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Ancient Definitions of Personhood and Difficult Social Precedents: The Homunculus, the Golem, and Aristotle

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Abstract

This article discusses the basic philosophical and legal standards applied to defining the existential status of two artificial androids, the golem and the homunculus, during the Middle Ages and Renaissance, when their creation was actually considered possible and often believed to be an accomplished fact. It will also show how the historical definition of personhood has generally coincided with Aristotle's notions, which he provides mainly to determine who is worthy of slavery. These sorts of historical stances on personhood are important because they elucidate the difficult social precedents facing any redefinition of non-human personhood today."

This paper was given at the Conference on Personhood Beyond the Human, Yale University, Dec. 6-8, 2013. It is a somewhat revised excerpt from my book *Androids and intelligent networks in early modern literature and culture: artificial slaves* (New York: Routledge, 2013), and is used with permission of the publisher.

Before deciding how to define and proceed with modern definitions of personhood beyond the human, it will help to see how personhood has been defined historically—especially with regard to several ancient androids, because in their day they presented the best case for individuals who might have had, by the time's definitions, the chance to be considered fully human. So this presentation will discuss the basic philosophical and legal standards applied to defining the existential status of two artificial androids, the homunculus and the golem, during the Middle Ages and Renaissance, when their creation was actually considered possible and often believed to be an accomplished fact. It will also show how the historical

definition of personhood has generally coincided with Aristotle's notions, which he provides mainly to determine who is worthy of slavery. These sorts of historical stances on personhood are important because they show the difficult social precedents facing any redefinition of non-human personhood today.

The idea of the homunculus predates the Renaissance, though it reaches its zenith in that era. The science historian William Newman has shown that the idea of producing an artificial human being goes back at least as far as the early Middle Ages, and perhaps as far back as late antiquity, and that the basis for the concept originates with Aristotle. Although he did not believe in the possibility of making artificial humans, Aristotle's theories about human reproduction and spontaneous generation led his followers to believe in its feasibility. The Greek philosopher's notion of reproduction attributed to male semen the roles of form and life while relegating the lesser role of a secondary nutritional matter to menstrual blood. Thus, since the female's role was essentially to provide a nutrient-rich vessel for the gestation of the fetus, thinkers and scientists of the late Classical, medieval, and Renaissance periods had precedent to assume that, given male sperm and sufficiently similar nutrition, warmth, and a vessel, one could create a human asexually.

The earliest descriptions of the creation of an artificial man exist in two works that probably date from the late Classical period and early Middle Ages, respectively. The first of these is the story of Salaman and Absal, a story that originated with the Arabs in the Middle East. It is mentioned by Avicenna, the great Persian physician and philosopher of the tenth century, but, as Newman argues, there is a different and probably much earlier version of the story that dates back to at least the third or fourth century A.D. (Newman 2004, 177). There is, however, another very early work, a book of magic called *The Book of the Cow (Liber vaccae)*, that gives the earliest actual recipe for creating a homunculus. The Persian scholar Jabir ibn Hayyan comments on this work and, because most of the works attributed to him date to the from the 800's and 900's A.D., *The Book of the Cow* must date from before that—the late Classical era or early Middle Ages. According to Newman, this early work, long attributed to Plato, survives only in a rare Latin manuscript, the *Codex Paneth*, which is itself a translation from Arabic (Newman 2004, 180). It gives a recipe for creating an artificial man by mixing human sperm with a phosphorescent stone, implanting this mixture in the womb of a cow or sheep, then feeding the small human that emerges on blood.

It is important to note here that this first recipe we have for an artificial human indicates that it is specifically for creating a human servant, and one with super-normal, "miraculous" power to boot. The point of the creation process is to produce a humanoid that, "if a man has raised it and nourished it until a whole year passes, and left it in milk and rainwater, it will tell him about all distant things and occurrences [omnia absencia]." Moreover, it has the power to influence the "progress of the moon, or to change one into a cow or a sheep," or it can be cut open while alive and its bodily fluids, when applied to the feet, will allow its maker to walk on water.² Note here the unflinching, almost offhanded mention of vivisecting a human and smearing his fluids on one's feet. This is clearly linked with its status as subhuman and slave. More on this topic later.

