

Artificial Men: Alchemy, Transubstantiation, and the Homunculus

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Therefore the Philosophers have created a Phenix, and Salamander. For if it were done by the conception of two bodies, it would be a thing subject to death; but because it revives it self alone, the former body being destroyed, it riseth up another body incorruptible.

—Sandivogius, *A New Light of Alchymie* (trans. 1650)

[Maier] saw the perfection of it [the hermetic “work”] in the birth of the Philosophic Stone in the Sacred Nativity; its sublimation in the life and passion; dark and black in death; then in the resurrection and the life, the red and perfect colour. This comparison is found in the nativity, life, passion, death, and resurrection of Christ as commemorated in the Eucharist. Thus earthly things are the pictures of the heavenly, “Lapis itaque ut Homo.”

— J. B. Craven, *Count Michael Maier: Life and Writings* (1910)

By creating an anthropoid, the Jewish master is not only able to display his creative forces, but may attain the experience of the creative moment of God, who also has created man in a similar way to that found in the recipes used by the mystics and magicians. Paraphrasing a statement of Glanvill, we may describe the Golem practices as an attempt of man to know God by the art He uses in order to create man.

—Moshe Idel, *The Golem* (1990) (emphasis added)

METAPHOR IS A FIGURE OF RESEMBLANCE, even if its literary charm and its pedagogical powers depend on the kick of difference. In the period immediately preceding the seventeenth century’s grand eschewal of metaphor, especially in Protestant nations that detested the Catholic



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mystery of the Eucharist with its overtones of cannibalism, the fundamentally metaphorical process of alchemical transformation fascinated many of those who considered the natural world in ways we might now consider precursors to the “properly” scientific. Paracelsus comes quickly to mind as the medical thinker who offers a recipe for the formation of a “chymicall homunculus” in the controversial late treatise, *De rerum naturae* (1537), addressed to his brother and summarizing the gist of his knowledge as he saw it in the last phase of his life. His man-made man is formed alchemically—in a test tube—from human sperm, heated by horse dung for the forty weeks of normal human pregnancy, and “from such Artificiall men, when they come to Mans age, are made Pygmies, Gyants, and other great and monstrous men, who are the instruments of great matters,” according to a seventeenth-century English translation.¹

The seventeenth century was to see the German of Paracelsus translated into French, Latin, and English, and a great alchemical flowering in northern Europe, perhaps especially in England where Baconian empiricism, inspired by the more demonic branches of alchemy, was taking root and inspiring considerable hands-on experimental activity. Paracelsus’ sixteenth-century focus on the man-made man had a future, even if the culture of signification in which it emerged was soon to be rationalized and literalism to take hold of the natural philosophy of western Europe.² Pre-Mendelian anticipations of cloning reached an amazing climax in the eighteenth-century French utopian thinker Rétif de la Bretonne’s “Multipliandre,” a precursor of Marquez’s Colonel, who manages over the course of thirty-six years in an incestuous harem to father 232 children and 2,320 grandchildren, albeit with the help of women, and whose offspring will eventually dominate the populations of most of the world’s countries, including Australia’s.³ During decades that overlapped with Rétif’s, the Swiss entomologist Charles Bonnet worked memorably, if less spectacularly, on the parthenogenesis of the aphid.⁴ And the “animalculistes” generally who followed Leeuwenhoek’s micrographic discovery of sperm cells in semen believed in a basically monogenetic (and masculine) reproductive universe, the “preformationists” among them, in particular, believing that these sperm cells contained perfectly formed homunculi that were developed into life-sized infants in the matrix of the womb.⁵ The cultural history of modern attempts to develop human cloning has a rich past that in all its various manifestations is held together by one motive of mythic depth and familiarity—the male desire to reproduce the self in perfect mimesis, without female assistance, in a bid for a kind of vicarious personal immortality.

My recent research into the issues of parthenogenesis, homunculi, and the Jewish golem is focused on the seventeenth and even eighteenth centuries, where the mythical and alchemical

¹ *Of the Nature of Things*, printed and bound with *A New Light of Alchymie: Taken out of the fontaine of Nature, and Manuall Experience. To which is added a treatise on Sulphur: Written by Michael Sandivogus . . .*, tran. J. F. M.D. (London: Richard Cotes for Thomas Williams, 1650), 8. (This is in fact Thomas Vaughan’s pseudonymous translation of a text by pseudo-Paracelsus, though believed by many scholars to be based on an authentic text.)

² On the relation of literalism in interpretation, and writing, to the rising success of natural philosophy, see Peter Harrison, *The Bible, Protestantism, and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998), esp. 107–20.

³ Rétif de la Bretonne, *Voyages de Multipliandre* (Dijon: Ulysse, fin de siècle, 1990 [repr. from author’s *Posthumes*, 1802]).

