rupture when Kelley's "spirits"—whom he alone can see and hear—tell him that he and Dee are supposed to share everything, including their wives. Dee, still reluctant to admit his disappointment in Kelley, returns with Jane to England while Kelley, whose reputation now outshines his own, remains in initial splendor at Rudolf's court in Prague (only later to be imprisoned for fraud).

Despite the constant theme of gold, which attracts Queen Elizabeth, the Polish Count Adalbert Laski, the Emperor Rudolf, Graf Rosenberg, and others to Dee, the novel has little to say about alchemy. Dee himself is regularly designated as a "mathematician" and "astrologer"; it is only in Prague and in association with Kelley that he is sometimes called an alchemist. In his blind idealism he repeatedly reminds Kelley and others that "It is not the base minerals and volatile chemicals that we must seek to transmute....those are but symbols of the transfiguration which must take place in ourselves, when, the great secret being in our possession, we shall be as gods" (137). But Laski, the emperor, and others, concerned with alchemy only for its promise of gold, listen with indulgent skepticism to Dee's hopes for "divine wisdom which is to transmute mankind into a heavenly likeness" (137).

Dee is attracted to Kelley, and remains long committed to him, simply because he hopes through Kelley's spiritism—and from the book and two powders Kelley claims to have discovered at Glastonbury—to obtain for his idealizing purposes the philosopher's stone and the elixir of life (109). The only laboratory described in the novel is that of the mad Emperor Rudolf (166), and the only experiment is one carried out by the emperor that allegedly resulted in the production of an ingot of gold (151). Later, when Kelley realizes that he can benefit more from transmutations than from his spirit visions, he makes several "projections" with his two powders, allegedly producing on occasion gold and a large ruby (172) but usually failing. Yet these projections cause his reputation to soar while Dee's falls. Like her German contemporaries, Bowen—clearly skeptical about the transmutatory power of alchemy as fraudulently practiced by Kelley—presents Dr Dee as a spiritual alchemist.

PARACELSUS REDIVIVUS

Just as French writers looked upon Nicolas Flamel as their exemplary alchemist and the English upon John Dee, German-language writers of the 1920s and 1930s turned in a conspicuous wave of enthusiasm to Theophrastus von Hohenheim, known as Paracelsus (1493/4–1541). This trend was in large measure a symptom of a more general turn to

positive examples of German character in myth and history as an escape from the national despondency resulting from the defeat in World War I. Their Paracelsus was an alchemist among many other things, and his alchemy was thoroughly spiritualized. But, first and foremost, he exemplified what was regarded as the German spirit at its finest: in this case, a man whose determination never failed despite repeated challenges and setbacks. (In Arthur Schnitzler's verse drama *Paracelsus* (1894) the protagonist is famed as a physician, a hypnotist, a pre-Freudian psychoanalyst—but not as an alchemist.)

The most conspicuous example was also the earliest and the longest: the three-volume *Paracelsus* by Erwin Guido Kolbenheyer (1878–1962), an Austrian who became a prominent advocate of National Socialism (and, as a result, was prohibited from publication in the years following World War II). In this, his principal work, the author is concerned not with politics but with what he regarded as the Teutonic genius, a view signaled clearly by the closing words of the almost thousand-page novel: "*ECCE INGENIUM TEUTONICUM*" (960).⁴³ Despite its linguistic difficulty—much of it is written in the author's approximation of Swiss German and other South German dialects of the Reformation period—the separately published volumes were soon reissued in a popular one-volume "Volksausgabe" and recommended for school reading. (The copy in the Princeton University Library, purchased in 1948, was originally owned by the "Adolf Hitler Schule" in an unspecified town.)

The first volume, *Die Kindheit des Paracelsus* (1917), is restricted, as the title indicates, to the period of its hero's early childhood, from birth to age seven, in and around the Swiss town of Einsiedeln. Since documentary evidence is wholly lacking, the entire plot is freely invented and deals principally with the lives of various older members of his extended family. *Das Gestirn des Paracelsus* ("Paracelsus's Star" or "Constellation," 1921) follows him, again based on only sketchy biographical evidence, through his early education in an Austrian monastic school, where he is briefly exposed to the "spagyric art," and then through his studies at the universities of Tübingen and Ferrara. In the first part, during an outbreak of the plague, Paracelsus and a few fellow students remain in Ferrara after their professors of medicine have fled, and Paracelsus has the first opportunity to demonstrate his homeopathic healing techniques, as a result of which he is awarded his doctorate (a fact that has not been historically proved).

The second part of volume 2 follows Paracelsus on adventurous journeys that lead him across Europe—from France by way of Denmark,

⁴³ E. G. Kolbenheyer, *Paracelsus: Romantrilogie* (Munich: Albert Langen/Georg Müller, [1939]).

Poland, and Austria—as he vainly seeks recognition for his various acts of healing, but is constantly cheated out of payment by his patients and repulsed by the traditional physicians of the various localities. At one point he hopes to find tranquility enough to prepare his accumulated writings for publication—a process described in alchemical terms: his writings were still "in chaos, in their prime matter"; now he hopes "to coagulate, to calcinate the matrix of his writings" (557), and he intends to do so "in the German language and writing like Doktor Martinus" (= Martin Luther) because he wanted to be heard and understood by the populace (560). In the hope of publication he goes to Strassburg, a publishing center, but is soon summoned to Basel to treat the noted publisher Frobenius for a case of gangrene. Because his cure is successful he is called to Basel, by the city council but not the university, as the town's official doctor and teacher. In his first lecture he impresses his students with his proclamation of German healing.

The power of healing and the impetuosity ["das Ungestüem"] of the art has been born to me only through the fatherland. Arabia engendered Avicenna, Pergamum bore Galen, Marsilius emerged from Italia, and Germania has brought forth its emergency doctor ["Notarzet"] named Theophrastus—born in a time of need ["Not"]. (618)

But his position and authority are constantly challenged by the academics, especially because he dares to teach in German rather than Latin, and when Frobenius dies—for entirely different reasons—he is again run out of town.

The third and final volume appeared in 1925 with the telling title "The Third Kingdom" (*Das Dritte Reich*), a venerable and originally religious term that, since the publication of Arthur Moeller van den Bruck's *Das Dritte Reich* (1923), had begun to be associated with the policies of Hitler and National Socialism. In Paracelsus's case, his "third kingdom" was the heritage he left in the form of the great works he wrote during his later years: works that mostly circulated in manuscript since their publication was often prohibited at the demand of traditional academic scholars. "They had driven him from his teaching chair and forbidden the master his students" (711). In flight for two years with nothing but conflict wherever he comes, only one possibility remains for him: "Paper, the letter, the ink pot" (711).

The German has a childish and inexperienced temperament, so that he believes only what seems foreign and comes from afar. So the Galen gang comes along as the wisest because they learned it from the Greeks, and proudly the bacchants of Avicenna because their master was an Arab, and the followers and poets of Erasmus boast, speaking in Latin, Greek, Hebrew, and

everything still remains only lies, arrogance, and defrauding ["Bscheißerei"] of their patients. I was also raised in the garden where they had chopped down the trees and was no small ornament at the university. I experienced the higher schools of Italy, Spain, France, and then had to cultivate anew the branch chopped off in Germania and then win again my fecundity on German soil. That is the greatness of Luther: not that he beat back the extortionary trade, power, and whoring of the pope and the ecclesiastical ranks, but that he has dug out the felled German tree from the alien earth and planted it in its own earth so that it can grow and bear its fruit. (728–9)

Chased out of Basel, Paracelsus moves restlessly from Colmar to Nuremberg to Regensburg and other towns of Alsace and Swabia until, finally, he crosses the Alps back into Austria, where he dies in Salzburg. At one point, in Nuremberg, the narrative pauses long enough to portray a platonic love between Paracelsus and one of his patients, a young nun with whom he is able to have engaging conversations until her death. Otherwise we hear almost exclusively about his writing and his mostly unsuccessful efforts to have his works published.

In the course of the three volumes Kolbenheyer has little to say about alchemy. We hear of Paracelsus's exposure to the spagyric art as a schoolboy and of his visit to an alchemical athanor near Tübingen. He prepares his own medicaments because he finds nothing useful in the pharmacies, and occasionally the procedure is briefly mentioned, as when he supervises his famulus in the preparation of a tinctura Antimonii. "It is circulating for the final night; afterwards the *liquor alcahest* will be ripe, the *menstruum* universale. Look, the spiritus already has drawn a solar color from the ammoniac blossoms" (577). We hear (620) in passing, but without explanation or definition, about his theory of "the three-shaped nature of the world"—from the traditional dualism of sulphur and mercury he created a trivium by the addition of salt to symbolize spirit, soul, and body—and "the primal will of the archeus" (the "inner alchemist" of each bodily organ that determines its function). At the end of his life he still tirelessly urges his hearers to pay less attention to books and to practice a proper alchemy: "to separate the useless from the useful and to elevate it into its final materia and nature" (925). Snapping his fingers, he tells them: "Experientia! Go hither, seek, read in the book of nature! . . . What are you doing, you benchriders, always sticking your noses into the paper world and seizing letters! You're bound in parchment!" But ultimately Kolbenheyer's hero is hailed for his courageous persistence in the face of defeat, his defiance of authority, his defense of what is German against foreign intrusions. Alchemia medica may be his field, but the author is concerned less with that field of enterprise and more with Paracelsus's lively manner of advocating and defending it.

The theoreticians and scholars did not lag far behind. In 1923 the novelist Franz Spunda published an edition of "Magical Instruction of the Noble and Highly Erudite Philosopher and Physician Philipp Theophrast von Hohenheim called Paracelsus" ("Magische Unterweisungen des edlen und hochgelehrten Philosophen und Medici Philippi Theophrasti von Hohenheim Paracelsus genannt") and, two years later, his monograph Paracelsus (1925). Then in 1941 for the widely celebrated four-hundredth anniversary of the philosopher's death he brought out a summarizing study, "The Worldview of Paracelsus" (Das Weltbild des Paracelsus), which begins with an image that by that time had become an almost inevitable commonplace: Paracelsus as "the Faustian man," the epitome of the "German soul," who achieved his final shape in Goethe's work. 44 But Spunda points out a significant difference: whereas Faust strives for knowledge of the beyond, Paracelsus seeks experience of the most varied aspects of worldly reality through travel and motion (16). Following a brief sketch of his predecessors, notably Agrippa von Nettesheim, and a quick survey of his life, Spunda devotes most of his book to a chapter-bychapter discussion of Paracelsus's various fields of effort and enterprise: medicine, "anthropology" (his theory about the nature of man), cosmology, "astrosophy" (an esoteric religion in contrast to the casting of horoscopes, which he despised), mysticism, magic or "archidoxis" (applying the understanding of nature to man), and theology. Among all these interests of that universal man, alchemy plays a restricted role: beyond medical alchemy, it concerns the higher art of bringing the imperfect to perfection within man himself. As for Paracelsus's theory of creating a homunculus from the putrefaction of human sperm, Spunda, without denying its possibility, reads it as a religious metaphor for man's creative power in his *imitatio dei* (169–74). Here too, then, Paracelsus the alchemist has been totally spiritualized.

The finest book written during those years, and one that fully deserves our attention still today, is *Paracelsus* (1927) by Friedrich Gundolf (1880–1931), a disciple of Stefan George and professor at Heidelberg who was greatly respected for his biographical studies of such figures as Goethe, Kleist, and Julius Caesar and for his monumental work on Shakespeare and the German mind (*Shakespeare und der deutsche Geist*, 1911). In his brilliantly written and highly readable account of his life and work, Gundolf wanted, in the words of his preface, to rescue Paracelsus from the bibliographies and histories of medicine by exposing his character and work in its entire intellectual breadth ("seine gesamtgeistige Art

⁴⁴ Franz Spunda, *Das Weltbild des Paracelsus* (Vienna: Andermann, 1941), 7.

und Arbeit"). ⁴⁵ For Gundolf, Paracelsus represented along with Luther "the most natural ['die ursprünglichste'] and perhaps the most powerful German soul of the Reformation period" (12). Like Spunda and others, he likens Paracelsus to Goethe's Faust, writing that his "macrocosmic zeal" is not found again in such freshness of awakening until Goethe's *Urfaust* (18–19). Gundolf succeeded beyond his expectations. As he wrote to a friend shortly after the book's publication, it had brought him "a new category of letters received: alchymistic and paramystic—just what I don't need."⁴⁶

Rather than segmenting Paracelsus's accomplishments in separate chapters, Gundolf's monograph presents their enormous variety as an interwoven whole. He stresses the significance of Paracelsus's contributions to the development of the German language, notably his introduction of German into the lecture halls, and specifies the three sources of his original language: medical and chemical writings in Latin, Greek, and Arabic; the living language of all social levels, with which he became acquainted through his travels; and the cultivated written German of Martin Luther and the humanists (120–1). As a physician, he states emphatically, Paracelsus was never simply a medical man but rather saw his patients as a whole, letting every symptom expose its depths and breadths (26). He was connected to the mystics more by his negations than by his positions, through his rejection of external rules and constraints rather than through any inner sense of divine harmony and bliss (50). For him theology was simply the basis from which he set out on his explorations of nature (54).

Paracelsus's so-called "magic" was alchemy in its final stage and chemistry at its beginning: the art of dissolving and binding materials through natural-scientific experiments for purposes of earthly healing or use (75). "Alchemy is the moderator between the macrocosmic powers and the microcosmic materials" (99). In all earthly plants, stones, and metals are hidden heavenly powers that must be released by processes of dissolution, mixing, fixing. Paracelsus did not seek, like most alchemists of his day, to win new materials, and notably gold (100). This Paracelsan sense, Gundolf believes, found its poetic transfiguration in Goethe's *Faust*, and he quotes precisely the same lines that his Heidelberg colleague Ruska had quoted a year earlier at the end of his edition of the *Tabula smaragdina*, which Gundolf undoubtedly knew. Was Paracelsus an ancient or a modern? He was tied to the Middle Ages by his macrocosmic views and to the Renaissance by the ruthless desire for experience through which he

⁴⁵ Friedrich Gundolf, *Paracelsus* (Berlin: Bondi, 1927).

⁴⁶ Friedrich Gundolf and Erich von Kahler, *Briefwechsel, 1910–1931*, ed. Klaus Pott, 2 vols (Göttingen: Wallstein, 2012), vol. 2, 62.

destroyed the scholastic web of beliefs (82-3). In sum, Gundolf's Paracelsus is a thoroughly spiritualized alchemist.

During those same years many poems about Paracelsus appeared, reaching a highpoint with the celebrations in 1941.⁴⁷ But conspicuous in these poems is the restriction of alchemy to iatrochemy or the spagyric art. Paracelsus is hailed, especially by poets sympathetic to National Socialism, as a herald of the German fatherland. In her volume *Parazelsus* und sein Jünger: Dichtung von der inneren und äußeren Welt (1921), for instance, Erika Spann-Rheinsch (1880-1967) lists the "seven remedies" ("Die sieben Heilmittel") cited by "the master of healing," a list beginning with what amounts to a pre-Nazi "purity of blood":

Rein sei des Volkes Geblüt! Die Städte und Staaten verwesen. Wenn sie Ein Leib nicht mehr sind, sondern ein Völkergemisch!⁴⁸ (Let the people's blood be pure! Cities and states decay if they are no longer one body, but a mix of peoples.)

Here Paracelsus, in a phrase ominously anticipating the notorious slogan at Auschwitz and other Nazi concentration camps ("Arbeit macht frei," or "Work liberates"), goes on to specify work—"Work brings us salvation" ("Arbeit bringt uns Heil!")—and exhorts purity of the people's soul ("Rein sei die Seele des Volks!").

We hear the same message, making a similar appeal to the belief in homeopathic medicine as "the German art of healing," 49 in "Paracelsus" (1928), a sonnet by Ernst Bertram (1884–1957), poet, literary historian, and like Gundolf a member of the circle surrounding Stefan George. With an image recalling Kolbenheyer's depiction, Paracelsus tells his people:

> Ihr schreit nach fremdem Arzt. Doch jedem Land Wächst seine Krankheit selbst und Arzenei...⁵⁰ (You cry for a foreign doctor. But for every land its own illnesses and medications grow...)

But, he warns:

euch alle heilt Nur Baum, nur Kraut, nur Wurzel eures Lands Und eures Landes Pest nur Landes Sohn. (Only tree, only herb, only root of your land can heal you, and only your land's son can heal your land's plague.)

 ⁴⁷ See Paracelsus im Gedicht: Theophrastus von Hohenheim in der Poesie des 16. bis 21.
 Jahrunderts, ed. Joachim Telle (Hürtgenwald: Guido Pressler, 2007), 148–68.
 ⁴⁸ Paracelsus im Gedicht, 150–2.
 ⁴⁹ Stockhammer, Zaubertexte, 188.

Paracelsus im Gedicht, 150–2.
Paracelsus im Gedicht, 155.