In the Renaissance, the notion of the homunculus was most closely associated with Philippus Aureolus Theophrastus Bombastus von Hohenheim, better known as Paracelsus, who gave the most detailed descriptions of this creature and how to make it. In "On the Nature of Things (De natura rerum)," he describes in much greater detail how this creature is made, giving readers a veritable recipe for making one:

Let the semen of a man putrefy by itself in a sealed cucurbite with the highest putrefaction of the *venter equinus* [horse manure]³ for forty days, or until it begins at last to live, move, and be agitated, which can easily be seen. After this time, it will be in some degree like a human being, but, nevertheless, transparent and without body. If now,

after this, it be every day nourished and fed cautiously and prudently with the arcanum of human blood, and kept for forty weeks in the perpetual and equal heat of a *venter equinus*, it becomes, thenceforth a true and living infant, having all the members of a child that is born from a woman, but much smaller. This we call a homunculus; and it should be afterwards educated with the greatest care and zeal, until it grows up and begins to display intelligence. (Paracelus 1894b, 1: 124)

Clearly, Paracelsus' recipe blends the elements of Aristotelian reproduction and spontaneous generation discussed above. But the elements of reproduction are reduced from Aristotle's original model because any contribution from the woman has been left out almost completely. As we have seen, Aristotelian theory requires the woman's body to provide not only a warm, protected environment, but also to contribute the specific matter from which the baby is formed. This is what gives the human child qualities of both parents. Yet one may see from Paracelsus' prime focus on the putrefaction of substances (or on their "digestion," as he calls it in another passage), that the real focus for him is control of a process more like spontaneous generation. The important thing to remember is that this process, also called abiogenesis, was the process by which, from ancient times, many *lower* creatures, such as insects, were thought to originate spontaneously from rotting organic matter. The connection of the homunculus with this process implies its low status relative to its maker.

Around the same time and in the same context as Paracelsus, Cornelius Agrippa von Nettesheim (1486-1535) also mentions the making of a homunculus. Like Paracelsus, Agrippa practiced medicine, believed in discovery through experimentation, and had many public disagreements with authority, though his were generally with the Church, rather than the medical establishment. In his *Three Books of Occult Philosophy (De Occulta Philosophia)* Agrippa (1651) discusses how the spontaneous generation of living things is made possible by using the proper mixing of natural elements under the proper astrological influence. Among other creatures produced in this way, such as frogs generated from dried, powdered duck mixed with water, Agrippa mentions the homunculus. Again, the artificial man is grouped with animals—and the animals, in turn, are seen as objects. They can be dried and powdered, like inert materials, and reconstituted later by adding water.

The Homunculus as Artificial Servant

An important connection between the two men's descriptions is their use of the term "natural" to describe animate, humanoid things not born of human parents. Paracelsus states of the homunculus that "philosophers name such creatures naturals." Agrippa, too, discusses "naturals" in *Three Books of Occult Philosophy*, and his more detailed explanation of them is revealing. In the context of mathematics and "the many wonderful works which are done by mathematical arts only," he asserts:

...of mathematical doctrines only works like to naturals can be produced, as Plato saith, a thing not partaking of truth or divinity, but certain images kin to them, as bodies going, or speaking, which yet want the animal faculty, such as were those which amongst the ancients were called Dedalus his images, and automata, of which Aristotle makes mention... (1651, bk. 2, ch. 1)

This passage makes several things clear: first, Agrippa considers naturals "kin to" automata. Second, the context in "which Aristotle makes mention" of Daedalus' images and automata, in his *Politics*, is in contemplating the idea of a more convenient slave (1995, 1253b25-1254a1); thus, it is implicit that Agrippa thinks of homunculi, as well as other naturals and automata, as slaves too. Indeed, like Aristotle, who justifies slavery in part by contending that non-Greeks are not fully human, and so can be seen, like mules, as "natural slaves," Agrippa sees all naturals as something less than human. What Agrippa means when he defines "naturals," like the homunculus, as things "not partaking of truth or divinity, but certain

images akin to them," is that they lack a soul. In other words, "natural" designates any apparently living, humanoid thing that is not really human, but simply a product of nature's elements, without the heavenly components inherent in humans. Thus, besides showing that both Agrippa and Paracelsus are talking of the same sort of human simulacra, the term "natural" provides insight into this kind of creature's low place in the cosmic order, relative to humans.