⁴ Charles Bonnet, *Traité d’insectologie* (Paris: Durand, 1745) and *La palingénésie philosophique, ou Idées sur l’état passé et sur l’état futur des êtres vivants: ouvrage destiné à servir de supplément aux derniers écrits de l’auteur et qui contient principalement le précis de ses recherches sur le christianisme* (Geneva: C. Philbert, 1769).

⁵ For a thorough account, see the relevant sections of Clifford Dobell’s *Antony van Leeuwenhoek and his “little animals,” being some account of the father of protozoology and bacteriology and his multifarious discoveries in these disciplines* (New York: Harcourt Brace, 1932; repr., New York: Dover, 1960).

combine with the biological in ways that establish the ground of current commercial and ethical debates about cloning. This article, however, will emphasize an earlier issue, the sixteenth-century rhetorical, religious, and alchemical stakes raised in the Paracelsian experimental recipe, with an eye to the basic dynamic of self/other, or more broadly and deeply, same/other. It seems of value for the framing of debate to consider the potential for *unheimlich* monstrosity in what is too much of the same. The collapse of necessary difference evoked by cannibalism (along with its hysterical provocation of an absolutism of difference) has received fruitful attention in our investigations into European “othering” in the later Middle Ages and Renaissance, much less so the prebiological and legally hypermanaged field of incest and related phenomena. The violently divisive issue of the transubstantiation is rarely discussed in terms of the collapse of difference or in connection with alchemy.⁶ My hope is that this article can not only consider a new avenue to the dominant place of metaphor in this transitional period, but also open further the question of what is differentially at stake in xenophobia and homophilia and their related but separate monstrosities. Can we learn something about the fatal instinct to project a monstrous other, from hypertrophic signs of the instinct to propagate a monstrous same? A look at the history of European aspirations to the artificial production of a man may tie the art of alchemy, at least in its popular and allegorical forms (but perhaps even in its more pragmatic metallurgic form), to the history of the fate of metaphor—the supreme figure of early modern European poetry.



The premodern history of the alchemical homunculus goes back a long way and has been surveyed in several papers by William R. Newman, as well as in a chapter of his recent book, *Promethean Ambitions*.⁷ The book provides a medieval and early modern history of alchemy’s relation to the fine arts in the fierce competition between art and nature, as perceived in a culture that included science and especially technology in its definition of art. Indeed, alchemy was often what was meant by the phrase “the Art” in Renaissance English, French, and Latin, known as the *ars divina*, the “sacred art,” or, more ominously in German, *der schwarze Kunst*. Du Cange’s great dictionary of medieval and Renaissance Latin translates *chimia* as “auri conficiendi ars sacra . . . [the sacred art of making gold] nostris Alchimie”; the Larousse dictionary of Renaissance French gives the first instance of *chimie* in French as 1554, meaning “Alchimie.”

The allegorical image of the human production of a homunculus, or at least of parthenogenic males, stems from late antiquity and depends in part on Aristotelian ideas of the superior power of sperm to the female contribution of menstrual blood, as well as on the so-called *bougonia*, the technical production of bees from a dead cow described vividly in Book IV of Virgil’s *Georgics* (29 B.C.E.). Newman locates the first technical account of production of the homuncu-

⁶ On early modern ideas about cannibalism, see especially Frank Lestringant’s essay on the eucharistic battles, “Catholiques et cannibales: Le theme de cannibalisme dans le discours protestant au temps des guerres de religion,” in *Pratiques et discours alimentaires à la Renaissance* (Paris: Maisonneuve et Larose, 1982), as well as his book-length analysis, *Une Sainte Horreur, ou le voyage en Eucharistie (XVIe–XVIIe siècle)* (Paris: PUF, 1996), and Peter Hulme’s classic account of the etymology of the word in the first chapter of *Colonial Encounters: Europe and the Native Caribbean, 1492–1797* (London: Methuen, 1986).

⁷ See William R. Newman, *Promethean Ambitions: Alchemy and the Quest to Perfect Nature* (Chicago: University of Chicago Press, 2004), as well his article, “The Homunculus and His Forebears: Wonders of Art and Nature,” in *Natural Particulars: Nature and the Disciplines in Renaissance Europe*, ed. Anthony Grafton and Nancy Siraisi (Cambridge, MA: MIT Press, 1999).

lus in the originally Arabic *Book of the Cow*, purportedly by Plato (available now only in what Newman calls a “dodgy” Latin translation and undated by him, though it would seem to be sometime between the third and eighth centuries; it is disavowed in writings attributed to the Persian alchemist Jabir). It applies the basic (and grotesquely violent) techniques of the *bougonia* to the production by “spontaneous” generation of a magically powerful rational animal that can tell its maker “all things that are absent”;⁸ one can also vivisect it and, for instance, “use its fluids” to walk on water. Newman thinks it very likely that Paracelsus read this text. The ninth- and tenth-century texts attributed to Jabir considered the creature demonic, but themselves describe another technique by which the adept can make wholly new species, including, for instance, a girl with the face of a boy or even, with luck, “a being with prophetic powers.”⁹ The apparatus for this nondemonic production places the vessel inside a large metal rotating sphere designed to “simulate the effects of the crystalline spheres that rotate about the earth itself.”¹⁰