In a subtler nationalistic tone Paracelsus sings that "the evening stillness of home accompanies me like a prayer" ("geht der Heimat Abendstille / mit mir wie ein Gebet").51

In another poem—"Deutsch" in the cycle *Paracelsus in Salzburg* (1941) by the Austrian poet Gisela Beer (1896–1983)—Paracelsus boasts, no small accomplishment in his time, that he has also "felt, thought, lived, written, and fought in German, wept, laughed, love, rejoiced and suffered in German":

> Deutsch hab' ich stets gefühlt, gedacht, Gelebt, geschrieben und gestritten, Deutsch habe ich geweint, gelacht, Geliebt, gejubelt und gelitten.⁵²

Max Mell's (1882-1971) contribution to the Nazi-colored celebration of Paracelsus in Salzburg ("Verse zum Gedächtnis des Paracelsus Salzburg 1941"), citing his "beloved German" ("in dem geliebten Deutsch") and his "German manner" ("Es ist die deutsche Art"),⁵³ goes on to mention in his final lines the "great alchemy" to which Paracelsus dedicated himself ("der großen Alchemie sich gebend").

In "Paracelsus singt" (1931) Hans Friedrich Blunck (1888–1961), later president of the National Socialist Writers' League ("Reichsschrifttumskammer"), describes the inebriated alchemist as he returns home at night from a drinking bout to his room, where he believes that he is challenged by the Devil. With the assistance of swords wielded by the four elements Paracelsus defends himself drunkenly, smashing retorts as his furnaces smoke, until his enemy flees.⁵⁴ In general, however, the poets of the period have little to say about Paracelsus the alchemist, concerned as they are with the early patriot and advocate of the German language (rather than the alien Latin).

In 1929, to take a final example, Carl Gustav Jung delivered an address at Einsiedeln in the house where Paracelsus was born.⁵⁵ Because Jung had not yet discovered alchemy, which was to play a central role in his later thought, the words "alchemy" and "alchemist" do not occur in this talk, where Paracelsus is designated simply as "an eccentric thaumaturge" (5). Instead, like most of his contemporaries, Jung locates Paracelsus along with Meister Eckhart, Agrippa, Angelus Silesius, and Jacob Boehme

Fridolin Hofer, "Paracelsus' Waldlied," in: Paracelsus im Gedicht, 157.
 Paracelsus im Gedicht, 165.
 Paracelsus im Gedicht, 165–7.

⁵² Paracelsus im Gedicht, 165. 54 Paracelsus im Gedicht, 158–9.

^{55 &}quot;Paracelsus," in: C. G. Jung, The Spirit in Man, Art, and Literature, trans. R. F. C. Hull, Bollingen Series XX/15 (Princeton, NJ: Princeton University Press, 1971), 3-12.

among the German thinkers and poets with "primitive but forceful originality" (8) and praises him for his then scandalous practice of lecturing and writing in German rather than Latin. While Jung honors Paracelsus as a "great medical pioneer" (12), his understanding of disease and medication is described, as in the studies and poems above, as essentially homeopathic. "For every ens morbi there existed a natural 'arcanum' which could be used as a specific against the corresponding disease" (10). Above all: in agreement with the tendency of the times Jung devotes his talk to "Paracelsus the spiritual man" (7), who after the vicissitudes of his earlier life underwent at age thirty-eight a "remarkable psychic change" (6). In his thought both psyche and nature were animated with incubi, succubi, devils, witches, and others. Diseases were entia or beings caused by succubi and, therefore, had to be treated spiritually. At this point, in sum, Jung's view of Paracelsus is wholly at one with the generally nationalistic views of his contemporaries: what Joachim Telle shrewdly labels the "cultic 'hurrah-poetry' of the period."56 Only a few years later did his thought move toward a greater appreciation of alchemy, which became a pillar of his intellectual universe.

C. G. JUNG: A TRANSITION

It is fitting, for at least four reasons, to conclude this chapter with a consideration of C. G. Jung and his interpretation of alchemy. First, his views mark the culmination and the most profound expression of the spiritualized reading of alchemy. Second, Jung's views emerged only during the 1930s and 1940s, well after alchemy had lost its attraction for many writers and, accordingly, had no impact on the writings of his contemporaries. Third, while his ideas were formed and expressed too late to have any effect on literature *entre deux guerres*, they constituted a central aspect of his later thought and exerted, as we shall see in the next chapter, a major influence on the writers of the postwar era. Finally, the evidence for instance, the Ngram cited in my opening chapter—suggests that it was mainly in Jung's circle that an interest in alchemy survived into the 1930s. Mircea Eliade recalled in his autobiography that, apart from a few friends, "I don't believe my research concerning alchemy interested very many. Camil Petrescu asked me quite frankly why I had wasted my time on such a dry and irrelevant subject."57

⁵⁶ Paracelsus im Gedicht, 369.

⁵⁷ Mircea Eliade, *Autobiography*, vol. 1: *1907–1937*, trans. Mac Linscott Ricketts (San Francisco: Harper & Row, 1981), 294.

Jung reports in his autobiography that his interest in alchemy was initially stirred by the sinologist Richard Wilhelm, who in 1928 sent him a copy of his translation of the Chinese classic *The Golden Flower*, but that interest took shape only slowly. During his early days in Freud's circle Jung became acquainted with Herbert Silberer, whose essay he published in his yearbook in 1909, and he was aware of Silberer's 1914 book The Hidden Symbolism of Alchemy and the Occult Arts. But "at the time his book was published," he acknowledged years later, "I regarded alchemy as something off the beaten track and rather silly, much as I appreciated Silberer's anagogic or constructive point of view."58 The turning point came only when Wilhelm sent him his translation, to which Jung provided a "European Commentary" for their joint publication: The Secret of the Golden Flower: A Chinese Book of Life (Das Geheimnis der goldenen Blüte: Ein chinesisches Lebensbuch, 1929). Jung hoped "to build a bridge of psychological understanding between East and West" as an act of noblesse oblige following the "act of violence" of the European invasion of the East.59

Jung realized at the time that the Taoist classic was also an alchemical treatise, but "it seemed to me a matter of no importance," he admits in his 1938 foreword to the second German edition (4). Although it was The Golden Flower that first put him on the right track, only a deeper study of the Latin treatises revealed to him "in medieval alchemy the long-sought connecting link between Gnosis and the processes of the collective unconscious that can be observed in modern man" (4). Although in his "European Commentary" we still find no mention of alchemy, then, that acquaintance with the Golden Flower inspired him with the urge to learn more about the European alchemical texts, and he commissioned a book dealer to send him any such books that might become available. 60 But even after he received a copy of the sixteenth-century Artis auriferae volumina duo, the two-volume collection of Latin alchemical treatises on "the gold-making art," he left it untouched for almost two years. As we have already seen, in his 1929 lecture on Paracelsus alchemy goes unmentioned.

Gradually, as he became aware of such standard alchemical phrases as solve et coagula, lapis, materia prima, and Mercurius, Jung began to perceive that "analytical psychology coincided in a most curious way with

⁵⁸ C. G. Jung, *Memories, Dreams, Reflections*, ed. Aniela Jaffé, trans. Richard and Clara Winston (New York: Vintage, 1963), 204.

⁵⁹ C. G. Jung, *Alchemical Studies*, trans. R. F. C. Hull, Bollingen Series XX/13 (Princeton, NJ: Princeton University Press, 1967), 3–55, here 55.

alchemy," which provided a historical counterpart to his psychology of the unconscious, suggesting "the uninterrupted intellectual chain" back to the Gnosticism that had long fascinated him.⁶¹ The first major studies in which he came to grips with in this new appreciation of alchemy were the two Eranos lectures that, in expanded form, constituted the later volume Psychologie und Alchemie (1944).

In the first of these, "Dream Symbols of the Process of Individuation" ("Traumsymbole des Individuationsprozesses," 1935), Jung exposed the parallels between the dreams of an analyzed subject and the images illustrating the classic Renaissance/Reformation works of alchemy. (That same issue of the Eranos-Jahrbuch included an essay by the art historian Rudolf Bernoulli (1880-1948), a member of Jung's circle, "Spiritual Development as Reflected in Alchemy and Related Disciplines.") But here the analogy still remains on the most general level. "The symbols of the process of individuation that appear in dreams are images of an archetypal nature which depict the centralizing process of the production of a new centre of personality."62

The next piece—"The Idea of Redemption in Alchemy" ("Die Erlösungsvorstellungen in der Alchemie," 1936)⁶³—became far more specific, beginning with a description of the alchemical process and its symbols and explaining its psychic nature for audiences unfamiliar with the material. "The alchemical opus deals in the main not just with chemical experiments as such, but with something resembling psychic processes expressed in pseudo-chemical language" (242). In discussing "The Work" Jung explains "the profound darkness that shrouds the alchemical procedure": "although the alchemist was interested in the chemical part of the work he also used it to devise a nomenclature for the psychic transformations that really fascinated him" (289). Jung concludes that the alchemy of the classical epoch "was, in essence, chemical research work into which there entered, by way of projection, an admixture of unconscious psychic material" (476). Because of the impersonal nature of matter itself, "it was the impersonal, collective archetypes that were projected: first and foremost, as a parallel to the collective spiritual life of the times." Summarizing earlier pages on "The Lapis-Christ Parallel" he observes that "the projection of the redeemer-image, i.e., the correspondence between Christ and the *lapis*, is therefore almost a psychological necessity, as is the parallelism between the redeeming opus or officium divinum and the

Jung, Memories, 205.
 Jung, Psychology and Alchemy, trans. R. F. C. Hull, Bollingen Series XX/12 (Princeton, NJ: Princeton University Press, 1968), 41. ⁶³ Jung, Psychology and Alchemy, 225–472.

magistery." In sum, the alchemical symbols are "primordial images, from which the religions each draw their absolute truth" (483).

Over the next two decades Jung produced a series of essays on more specific topics to which he applied the basic insights outlined in "The Idea of Redemption in Alchemy": namely, its general psychic implications and its specifically Christian meaning. In 1937 he published his Eranos lecture "The Visions of Zosimos" ("Einige Bemerkungen zu den Visionen des Zosimos"), in which he explored the thought of the third-century philosopher, whom he appreciated in particular as an early synthesizer of alchemy and Gnosticism. "Although chemistry has nothing to learn from the vision of Zosimos, it is a mine of discovery for modern psychology, which would come to a sorry pass if it could not turn to these testimonies of psychic experience from ancient times."64 In 1941, for the four-hundredth anniversary of Paracelsus's death, Jung delivered two lectures that were then published as the small volume *Paracelsica* (1942). The first, "Paracelsus the Physician," which was delivered to the Swiss Society for the History of Medicine and the Natural Sciences, deals, as the title suggests, not with Paracelsus's alchemy, which is mentioned only in passing, but with his homeopathic ideas as introduced more briefly in his 1929 lecture. Here, in particular, Jung stresses the astrological influences that affect the "inner heaven" of man. 65

The second talk, "Paracelsus as a Spiritual Phenomenon" ("Paracelsus als geistige Erscheinung"), which was expanded considerably for publication, comes to grips with "philosophical alchemy, then on the point of extinction," which enjoyed a renaissance largely thanks to Paracelsus's efforts. 66 Recapitulating his earlier theory that the *opus alchymicum* was always understood as an *opus divinum* and the *lapis philosophorum* as an allegory of Christ, Jung argues that "many things in Paracelsus that would otherwise remain incomprehensible must be understood in terms of this tradition" (123). Following an analysis of Paracelsus's *De vita longa*, he concludes that "besides the physician and Christian in Paracelsus there was also an alchemical philosopher at work who, pushing every analogy to the very limit, strove to penetrate the divine mysteries" (188).

The following year, at the Eranos Conference of 1942, Jung delivered two lectures, "The Hermetic Principle in Mythology, Gnosis, and Alchemy," which he published in the yearbook under the title "The Spirit Mercurius" ("Der Geist Mercurius"). Like Silberer some thirty years earlier, who laid the basis for his book with a Rosicrucian fairy tale, Jung

Jung, Alchemical Studies, 57–108, here 108.
 Jung, The Spirit in Man, 13–30, here 21.
 Jung, Alchemical Studies, 109–89, here 111.

begins with the analysis of the Grimms' fairy tale "The Spirit in the Bottle" ("Der Geist im Glas") and goes beyond Mercury as quicksilver or fire to discuss its function as spirit and soul, arguing that "he is the process by which the lower and material is transformed into the higher and spiritual, and vice versa" and "the reflection of a mystical experience of the artifex that coincides with the *opus alchymicum*." In "The Philosophical Tree" ("Der philosophische Baum," 1945), as in the earlier "Dream Symbols of the Process of Individuation," Jung takes the works of patients—here paintings rather than dreams—as a means through which to explore the meaning of the tree for alchemists and to illustrate the analogy between the growth of the "philosophical tree" and the natural growth of the human psyche. ⁶⁸

This investigation of symbolic representations of the psyche using alchemical images continued in his major work, *Aion: Researches into the Phenomenology of the Self (Aion: Untersuchungen zur Symbolgeschichte*, 1951), where he published "The Fish in Alchemy" and "The Alchemical Interpretation of the Fish," showing that "the alchemical fish symbolism leads directly to the *lapis*, the *salvator*, and *deus terrenus*; that is, psychologically, to the self." The fish, drawn from the depths of the unconscious as it is drawn from the depths of the sea, becomes "the bridge between the historical Christ and the psychic nature of man, where the archetype of the Redeemer dwells."

Jung's final synthesizing statement on alchemy constituted his last major work, Mysterium Coniunctionis: An Inquiry into the Separation and Synthesis of Psychic Opposites in Alchemy (Mysterium Coniunctionis: Untersuchung über die Trennung und Zusammensetzung der seelischen Gegensätze in der Alchemie, 1955–6). The subtitle, which intentionally suggests the alchemical slogan solve et coagula, is intended to describe, first, "the dissociation of personality brought about by the conflict of incompatible tendencies" and their resolution by the therapist, who "confronts the opposites with one another and aims at uniting them permanently." Jung begins with the opposites that come together in the alchemical coniunctio—moist and dry, hot and cold, higher and lower, and others: oppositions that, Jung believes, explain the alchemists' fondness for paradoxes (42). This is followed by an extensive discussion of the various

⁶⁷ Jung, Alchemical Studies, 191–250, here 237.

⁶⁸ Jung, Alchemical Studies, 251–349.

⁶⁹ Jung, Aion: Researches into the Phenomenology of the Self, trans. R. F. C. Hull, 2nd edn, Bollingen Series XX/9ii (Princeton, NJ: Princeton University Press, 1968), 118–83, here 183.

⁷⁰ Jung, *Mysterium Coniunctionis*, 2nd edn, trans. R. F. C. Hull, Bollingen Series XX/14 (Princeton, NJ: Princeton University Press, 1970), xiv–xv.

personifications that exemplify the opposites—sol and luna, sulphur and salt, rex and regina, Adam and Eve—and finally of their conjunction in alchemy (the quintessence) and psychology (self-knowledge). Alchemy, he summarizes in his epilogue, with its wealth of symbols, offers us insight into an endeavor of the human mind that could be compared to a religious rite, an opus divinum. The difference between them is that "the alchemical opus was not a collective activity rigorously defined as to its form and content but rather, despite the similarity of their fundamental principles, an individual undertaking in which the adept staked his whole soul for the transcendental purpose of producing a unity." Noting that Herbert Silberer first discovered "the secret threads that lead from alchemy to the psychology of the unconscious," Jung states that alchemy "effectively prepared the ground for the psychology of the unconscious": first by its symbols and, second, by exemplifying "symbolical procedures for synthesis" that the psychologist can discover, as Jung did in his earlier works, in the paintings and dreams of his patients. "The entire alchemical procedure for uniting the opposites... could just as well represent the individuation process of a single individual" (555).

In his introduction to the 1944 publication of *Psychology and Alchemy* Jung wrote that until recently scholarship had been interested only in the relationship between alchemy and chemistry, "concerning itself very little with the part it played in the history of philosophy and religion" (23). While this statement is generally correct, Jung ignores the insights of writers of the past one hundred years who contributed to the broader spiritualization of alchemy. ⁷¹ Nor does he mention the specifically Christian tradition extending from Flamel by way of Huysmans to Fulcanelli, relating church architecture and images to alchemy. Yet although his insights of the 1930s and 1940s were not so original as perhaps he and his followers believed, and have been contested subsequently by other professionals, his extensive and authoritative development of the spiritualization of alchemy contributed enormously to its popularization in the following decades.

Maillard, "Alchemie in Theorie und Literatur," 185, locates Jung properly "in the context of a series of attempts at interpretation" but fails to note his neglect or ignorance of that broader context.

Popularizations, or Projectio

In the spring of 1969, Time magazine front-paged an article entitled "Astrology and the New Cult of the Occult," which reported that "along with pot and fascination with Eastern mysticism, astrology has made itself at home in the radical 'free colleges' for dropouts that are being established across the country." Partly fad, it continued, the phenomenon of the occult also suggests "a deep longing for some order in the universe—an order denied by modern science and philosophy." Two months later Father Andrew M. Greelev proclaimed in *The New York* Times Magazine that "There's a New-Time Religion on Campus." The Catholic theologian and professor of sociology described how students, alienated from society and traditional religions and skeptical of rationalism and empiricism, were turning for spiritual guidance not simply to Zen or I Ching but to such occult movements as astrology, sorcery, witchcraft, and divination. Not to be outdone, Esquire magazine commissioned a cluster of articles proclaiming that the growing occurrence of evil and the occult in California constituted part of "a diabolical plan." 3 By 1972 Nat Freedland felt entitled to speak of The Occult Explosion in the United States, embracing "a psychic energy field" (chapter 2) that offers "keys to the unknown" (chapter 9) by means of meditation, astrology, magic (white, black, and satanic), and spiritualism. He opened his book with the news that the Paracelsus Research Society in Salt Lake City, Utah, offered a two-week alchemy course on turning lead into gold.4

The new popularity of the occult and, specifically, alchemy did not wait long for its literary reflection. Already in 1968 Marguerite Yourcenar had published her magnificent novel about a Renaissance alchemist, *L'Oeuvre au noir* (translated in 1976 as *The Abyss*), and Leslie Whitten's *The Alchemist* (1973) was the first in a series of novels of the following decades in various countries that revolved somehow around alchemy. The topic

¹ Time, March 21, 1969, 47–56, here 48.