Because of its lowly status, we may see an implicit reason for Paracelus' reference to the homunculus, in his "De vita longa," as something to be "used" (Paracelsus 1894a). For, despite their subhuman status, they have supernormal aptitudes, spirit-like abilities to know "hidden and secret things," and "great, forceful," beast-like strength (Paracelsus 1894b, 1:124). And the fact that they are akin to machines provides a justification for using them as slaves. Animals and automata have no souls: the inclusion of homunculi and wild people in the same category as animals and automata makes their use as servants ethically acceptable. This ethical convenience is implicit not only in Agrippa's comparison of naturals to machines, (anticipating extreme Cartesian views in the early 18th century of all living beings as "organic machines," with humans differing in their possession of souls), but also in Paracelsus' references to them, in "A book on nymphs," as either "beasts" or "things" (1941, 230 and 216, respectively).

It is no coincidence that Paracelsus' judgments that "naturals," despite all of their powers, were inferior to humans and that this inferiority was based on deficiencies in reason and intelligence sound much like statements made by the era's apologists for the enslavement of the American Indians. As Anthony Pagden points out in his *The Fall of Natural Man* (1982), Paracelsus was among a number of thinkers of his time who lumped American Indians together with nymphs, satyrs, giants and pygmies as "wild men." He had two reasons for this: first, he thought the two groups bred in the same way—through a form of spontaneous generation. The other, more prominent justification was these "barbarians" lack of reason. Following Aristotle's definition of the "natural slave," men such as Juan Ginés de Sepúlveda, Gil Gregorio, Bernardo de Mesa, and the Scottish theologian John Mair asserted that the Natives of the New World, because they lacked the ability to deliberate or to reason in any significant way, were, despite their prowess in war, agriculture and other things, somewhere between beast and human; hence, they could be forced into servitude.⁴

This formulation of the homunculus as both slave and super-powerful tool triggered significant debate among Europeans, as did the treatment of the American Indians. Some European scholars, such as the medieval commentator pseudo-Thomas, seem to agree with the view that the homunculus was subhuman and so available for exploitation by its creator. Other Europeans do not agree with this kind of formulation. Some of them disagree because they see such treatment of any kind of animal as immoral, and others because they differ with pseudo-Thomas' view of the creature's soul. William of Auvergne advocates the first of these views. In his treatise "On Laws (de legibus)," he denounces the practices specified in The Book of the Cow on the grounds that it is wrong to create artificial animals of any kind just so that they can be killed for other purposes (Auvergne 1591, 34). Moreover, in his work "On the Universe (de universo)" he worries that the practice of collecting human semen for creating homunculi according to The Book of the Cow's instructions is too similar to what nighttime demons like succubi do in order to create races of monsters (Auvergne 1591, 1009A). This kind of theological qualm is more pronounced in the writing of other medieval scholars. Like William, they disapprove of creating homunculi, but their disapproval stems from a more serious concern that creating homunculi amounts to manipulating God. They argue that the homunculus must have a rational soul in order be alive, and this raises the problem that such a soul can only come from a divine or demonic source. If, as Alonso Tostado thinks, the rational soul must come from God, then creating homunculi is bad because it represents, in a story he relates about Arnold of Villanova's homunculus, an attempt to coerce God into providing a soul for a human maker's creation (Tostado 1508, chap. 36, f. 5v).