Medieval Latin writers were mostly unimpressed: the alchemists stuck to “empirick” work with metals, and theologians like William of Auvergne inveighed against the pseudo-Plato and anything that smacked of the intervention of incubi and succubi.¹¹ But a fourteenth-century work by a pseudo-Thomas argues that the homunculus of the alchemist Zakariya al-Razi proves experimentally that female seed does not contribute to generation, and the late thirteenth-century Catalan physician Arnold of Villanova was widely believed to have succeeded in creating a homunculus himself. In the fifteenth century, Alonso Tostado disapproved of these demonic procedures; nonetheless his description of the Incarnation makes Jesus himself sound rather like a homunculus nourished in the sealed vessel of Mary’s womb.¹² It remained to Renaissance alchemy to interest itself in a redeemed version of the man-made homunculus, and this occurred during a phase that Newman describes as one of increasing allegorization and decreasing “scientific” rigor of the Art itself.¹³

⁸ Grafton and Siraisi, *Natural Particulars*, 331.

⁹ Newman, *Promethean Ambitions*, 182.

¹⁰ *Ibid.*

¹¹ The theological problems generated by the substitution of essential forms (in the consecration of the eucharistic host) and their coexistence (in the hypostatic union of the Incarnation) gave even Thomas Aquinas headaches, as the ontological strangeness of both Christ’s divinity and the eucharistic transformation could not permit this process to extend beyond those very particular *supposits*. (The problems are treated mainly in Questions 2–4 and 17–19 of the *Summa Theologica*.) The creation of the homunculus can be read as a kind of vulgar parody of the Incarnation itself, almost a theological joke, though of course this would only reinforce the theological position that the devil’s powers are limited to grotesque and malfunctioning imitation.

¹² See Newman’s detailed commentary on the relevant section of Alfonso Tosatado’s *Eximium ac nunc satis laudatum opus* . . . (Venice: Joannes Jacobus de Angelis, 1508), in *Promethean Ambitions*, 191–95. See also H. L. Ogrinc: “the fact that alchemists made analogies between the alchemistic process and the Christian mysteries is not so strange when we remember that in the middle ages most alchemists were clerics. . . . Although it is true that a number of clerics were offended by Henry VI [of England’s] appeal in which the transmutation of metal was likened to the consecration during holy mass, many others did not object” (“Western Society and Alchemy from 1200 to 1500,” *Journal of Medieval History* 6 [1980]: 126).

¹³ This was not a consistent shift. Edward Kelley’s late sixteenth-century alchemical manuscript is a recipe book, of which the illustrations are figurative almost by necessity, since the terminology is, but the text of which is grindingly practical and was published by Ashmole and many others during the seventeenth-century revival; for the illustrations, see “Theatrum astronomiae terrestris” (Houghton MS Lat 16, Houghton Library, 1594). (Kelley is best known as the English mathematician John Dee’s “skrier,” in his later obsession with prophecy, and may indeed be the author, though he said he found it when an English bishop’s tomb was exhumed.)

Newman does not discuss the eucharistic “transubstantiation,” but in my terms as well as in Tostado’s, it is a partner in the larger movement that encompassed, finally, the transmutation of alchemical experimental science into modern chemistry, and the *translatio* of alchemical allegory into “mere” metaphor, decorative rather than efficacious. Or into what we might most cogently call poetry, though it is already a reduced poetry, a poetry with far weaker epistemological claims than Philip Sidney assumes when he calls it “Queen of the Sciences” in his *Defence of Poesie* (1581, pub. 1595), or that we see in the persistent medieval image of Virgil the Magician. In the 1960s and early 1970s, John Warwick Montgomery made a (contested) case for an important early modern Lutheran contribution to the history of science, long considered negligible by the grand narratives of the “Scientific Revolution,” particularly though not exclusively through the discipline of chemistry. Montgomery notes that Brahe, Melanchthon, and Kepler were all Lutherans, and explains that it was the Lutheran doctrine of the “Real Presence” of Christ that permitted their intense concentration on natural inquiry:

In [Michael Maier’s] largest work, the *Symbola aureae mensae*, Maier affirms the indissoluble connexion between the cardinal Lutheran doctrine of the Real Presence and the alchemical aim of transforming the external world through the discovery of the “Philosopher’s Stone,” i.e. through the discovery of Christ’s presence in both macrocosmic and microcosmic reality. A woodcut depicts the Alchemist in full eucharistic vestments saying mass at an altar.¹⁴