² New York Times Magazine, June 1, 1969, 14–28.

³ Esquire, March 1970, 99–123, here 100.

⁴ Nat Freedland, *The Occult Explosion* (New York: Putnam, 1972), 11.

was approached from a whole compass of directions. The largest category embraces straightforward historical fiction, such as Yourcenar's novel. Others, like Whitten's, introduce alchemy in one fashion or another into the present. Still others link past and present contrapuntally by means of parallel plots. In some cases, finally, the term "alchemist" is used only metaphorically in fictions that have nothing whatsoever to do with alchemy. But the sheer number of works alluding through their titles to alchemy and alchemists is striking and suggests the growing fascination of the phenomenon.⁵

HISTORICAL FICTIONS

The recent literary resurgence of interest in alchemy begins with one of its finest manifestations: Marguerite Yourcenar's prize-winning *L'Oeuvre au noir* (1968). As Yourcenar explained in her "Author's Note" to the English edition:

In alchemical treatises, the formula *L'Oeuvre au Noir*, given as the French title to this book, designates what is said to be the most difficult phase of the alchemist's process, the separation and dissolution of substance. It is still not clear whether the term applied to daring experiments on matter itself, or whether it was understood to symbolize trials of the mind in discarding all forms of routine and prejudice.⁶

This refers, as we have seen, to the first stage in the *magnum opus* known as *nigredo*—an association lost in the translated title *The Abyss*. But Yourcenar's definition suggests that we should anticipate, since she is a novelist and not a chemist, a fiction depicting what she elsewhere called "a revolutionary theory" in which the hero challenges the beliefs of his time.

As we learn from the "Author's Note" the novel was initially conceived and partly written as early as 1921–5—during the period *entre deux guerres*

⁵ Janet Gleeson's *The Arcanum: The Extraordinary True Story* (1998), which is sometimes mentioned in this connection, is neither a fiction nor about alchemy: it is a lively biographical account of Johann Friedrich Böttger (1682–1719), who, having failed as an alchemist to make gold for August the Strong (August II of Saxony and Poland), more than compensated for that failure by finding the formula for the "white gold" of Dresden's famous porcelain.

⁶ The French original was published by Editions Gallimard; I refer in my discussion to the English translation, *The Abyss* (New York: Farrar, Straus and Giroux, 1976), made by Grace Frick in collaboration with the author, here 367.

⁷ C. G. Bjurstrom, "Yourcenar parle de *L'Oeuvre au noir*," *La Quinzaine Littéraire*, September 16, 1968, 4–5; quoted in Geneviève Spencer-Noël, *Zenon et le thème de l'alchemie dans L'Oeuvre au noir de Marguerite Yourcenar* (Paris: Nizet, 1981), 119.

when writers and thinkers were again becoming obsessed with alchemy. Although various fragments were composed and published earlier, the novel was completed in its final form only between 1962 and 1965. In the meantime the author had published, among other things, her acknowledged masterpiece, The Memoirs of Hadrian (1951). Like that earlier work, The Abyss is based on an impressive familiarity with the history and culture of the period depicted: in this case the early sixteenth century, mainly in Flanders. And its central figure, the alchemist-physicianphilosopher Zeno, while (unlike Hadrian) wholly fictional, is based on elements borrowed from the lives of known intellectuals of the period: notably Erasmus, Paracelsus, Campanella, Tycho Brahe, and others. His scientific research is inspired in large measure by the Notebooks of Leonardo da Vinci, and the authentic alchemical formulas cited in the novel are taken, we are told, from Berthelot's La Chimie au moyen age (1893), C. G. Jung's Psychology and Alchemy (1953), and Julius Evola's La Tradizione ermetica (1948). As in most historical novels, many of the figures who appear—apart from Zeno himself—are actual historical personages. And the atmosphere of the period, notably the Counter-Reformation and Inquisition, is depicted with professional accuracy. In her "Reflections on the Composition" of Memoirs of Hadrian, Yourcenar calls her method for historical fiction "akin to controlled delirium...a constant participation, as intensely aware as possible, in that which has been." She goes on to lay out the rules of the game for the historical novelist: "learn everything, read everything, inquire into everything" and, at the same time, like Hindu ascetics, "try to visualize ever more exactly the images which they create beneath their closed eyelids."8 The brilliant results of this method are everywhere apparent in *The Abyss*.

The novel belongs essentially to the genre of the *Bildungsroman*, tracing the life and intellectual–spiritual development of the hero from childhood until his suicide more than fifty years later in prison, where he has been indicted and found guilty on a number of spurious charges, both civil and ecclesiastical. Zeno is the illegitimate son of the daughter of a prosperous family in Bruges and an ambitious young priest sent in 1508 to Cambrai as apostolic secretary and counsel to the League of Italian states organized against Venice. Destined for the church, Zeno receives an excellent education, as well as the elements of alchemy, from a canon in Bruges, Bartholomew Campanus. At the same time he acquires the practical skills of cloth-weaving from his boyhood friends who work in the local factories, and devises labor-saving improvements for the looms.

 $^{^8\,}$ Marguerite Yourcenar, *Memoirs of Hadrian*, trans. by Grace Frick in collaboration with the author (New York: Noonday, 1990), 328, 330–1.

Later, while at the School of Theology at Louvain, he cultivates his interest in alchemy. Following a brawl in Bruges, he leaves home and spends time in Ghent with a provost of the cathedral who is engaged in alchemy. His reputation at home is further damaged when, in 1539, he publishes a pamphlet on physiology in radical contradiction to the teachings of the schools.

Zeno's travels in part 1 (mostly mentioned, and not recounted) take him all over the world as a physician—from medical studies in Montpellier and Spain to Constantinople and Algiers and by way of Innsbruck and Würzburg to Poland, Sweden, and Paris—while surrounded by the turmoil of Counter-Reformation Europe (notably the radical Anabaptist Rebellion of Münster in 1534–5, or the 1549 outbreak of plague in Cologne). Years later (part 2) he returns under a false name to Bruges, where he and his earlier misdemeanors and imagined crimes have long been forgotten. There he opens a clinic as a physician to the poor and continues his studies and writing until, finally, in 1569 his true identity is exposed and (part 3) he is indicted, brought to trial, and found guilty for his alleged crimes, ranging from heresy to sodomy.

Zeno's is the story of a prototypical Renaissance intellectual who, from his studies and travels, gathers knowledge and experiences that enable him to develop views—views exposed in several lengthy conversations in the novel—that challenge the society and beliefs of his own time: its politics, its religion, its social stratification, its science and medicine. While offered the opportunity to save his life by recanting, he refuses out of principle to do so and chooses to take his own life rather than suffer execution. He reaches his existential nadir around age fifty, during his clandestine life following the return to Bruges, in the chapter entitled "The Abyss." Despite the good works of healing that he is doing, his existence seems increasingly pointless, and "his sedentary life weighed on him like a sentence of imprisonment" (166). Then gradually he began "to emerge from the dark defile" (193), attaining a new sense of fulfillment within himself, a sense that enables him to accept his death with equanimity.

What does alchemy have to do with this? The author includes it in part because the study of alchemy was a typical pursuit among intellectuals of the early sixteenth century, and the background would have been incomplete without that representative element. We are told that Zeno studies alchemy—first with his tutor in Bruges; later at Louvain "in defiance of the School" (36); in his perusal of the writings of Nicolas Flamel and other alchemists (188); and in the course of his travels in East and West. But the frequent mentions of alchemy almost always invoke its spiritual meaning. We never see Zeno in a laboratory or performing actual experiments.

Indeed, the two specific references to alchemistic practice are both negative, as when Zeno thinks of:

those fraudulent experiments wherein Court alchemists try to prove to their royal clients that they have found something, although the gold at the base of the alembic proves to be only that of an ordinary ducat, long passed from hand to hand, and put there by the charlatan before the heating began. (169)

Or again, recalling disdainfully the machines he designed in his youth to improve the weavers' lot: "They are like certain discoveries of the alchemist who lusts only for gold, findings which distract him from pure science, but which sometimes serve to advance or to enrich our thinking" (334). As his understanding of alchemy increases, he imagines that "making gold will possibly be as easy someday as blowing glass" (124) and that "it would suffice merely to apply oneself seriously in order to deduce from a few simple principles a whole series of ingenious machines capable of increasing man's wisdom or his power, such as engines to produce heat by their motion."

Otherwise the alchemical allusions serve as metaphors for the human condition. As a young man, gazing up at the trees in the forest of Houthuist, Zeno:

fell back into those alchemical speculations which he had begun in the School, or rather, in defiance of the School; in each vegetal pyramid above him he could read secret hieroglyphs of ascending forces: the sign of Air, which bathes and feeds those fair sylvan entities; the sign of Fire, the virtuality of which they have already within them, and which perhaps will destroy them one day. (36)

Later, as his interests turn increasingly to medicine, he explains to a cousin that "the arts of mathematics and mechanics, on the one side, and the Great Art, alchemy, on the other, apply to our study of the universe only those same truths which our bodies teach us; for in our bodies is repeated the structure of the Whole" (112)—where we recognize the ancient teaching of the *Tabula smaragdina*: that what is below mirrors what is above. "There were moments when he trembled, as if on the verge of a transmutation: some particle of gold appeared to be born within the crucible of the human brain" (169). Thinking (in the chapter "The Abyss") of the classic formula *solve et coagula*:

he knew well what that formula signified, the rupture of established notions, a great crack in the heart of things. As a young clerk he had read in Nicolas Flamel the full description of the *opus nigrum*, of that attempt at dissolution and calcination of forms which is the first but most difficult part of the Great Work. (188–9)

Initially he had mistaken the alchemical process of separation and reduction for mere rebellion. Later, rejecting "the trumpery in all those teachings" as vague dreams, he chose "to dissolve and coagulate matter in the strict sense of experimentation with the body of things." But now the metaphysical and pragmatic were meeting: "the *mors philosophica* had been accomplished: the operator, burned by the acids of his own research, had become both subject and object, both the fragile alembic and the black precipitate at its base; the experiment that he had thought to confine within the limits of the laboratory had extended itself to every human experience." He wonders if the alchemical quest might turn out to be more than a dream: if he himself "would come to know also the ascetic purity of the White Phase of the Great Work, and finally the joint triumph of mind and senses which characterizes the Red Phase, the glorious conclusion." At this point, at the nadir of his experience, his former doubts and "No" become "an audacious 'Yes'" (189).

Having attained this affirmative insight, he explains to his patient and confessor, the prior of the Cordeliers at Bruges, that the symbols and figures employed by his fellow alchemists prevent more obtuse minds from seeing beyond the material image "while the more judicious tend to disdain a form of knowledge which, although it could carry them far, seems to them to be imbedded in a morass of dreams" (211). Ultimately, as he tells his former tutor, the canon, "Each of us alchemist philosophers is his own master, and his sole disciple. Each starts the Great Experiment anew, ex nihilo" (341). Given his essentially philosophical understanding of alchemy, he can now, as life from his opened veins ebbs from him, see his own death as the fulfillment of the magnum opus. In the darkness surrounding the dying Zeno, "black turned to livid green, and then to pure white; that pure, pale white was transmuted into a red gold" (354)—precisely, we recognize, the stages from nigredo by way of cauda pavonis and albedo to rubedo.

In sum, while Zeno performs no *magnum opus* in an alchemical laboratory, at least none that is described or mentioned in the novel, his life turns out to re-enact the stages of that Great Work. For him, the early exoteric attraction of alchemy gives way to a wholly esoteric one. But Yourcenar implies far more than the symbolic understanding of alchemy by a representative mind of the Renaissance. She also has in mind, perhaps foremost, the "presentiments of dangers" for our own age that can be read in alchemical treatises, "which abound in warnings against misuse of

⁹ Spencer-Noël, *Zenon et le thème de l'alchemie*, 61–76, cites other passages that seem more or less to suggest various stages in the alchemistic process. See also David Meakin, *Hermetic Fictions: Alchemy and the Novel* (Keele, Staffordshire: Keele University Press, 1995), 151–61.

technical inventions by the human race. Their admonitions now seem to us prophetic." ¹⁰ *The Abyss* is not simply a brilliant and gripping historical novel; it also presents a striking analogy to many of the problems and prejudices of modern civilization.

While Yourcenar's The Abyss displays the formal structure of a Bildungsroman, another international bestseller, The Alchemist (O Alquimista, 1986) by Brazilian author Paolo Coelho, follows the typical pattern of those fairy tales (such as "The Pedlar of Swaffham" or as found in *The 1001 Nights*) in which the hero sets out to find a promised fortune, only to discover ultimately that it lies hidden back at his starting point. Coelho's parable features a young Andalusian named Santiago, who in an unspecified past¹¹ leaves the seminary at age sixteen to become a shepherd because "he wanted to know the world, and this was much more important to him than knowing God and learning about man's sins" (8).12 Having dreamed twice about a child who transports him to the Egyptian pyramids, he consults a gypsy fortune teller who tells him, in return for his promise to give her one tenth of his findings, that he will discover at the pyramids a treasure that will make him a rich man. Santiago doesn't initially take the dream and its interpretation seriously, but that evening he meets an old man who introduces himself (with name and title from Genesis 14:18) as Melchizedek, the king of Salem, and encourages him to make the pilgrimage to the pyramids. The stranger gives him two stones from his breastplate called Urim and Thummim (Exodus 28:30) and tells the perplexed youth that "you have succeeded in discovering your destiny" (22). Selling his sheep, Santiago makes his way to the coastal town of Tarifa, where he is promptly cheated out of his money. He works for several months in a crystal shop, where through his initiative he earns enough to continue his journey to the pyramids.

It is only at this point, almost halfway through the short fable, that alchemy is mentioned for the first time; indeed, when he first hears of it, Santiago says that "I don't even know what alchemy is" (73). One of his fellow travelers in the desert caravan is an Englishman engaged in the search for "a famous Arabian alchemist" who is reputedly "more than two hundred years old, and . . . had discovered the Philosopher's Stone and the Elixir of Life" (69). He explains to Santiago "the principle that governs all things. In alchemy it's called the Soul of the World" (82). "Everything on

¹² Quoted here and elsewhere from: Paulo Coelho, *The Alchemist*, trans. Alan R. Clarke (New York: HarperCollins, 1993).

^{10 &}quot;Author's Note," 366.

¹¹ The twentieth-century "Fulcanelli" is mentioned once in passing, but the entire atmosphere of the work with its shepherds and caravans is pre-modern and timeless.

earth is being continuously transformed, because the earth is alive," he continues, "and it has a soul. We are part of that soul, so we rarely recognize that it is working for us." He shares his books, in which Santiago reads about "mercury, salt, dragons, and kings" (83) without understanding any of it apart from the central idea: "all things are the manifestation of one thing only." The Englishman, without mentioning Hermes Trismegistus, tells him about "the most important text in the literature of alchemy"—the Emerald Tablet—and Santiago is fascinated by the stories of:

men who had dedicated their entire lives to the purification of metals in their laboratories; they believe that, if a metal were heated for many years, it would free itself of all its individual properties, and what was left would be the Soul of the World. This Soul of the World allowed them to understand anything on the face of the earth, because it was the language with which all things communicated. They called that discovery the Master Work—it was part liquid and part solid. (84)

Santiago, eager himself to be able to create gold, reads the lives of alchemists who have reputedly done so: Helvétius, Elias, Fulcanelli, and Geber. But the instructions for achieving the Master Work are confusing: "There were just drawings, coded instructions, and obscure texts" (85). The Englishman, disappointed at Santiago's lack of appreciation for the secrets of laboratory alchemy, fails to realize that Santiago has actually seized the central idea of the Art.

The caravan eventually makes its way across the desert to a vast oasis, where in fact they find the alchemist who learned the science from his grandfather, who had in turn learned from his father, "and so on, back to the creation of the world" (132). Recognizing in Santiago a true disciple, he explains that most alchemists failed to make gold because they were looking only for gold: "They were seeking the treasure of their destiny, without wanting actually to live out the destiny." In the early days "the Master Work could be written simply on an emerald." But later alchemists, rejecting simplicity, wrote tracts and philosophical studies. To illustrate the message of the Emerald Tablet, he makes a simple drawing in the sand—a drawing that "can't be understood by reason alone. The Emerald Tablet is a direct passage to the Soul of the World" (133). He urges Santiago to immerse himself in the desert, which will give him "an understanding of the world" (134). "Listen to your heart. It knows all things, because it came from the Soul of the World, and it will one day return there." Leaving behind the young woman, Fatima, with whom Santiago has fallen in love, the two set off across the desert. In that atmosphere, we are told, Santiago's heart "was content simply to contemplate the desert, and to drink with the boy from the Soul of the World. The boy and his heart had become friends, and neither was capable now of betraying the other" (141).