The Golem

The idea of creating a golem first appears in late twelfth-century Jewish commentary on the *Sefer Yetzirah (Book of Creation)*, a Cabalistic text, though the roots of the idea that a human could create living things by ritualistic magic may go back much further. As Gershom Scholem, the most authoritative source on the history of the golem in Jewish thought, notes, "The idea that [God's] act of creation might be repeated by magic or other arts" has its origin in "the legends recorded in the Talmud concerning certain famous rabbis of the third and fourth centuries" (Scholem 1965, 165). Many others think that the *Sefer Yetzirah* itself may be older than the Middle Ages, and the medieval commentators on the *Sefer Yetzirah* mention that figures of the remote past, such as Abraham and Jeremiah, had actually managed to use the knowledge contained in this book to create living beings (165).⁵

As with the homunculus, the association of the golem with automata, as well as its subhuman status, implies a servile status for the creature. By the sixteenth century the golem does in fact come to be represented mainly as an artificial servant, rather than the mere product of a devotional exercise. Significantly, this transformation of the golem from a simple creation meant to signify its creator's holiness and wisdom to a useful slave happens around the same time as the advent of the homunculus. A manuscript from the time of Paracelsus and Agrippa constitutes the oldest known record of the servant-golem; in the document it is noted that Samuel the Pious "had created a golem who could not speak but who accompanied him on his long journeys through Germany and France and waited on him" (Scholem 1965, 198-99).

These servant-golems were usually depicted as mute, which was seen—in an echo of the Aristotelian standards of servitude noted above—as a mark of their inferiority to humans. As Scholem explains, those who contended that the golem could not speak used a rationale similar to Aristotle's:

For several Kabbalists who accepted the anima rationalis of the philosophers, the power of speech was inseparable from reason. Thus Bahya ben Asher ([in]1291) says of Rava [an early golem creator]: 'He was able to give his creature a motor soul, but not the rational soul which is the source of speech.' This is in keeping with the view prevailing among the Kabbalists that speech is the highest of human faculties, or, to quote J.G. Hamann, the 'mother of reason and revelation.' (1965, 193)

Despite the apparent limitations to the golem's capacities of reason and its consequent subhuman status, the legends about the golem-as-servant depict the creature as paradoxically powerful, like the homunculus. Because its animus and form is of the earth, it "becomes the repository of enormous tellurian forces [i.e., forces from the earth]" and can, much like the "naturals" and automata mentioned by the occult philosophers, embody and use certain of nature's powers much more effectively than its human maker (Scholem 1965: 164, 195, 202). In particular, the golem has a great physical strength that comes from its elemental nature—that is, from the earth itself.

To conclude, we can see that definitions of "personhood" have historically relied not just on anthropocentric, but culture-centric views, such as whether someone could speak one's own language (much less speak at all), and whether they wore clothing similar to one's own, or had a body similar to one's own. Such ancient views of non-human persons as the homunculus and the golem thus point to the stubbornness with which we hang on to the convenience of our chauvinistic definitions of what is "human" and what is subhuman. If we want to persist in clinging to our sense of our own exceptionality, as did Aristotle's Greeks, and to have the convenience of designating all but our own "tribe" as subhuman, so that we can use them as objects for unsavory purposes, then we will continue as we have, for the last 2500 years, relegating all but ourselves and our private circle to expendability—or worse,

designating them as enemies. And that will not only impoverish us, but will also threaten earth's balance and our very existence.

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¹ See chapter 4 of Newman (2004). I am indebted to this source for much information on the homunculus, especially that related to Classical and Arabic traditions.

² Codex Paneth 393rb; quoted and translated in Newman (2004, 180); I have changed the translation of omnia absencia to one that seems more idiomatic.

³ Although *venter equinus* translates literally as "horse's womb," alchemists used it as a special term for warm, fermenting horse dung; Paracelsus used it this way, too, and often even took this metaphorical process one step further, using the phrase to signify any source of low, constant heat (Newman 2004, 215).

⁴ On the theological debates regarding the enslavement of the Amerindians, see chapters 2 and 3 of Pagden's book. The arguments he outlines there, as put forth in the early sixteenth century by their main proponents, Bartholomé de Las Casas and Juan Ginés de Sepúlveda, were Spanish in origin, but their influence spread widely, as is implicit in the participation of the Scotsman John Mair in this debate. Indeed, I discuss in my in his chapter on Shakespeare's *Tempest* (LaGrandeur 2013), the arguments presented in these debates were well known in England from the mid-sixteenth century on.

⁵ Regarding the golem, see also the books by Sherwin and by Idel.