Montgomery is invested in returning Lutheranism to the cast of thought systems productive of experimental science and does not discuss the potential relation of the doctrine of the transubstantiation to the doctrines of alchemy, epitomized in the Renaissance interest in the “artificial” laboratory production of a “little man” without the substantial contribution of female seed. Of course, the Virgin Birth is *not* a doctrine that requires a solely masculine generation of a divine and supernatural human: Mary, even to the Protestants who worked to reduce her importance in the *dramatis personae* of the divine, was and had to be a partner in this procreation, or Jesus could not be an Incarnate God, half human, half divine. Nonetheless, the transubstantiation of the sacramental feast of the Eucharist was a process that became at least potentially susceptible to “chymical” explanation in the intellectual world of the Reformation, a world that included the increasingly philosophical and spiritualized discipline of “chymistry,” the art of transmutation, and an increasingly naturalized theology.¹⁵

Montgomery is stimulating, if not quite convincing, on the relation between Reformation alchemical theory and inquiry and the Real Presence (which for Luther, unlike the alchemists, includes the metamorphosis of both accident and substance, whereas alchemical gold was normally held to be a matter of transformed accidents only). Transubstantiation is obviously not a chemical process in either alchemical or modern chemical terms: one does not make matter, in even the most animistically conceived material world, into God by any process of material

¹⁴ John Warwick Montgomery, *Cross and Crucible: Johann Valentin Andreae (1586–1654), Phoenix of the Theologian* (The Hague: M. Nijhoff, 1973), 18–19.

¹⁵ On eucharistic transubstantiation, see Objection 4 to Descartes’s *Meditations*, and the final section of his (Descartes’s) reply to the fourth Objection. On chemical transmutation, see, e.g., William H. Brock, *The Norton History of Chemistry* (New York: W. W. Norton, 1993). For a pragmatic sympathy to this analogy in pre-Reformation England, see Bruce T. Moran, *Distilling Knowledge* (Cambridge, MA: Harvard University Press, 2005), 32–33. On Henry VI’s sense that “priests might be particularly good at making gold because the Catholic Mass required them to produce a literal transmutation in the celebration of the Eucharist,” see *ibid.*, 32. See further Ogrinc, “Western Society and Alchemy.”

transmutation, even a divinely assisted one. The incarnate God of the eucharistic host is not just any material and spiritual body. It is God's expressed will, according to Counter-Reformation Catholic theology, that the actual or rather "real" holy and incarnate body of the incarnated Christ be consumed by the members of his church, in a ritual that does not merely recall but re-enacts the Last Supper: *hoc est meum corpus*, says the Latin Bible. Not *hoc est similis*. As the *Catholic Encyclopedia* puts it:

When, therefore, He Who Is all Truth and All Power said of the bread: "This is my body," the bread *became, through the utterance of these words*, the Body of Christ; consequently, *on the completion of the sentence* the substance of bread was no longer present, but the Body of Christ under the outward appearance of bread. Hence the bread must have become the Body of Christ, i.e. the former must have been converted into the latter.¹⁶

Catholics are still charged to believe that the Consecration's performative "words of Institution" over the host enact an absolute of metaphorical power.¹⁷ As Jesus, son of Mary, *is* despite his mortal body God, so the bread *is*, despite the accidents of crumb and crust, his sacred body. The analogy is seductive and seems to have seduced at least the early sixteenth-century author of the "Alchemical Mass" (Nicholas Melchior Cibenensis), published in the *Theatrum chymicum* (1602), as well as Michael Maier, who includes it in his 1617 *Symbola aureae mensae*.

The absence of residual difference after a spiritually aided process of transformation or *translatio* is what links these important processes with each other, with metaphor, and with the increased interest in Jewish culture in the making of the golem. For help with the history of the golem, I turn to the unequalled work of Gershon Scholem and, more recently, Moshe Idel, who trace a quickened interest in the actual magical production of a golem to the late twelfth- and thirteenth-century writings of Rabbi Eleazar of Worms and his circle, along with the Pseudo-Saadya.¹⁸ This magical production, whether "ritual," as Scholem calls it, or "technique," as Idel prefers to say, involves the complicated utterance (letter by letter) of certain "words of Institution" over a man-shaped lump of clay, in preference to the harnessing of celestial or astral energies as in the alchemical tradition.¹⁹ It stems, ultimately, from commentary on the word "golem," which appears only once in the Bible: a second- or third-century midrash in the *Genesis Rabbah* reads, "In the hour when God first created Adam, He created him as a golem, and he was stretched out from one end of the world to the other, as it is written in Psalms (139:16): 'Thine eyes did see my golem.'" One version of the famous story from which so much commentary and practice sprang appears in a particularly clear form in a text written down by students of Rabbi Judah of Speyer (who died in 1217):

Ben Sira wished to study the *Sefer Yetsirah* (Book of Creation). Then a heavenly voice went forth: You cannot make [such a creature] alone. He went to his father Jeremiah. They

¹⁶ "The Real Presence of Christ in the Eucharist," in *New Catholic Encyclopedia* (Washington, DC: Catholic University Press, 2002), <http://www.newadvent.org/cathen/05573a.htm> (accessed April 10, 2010) (emphases mine).