When they are soon to part, Santiago asks the alchemist to tell him about alchemy—not about the Soul of the World but about transforming lead into gold. The alchemist explains the principle of evolution: everything has evolved. For wise men gold is simply that which has evolved furthest, but many don't understand: "So gold, instead of being seen as a symbol of evolution, became the basis for conflict" (144). One day Santiago goes alone into the desert, where he holds a dialogue with the sun, informing it that alchemy exists "so that everyone will search for his treasure, find it, and then want to be better than he was in his former life" (158). When we become better, then "everything around us becomes better, too." On the day of their parting the alchemist finally does produce from his pouch a "strange yellow egg" (162)—the philosopher's stone—and uses a sliver from it to transform a pan of melted lead into gold, of which he gives a quarter to Santiago.

Santiago rides on to the pyramids, where he digs for his promised fortune. Some passing Arabs, taking his piece of gold, laugh at his futile efforts. Their leader tells him that he too had once had a recurrent dream on this very spot: that he should travel to Spain, where he would find a hidden treasure under the roots of a sycamore tree near a ruined church where shepherds kept their sheep. "But I'm not so stupid as to cross an entire desert just because of a recurrent dream" (172). Santiago rejoices because he now understands where to find his promised treasure. In the brief epilogue we learn that he returns to Spain and to the abandoned church where he had often sheltered his sheep. There, beneath the sycamore he finds a chest of Spanish gold coins which enable him to pay the gypsy fortune teller and to return to the desert oasis to join Fatima, the love of his life.

Coelho's parable has as little to do with laboratory alchemy as does Yourcenar's novel. But unlike the knowledgeable quotations that provide authenticity in *The Abyss*, we find here only highly romanticized "feelgood" generalizations, as vague as the unspecified time of the action, that have little to do with actual alchemy or alchemists, either exoteric or esoteric. It is easy to understand the worldwide appeal of the work, which is allegedly the most frequently translated work by any living author: it appropriates a trendy title and topic; it follows a predictable formula; it introduces almost ritually various archetypal figures and situations: the gypsy fortune teller, the ageless biblical Melchizedek, the mysterious alchemist in the desert, dialogues with the sun and wind and so forth; and its message does not strain the mind: "life really is generous to those who pursue their destinies" (176). One readily believes Coelho, who told an interviewer for *The Guardian* that he wrote his undemanding

book in only two weeks because the story was "already written in [his] soul "13

That same year another even more remarkable novel appeared by the Australian writer David Foster (b. 1944), who, unlike Coelho, wrote and revised his manuscript for ten years, as he tells us in his Acknowledgment. Foster's The Adventures of Christian Rosy Cross (1986) is a witty and often irreverent elaboration of the life of Christian Rosencreutz ("Rose Cross") as depicted in the Fama Fraternitatis, of the Praiseworthy Order of the Rosy Cross, Addressed to all Scholars and Heads of Europe (Fama Fraternitatis, desz Löblichen Ordens des Rosenkreutzes, an alle Gelehrte und Häupter Europae geschrieben, 1614). While the Fama was published anonymously, it emerged from the circle of student friends at the University of Tübingen to which Johann Valentin Andreae (1586-1654) belonged, the author of the renowned Chymical Wedding (written 1605, published 1616; see Chapter 2).¹⁴ Andreae never acknowledged authorship of the Fama, which was written after the composition of the Chymical Wedding to explain the life of its alleged author, Christian Rosencreutz. But both works, along with the so-called Confessio Fraternitatis (1615), although utter hoaxes, provided the inspiration for those who took them seriously and founded the Rosicrucian movement, which initially flourished before the Thirty Years War (1618–48) and then, from the eighteenth century onward, enjoyed increasing popularity.

The Fama, allegedly written years after his death by later members of the brotherhood he founded, provides only the sketchiest details regarding C. R.'s life: 15 he is designated here only by his initials, and even his birthand-death dates (1378-1484) can be calculated only from the Chymical Wedding. We learn that he was German and that, because of the poverty of his noble parents, he was placed at age five into a monastery, where he learned Latin and Greek. In his early teens he accompanied another brother, P.a.l. (Pater a.l.)¹⁶ to the Holy Land, and, when that brother died in Cyprus, went on by himself to Damascus, where he impressed the Turkish rulers with his medical abilities. At age sixteen he journeyed to Damcar (Damar in present-day Yemen), renowned for its wise men,

¹³ Hannah Pool, "Question Time," *The Guardian*, March 18, 2009, , retrieved June 17, 2012.

¹⁴ On Andreae see Wilhelm Hoßbach, *Johann Valentin Andreä und sein Zeitalter* (Berlin: Reimer, 1819).

¹⁵ I refer to the original German edition as reprinted in: Joh. Valentin Andreae, Fama Fraternitatis (1614), Confessio Fraternitatis (1615), Chymische Hochzeit: Christiani Rosencreutz. Anno 1459 (1616), ed. Richard van Dülmen (Stuttgart: Calwer Verlag, 1973), 15-30.

The letters "a.l." have never been satisfactorily explained.

where he mastered Arabic and learned mathematics and physics. Three years later he went to Egypt, where he was taught botany and zoology, and then on to Fez, where he studied magic and the Kabbalah. After two years he returned to Europe in the hope of bringing Eastern wisdom and learning to scholars and intellectuals there, but the latter were not interested in anything that would discredit their own knowledge. Eventually he came back to Germany where, during the Reformation years, he established in a modest house his own monastery, initially with only three brethren. As it grew, his successors circulated the *Fama* to invite all interested Europeans to join and share their secret knowledge. It is worth noting in our context that they specifically deny that the *mutatio metallorum* is the apex of philosophy, claiming that gold-making is only a trifle and a "parergon," a by-product, of their work.¹⁷

On this sketchy basis Foster has constructed his novel, which not only puts alchemy in the forefront but also, among other things, explains the entire visit to Damcar as a series of opium dreams of Christian's while he is still in Damascus, and interpolates a number of raucous scenes triggered by Christian's enormous penis, which he tries to conceal beneath his monk's habit in a two-foot-long ram's horn. The author also adds figures and details from the *Chymical Wedding* and sprinkles his text with Latin epigrams from the works of Michael Maier.

Following the opening chapter, in which the birth is described in gory detail and Christian's father suspects that the child is not his, he is sent to a Dominican cloister, where he is baptized and soon instructed in alchemy, or the Art, by Brother Cornelius, whose laboratory is described in considerable detail, from the huge furnace with its bellows and coal tub to the glazed bottles containing "hyle," "sang," "azoth," "urine," and a variety of other elements, along with lumps of lead fallen from the roof. Christian explores the cucurbits, lutes, and phials as well as the mortars, alembics and aludels, and "in one corner, a philosophical egg" (14–15). 18 When he is twelve years old the Inquisition inspects the monastery and destroys the laboratory; while he is permitted to resume his "chemistry," this time the fire is only spiritual. When Christian is fifteen he develops a medical problem: satyriasis with a two-foot-long penis in permanent erection. Soon he is introduced to sex in a "massage parlor"—actually the Dominican retreat for homeless women—where he contracts a venereal disease. When he becomes delirious, the monks try to treat him with various remedies, but to no avail. So Christian decides to accompany his friend, Brother Pal, on a pilgrimage to the Holy Land.

¹⁷ Andreae, Fama Fraternitatis, 29.

David Forster, *The Adventures of Christian Rosy Cross* (New York: Penguin, 1986).

In Venice a friar named Anselm approaches Christian and offers to make him a small fortune, saying that he had witnessed a transformation accomplished by an adept, a converted Jew, who kept the stone in a phial. He shows Christian a book with twenty-one leaves, all covered with strange letters (Arabic) and painted figures. (As described, they are illustrations typical of alchemical texts.) Leaving Pal behind on Cyprus, he goes to Rhodes in search of an adept: a man named Bernard, who tells him how, many years earlier, he came into possession of a large quantity of the red tincture, given to him by a ragged old man. From that day on, he confesses, he has not had a moment's peace of mind. He relates his life, shows Christian his handsome laboratory, and explains the theory of alchemy:

"We can't make base metals, Christian; we don't know their composition. We can only make gold, which has no impure sulphur, by means of our Stone, which is pure quicksilver. Basically, that which is volatile and flees the fire, like a dove, is called soul; that which remains in the fire, like a salamander, is called body; and that which unites body and soul is called mercury, or spirit. Now if the soul remains with the body, we have success. But what generally happens is the soul rises taking the body with it. To watch the furnace closely is the whole secret of the Art. Nature, alone, cannot effect the desired union of body and soul which is brought about by our Stone; there is no one to take the vessel from the heat." (59)

When their experiment fails, he sends Christian to Damascus for the necessary ingredient: the world's purest mercury, arsenic-free.

Following a brief capture by pirates, Christian arrives in Damascus, where he works in a massage parlor and meets a mysterious stranger called The One, who tells him that he is awaited in Damcar. He gives Christian "the Stone"—a dirty old lump that he finds in his cloak—and which, though never specified, is opium: the vegetable stone in contrast to the mineral stone of gold. By means of "the Stone," then, Christian is able to reach Damcar whenever he likes. Before long he gets a job with a chemist who smells strongly of sulphur and lectures him and the other more advanced students on "chemistry." When Christian has finally managed to clean his cauldron with urine, he is given a project. The master tells him:

"Nature has two ways of producing gold: the immediate method, by which mercury is changed at once to gold, and the mediate method, by which mercury is converted first to lead, then iron, then bronze, and so on. Art is supposed to imitate Nature in the second method, for of course, as Geber says, if Nature did *not* change common metals into gold, then all the efforts of Our Art would be in vain." (87)

As the lectures on alchemy continue, in his opium-induced trances Christian has dreams or visions prompted by the *Chymical Wedding*, notably the scenes with the gatekeeper, which involve a higher "chemical truth."

Eventually both the master in Damascus and the viceroy in Damcar are disappointed in Christian because he smokes too much. So he makes his way, in 1401, over Fez back to Europe, where for all practical purposes the alchemy stops and the narrative—now involving the Inquisition, Pope Benedict XIII of Avignon, Christian's ordination as a Dominican, a figure named Adam Cadmon (after the Kabbalistic primal man)—goes well beyond the *Fama*. Christian, having renounced opium, now conducts an Inquisition against heretics and the vegetable stone. Later returning to Germany, he spends the rest of his life restoring his family's derelict castle and dreaming of being a gatekeeper (like the Rosencreutz of *Chymical Wedding*).

Christian encounters alchemists at every stage of his journey, far more than suggested in the *Fama*—Pater Cornelius in the monastery, Anselm in Venice, Bernard in Rhodes, the master in Damascus—and each of them speaks at length, and knowledgeably, about the Art, using material, as Foster acknowledges in his introduction (x), from Waite's *Lives of the Alchemystical Philosophers*. Taking as his "mentor in matters alchemical" the seventeenth-century alchemist Michael Maier, Foster offers his reconstruction of Rosencreutz's life "because of my conviction our present age resembles that of Christian Rosy Cross." Foster's novel contains a greater variety of alchemists than any other fictional work in this chapter although the playful premise of the book—concerning the vegetable stone of opium—has no basis in historical alchemy.

How to characterize Evan S. Connell's *The Alchemist's Journal* (1991), which in its second edition is more accurately entitled *Alchymic Journals* (2006)? Not a historical novel or even a novel at all—it has no plot—this enormously learned linguistic tour de force recapitulates, through the journal entries of seven intellectuals writing in the language of their day, varying attitudes toward alchemy from the time of Paracelsus (1493–1541) to a philosopher of the early seventeenth century, when chemistry was moving away from alchemy.

The aging Paracelsus, who terms himself the "monarcha medicorum" and "Prince of Physicians" (7), comes across as arrogant and egomaniacal as he rages against his perceived inferiors—pseudo-alchemists, charlatans, mock-doctors, "squint-eyed gut-bucket butchers serving slabs of deceit" (17)—and exclaims that "the alchymist must understand cosmology because a doctor that treats only the effect of disease is like one that would excoriate and drive winter aside by brushing a little snow from his

door" (20–1).¹⁹ After his death Paracelsus is characterized by one of his novices as "swollen tight with vanity" (46) and father of a homunculus (47); but from him the novice learned the humanistic message that man is "the supreme retort, an alembic, a cucurbit within which fermentation will occur and thoughts be distilled" (60). In contrast to the novice's admiration, the skeptic's journal amounts to a catalog of doubt, in which he questions by name and teaching all the leading authorities of alchemy, from Paracelsus and Aquinas to Dee and Albertus Magnus, who "having been transmogrified from an ass to a philosopher was converted back again" (93). He rejects all the claims of alchemy: "We testify enough against putative testament, more than enough to question each supposed triumph" (83).

The physician's entries that follow constitute ruminations upon medical topics ranging from sexuality and the lasciviousness of women to diet and medicaments. He regards disease as "an overflow of corrosive catarrh which descends from the base of the skull to visceral organs" (119) and questions Paracelsus's logic (e.g. that "sidereal effluents drip from above," 130). The "prudent alchymist, should he grow hesitant or feel uncertain of his diagnosis, abstains from counsel" (137). The Christian secretary (historian), calling "alchymistry" "an incomplete volume without words" (153), regards himself as one among other "humble biographists expending ourselves with quiet scribbling to complete the archives of inheritance" (170). He challenges most of the skeptic's arguments, calling him "a new mouse fumbling through darkness" (146), and uncritically cites authority. "We believe in palingenesis. Avicenna, Cardanus, Averroes, Eckhartshausen, Seneca, Plato, Caspalin and others confirm the truth of this" (170).

For the revolutionary, in whose eyes "ideals pass, titles follow" and "truth is legislated from existence" (173), alchemy provides apt metaphors: "No past but inhabits the mind. Say the present is Sol, the past Sulphur, the future Mercury. Present answers neither past nor future" (177). The sequence of journals ends with the balanced views of a philosopher in a new age. "Now the chymist with his trade prepares to analyze and distil and refine occluded liquid, whereas an alchymist at his craft sets forth to direct the novice through qualified reflections, and therefore he must demonstrate how the Magnum Opus begins" (208). Is history, he wonders, "the register of fallacious dispute and mischance, of infamous sophistry" (203)? "Which of us has visited the antechamber of understanding?" (204). To his modern eyes the ancient art has become pure philosophy. "We ask no unprecedented honorarium since by alchymic craft we transmute men to makers of prodigious dreams" (210).

¹⁹ Evan S. Connell, *The Alchymist's Journal* (San Francisco: North Point Press, 1991).

In Connell's linguistically brilliant and literarily ingenious work, which is based upon a knowledge of the history of alchemy as thorough as that of most historians of the field—and which, not incidentally, opens with an epigraph from Jung—we gain a lively sense of shifting attitudes toward alchemy during the two centuries when it was parting ways with chemistry and as modern science and modern philosophy were beginning to take shape. At the same time, the work also offers sharp insights into the spectrum of seven (!) different types of mind or mindset that are still very much present in our own society as well as their reasons for the acceptance or rejection of the alchemist's Art.

The bestseller "The Alchemist" (*Die Alchimistin*, 1998)—the suffix "in" makes it clear that this alchemist is a woman—is the first in a trilogy of alchemist novels by Kai Meyer, the prolific German author of fantasies and historical novels. ²⁰ The complex plot of the voluminous work, which moves from a castle on a Baltic island (based on Arnold Böcklin's painting *Die Toteninsel* or "Isle of the Dead") by way of an isolated monastery in the Swiss Alps and the subterranean caverns and passageways underlying Vienna's Hofburg to a castle in a remote section of the Georgian Caucasus, and which takes place principally in fin-de-siècle Europe with extended flashbacks to the thirteenth century, is based on an allegedly alchemistic theme but actually has relatively little to do with alchemy.

It concerns an ongoing battle between two men, Nestor Institoris, the inhabitant of the Baltic castle, and Lysander, the denizen of the Viennese underworld. Both are the ageless disciples of Morgantus, a Knight Templar, who discovered or inherited the ancient secret of eternal life: to soak himself in, or drink the blood of, his own daughter produced by incest—a process repeated by the three of them through the centuries and one allegedly justified by none other than Michael Maier, who is quoted as writing: "Bring a brother and a sister together and hand them the pitcher of love, that they may drink of it"—and from that union shall arise the philosopher's stone. 21 But as the three men grow older and less capable of the sexual energy necessary for those constant renewals, they search for another elixir: the plant of rejuvenation that the epic hero Gilgamesh finds in the seabed in Tablet XI of the Epic of Gilgamesh. This was the goal for which Nestor had been seeking for years in his rooftop alchemical garden—a plant that does not occur otherwise in alchemical lore. Lysander, who has vied with Nestor for centuries, sends a killer to murder him

²⁰ Followed by *Die Unsterbliche* ("The Immortal Woman," 2001) and *Die Gebannte* ("The Banished Woman," 2012). Hitherto mainly Meyer's fantasies for younger readers have been translated into English.
²¹ Kai Meyer, *Die Alchimistin* (Munich: Heyne, 2011), 110.

and his daughter: Gillian, the hermaphrodite son of Morgantus and, as a hermaphrodite, himself a powerful alchemistic symbol used frequently to denote the successful union of the *magnum opus*: "The goal of the adept is the union of the male and female principle" (285).

Gillian kills Nestor but, falling in love with his daughter Aura, cannot carry out the second murder. Later, when they sleep together, they conceive a son, Gian, who inherits mystical powers from them (the hermaphrodite and the virgin daughter of an immortal). The same "inherited knowledge" (288: "vererbtes Wissen") characterizes Tess, Lysander's daughter by his own daughter Sylvette: she is termed "the product of a Hermetic experiment: the child of an alchemist with his bodily daughter" (286). The plot, a Gothic novel set in modern times, involves many murders, kidnappings, and adventurous rescues in romantic sites. At the end both Nestor and Lysander, along with Morgantus, are dead, along with Aura's mother and two foster brothers. She and Gillian remain alive to star in the following volumes of the trilogy; they have both received immortality from the Gilgamesh plant that grows from the ground where Nestor is buried. (It turns out that it grows only on the graves of immortals.)

In this perilous action alchemy as such plays a minor role; legends of the Knights Templar are at least equally important. We recognize such common alchemical symbols as the pelican (on the door to Nestor's laboratory and elsewhere), the number seven (the years separating the two parts of the action, a clock that displays a mystic image when it strikes seven), the hermaphroditic nature of Gillian, and others. But no experiments are carried out: Nestor has a laboratory which is described in passing (69) but spends most of his time cultivating his plants and searching the ancient tomes of his library for information regarding the Gilgamesh plant. As he explains to his foster son Christopher, "the main goal of every alchemist, today as seven hundred years ago, is the Great Work"—the production of the philosopher's stone (75). The transmutation of metal into gold is of secondary importance; its most important property is that of a panacea. "Dissolved in wine, the stone heals every illness, prevents aging, yes, even gives eternal youth" (76). Later, as Gillian is revealing to Aura her father's story, which was unknown to her, he explains:

alchemy is not a science like chemistry. Some say that alchemy has a little to do with magic, or at least with what people formerly considered magic. But superstition is always in league with it. In former centuries it bestowed a special power not only on people, but also on certain places. (213)

But the plot ultimately revolves around the alchemist's search for the elixir of life. Nestor emasculates a youthful lover of Aura and then sends her off

to a remote boarding school in order to preserve her virginity until she is twenty-one and ripe for their incest—should he, in the meantime, fail to find the Gilgamesh plant. Aura, the "alchemist" of the title, unlike the heroines of several of our novels, is not trained by her father; but with the genius of her own incestuous birth from an immortal and his daughter she learns everything she knows from the books in his library. In this novel she does not practice alchemy. Yet the great success of the work in Germany, where it is available as a talking book, and in various translations, reinforces our observation of the revival and widespread contemporary interest in the art.

Katharine McMahon's *The Alchemist's Daughter* (2006) is a knowledgeable, readable historical novel set in England in the social-intellectual context of the 1720s, just at the time when alchemy was beginning to lose the position of authority and appeal it once held. It is well informed about alchemistic procedures, notably the (futile) efforts toward palingenesis, which occupy a central position in the plot.²² Sir John Selden has raised his daughter Emilie in the isolation of his estate where, a protégé of Isaac Newton, he devotes himself to alchemy and teaches her everything, including mathematics and natural philosophy. But at age nineteen the brilliant but wholly inexperienced girl falls in love with the handsome adventurer Robert Aislabie, who just wants to exploit the family estate and fortune. Seduced by him, she becomes pregnant, marries him, and goes off to London, where she is introduced to London high society.

When her father dies, embittered because alchemy failed him in his project of regeneration of life, Aislabie begins to take over the estate. He remodels the manor and grounds with no regard for expenses or for the villagers who are dependent on the estate for their livelihood. Emilie, gradually disenchanted with her marriage, hopes to carry out her father's last experiment: palingenesis of a rose through alchemical processes. Emotionally she is torn between passion with her husband and intellectual life with her dead father. In memory of her father she attends Isaac Newton's funeral at Westminster but then is unable to find her mother's alleged home in London or any relatives who know of her. When she catches her husband having sex with her maid, Sarah, she leaves London.

When the villagers at home almost attack her because of Aislabie's neglect of the village and their payments, she becomes depressed and tries to commit suicide with the final step of palingenesis: adding saltpeter to the mixture, she causes an explosion in which she is almost killed. The explosion exposes her father's hidden diaries, from which she learns that she was a whore's daughter, taken in by Selden and raised as his own child.

²² Katharine McMahon, *The Alchemist's Daughter* (New York: Crown, 2006).

Recovering from her physical and emotional wounds, she regrets her rejection of the maid, Sarah, who was pregnant from her husband. She goes to London to find her, now dying, and takes her child, Aurelia, to raise as her own. When her husband goes off with his slave ship, they are presumably divorced. She goes back to Selden Hall and presumably will marry Rector Shales, a widower, who is also a skilled natural philosopher but not an alchemist.

Apart from the early pages and the later experiment with palingenesis, the book does not say a lot about alchemy, although the laboratory pages are well informed. The novel gradually becomes more of a social novel with obligatory sex scenes and satirical comments on London society in 1720s: the exploitation of peasants, the slave trade, and so forth. Emilie and her father refer frequently to contemporary scientific works and heatedly discuss the phlogiston controversy. When her deadly experiment convinces Emilie that phlogiston is wrong, she turns her interest to the pure sciences and chemistry, reflecting thereby the general direction of the early eighteenth century.

Dave Duncan's "Alchemist" trilogy (The Alchemist's Apprentice, 2007; The Alchemist's Code, 2008; and The Alchemist's Pursuit, 2009), featuring the impoverished nobleman Alfeo Zeno, who serves as apprentice to the "alchemist" Filippo Nostradamus (nephew of the celebrated Michel) in late sixteenth-century Venice, could be seen as a Renaissance Nero Wolfe series. While Nostradamus stays at home in his palace apartment, like Wolfe in his Manhattan brownstone, the first-person narrator, Alfeo (who owes his last name to Yourcenar's Zeno?), like Archie Goodwin, roams around the city in various entertaining, swashbuckling adventures. The novels display a colorful historical background and context but have nothing to do with alchemy. In The Alchemist's Code, for instance—in which Nostradamus and Zeno identify and catch a spy in the Venetian government—various occult practices play a role: Tarot cards, cryptography, Kabbalah, dowsing, pyromancy, necromancy (all largely contrived)—but no alchemy at all. In the opening volume of the series—in which the pair identify the murderer in a poisoning case with political implications—Nostradamus's "alchemical workbench with its mortars and alembics" is briefly mentioned, he reads a work entitled Hermes Trismegistus, and he puts Alfeo into a clairvoyant trance by having him recite "the twelve gates to alchemy" (from George Ripley's work of that title) from calcination to projection.²³ But otherwise we see absolutely no evidence of Nostradamus's alchemistic practice. The term serves simply as a catchy title for a lively, readable series of historical romances.

²³ Dave Duncan, *The Alchemist's Apprentice* (New York: Ace, 2007), 13, 195, 199.

COUNTERPOINT OF PAST AND PRESENT

The historical past also plays a significant role in another set of novels: not simply for its own sake, but as an explanatory parallel to events taking place in the present. One of the most remarkable works in this category is Lindsay Clarke's *The Chymical Wedding* (1989), whose archaicizing title (reminiscent of Andreae's *Chymische Hochzeit*) alerts us immediately to the theme of alchemy.

The historical aspect of the novel is based loosely on the life of Mary Anne Atwood, who on their Hampshire estate collaborated with her father, Thomas South, in his alchemical pursuits, wrote and published an exegetical introduction to his poetic work, and then with her father bought up and burned the entire edition (see Chapter 4). In Clarke's "romance" that history is retold in the story of the widowed Sir Henry Agnew and his brilliant daughter, Louisa Anne, in the isolated Norfolk village of Munding, where they engage in the study and practice of alchemy. As in the case of Mary Anne Atwood, Louisa—to free her father's spirit for his greater work, an epic on "the spiritual crisis of the age" (271)—writes and publishes *An Open Invitation to the Chymical Wedding*, which she then willingly burns in order to "free it" (493).²⁴ But here the story is complicated by the arrival of a new rector, the Reverend Edwin Frere, and his wife, Emilia. When Emilia, miserable in the rural isolation of Norfolk, returns to Cambridge, Edwin and Louisa fall in love.

The complications of that mid-nineteenth-century plot, narrated in the third person, are paralleled by the contemporary story set in the early 1980s and told in the first person by Alex Darken, a young writer who has sought refuge from Cambridge and new inspiration in Munding. There he encounters the aging poet Edward Nesbit and his young lover, Laura, an American ceramicist. The obvious parallels—the young lover of the daughter or companion of an older man—are complicated and reinforced by the efforts of the contemporaries to discover the secrets that the Agnews had pursued in the same premises over a century earlier. Laura's ceramics are fired in a furnace and in a process that seem conspicuously close to the alchemist's athanor and *magnum opus*: "a sort of practical alchemy" (226).

Those secrets—alchemy—are densely represented in Clarke's account. Louisa, her father's research assistant—amanuensis—muse, is introduced as his "mystic sister" (83) or "soror mystica" (308), as Peronelle had been to her husband, Nicolas Flamel, or Teosebeia in ancient times to Zosimus.

²⁴ Lindsay Clarke, *The Chymical Wedding: A Romance* (London: Jonathan Cape, 1989).

When she contemplates Edwin Frere at the beginning of her fascination with him, she thinks of the description of Mercurius in the tract Aurelia occulta from volume 4 of the Theatrum chemicum (194). In a dream she sees her ancestor with his own soror mystica as he undertook the magnum opus through the stages of nigredo, albedo, and rubedo until the stone appeared (308–9). Gradually she realizes that *conjunctio* was "the central symbol which had proved the stumbling-stone of her work" (298). If she hoped to achieve her goal, "the reconciliation of Sol and Luna after the violence of their strife, the chymical wedding of Sulphur and Quicksilver," then she had to experience it personally and not simply comprehend it intellectually. In the love that unites her and Edwin Frere she recognizes the resolution of mind and body, of the Christian church and the Hermetic mystery, that was lost when the church "missed the opportunity to wed its spiritual vision with the natural magic of alchemic lore" (405). Christianity now had the chance to reunite the shattered human consciousness. Edwin, however, is incapable of making that leap. Torn apart by his longing for Louisa and his responsibility to the church, he emasculates himself with a razor and moves to a parish in the London slums. "Priest to both God and Goddess now, never again to be the lover of Louisa Agnew, he had become, and would for ever remain, her mystic brother" (471).

In the modern action, Edward Nesbit reads an antique volume illustrated by two winged figures—a female sprawling across a naked man with the caption FERMENTATIO (101). Inspired by that Hermetic illustration, Alex Darken sees in a dream a laboratory crowded with alchemistic apparatus and operated by an old man and a young woman in whom initially he recognizes Nesbit and Laura and then familiar strangers from the past, presumably Agnew and Louisa; while in a corner he becomes aware (as in the illustration) of two naked figures making love, whose "tender energy was gathered now into the still" (125). "That is the one true philosophical Pelican," the old alchemist announces. Elsewhere Nesbit explains to Alex the numerically coded name of Alchimia from Andreae's Chymical Wedding (160–1). When Alex confesses that he previously knew nothing about alchemy apart from Chaucer's mockery, Jonson's satire, and the conceits of the metaphysical poets, Nesbit explains its loftier esoteric meaning: "Alchemy is the effort to heal the split in consciousness" (165). Albeit mystical, it is both a science and an art. Relating it to Heisenberg's indeterminacy theory—that the observer and the observed belong to the same interactive field—he says that it "sees the world as a great dance of symbols. A delicate web of correspondences in which nothing is finally separable from everything else." He goes on to argue that alchemists have always known what physics has only recently discovered: "that matter is fissive" and that consciousness also splits (166). The central problem for the alchemists was "to realize a whole vision of life... One that reconciles matter with spirit, heart with mind, the female in us and the male, the darkness and the light... That was the Elixir, the Stone, the Gold," all of which are merely symbols for what cannot be expressed, only experienced, as in "the chymical wedding."

Edward introduces Alex to the *Smaragdine Tablet* of Hermes Trismegistus, which is cited in full, and explains to him that such terms as "psychic integration" are abstractions whereas a stone that turns all to gold is food for the imagination. "The rational intellect is side-stepped and one must look within" (218). He points out to the younger man that the language of alchemy is like poetry, in which "some experiences are communicable only through symbols"—a statement that he exemplifies with lavishly illustrated volumes of alchemy.

Gradually Alex begins to grasp the meaning of the Hermetic myth:

Like more orthodox Christians, the alchemists maintained that mankind had suffered a fall; but this lapse from grace was not seen merely as matter of original sin. It was a critical moment in the great experiment of Nature. It was the very access of consciousness—life's arrival at the moment where it might contemplate and shape its own existence. (222)

Rather than trust in the redemptive love of Christ, "the alchemists maintained that through the correct disciplines such a return might be made" (223). In his effort to understand he studies alchemistic texts with the older poet: Raymond Lully, Helvetius, Thomas Norton, Michael Sendivogius, and others (233–4).

When Alex leaves Munding, saying that he will miss the place very much, Nesbit tells him to take it with him, "carrying it invisibly inside, the way Louisa kept her secret" (537). When Alex insists on knowing the secret, Nesbit simply raises the index finger of his left hand and with the other sealed his lips: "the ancient gesture of the secret" (538):

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"Are you telling me the secret is there is no secret?"
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The work closes with a reproduction of that image of silence from the famous seventeenth-century French alchemistic text *Mutus liber* (539), which purports to explain alchemy through images alone.²⁵

[&]quot;Did I say anything so dull?"

[&]quot;I didn't hear you say anything at all."

[&]quot;Precisely."

²⁵ For further discussion see Liliana Sikorska, "Alchemy as Writing—Alchemy and Writing: A Study of Lindsay Clarke's *The Chymical Wedding*," in: *The Golden Egg: Alchemy in Art and Literature*, ed. Alexandra Lembert and Elmar Schenkel (Glienecke/Berlin: Galda

Along with Yourcenar's *The Abyss*, Clarke's "romance" is one of the most remarkable and knowledgeable fictions of alchemy. Although Clarke provides more scenes of actual alchemistic practice—notably in the dreams of Alex and Louisa and, symbolically, in Laura's ceramic practices—he, influenced like Yourcenar by Jung's interpretation (see his "Acknowledgments," 541), is interested essentially in the spiritual side of alchemy—in its significance for the individual and for society as a whole: the reunification of mind and matter, of spirit and nature, of Christianity and Hermeticism.

Peter Ackroyd's The House of Doctor Dee (1993) also employs a counterpoint of past and present. Like Clarke's The Chymical Wedding, it consists of alternating chapters although both here are cast in the first person, involving a historical figure from the past and a fictional hero in the London present. John Dee (1527–1608) was one of the most colorful and, at the same time, intellectually significant figures of the Renaissance. After having studied law, mathematics, and geography in Cambridge and on the continent (with Mercator, among others), he was imprisoned briefly in 1555 by Queen Mary on suspicion of lèse-majesté and witchcraft. During the reign of Queen Elizabeth, however, he enjoyed for a time considerable influence at court for his astrological prowess and served as a trusted advisor in navigational matters. Then in 1576 he met Edward Kelley, a dubious lawyer reputed to be a medium, with whom he conducted numerous séances, turning increasingly away from his earlier scientific pursuits and toward alchemy and magic. In 1583, with his wife and Kelley, he left England and went by way of Poland to the court of Emperor Rudolph II in Prague, where he remained until 1589. From 1595 until Queen Elizabeth's death in 1603 he served as prefect of Manchester College and then spent the last years of his life on his estate in the London district of Mortlake.

Ackroyd takes numerous liberties with the actual life of Dr Dee and covers much less of it than did Meyrink/Schmid Noerr in *The Angel of the Western Window*. The account, which relates nothing of the years in Prague, focuses on a single alleged episode according to which Edward Kelley moves into Dee's house, seemingly conjures up spirits of the dead, and provides tokens of a lost primeval city in Glastonbury—home of the race before the Flood—of whose existence Dee dreamed. But all this activity is undertaken simply to enable him to steal Dee's equipment and ideas and notably his secret studies regarding creation of a homunculus. Taking his books, he sets fire to the house and destroys all of Dee's work.

und Wilch, 2002), 81–100, which analyzes the novel as "a true case of hypertextuality" (98); and Meakin, *Hermetic Fictions*, 144–50.

Dee's story is set in counterpoint to the story of Matthew Palmer, a private researcher in London libraries, who inherits from his father a house with alchemically symbolic colors²⁶ that turns out to be the very house of Dr Dee. Matthew discovers that his divorced father had belonged to the John Dee Society, that he had practiced magic in that house, and that he had been long engaged in a homosexual affair and sexual rites with Daniel Moore, Matthew's closest friend. He also finds out that he was actually the adopted son of his presumed father. In the course of his investigations to learn more about the house he consults such works of scholarship as Frances Yates's *Giordano Bruno and the Hermetic Tradition* as well as Nicholas Clulee's *John Dee's Natural Philosophy* and finds that, despite their disagreements, "all my books conveyed the same central theme—that [Dee] stood upon that ground where the concerns of his age met and could not easily be distinguished" and that he "belonged to every time," from the Middle Ages to the present, anticipating the scientific revolution (132).²⁷

In the course of the parallel stories we hear a great deal about alchemy. Dee lists "the marvels within my books" $(64)^{28}$ —by Zoroaster, Orpheus, and Hermes Trismegistus as well as such later alchemists as Petrus Bonus, Cornelius Agrippa, Trithemius, and the *Splendor solis*. Dee boasts that he is "not some poor alchemist, newly set up, with scarcely enough money to buy beechen coals for my furnace" (75). Citing the famous dictum from the *Tabula smaragdina*—"what is above also lies below; what is below is also above"—he comprehends "the eternal connection" (77) linking the seven planets to "the seven alchemical doors, calcination, fixation, solution, distillation, sublimation, separation and projection." And he talks at length about his "rare and precious experiments." He goes to the theater and provides an alchemical interpretation of the speeches (113–16; written by Ackroyd for the purposes of the novel). He inscribes on the floor of his scrying room (for crystal gazing) magical characters from Cornelius Agrippa's *De mysteria mysteriorum* and the *Mutus liber* (183).