¹⁷ See Judith Anderson, "Language and History in the Reformation: Cranmer, Gardiner, and the Words of Institution," *Renaissance Quarterly* 54 (Spring 2001): 20–51.

¹⁸ Gershon Scholem, "The Idea of the Golem," in *On the Kabbalah and Its Symbolism*, trans. Ralph Manheim (New York: Schocken, 1965); Moshe Idel, *Golem: Jewish Magical and Mystical Traditions on the Artificial Anthropoid* (Albany: SUNY Press, 1990).

¹⁹ On differences between the pagan, Muslim, and Christian alchemical tradition and the Jewish mystical understandings of transmutation and the golem, see Gershon Scholem, *Alchemy and Kabbalah*, trans. Klaus Ottman (Putnam, CT: Spring, 2006).

busied themselves with it, and at the end of three years a man was created to them, on whose forehead stood *emeth* [truth], as on Adam's forehead. Then the man they had made said to them: God alone created Adam, and when he wished to let Adam die, he erased the *aleph* from *emeth* and he remained *meth*, dead. That is what you should do with me and not create another man, lest the world succumb to idolatry as in the days of Enosh. The created man said to them: Reverse the combinations of letters [by which he was created] and erase the *aleph* of the word *emeth* from my forehead—and immediately he fell into dust.²⁰

Other versions of the story do not include the speaking of the golem, who is mute but grows ever more gigantic, until the rabbi hits upon the idea himself of erasing the *aleph*—in this version unfortunately the fall of the huge golem crushes the rabbi and kills him.

The making of the golem from the letters of the name of God and/or from the so-called alphabets of the mystical *Book of Creation* has a long, complex, and fascinating history in Talmud, Midrash, and Kabbalah—in “official,” folk, and esoteric commentary on Genesis. Some texts bespeak more ambivalence than others, some are mystical, and some provide instructions for the production of the golem. The actual making of the golem is an intense experience more important than any pragmatic result. Scholem sees the medieval texts as built around a ritual in which the officiating rabbi experiences an ecstasy of identification with God the Creator; the development of the pragmatic idea of the golem as servant like Faust's homunculus is very late.²¹

Cybernetics is our major contemporary site of anxiety over the production of the “artificial man,” as the Renaissance called him, and this version depends—as did the making of the golem and the transubstantiation of the host, at least in part—on literalized metaphor, on “words of Institution”: the golem in particular was to be made from individual characters, like a software program.²²

For our purposes, Newman's claim that the alchemical homunculus and the Jewish golem are “utterly different” is irrelevant.²³ They are perhaps more closely intertwined than Newman thinks. Jewish culture was porous; it took and gave influences via contact with Christian, Islamic, and even Hindu cultures: recipes for production of the golem show the impact of yoga, for instance, on medieval Jewish thinking, and Simon Forman's sixteenth-century transcription of Alexander von Suchten's alchemical treatise on antinomy replaces his “antinomy” with the Hebrew word “coka.” The periods of their efflorescence—the second and third centuries of the Christian era, the twelfth century to the fourteenth, and the sixteenth- and seventeenth-century Renaissance and Reformation—are overlapping, sometimes identical.²⁴ The “art” of alchemy is a tech-

²⁰ Scholem, *On the Kabbalah and Its Symbolism*, 179.

²¹ All these texts have mesmerized twentieth-century thinking about cybernetics, unsurprisingly, and until recently one could find several on the Web site of my colleague Jordan Pollack, in the Computer Science Department at Brandeis, who made international news in 2001 with the announcement that he had produced an evolutionary process in his work with robots and software. See <http://www.demo.cs.brandeis.edu/golem/> (accessed April 10, 2010); note the antimetaphorical article there on golem-making in the context of Jewish theology by Rachel Strausser, <http://www.csua.berkeley.edu/~ether/thesistext.html> (accessed April 10, 2010).

²² Of course, software programs, artificial intelligence and now even so-called artificial life have been a major interest of philosophers as well, and the issue of autonomy an ethical problem that can only increase in interest and urgency under the pressure of work like Jordan Pollack's (see note 22). Here the seventeenth-century work and legend of the famous Rabbi Loew of Prague, who is reputed to have created a golem to protect the ghetto against the depredations of anti-Semitic mobs, comes into play, but here we must leave both Loew and Pollack to return to the Renaissance.

²³ Newman, *Promethean Ambitions*, 183.

²⁴ Scholem is convincing (in his *Alchemy and Kabbalah*) on the subject of the difference between Christian and Jewish alchemical thought—gold simply doesn't have the primacy or perfection in Jewish Kabbalistic symbolism that it did for Christian European alchemy (pt. 1, 20–37).

nology concerned primarily with the processing of metals and secondarily with life-preserving drugs. The making of the golem is a primarily religious matter; the homunculus is formed from male sperm, the golem merely from “virgin” soil. But even if they are theoretically different in their immediate contexts, they bespeak a similar longing and a similar relation to the problematics of Sameness.