²⁶ Black, white, green, and red doors. See Alexandra Lembert, "The Eternal Return of the Same? A Comparison between Peter Ackroyd's *The House of Doctor Dee* and Gustav Meyrink's *Der Golem* and *Der Engel vom westlichen Fenster*," in: *The Golden Egg*, 101–14, here 102. "The house with its architecture and interior serves, therefore, as a metaphor for the psyche—both individual and collective—in which the borderlines between past and present are blurred and a linear understanding of time is dismissed."
²⁷ Elmar Schenkel, *Die Elixiere der Schrift: Alchemie und Literatur* (Eggingen: Edition

Elmar Schenkel, *Die Elixiere der Schrift: Alchemie und Literatur* (Eggingen: Edition Isele, 2003), 57, remarks perceptively that "the magus-figures who appear in these novels stand according to Jungian psychology for the attempts of the self to attain integration." While Schenkel is referring specifically to Ackroyd's novel and to Meyrink's earlier *Engel vom westlichen Fenster*, his remarks can be applied more generally.

²⁸ Peter Ackroyd, *The House of Doctor Dee* (London: Hamish Hamilton, 1993).

But his thoughts are primarily obsessed by the homunculus: "the secret which is a hundred thousand times finer, more pure and more exalted than the most fine alchemy: to create a being which lives and grows" (240). Hidden in the house, Matthew discovers "Doctor Dee's Recipe" (123) for creating the homunculus from sperm buried in a sealed glass in horse dung for forty days until it begins to breathe and move its limbs. (This is of course actually Paracelsus's formula.) Reading on, Matthew recognizes his father's handwriting as the text details the continued existence of the homunculus from the time of the Black Death through the centuries down to World War II and man's journey to the moon. Peering with Kelley into the crystal stone, Dee sees the birth of the homunculus re-enacted (195). This is the secret that Kelley allegedly steals from Dee.

During the first half of the novel the two lines are kept separate. But gradually the one obtrudes upon the other: at one point, for instance, Kelley seems to see in his crystal a conversation between Matthew and his friend Daniel (186). Elsewhere Matthew is repeatedly disturbed by visions of strange figures inside and outside his/Dr Dee's house. In fact, it is even suggested that he, the orphan of unknown parentage, is the eternal homunculus created by Dee. One of his mysterious visitors calls him "little man," which, as Daniel explains, means homunculus: "the word of the alchemist. It is the name of the creature formed by the magician, and grown within glass before it reaches its maturity" (266–7). When Matthew asks what that has to do with him, Daniel answers: "That's what you are, isn't it? A homunculus? That's what your father told me." Then Daniel vanishes himself, like one of Dee's specters.

Finally the two lines come together. At the beginning of his last chapter Matthew reflects: "So who in this world can make the dead speak? Who can see them in vision? That would be a form of magic—to bring the dead to life again, if only in the pages of a book" (258). In Dee's following narrative ("The Vision"), Dee is strolling through London, when suddenly he sees the London of the future, and seems to become Matthew Palmer. "You have been born again, John Dee," a voice calls out, "and will grow up in a city called London" (274). At that point the voice of Matthew—or is it Ackroyd?—takes over and says:

I do not understand how much of this history is known, and how much is my own invention. And what is the past, after all? Is it that which is created in the formal act of writing or does it have some substantial reality? Am I discovering it, or inventing it? Or could it be that I am discovering it within myself, so that it bears both the authenticity of surviving evidence and the immediacy of present intuition? *The House of Doctor Dee* itself leads me to that conclusion: no doubt you expect it to be written by the author whose

name appears on the cover and the title-page, but in fact many of the words and phrases are taken from John Dee himself.

On the final page Matthew sees John Dee and asks him to assist in a mystical enterprise:

Help me to create another bridge across two shores. And so join with me, in celebration. Come closer, come towards me so that we may become one. Then will London be redeemed, now and for ever, and all those with whom we dwell—living or dead—will become the mystical city universal. (277)

Ackroyd's novel, as well informed as Clarke's, communicates a nice sense of historical atmosphere and detail. And it introduces considerable information about alchemy, including an aspect that has been largely neglected since Goethe: the homunculus. But the esoteric meaning of alchemy is ultimately confused by the author's own speculations on the meaning of history and the conflation of past and present. Alchemy here is given a highly personal twist of interpretation, and the story moves from the level of realism into pure myth with the convergence of Dee and his homunculus Matthew in a timeless London.²⁹

Adam Williams's *The Book of the Alchemist* (2009) differs from the contrapuntal novels of Clarke and Ackroyd, as well as the earlier historical novels, to the extent that the "alchemist" here is not a post-medieval West-erner but, rather, a Jew writing in Arabic in eleventh-century Andalusia—at the time, that is, when the harmonious and intellectually exciting life of Christians, Jews, and Muslims was beginning to be disrupted by the expansionist ambitions of King Alfonso of Leon-Castile and the invasion of the Iberian peninsula by the Almoravids (Berbers), all enlivened by the colorful adventures of El Cid.

Samuel's first-person narrative, written retrospectively in 1097, recounts the lives of three boyhood friends united from 1063 to 1091 in what they call the Brotherhood of the Craft in the (imaginary) Andalusian kingdom of Mishkhat: Samuel, son of a rabbi, who becomes an alchemist and physician; Aziz, nephew of the king, who becomes the vizier, and then king; and Paladon, son of a mason, who becomes a brilliant architect. The complicated plot, which involves love, war, politics, faith, and betrayals, ends when Aziz has been killed by the Almoravid invaders along with his sister, Paladon's lover and wife; Paladon escapes with their son to parts unknown to build another temple; and Samuel eventually emigrates in search of the learning that initially brought the three of them together as boys and informed their friendship.

²⁹ Lembert, "The Eternal Return of the Same?" notes parallels between Ackroyd's novel and those of Meyrink, with special reference to the motif of the homunculus.

Samuel's manuscript, which reflects the disintegration of the peaceful world of their youth into a conflict of fanaticisms—what might be called social putrefactio—is discovered in 1938 in a Spain torn apart by war between the republicans and Franco's fascist nationalists by Enrique de los Reyos Pinzon, a medieval historian who served as minister of culture in the republic and now, as an idealistic socialist, is repelled both by the nationalists and the communists who have taken over his party. Arrested by a gang of communists, he and his young son along with a group of villagers are imprisoned as hostages in a lovely cathedral. It was erected centuries earlier, he discovers, over a handsome mosque designed and built by Paladon in an ancient cave known as the Niche of Light, which had earlier been a Christian shrine. There Samuel, on the eve of his exile, had hidden his memoirs in one of the pillars of the mosque. Samuel's writings, which Pinzon translates and reads to entertain his fellow prisoners, reveal the existence of a hidden passage from the mosque that enables his fellow prisoners, taking Pinzon's small son with them, to escape. Pinzon himself remains behind in a self-sacrificial act in order to prevent the communists from blowing up this monument to humanity.

The mosque, which had enshrined tolerance, had, like their beloved Republic, attracted the same unthinking hatred. Mishkhat's slide into factional hatred followed by mob violence was different only in degree from what had taken place in cities throughout the country at the beginning of the war. There had been the same fatal combination of good intentions, incompetence, malevolence and ambition. The military response had been equivalent.... Freedom had shrivelled and died. (269).³⁰

The two parts—Samuel's lengthy narrative and the much briefer third-person account of Pinzon's activity in 1938—display, despite the difference in narrated time, remarkable parallels, both in figures and plot and, especially, in theme. The novel is persuasive in its detailed description of life—intellectual, cultural, social—during the decades depicted. Samuel is very much an Arabic alchemist: that is to say, he is interested not in transforming base metals into gold but, rather, in the iatrochemical or medical properties of plants and stones and in the use of his elixirs to prepare effective medications. And he believes in the higher symbolism of alchemy. "As the alchemical process is a refining of essences defined in the dawn of Creation, so too is any human's brief existence on this earth predicated by what has gone before him" (55).

As a boy Samuel was educated by his father, the rabbi, who was interested in "the alchemy of plants" and taught him about "the distillation of

³⁰ Adam Williams, *The Book of the Alchemist* (London: Hodder & Stoughton, 2009).

medicines from the essence of plants" and took him on long walks in the countryside, where they gathered various plants (68–9). Later he learned from his father certain basic experiments:

to separate the three essentials, the physical salt, the spiritual mercury and the sulphur of the soul, that are to be found in every living organism, having emanated there through the elements of earth, water, air, fire, and the celestial salt and nitre present in the Prima Materia. These essentials, mixed in the appropriate way, produce the magisteries and ens tinctures that make up the alchemist's medicine and potions. (69)

He outlines the complicated processes and tools required to realize the theory: the various stages, the steady fire, the pipes and glassware. Soon more adept than his father, Samuel makes potions from plants for palsy, liver, and other ailments. By age fourteen he even dreamed about making the philosopher's stone (71) and, indeed, he writes that he had once succeeded in transmuting silver into a few ounces of gold. When later, as court physician, he is asked to demonstrate his alchemical skills for a visiting Christian delegation who knew nothing of the science but "tales of wizardry by which common stones were transformed into gold" (188), Samuel chose other transmutations: notably a soothing potion for epilepsy made from oil of iron and cinnabar with other mineral essences. "This, I thought, would brilliantly demonstrate to the Christians that, far from being a diabolic art, alchemy was a benign and useful tool of modern medicine" (189). (In fact, they consider it blasphemy—an imitation of Christ's miracles.)

We hear on several occasions about Samuel's preparation of medications by alchemical processes—from minerals as well as herbs. When his friend Paladon builds the lovely mosque in the cave, they imagine it to be "a microcosm of God's universe" according to astrological, numerological, and alchemical rules: each of the 365 pillars is fashioned "of different stone with different alchemical properties" (205) with vials of essence buried underneath. When Samuel, during a lengthy imprisonment, becomes mentally unstable and experiences repeated visions, he imagines that "Hermes Trismegistus came one day and set up his alchemical equipment to demonstrate to me an easier method for creating the philosopher's stone" (294). He has nothing but contempt for those who believe in charlatanry and who mock him, as when his one-time friend Aziz speaks of "establishing a department of alchemy" that he could head and turn the piles of granite left by Paladon into gold bars (228). But even the invading Christians, who want to destroy the Arabic civilization of Andalusia, respect his knowledge and plan to send him to Toledo along with his patron's library to "translate this so-called philosophy for the benefit of Christians" (344).

In general, however, almost all the references to alchemy concern medical alchemy, and Samuel presents himself principally in his role as a physician—both to royalty and to the common folk he treats. A non-believer in any of the three religions that surround him, he believes in "the divine fire of the Prime Mover" and resolves to "restore this family, and our brotherhood, by whatever alchemy it took" (323). It is this belief in a basic humanity that ties him, nine centuries later, to Pinzon with his faith in a humanity that transcends the political divisions of mankind and, albeit an atheist, gives his own life in order to save the great monument to humanity.

At the end of the day what was any man but his commitment to an idea? Ideas not only underlay civilisation. They were the spark of the divine, separating order from chaos, evoking a wonderful vision of eternal harmony and hope. It was simple, really. By preserving these stones, Pinzon, like Paladon and Samuel, would be ensuring that a small flame continued to shine in the enveloping darkness. (424)

In this section, finally, we should note "The Secrets of the Immortal Nicholas Flamel" (2007–12), a series of six bestselling and widely translated fantasy novels for youthful readers by Michael Scott. The novels feature fifteen-year-old twins in the present day, one of whom works in a bookstore owned by Nick and Perry Fleming, who turn out to be none other than Nicholas Flamel and his wife, Perenelle. The plot revolves around the efforts of Dr John Dee to steal the ancient codex containing the secret recipe for their elixir. The twins' adventurous attempts to defeat him lead them around the world and to encounters with Gilgamesh, Prometheus, and other figures, both mythic and historic.

ALCHEMY IN THE PRESENT

While Lindsay Clarke, Peter Ackroyd, and Adam Williams introduce alchemy into the present indirectly through temporal counterpoint, other writers, such as Leslie Whitten in *The Alchemist* (1973), find reasons for alchemy to take place directly in our time. On the surface we are dealing here with a typical D.C. novel with political schemes and scandals and lots of explicit sex. Martin Dobecker, a lawyer in the Department of Labor, catches the eye of the seductive Anita Tockbridge, an ambitious official in the Department of Health, Education, and Welfare who becomes Assistant Secretary of Labor and, through her intimate friendship with the Vice President, seems to be the obvious candidate for Secretary of Labor. Martin and Anita use their guile and sexual skills to promote their professional interests until their schemes explode.

Alchemy enters the novel in various ways. Martin, initially a loner interested in "beautiful, useless things" (242)31 such as Ming china, Baudelaire, and opera, is constructing rather clumsily in his basement an alchemical furnace, Athanor, which is described elaborately and diagrammed in the text (32). Following the instructions of Ramon Lull, he hopes to produce a philosopher's stone or "pelican," which "would, in theory, make me a wiser, better man as well as a rich one" (33). Later he and a girlfriend drunkenly—"The Philosophers are stoned" (165)—try out the apparatus with water to see if the condensation of matter in the alembic works. Finally he experiments with two gold wedding rings and a chip of silver, which he distills seven times—"the seven magical words of medieval occultism" (363)—and determines that it doesn't work. "This was the Philosopher's Stone: nothing...an uncohesive creation, tints of gold on the leaden, blackened surface, and the bright gold within" (364). In the process, however, Martin discovers that "I had undergone an alchemical change" (315), which motivates him to begin a new life away from the political corruption of the capitol.

Alchemy is only one among the manifold occult practices that preoccupy the important Washington figures. The Austrian ambassador conducts black masses at his home, where he also, for purposes of blackmail, secretly films other political leaders in illicit sex acts. Anita shares Martin's interest in the arcane, and in the course of the novel we hear of fortune telling by Tarot cards as well as the legends of such mystics as Faustus, Paracelsus, and Rabbi Lwov. But alchemy is by all measures the principal occult practice in the novel and provides, with its false promises of gold (money), an appropriate image for Washington politics. Although the chemical transmutation that Martin attempts in his basement athanor doesn't succeed, the spiritual transformation that constitutes the goal of the true alchemist is achieved.

Robertson Davies's *The Rebel Angels* (1981) is not a political novel but, rather, a witty, erudite university novel set in Toronto. The plot revolves around a lovely graduate student—half Polish nobility, half gypsy—and three professors who are obsessed with her. Their story is related in two alternating first-person narratives: by Maria Theotoky herself and by Simon Darcourt, her professor for New Testament Greek and an Anglican priest, who loves her as his Sophia.

Alchemy enters the novel only indirectly, along with Gnosis, Kabbalah, and other esoteric matters, because the entire plot is saturated with medieval and Renaissance material. The title refers to the apocryphal

³¹ Leslie H. Whitten, *The Alchemist* (New York: Charterhouse, 1973).

story of the rebel angels who betrayed secrets of heaven to King Solomon—like Maria's professors, who have established "what Paracelsus calls The Second Paradise of Learning" (277),³² and which provides the subtitle for the sections written by Maria.

Maria's major professor, Hollier (paleo-psychology), has on top of a bookcase in his room "a large alchemist's retort, of the kind that looks like an abstract sculpture of a pelican" (7). Hollier, who is interested in "Filth Therapy," sends Maria to consult Froats, a professor of biology who investigates human excrement:

"It's astonishingly similar to alchemy in basic principle—the recognition of what is of worth in that which is scorned by the unseeing. The alchemist's long quest for the Stone, and the biblical stone which the builders refused becoming the headstone of the corner.... the *lapis angularis* of the Alchemical Cross, and the stone of the *fil[i]us macrocosmi* which was Christ, the Wholly Good." (82)

Froats himself is "a latter-day alchemist; he seeks the all-conquering Stone of the Philosophers exactly where they said it must be sought, in the commonest, most neglected, most despised" (157). Hollier explains that the bain-marie or kitchen water bath was invented by Maria Prophetissa, "the greatest of the women-alchemists" originally as "one of the surviving alchemical instruments" (152).

Another figure, the renegade scholar and priest Parlabane, says: "This is like an alchemist's chamber in some quiet medieval university. And fully equipped! Here is the great scholar himself, Clement Hollier. And here are you, that inescapable necessity of the alchemist, his *soror mystica*, his scholarly girlfriend, to put it in modern terms" (p. 11). Parlabane, who sponges off his friends, calls himself Hollier's famulus.

Maria herself is writing her dissertation on Rabelais. The plot involves a lost manuscript, and alleged letters to Paracelsus, revealing that Rabelais was "if not a Cabbalist at least a student of Cabbala, and if not an alchemist at least a student of alchemy" (92). Hollier believes that it will provide exciting material for Maria's dissertation. "What new light he expected on Rabelais and Paracelsus I could not guess; he dropped hints about Gnosticism, or some sort of crypto-protestantism, or mystical alchemy, about herbal cures, or new insights into the link between soul and body that were counterparts of the knowledge Ozy Froats was so patiently seeking."

Darcourt, the most balanced of Maria's three admirers, is suspicious of "alchemists and detrimentals of that sort" (p. 37). He ultimately

³² Robertson Davies, *The Rebel Angels* (New York: Viking, 1981).

renounces his own love and performs the wedding ceremony when Maria marries her young lover.

While Davies's novel is not *about* alchemy and while there is no suggestion that Maria's marriage is a "chymical wedding," the Hermetic art provides a leading sub-theme in a work depicting a humorous contemporary counterpart to the universities and laboratories of a past when all self-respecting intellectuals professed an interest in alchemy.³³

With Hilary Mantel's *Fludd* (1989) we move from university society in Toronto to a small Catholic community in England featuring a priest who has lost his faith, a convent of malicious nuns, a gathering of skeptical parishioners, and all the ingredients of a proper English satire. Everything changes when a man named Fludd appears to serve as the priest's new curate. Fludd is identified in a preliminary note as the modern counterpart of "the real Fludd...a physician, scholar and alchemist." Robert Fludd (1574–1637) was a younger contemporary of John Dee, received his MA at St John's College, Oxford, and, following extensive travels on the continent, returned there for his doctorate in medicine.³⁴ As a member of the Royal College of Physicians in London, he conducted a successful medical practice and corresponded with leading scientists of his age. At the same time, an early advocate of the Rosicrucians, he carried out in his laboratory experiments in alchemy, in which he saw the secret to the understanding of nature.

Here we are not dealing with temporal counterpoint, as in *The House of Doctor Dee*. Instead we are asked to believe that Curate Fludd is actually identical with the historical alchemist.

But times have changed. "Can it be, he thought, that the transformative process is already underway? In these days, he no longer worked in metal, but practised on human nature; an art less predictable, more gratifying, more dangerous" (104).³⁵ Consequently, he conducts no alchemical experiments and the book contains only a few passing allusions to alchemy, but his very presence enables individuals in the parish—principally Philomena, the novitiate nun whom he liberates and sets on her way to a new life with a supply of "gold"—to find themselves.

Initially he is discouraged by his mission. "I am breaking down, he thought, dissolving into destruction and despair; this is my *nigredo*, this is the darkest night of my soul. Just as the statues lie in their shallow graves,

³³ See also Shane C. Walters, "From Alchemy to the Union of Root and Crown in Robertson Davies' *The Rebel Angels*," http://www.alchemywebsite.com/shane_walters.html, retrieved June 20, 2012.

Antonio Clericuzio, "Fludd, Robert," in: *Alchemie*, 139–40.
 Hilary Mantel, *Fludd* (New York: Viking, 1989).

taking on the hue of the soil and the smell of mortification, so my spirit is buried, walled in with corrupting agents" (78). Elsewhere he explains to Philomena what was before Creation: "There was the *prima materia*, without dimension or quality, neither large nor small, without properties or inclinations, neither moving nor still" (102).

"In my former trade, a trade which I seem to have forgotten now, or at least I have lost my touch with it, there was a business which we called the *nigredo*, which is a process of blackening, of corruption, of mortification, of breakdown. Then there is a process we call the *albedo*. It is a whitening." (106)

The weird conversation causes Philomena to experience strange dreams: "Nigredo, a huge blackamoor, offered her a cigarette from a silver case. Albedo, an angel, lit it for her" (112). At their final encounter, when Fludd has rescued her from the convent and before his final disappearance—presumably off into another time and place—he tells her: "Because in the work of transformation, there are conditions of success. The art requires the whole man; and besides the alembics and retorts, the furnace and the charcoal, there must be knowledge and faith, gentle speech and good works. And then when all of these are brought together, there must be one further thing, guarantor of all the rest: there must be silence" (178).

Again, then, we encounter the same spiritual transmutation that characterizes alchemy when it occurs in modern fictions. But here a timeless Fludd seemingly appears in the reality of the present and not simply, like John Dee in Clarke's novel, as a vividly imagined presence.

Umberto Eco's Foucault's Pendulum (Il pendolo di Foucault, 1988) is often cited in this context because his brilliant fictionalization of conspiracy theory in the late twentieth century inevitably involves alchemy along with other occult practices. The basically simple plot of the vast work involves three friends, editors at a publishing house in Milan. Amazed by the submissions received for two new series on the occult, they concoct as a private joke a conspiracy theory of their own in order "to transform into fantasized reality that fantasy that others wanted to be real" (337).³⁶ Playing cleverly with numerological and orthographical tricks, they establish far-fetched connections linking the Knights Templar to other world conspiracies, from the Rosicrucians, Jesuits, and Freemasons down to the Elders of Zion. As they become more obsessively involved with their game, they begin for their respective reasons—ambition, religious mysticism, intellectual curiosity—to believe in its reality. When they claim to have discovered secret knowledge, they are blackmailed by members of an

³⁶ Umberto Eco, *Foucault's Pendulum*, trans. William Weaver (1989; New York: Ballantine, 1997).

actual conspiracy that mirrors their own project, who frame one of the editors as a terrorist. When he refuses—since no such document exists—the conspirators hang him from the famous pendulum of the title (in the Conservatoire des Arts et Métiers in Paris). One of his friends, who has been helplessly observing the proceedings in secret, flees back to Milan, where he writes down the story as we have read it and awaits what he is convinced will be his inevitable murder by the conspirators.

This relatively straightforward plot is interrupted by numerous episodes, including elaborate histories of the Knights Templar, the Rosicrucian Manifestos, the establishment of the Freemasons, and the hoax of the Protocols of the Elders of Zion. It also contains references and allusions to other literary works by such writers as Borges, Flaubert, and Eugene Sue; and notably epigraphs (heading many of the 120 chapters) from familiar alchemistic works by Trithemius, Paracelsus, Robert Fludd, Michael Maier, and others. Johann Valentin Andreae plays a more central role than any other because the editors' enterprise—the invention of a fake conspiracy—is linked explicitly to Andreae's invention (in his wholly fictional Fama) of the Rosicrucian order. His Chymical Wedding holds a special position. Quotations from it are taken as the epigraphs for several chapters (9, 56, 57, 104, 119). The most conspicuous use occurs, however, when the three editors visit a castle outside Turin, where they have been invited to attend an alchemical celebration. The ceremony, which is described in detail (chapter 58), turns out to be a precise re-enactment of the wedding in Andreae's fiction, where the three royal couples are beheaded, and then of the succeeding alchemistic procedure, in which an egg is generated in a golden sphere, then a bird decapitated and reduced to ashes, which in turn are baked in a mold from which the figures of a youth and maiden appear.

Yet despite its importance as the model for a single fascinating chapter, alchemy is not structurally so important for the novel as, for instance, the numerology of the Kabbalah (which determines the number of its ten major divisions) or of the Rosicrucians (which determines the number of its 120 chapters). It does not have the same larger significance as does Flaubert's *Bouvard et Pécuchet*, which initially gave Eco the idea of devoting a work to "occult idiocy." Nor is Eco interested, as are most other authors of recent alchemistic works, in esoteric alchemy as a process of individual development. In this novel, which constitutes a veritable compendium of the occult, alchemy is simply another knowledgeably composed entry.

³⁷ Umberto Eco, "Borges and My Anxiety of Influence," in his: *On Literature*, trans. Martin McLaughlin (Orlando: Harcourt, 2004), 118–35, here 125.

The German writer Uta Treder, who teaches German cultural history at several Italian universities, has written popular works on Kafka, Schiller, and German Baroque drama for Italian readers as well as a series of novels in German, including Die Alchemistin (1993),38 with a pronounced feminist orientation. Alchemy is introduced late into the plotless story, which revolves around the weird behavior of a group of bizarre figures interacting at a German research library based clearly (though not explicitly) on the famous Herzog August Bibliothek in Wolfenbüttel. Alchemy occurs only midway into the otherwise disjointed text when several manuscripts, attributed to Maria Prophetessa—the early female alchemist first cited by the third-century alchemist Zosimas—appear mysteriously among the papers consulted by the narrator, whose name, as we learn in the concluding sentence, is Adriana or, after her maternal greatgrandmother, Hebrew Miriam. The manuscripts are allegedly autobiographical accounts (with no factual basis) by Maria Prophetessa, the sister of Moses and Aaron, of her life in ancient Egypt, her seven daughters, and her creation of the philosopher's stone. Her appearance justifies the occasional use of alchemical terms to describe the relationships between characters in the present: as "an alchemy of fusion" and "a chymical wedding" (117, 121). Otherwise the plot, ending when the various figures all leave the library, has absolutely nothing to do with alchemy, which is introduced without explanation or any further justification than the implied spiritual communion between the narrator and Maria Prophetessa essentially as a device to hold together the episodic text.

Like Treder's novel, Jeremy Dronfield's *The Alchemist's Apprentice* (2001) barely belongs to this category. The title of this intricate experimental fiction refers to a novel—"one of the biggest—if not *the* biggest—publishing bonanzas of the '90s" (5). But the author, Maddy Rhodes, has disappeared (if he ever existed), and only one copy of the book is left (if indeed it was ever published). No one except Jeremy Dronfield remembers the book or its author. All of this is very much beside the point, for only one brief passage of the alleged novel's text is included (200–5), and that is the only place in the entire work in which alchemy plays a role.

Allegedly "the story of a Jewish family who flee Germany just before the War and fetch up on Malta," it focuses on "the friendship between the twelve-year-old daughter and an elderly Algerian Fakir and alchemist" (5). In an attempt to explain to her what alchemy is, Izzat shows Rebecca a beautifully illustrated manuscript written by his grandfather. Then he shows her the table on which his own implements are arrayed: "Jeroboams,

³⁸ Uta Treder, *Die Alchemistin* (Frankfurt am Main: Insel, 1993).

retorts, flacons, tubes and pipes; dishes of porcelain and glass, bottles stoppered with wax seal; all arranged about the centerpiece—a great alembic of copper and glass, as tall as a man, and mounted upon a tripod over a polished brass spirit stove" (201). As Rebecca watches in fascination, he carries out an experiment described in detail (202–4), filling the alembic with earth, air, and water and, finally, some purple crystals and drops of a clear fluid. Each time he takes the residues, mixes them in a mortar, and places them in the alembic along with three base elements discovered by his ancestors: lead, amber, and salt. After much bubbling and hissing, the process reaches its conclusion: Izzat opens the chamber and lifts out a small pearl that Rebecca recognizes as gold. But he tosses it in the air, catches it in his hands, and shows her that there is nothing but a white powder:

"You think gold can be created so easily? Pah! You know how long it takes to create that quantity of pure gold?" Rebecca shook her head dumbly. "Five years! Five years of sweat and toil, five years of careful separation, distillation and rectification. One tiny little error and poof! all is gone, and you must begin again. This is your first lesson, apprentice; that the beginning and end of alchemy is patience." (204)

Otherwise Dronfield's novel has nothing to say about alchemy, which is used simply as a metaphor for writing, as in the poems of Baudelaire and Rimbaud:

Perversely, it occurred to him that a writer was more like a reverse alchemist, changing the gold of life into the base metal of words, but that wasn't the truth. Words were the base metal, life was the reagent, and writing was the gold. Illusory gold perhaps, gold that would collapse into dust under pressure, but while it lasted it would glitter brighter than oily yellow life. (204–5)

The fact that Dronfield's fiction incorporates into his primary novel, in which alchemy is simply a metaphor for literature, a brief selection from a work entitled "The Alchemist's Apprentice," in which an actual alchemical experiment is depicted, distinguishes this novel from the fourth and final category, in which alchemy is nothing but a metaphor.

ALCHEMY AS METAPHOR

By any measure, one of the oddest works of postwar European literature is Michel Butor's *Portrait of the Artist as a Young Ape (Portrait de l'artiste en jeune singe*, 1967). The title, apart from its obvious parody of James Joyce's *Portrait of the Artist as a Young Man* (1916) and its allusion to Dylan Thomas's *Portrait of the Artist as a Young Dog* (1940), also announces its alchemical motif. We learn from the epigraph to the main section that

"In Egypt, the god of writing, Thoth, was often portrayed as an ape" (29).³⁹ Since Thoth was the Egyptian aspect of Hermes Trismegistus, he—and through him the title—exemplifies a clear reference to alchemy.⁴⁰

Butor's "caprice" is a semi-autobiographical fiction based loosely on his sojourn as a young man in the summer of 1950 in the commanding Castle Harburg in northwestern Bavaria. Butor had developed an early interest in alchemy, an interest intensified by the writings of André Breton and the Surrealists, who introduced him to Fulcanelli's The Philosophic Abodes (which has a prominent role in his caprice). By 1953 Butor was so familiar with the subject that he was able to write an insightful article, "Alchemy and its Language,"41 arguing that alchemy is not simply badly understood chemistry. "The alchemical books seek to recover not technical formulas but philosophical and mystical doctrines" (13). The study of these works, which amount to "new variations" on a delicately reconstituted common theme, belongs to the history of science as well as religion. The seeming difficulty of the language and images is essential "because it's a question of transforming the mentality of the reader in order to render him capable of perceiving the meaning of the described acts" (17). Butor's "caprice" seeks to accomplish something similar.⁴²

While the five chapters of the "Prelude" constitute a reasonably straightforward narrative, the main section recounting Butor's sojourn as a young man in a castle in the "Holy Empire" gradually evolves into a phantasmagoria in which the narrative is increasingly interspersed with quotations from various alchemical works, from *The 1001 Nights* and other literary works, and from guidebook descriptions of executions carried out formerly in Castle H—. (The theme of death and rebirth is introduced through these grisly descriptions.) These narrative chapters, in turn, are interwoven with the seven parts of the author's continuous fairytale-like dream during his seven weeks at the castle.⁴³ There are

³⁹ Michel Butor, *Portrait of the Artist as a Young Ape: A Caprice*, trans. Dominic Di Bernardi (Normal, IL: Dalkey Archive Press, 1995).

⁴⁰ A writer as well read as Butor was probably familiar also with the excursus on "The Ape as Metaphor" in Ernst Robert Curtius, *Europäische Literatur und Lateinisches Mittelalter* (1948; 2nd edn Bern: Francke, 1954), 522–3, where over two dozen examples are cited.

cited.

41 "L'Alchimie et son langage," in: Michel Butor, *Répertoire: Études et conférences,* 1948–1959, vol. 1 (Paris: Éditions de Minuit, 1960), 12–19.

⁴² Jennifer Waelti-Walters, *Michel Butor: A Study of his View of the World and a Panorama of his Work, 1954–1974* (Victoria, BC: Sono Nis Press, 1977), 96, says with some justification that the essay "holds the key" to the novel by initiating the reader into "levels of meaning and the care with which a text must be studied."

⁴³ Wolfgang Hübner, Michel Butor auf der Harburg: Untersuchungen zu "Portrait de l'artiste en jeune singe" (Munich: Ernst Vögel, 1987), 11, suggests plausibly that the work actually requires a line-by-line commentary to identify and explain the hundreds of

detailed descriptions of mineral collections and a portrait gallery that contains, among others, the depiction of "an alchemist said to have lived in the fifteenth century" (87); mention of a trip to Munich and the actual 1950 performance there of Marlowe's *Faustus* as acted by Orson Welles with music by Duke Ellington; and depictions of fresco paintings of seven Greek deities that Butor studied on the occasion of a visit to the popular tourist destination of Castle Weissenstein in Pommersfelden.⁴⁴

The motif of alchemy is introduced in the opening pages when Butor he appears under his own name in the caprice—describes the demeanor of an older friend, Doctor H—: "like an alchemist bent over his athanor" (11). Doctor H—, a Hungarian refugee in Paris who was required, "in order to practice medicine in France, to present a new thesis, on Paracelsus, on whom he was a leading authority" (13), lived there in an apartment crammed with books on alchemy, which he lent to Butor. That was not, we learn, the author's first exposure to alchemy. During World War II he spent holidays with his family at his grandmother's house in the French countryside, which contained a vast library that the children were invited to dust: a library boasting, among other works, an anthology with tracts by such alchemists as Artephius, Flamel, and Synesius as well as a treatise by George Ripley from which he quotes and whose ornate illustrations he describes (15-18). A chapter depicting a symposium of intellectuals outside Paris, where he first meets Doctor H—, is headed Turba philosophorum, after the title of the famous medieval Latin discourses (first published 1572) in which Plato, Pythagoras, and other early philosophers (allegedly alchemists) dispute.

When he arrives by invitation at the castle in Bavaria, he discovers that it contains the second largest private library in Germany. There, on a shelf of books on alchemy, he finds Michael Maier's *Musaeum Hermeticum* along with other works (43). The allegorical dreams (printed in italics, to set them off from the main narrative) betray the influence of *The 1001 Nights* (notably the Second Calendar's tale), 45 Ovid's *Metamorphoses*, and Apuleius's *Metamorphoses* (more commonly known as *The Golden Ass*), in which the hero, Lucius, is transformed for a time into a ass. 46 In those

references and allusions. For many of these references see also Jennifer Waelti-Walters, *Michel Butor*, 66–72, 119–32, and *passim*, which essentially recapitulates the principal findings of her earlier *Alchimie et littérature: Étude de "Portrait de l'artiste en jeune singe" de Michel Butor* (Paris: Éditions Denoël, 1975). See also Meakin, *Hermetic Fictions*, 174–97.