The priority of masculine creation in Mediterranean religious life, both pagan and monotheistic, is not news. And alchemy in medieval and Renaissance culture was, if not a religious science, certainly a spiritualized one, and of necessity owed its theoretical justifications to specifically Christian spiritual understanding, although many of its major texts and techniques were Islamic and Arabic in origin (corrupt or misread versions of the Jewish kabbalah were important for Pico, Paracelsus, etc.). Nonetheless, Paracelsus’ *De rerum naturae* was outrageous enough to have provoked claims—recently and credibly contested, however—that it is spurious. Allow me to quote at length its paired discussion of female and male alchemical parthenogenesis: the Manichean sexual dichotomy they reveal may also reveal some of what has so discomfited commentators:

[N]ot only all Animalls, which have not proper Parents, and are not borne of things like to themselves are Monsters, but also those which are bred of other things.

So you see it is concerning a Basiliske, which also is a Monster, and indeed a Monster above all Monsters, and [than] which none is to bee more dreaded, because hee can kill any man with his meer looks, and sight: and because his poison is above all poisons, to which nothing in the world is to be compared. Hee carries his poison in a most secret manner in his eyes, and it is a conceived poison, not much unlike a menstruous woman, who also carrieth a secret poison in her eyes, *so that only by her looks a Looking glasse is fouled*, and tainted. So also if shee looke upon a wound, or an ulcer, shee infects that in a like manner, and hinders the cure thereof: so also with her breath, as well as sight, shee infects divers things, corrupts, and weakens them; and so also with her touch. For you see[,] if shee medle with wine at the time of her menstrues, that it is suddainly changed, and made thick; The Vinegar also that she medles withall, becomes dead, and useless. . . . But to return to what I proposed concerning the Basiliske, by what reason, and in what manner hee carries poison in his looks, and eyes; you must know that hee hath that property, and poison from menstruous women, as is aforesaid. For the Basiliske is bred of, and proceeds from the greatest impurity of a Woman, *viz.* her Menstrues, and from the blood of [her] Sperm, if it bee put into a gourd glasse, and putrefied in Horse-dung, in which putrefaction a Basiliske is brought forth. (emphasis mine)

On the other hand,

wee must by no means forget the generation of Artificial men. For there is some truth in this thing, although it hath been a long time concealed, and there have been no small Doubts, and Questions, raised by some of the ancient Philosophers, Whether it were possible for Nature, or Art to beget a Man out[side] of the body of a Woman, and naturall matrix? To this I answer, that it is in no way repugnant to the Art of Alchymie, and Nature, yea it is very possible: But to effect it, we must proceed thus.

Let the Sperm of a man by itself be putrefied in a gourd glasse, sealed up, with the highest degree of putrefaction in Horse dung, for the space of forty days, or so long untill it begin to bee alive, move, and stir, which may easily be seen. After this time it will be something like a Man, yet transparent, and without a body. Now after this, if it bee every day warily, and prudently nourished and fed with the *Arcanum* of Mans blood, and bee for the space of forty

weeks kept in a constant, equall heat of Horsedung, it will become a true, and living infant, having all the members of an infant, which is born of a woman, but it will be far lesse. This wee call Homunculus, or Artificiall [Man?]. And this is afterwards to be brought up with as great care, and diligence as any other infant, until it come to riper years of understanding. Now this is one of the greatest secrets that God ever made known to mortall, sinfull man. For this is a miracle, and one of the great wonders of God, and secret above all secrets, and deservedly it ought to be kept amongst the secrets until the last times, when nothing shall be hid [the apocalypse], but all things made manifest.²⁵

In pointing out the editorial attributions of spuriousness to this text I am not suggesting any heretofore unnoticed feminist tendencies in the long and multidisciplinary tradition of Paracelsian commentary. One could disapprove of this simply on Christian grounds: as I said before, the Incarnation—the central tenet of Christian doctrine—depends on full human participation in the generation of Jesus Christ, and the human in question here was female: the necessity of female seed in the making of a “rational animal” was logically, if not always in practice, an article of belief. One thing to notice about the Paracelsian homunculus is that, unlike the poisonous female basilisk (itself perhaps related to a Jewish mystical image of Earth as “half virgin, half snake” in the marriage with God that produced Adam), this clearly superior parthenogenic male is somewhat more spirit than body (this is also the tendency of Catholic versions of the eucharistic Real Presence). And not only is it not represented as lacking in any important way, as were the medieval golem and homunculus, it seems to be an improvement on the gross material bodies of naturally produced humans: it belongs to the “perfective” rather than magically productive branch of alchemy.

The general topic under which Paracelsus brings it up, as an alternative, is the topic of monsters, which Paracelsus himself defines as “Animalls, which have not proper Parents, and are not borne of things like to themselves,” or else things made by Art “in a glasse,” like the Basiliske or those fantastical creatures discussed in the Arabic texts of pseudo-Jabir. For, as Paracelsus says in his book *On the Bringing Forth of Men*:

God wills to make man out of two, and not out of one alone. For if men were born of the seed of one individual, he would not change in nature. His child would be just as he is, in the manner of a walnut tree, which is reborn of itself alone, and therefore is entirely like the one from which it is born. . . . But the mixing of seeds of man and woman results in so much change that no individual can be like the other. . . . Each individual’s seed breaks the unity of the other, and that is why no man is like another.²⁶

This certainly sounds like a disapproval of cloning, and the passage I quoted above, no more than the fragmentary tract *De homunculis* encourages widespread monogenetic reproduction. What I am pointing to in the veneration of magical masculine “ectogenesis” in an occult literature stretching from late antiquity through the seventeenth century, from Persia to Massachusetts, is an always troubling, often ambivalent, *wish* to abolish the necessity of difference, the primacy of difference: a wish that unites the mutually aversive religious cultures of Islam, Judaism, Catholicism, and Lutheran Christianity, as well as classical and Hellenistic philosophers.

²⁵ Paracelsus (via Sandrovigius), *Of the Nature of Things*, 8.

²⁶ Quoted in *Paracelsus: Selected Writings*, ed. Jolande Jacobi, trans. Norbert Guterman (London: Routledge and Kegan Paul, 1951) 262–63, from *Das Buch von der Gebärung der empfindlichen Dinge in der Vernunft (Von Gebärung des Menschen. Von des Menschen Eigenschaften)* [Jacobi cites vol. I, section 1 of *Paracelsus, Gesämte Werke*, ed. Karl Sudhoff and Wilhelm Matthiesen, 14 vols. (Munich: Oldenburg, 1929–1933)].

Many differences are overcome in these visions of the Art, but primarily the difference between the male “artist” and the male God, human creation and capital C Creation itself. We see also, with especially shocking clarity in the late text of Paracelsus, the mythical desire to erase the specific difference between male and female with respect to “Gebaerung,” that biological power that has in every Western culture threatened the ideological basis of the political and social supremacy of male persons: at some distance from the literature of alchemy, we might remember that the English ur-monster, Grendel, has only a mother. (In this respect it is worth noting the attention to female parthenogenesis of twentieth-century feminist utopias and radical feminist biology: an attempt perhaps to claim at last and literally the power so long and so destructively envied by male thinkers and artists in monotheistic societies.)

What has all this to do with the problem of metaphor in the Renaissance, that figure George Puttenham called, following Aristotle, “abuse”—“As figures be the instruments of ornament . . . so be they also in a sorte abuses or rather trespasses in speach, because they passe the ordinary limits of common vtterance”—and which the apologists of the transubstantiation rejected so strenuously at the Council of Trent, as a description of the eucharistic feast?²⁷

The basic power of metaphor is a source of trouble for the period of the Reformation not unrelated to the problems raised by the alchemical homunculus. Arguments about the metaphorical bearing of the “words of Institution,” with which we have observed close parallels in the production of the golem, are connected to the human, if divinely endowed, power of priests (and rabbis) to produce a conversion of substance (*conversio substantialis*), which we see literalized in the *technology* of an increasingly allegorized and spiritualized alchemy. Already Tostado in the fifteenth century saw the Incarnation as related to the demonic processes involved in the alchemical creation of the homunculus, and the esoteric but canonical gospel of John links the Incarnation as closely as possible to the concept of the “words of Institution”: “In the beginning was the Word, and the Word was with God, and the Word was God” (John 1:1) and “the Word was made flesh, and dwelt among us. . . .” (John 1:14, Authorized Version).

It is well to recall, in the context of contemporary critiques of “othering” in representations of journey, travel, and heroism, that God is the primary other of all European and Mediterranean monotheistic cultures, no matter how anthropomorphically conceived. This foundational case of the other lies at the base of a very different dynamic from the normally abjecting, exoticist discourses of colonial explorers and conquistadors. The usual Jewish stance toward this omnipotent other, and the ineluctable Muslim and Christian stance, is one of yearning, a desire to merge identities in an ecstasy of union. “Be thou perfect, even as thy father in heaven is perfect,” said Christ, and Thomas á Kempis obligingly created a manual in the *Imitatio Christi* (1418). Christian mimesis and similitude is not only encouraged but enjoined, in a reversal of the resistant Homeric perception (hinted at also in the Book of Job) that the gods imitate men, in all but the moral seriousness of mortals who must one day meet an absolute death. That mirror that the woman and the Basiliske foul with their gaze shines clear and bright when a man looks into the eyes of God and sees a glorified image of himself.