⁴⁴ See Hübner, *Michel Butor auf der Harburg*, 56–70, where the seven ceiling paintings are reproduced and discussed.

⁴⁵ On *The 1001 Nights* see Waelti-Walters, *Michel Butor*, 67 and *passim*.

⁴⁶ On the influence of Ovid and Apuleius see Hübner, *Michel Butor auf der Harburg*, 75–8.

dreams he meets a girl who presents herself as the daughter of the modern alchemist Fulcanelli, and a vampire transforms him into an ape that is ultimately changed back into his original shape because it can write beautiful calligraphic scripts (Thoth!).

In all of this, however, there is no alchemy as such: no laboratory (apart from the ancient one in the castle), no experiments, and no chemicals. Indeed, after the opening chapters the alchemy motif is reduced in importance in comparison with astrology, numerology, and classical mythology. 47 Alchemy is purely metaphorical: the number seven, for instance, plays a prominent role (the seven weeks of his sojourn, the seven chapters of the fairy tale, the seven ceiling paintings of Greek deities, among others).⁴⁸ Describing the visions he enjoyed on his afternoon walks around the village and its castle, he writes: "Alchemical is the word for those strolls of mine, colored by my readings in the huge library" (80)—alchemical because then his multifarious impressions are reassembled kaleidoscopically. As Butor put it in the last lines of his earlier essay: "The reader who wishes to understand the use of a single word in a specific passage is able to succeed only by reconstituting little by little an entire intellectual architecture."49

Accordingly, alchemy is an appropriate term with which to characterize Butor's effort, in this work and in the dreams encapsulated within it, to synthesize—solve et coagula!—the riot of discrete impressions, natural and intellectual, that thrust themselves upon his mind and imagination during his sojourn at the exotic castle. Following this alchemistic apprenticeship, the caprice ends with an "Envoi: The Other Journey," which has no text but only an epigraph: "After that, how could I fail to embark for Egypt at the first opportunity?" (123)—surely a metaphor for setting forth on his newly discovered career as an adept/writer.⁵⁰

Margaret Doody's *The Alchemists* (1980), despite its title, has absolutely nothing to do with alchemy—apart from an epigraph from Jonson's The Alchemist. 51 The title of this academic parody, which is set in Oxford of the mid-1960s, refers to a young threesome in North Oxford—Paul, Valeria, and Tony—who, like Jonson's Canon, support themselves as con artists. They write papers on demand for tutorials, run a betting agency, maintain a kind of secret brothel by inviting girls to parties at which the young men have paid for their company, and—the only

⁴⁷ See especially Hübner's incisive study, Marcel Butor auf der Harburg.

Waelti-Walters, *Michel Butor* (69), stresses the structural significance of the alchemistically significant number seven.

Butor, "L'Alchimie et son langage," 19.
 Thomas D. O'Donnell, "Michel Butor and the Tradition of Alchemy," *International* Fiction Review 2 (1975): 150-3, here 151.

Margaret Doody, *The Alchemists* (London: Bodley Head, 1980).

alchemy in the book—plying them all with a home-made aphrodisiac called *Quam celerrime* ("as rapidly as possible"). They also sell trivial manuscripts under false names and false stories to the newspapers. At the end they are unmasked in a big scandal and depart in their various unknown directions.

In Mark Illis's *The Alchemist* (1990), which more closely resembles Butor's autobiographical caprice than any other work, the fictional recollections of an aspiring writer about his boyhood—which involves various colorful figures, some of whom turn out to be the same person in disguise—alchemy simply provides an image for his thoughts. At a birthday party the children are entertained by a magician calling himself "the Great Pretender" and also, along with other names, "the Alchemist" (14).⁵² His final trick, changing lead to gold, leads to the precept: "Gold is the key to many doors" (16). After that we hear only sporadically about alchemy. A family friend, a confectioner (who is actually identical with the magician), tells the boy that the confectioner's art is found on the search for the Perfect Sweet. "You must not get bogged down in too straitened a definition of the word 'Alchemy', Billy. It is a wonderfully broad and encompassing, in fact an *engulfing* word. We shall call it the making of something golden from mundane or unpromising materials" (21).

He tries to make "golden sweets" in a friend's kitchen. Later, he discovers an old chemistry set with which he attempts, unsuccessfully, to transform a lead soldier into gold (97–100). As an adult he recalls that "my mother had taken seriously the exchanges between my father and myself, about alchemy. New conditions, new ingredients, a new outcome" (229), deciding as a result to forgo conventional behavior. As he ends his story, he thinks: "My own alchemical experiment, the long process, has also gone wrong. . . . I am coining the money, no problem, but something, some vital part of the process, has failed to happen" (243–4). Again, then, alchemy turns out to be the traditional metaphor for personal development and, as in Butor's work, for the writer.

What accounts for this conspicuous interest in alchemy and alchemists among writers of the recent present, whether in historical novels, in the counterpoint of past and present, in modern society, or as metaphor? The novelists are not alone, of course, in this obsession. Like Baudelaire and Rimbaud before them, Robert Duncan and Ted Hughes are conspicuously attracted to alchemical images in their poetry, although the figure of the alchemist is not prominent in their poems.⁵³

⁵² Mark Illis, *The Alchemist* (London: Bloomsbury, 1990).

⁵³ See Timothy Materer, *Modernist Alchemy: Poetry and the Occult* (Ithaca, NY: Cornell University Press, 1995).

Various reasons have been advanced. Stanton J. Linden has suggested the importance of Frances Yates's controversial study of Giordano Bruno and the Hermetic Tradition (1964) as a catalyst, at least among students of the Renaissance.⁵⁴ Claus Priesner cites Jung's interpretation of alchemy and its images as manifestations of archetypes and the collective unconscious as reasons for its appeal to those interested in its esoteric meaning⁵⁵—an argument supported by Marguerite Yourcenar and Lindsay Clarke in the afterwords to their respective novels and by Evan S. Connell's epigraph. Mircea Eliade noted that in a nineteenth century that cultivated the physico-chemical sciences, whose discoveries were rapidly applied to the increasing industrialization of mines and oil deposits, "man succeeded in supplanting Time." 56 To that extent "the alchemists, in their desire to supersede Time, anticipated what is in fact the essence of the ideology of the modern world"—a view implicit in several of the works considered above. Karen Pinkus concludes her study with the statement: "I posit ambivalence as a key to thinking about alchemy,"57 by which she means many things, including the modern ambivalence about alchemy itself—a view expressed in the novels based on the counterpoint of past and present as well as those introducing alchemy into the present. The editors of the German lexicon Alchemie see in the recent fascination a "skepticism vis-à-vis the rational sciences and so-called technical progress": a skepticism that views alchemy as a metaphor for an "integrated" ("ganzheitlich") method of knowing nature and oneself and "as a counter-model to a rational natural science and technology that is often felt to be dangerous and destructive."58 Elmar Schenkel goes so far as to see all literature as "distillation." All writing, as well as every creative process, can be reduced to the alchemistic formula solve et coagula.⁵⁹ "In writing itself something new emerges, something that was not previously visible"—a theory advanced, as we saw, by Michel Butor, Mark Illis, and others.

All these reasons, ultimately, can be understood within the broader context of the twentieth-century loss of faith and the search for viable substitutes to take its place. Alongside such surrogates as art, Eastern

⁵⁴ Mystical Metal of Gold: Essays on Alchemy and Renaissance Culture, ed. Stanton J. Linden (New York: AMS Prress, 2007), vii.

Claus Priesner, Geschichte der Alchemie (Munich: Beck, 2011), 122–3.

⁵⁶ Mircea Eliade, *The Forge and the Crucible*, 2nd edn, trans. Stephen Corrin (Chicago: University of Chicago Press, 1978), 173.

⁵⁷ Karen Pinkus, *Alchemical Mercury: A Theory of Ambivalence* (Stanford, CA: Stanford University Press, 2010), 173.

⁵⁸ Alchemie: Lexikon einer hermetischen Wissenschaft, ed. Claus Priesner and Karin Figala (Munich: Beck, 1998), 7.

⁵⁹ Schenkel, Die Elixiere der Schrift: Alchemie und Literatur, 61.

mysticism, political ideologies, myth, and utopia, which attracted many writers and thinkers in the early twentieth century,⁶⁰ we can now also locate alchemy. For, as we saw repeatedly, the figures in our novels almost inevitably turn to alchemy to fill a perceived gap in their lives: whether Alex Darken in his Norfolk village searching for the secrets of the Agnew father and daughter, Martin Dobecker building an athanor in his Washington basement, or Michel Butor perusing the library in a Bavarian castle.

⁶⁰ Theodore Ziolkowski, *Modes of Faith: Secular Surrogates for Lost Religious Belief* (Chicago: University of Chicago Press, 2007).

Conclusion, or Quinta Essentia

If our literary *magnum opus* has not generated the philosopher's stone, it has produced at least a residue of essential points that we may now summarize.

First and foremost, a clear line of development emerged in literary treatments of the figure of the alchemist: from satirization through gradual stages of spiritualization to its inevitable trivialization by popularization. These stages mirror in precise inversion public attitudes toward alchemy in general. During its period of greatest influence and credibility in the West, from the twelfth through the sixteenth century, writers from Dante to Ben Jonson felt the need to expose what they regarded as the widespread chicanery and fraud associated with alchemists. As alchemy was gradually discredited and displaced in the seventeenth and eighteenth centuries by modern chemistry and science, the figure of the alchemist virtually disappeared from literature. But images based on alchemy—images retained because they were familiar but no longer suffered from the association with fraud or charlatanry—remained popular in poetry from Shakespeare down through the religious poetry of Pietism.

At that point, when the practicing alchemist was only still a memory or had retreated into the seclusion of secret laboratories, the figure underwent a gradual process of rehabilitation as writers turned to it anew, focusing now not on the fraudulent operations of charlatans but on the esoteric speculations that motivated alchemists idealized through their spiritual efforts. This development, evident first in the alchemist's desire to help humanity, was later embodied in the figure of the alchemist as poet. Subsequently the alchemist and his processes were believed more generally to exemplify human psychological character or Jungian archetypes. But as the figure achieved this kind of redemption through sublimation, it became available once more for a popularization that often led to trivialization (as in the many examples cited in the first paragraph of Chapter 1 and several of the works discussed in Chapter 7). In sum, when alchemy, either exoteric or esoteric, is strong, writers are tempted to satirize or trivialize it; when public interest wanes, they seek to give it new meaning through interiorization. In any case, literary views of the alchemist vary in a direct inverse proportion to cultural—and not only scientific!—attitudes toward alchemy.

This process is essentially consistent with the initial stages described more sketchily by Elmar Schenkel in his stimulating essay, which begins with satire and then moves through the "Pietistic-Rosicrucian milieu" to Goethe and Mary Shelley. At that point Schenkel states that, following its liberation from the history of science, alchemy set out on an inner path with many aspects, which he illustrates with reference to a variety of positions that are often quite remote from the alchemists with whom we have been concerned: experimenters with narcotics from De Quincey to Aldous Huxley and Ernst Jünger; space travelers in the fictions of H. G. Wells; such artists as Kandinsky, Marcel Duchamp, and Mondrian, who explore alchemical images in their paintings; even Virginia Woolf's "room of her own" as the feminist's laboratory and Joyce as an alchemist of language in Finnegans Wake. Following brief remarks on Jung, Meyrink, and a few other writers discussed in the preceding chapters, Schenkel concludes with the observation that the alchemist's formula solve et coaqula applies to writing as well as to every creative activity, all of which begin with a return to chaos, which is then reshaped into a new order that releases its own elixir. "Literary alchemy knows no end" (62). Apart from Schenkel, I am unaware of any studies that focus on the figure of the alchemist—or, for that matter, on alchemy generally—in literary works over the entire period from Dante to the present. (In my Preface and notes I have cited various studies that concentrate on specific periods and individual writers.)

In the course of the preceding chapters certain patterns emerged in addition to the general shift from satirization to spiritualization. During the periods of satire and popularization—that is, at the beginning and end of our study—the works tend to be broadly international. The satires from Dante by way of Brant and Rabelais to Jonson embrace widely known and popular works in Italian, German, French, and English literature. The popularizations of the later twentieth century have an even broader scope, going beyond Italian (Umberto Eco), German (Kai Meyer), French (Marguerite Yourcenar and Michel Butor), and English-American (Lindsay Clarke, Robertson Davies, and others) to include Brazilian (Paolo Coelho), and no doubt others not treated here. In each case the popularization results from a broad public awareness of alchemy: initially as a hopeful belief in its exoteric power to produce gold and, in the later twentieth century, owing to the influence of such writers as Silberer, Jung, Eliade, and others who recognized its role as a reflection of, or model for, the psychic development of the individual.

¹ Elmar Schenkel, *Die Elixiere der Schrift: Alchemie und Literatur* (Eggingen: Isele, 2003).

The process of spiritualization, in contrast, is characterized by local and historical factors. It began in Protestant cultures (notably Pietist Germany and Anglican England), presumably because those writers sought in alchemy a rich and familiar source of imagery that was not indebted to the traditional Catholicism from which they had distanced themselves. The figure of the alchemist himself, newly liberated (through rejection) by scientific developments, was then taken up by German and English writers—Goethe, Hoffmann, Godwin, both Shelleys, and others—as a vehicle for their exploration of the psychic implications of the Romantic search for forbidden knowledge and powers. As the exoteric goal of alchemy was generalized into a symbol for the obsessive search for the absolute generally, the alchemist was appropriated by writers in France and the United States, who developed the tendencies implicit in their Romantic predecessors.

In France, where the works of Balzac and Dumas had given the alchemist a particular prominence, the now spiritualized figure was appropriated as an image of the poet himself by Baudelaire and Rimbaud, who passed it along to writers of the fin de siècle, notably Huysmans but also Rilke, Wedekind, Yeats, and others in Germany and England. Huysmans, it should be noted, was close to E. A. Hitchcock in his vision of the alchemist as an exemplification of religious ideas rather than strictly poetic values.

Following World War I, which interrupted this century-long process of continuous development, it was especially in a Germany seeking to recover from the disastrous aftereffects of the war through a turn to occultism that the alchemist gained a following among writers as well as such psychoanalytical thinkers as Silberer and Jung, who found in alchemy a rich source of images for the archetypes of the human mind. After a second break caused by World War II, the alchemist once again, and thanks in no small measure to the now fashionable influence of Jung, became a central figure in a number of popular works in many languages.

Along with this development another pattern became evident: the emergence of specific historical alchemists as popular national heroes. Among French writers from Hugo and Huysmans to Breton and Yourcenar we observed conspicuous mentions of Nicolas Flamel—long before his name was made familiar by the Harry Potter stories. Novelists in English tended to focus on such English alchemists as Dr Dee (Marjorie Bowen, Peter Ackroyd), Mary Anne Atwood (Lindsay Clarke), and Robert Fludd (Hilary Mantel). Those in Germany and Austria, as we saw in Chapter 6, seized on Paracelsus as a national icon. These figureheads, it should be stressed, are presented as exemplary and, as spiritual leaders, resist satirization. Flamel is hailed for his discovery of the alchemical

symbolism in Catholic cathedrals, a tendency that leads directly to the works of Fulcanelli in the twentieth century. Dr Dee, in contrast to his scheming associate Edward Kelley, as well as Mary Anne Atwood and Robert Fludd are presented as figures in search of both ancient wisdom and the inner life of their own souls. Paracelsus, as we saw above, emerged during the 1920s as a cultural embodiment of the Teutonic spirit generally and as a herald of iatrochemy or medical chemistry.

Some writers called on other alchemists for special purposes: the Rosicrucian *Fama* was used by Yeats for his description of the Order of the Alchemical Rose, by David Foster for the plot of his fictional retelling of Rosencreutz's life, and by Umberto Eco for his invention of a fictional conspiracy, while Andreae's *Chymical Wedding* provided the title and theme for Lindsay Clarke's novel and for the structure of a central episode in Eco's novel. The narrator of Yeats's "Rose Alchemica" follows the "Keys" of the fictitious monk Basilius Valentinus in his experiments, while Wedekind adopted the same figure as his own spokesman in his play. Among alchemical works the *Tabula smaragdina*, for its authority and its dramatic formulations, is quoted almost routinely; such beautifully illustrated volumes as *Splendor solis* and Michael Maier's emblem books are frequented cited for their images.

Why has alchemy, apart from the general lure of the occult and regardless of the particular historical circumstances over the centuries, exerted its special appeal? Unlike the various forms of mysticism, which promise to bring spiritual enlightenment; or spiritualism, which undertakes to provide contact with the world of the dead; or astrology, Tarot, and other forms of divination, which offer to predict the future, alchemy pledges to change present reality: to transmute base metals into gold and bring wealth; or to produce elixirs that restore health and youthful vigor. It is this hope for change, whether in the earthly world of matter, the human world of the psyche, or the social world of community and nation, that for centuries has lured otherwise reasonable people to the often unrealistic promises of the alchemists, whether economic, pharmaceutical, or political.

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