But the specific trope of metaphor is different in kind from the other tropes of similitude. It seems clear that the Mediterranean cultures mutually involved in the history of the magical and poetic arts are both drawn to and seriously afraid of the metaphorical *translatio* that in its extreme forms can amount to transmutation, *conversio substantialis*, the production of life by the

²⁷ George Puttenham, *The Arte of English Poesie*, ch. XVI [XVII], X 1v (see diplomatic edition, ed. Gladys Doidge Willcock and Alice Walker, Cambridge University Press, 1936), 180.

ars divina of human “artifice.” The loss of distinction between God and the human produces tales of golem-making that are increasingly seen to court destruction, even “the end of the world”; the Faustian homunculus belongs to a tale not of eternal life but eternal death.

What is more striking than this familiar opposition to “Art,” as alive today as it ever was, though we call it science or technology now, is the flourishing of its esoteric and as it were counterrevolutionary rites and productions in the Renaissance. As the rejection of transubstantiation swept through northern Christendom, so too did the rejection of “mists and metaphors” through a developing scientific discourse of “mechanical” philosophy and for that matter rhetoric itself; as Paracelsian medicine acquired the pejorative label of “chymistry” and stories of golem-making became more fatalistic, exactly contemporaneous were the turns among both Christian and Jewish magi toward the production of artificial life, and the Tridentine consolidation of Catholic doctrine officially raised the “metaphor” of the “words of Institution” to the status of a fundamentally magical performative.

I do not mean to suggest that the egg came before the chicken. The phenomena I have just listed, looked at from the perspective of a history of metaphor, amount more to a turbulence than to a narrative of thrust and counterthrust. They also suggest a heightened awareness, never quite articulated, of what is perhaps the potentially magical quality of metaphor that made Aristotle and Puttenham call it an “abuse,” and Paul Ricoeur, approvingly, a “scandal.”²⁸ Such terms have never been applied to the other figures of similitude.

What I *am* suggesting is that the extreme of metaphor is transmutation: that under certain conditions metaphor enacts a *conversio substantialis*, rather than drawing attention to a partial likeness between different or separate things. It is all very well for a man to imitate Christ, or to see himself as made “in the image and likeness of God.” But Simon Magus was said to have boasted of his *own* homunculus, made of air, that his creative power was not just like but the same as and indeed greater than God’s, for he had created a man out of air, “which was a thing more difficult than creating him of earth.”²⁹ In the late Middle Ages and the Renaissance, the efforts of Jewish golem-making, seen in their high medieval versions by Scholem as ecstatic rituals of imitation, acquire, as does the homunculus of Paracelsus and his pseudo-kabbalah-reading followers, a literalism that does not reduce or abandon metaphor, but monstrously completes it. The desire for a relation of homology with the divine is expressed with a doubled instinct for the Same in the alchemical recipe of the Christian doctor, whose home-made man is made with male sperm and becomes a little *male* (though golem-makers could apparently make an ambiguous woman as well). We take it for granted now that metaphor is just a mysterious way of indicating something mysterious. Even the Tridentine discourse around the transubstantiation inveighed against “mere” metaphor, and arguments against the “merely” metaphorical understanding of the “words of Institution” pointed out that Christ’s words at the Last Supper were his last will and testament. Testaments made on the brink of death necessarily eschew metaphor for clarity. I have begun to wonder whether all this

²⁸ See the analysis and critique of Aristotelian metaphoricity in ch. 1, “Between Rhetoric and Poetics: Aristotle,” in Paul Ricoeur, *The Rule of Metaphor* (Toronto: University of Toronto Press, 1977). Ricoeur translates literally a sentence from Aristotle’s *Poetics* that is particularly resonant for this discussion: on the subject of “some remarkable expressions from Homer”: “In all these examples the things have the effect of being active [energounta phainetai] because they are made into living beings’ (1412 a 3)” (34). Apparently this comment was resonant for Ricoeur too, whose study of the *Poetics* ends with a one-sentence paragraph: “Lively expression is that which expresses existence as *alive*” (43). One wonders what the full load of meaning here was for a priest who uttered the “words of Institution” every day.

²⁹ Idel, *Golem*, 5, quoted from *Ante-Nicene Fathers*, bk. 2, chap. 15, p. 101, also available online as *Early Church Fathers* (Christian Classics Ethereal Library), <http://www.ccel.org/fathers.html>.

talk of “mere” metaphor was not at a profound level a defensive way of reducing metaphor’s powers to those of a simple rhetorical figure among figures. Why so much and such fierce resistance to a figure of speech? Could that abiding sense of poets as magicians, and grammar as magic, attest to an equally abiding sense that metaphorical predications can institute reality? Have the subsequently contemptuous history of the divine/sacred/black art and the characterizing absence of the figure of metaphor from the reportage of experimental science (and the biblical interpretation of fundamentalist Christianity) been partners in a multimillennial narrative constructed to “other” the power that can make the Same? A