RealDolls and Other Humanoids

By Walter Cummins

Second in a series

Last time I wrote of the relationship of various prosthetic devices to the people who wear them. This time my topic is humanoids. At first glance, they may seem to be very different subjects. Prosthetics often and humanoids always, however, do share roots in robotics and artificial intelligence. But, more significantly, they question the relationships of human beings to devices that possess human characteristics. Recently, humanoids have become a particular subject of media fascination. What capabilities might such creatures possess? And should we be concerned?

The potential capabilities go beyond physical functions such as their ability to perform tasks that relieve human burdens, such as lifting heavy loads or vacuuming the carpet. In those abilities, they are similar to prosthetics that accomplish what an individual cannot, though in the case of the humanoid it's a matter of would prefer not to. The more troubling aspect of the potential arises from the artificial intelligence embedded in humanoid chips. If a computerized device can beat chess experts or drive cars more safely than people, what might an artificial being with a human form achieve more effectively than we can? In sci-fi the humans are often humiliated by the humanoid, if not literally destroyed. Could that really happen?

Let's start by distinguishing between robots and humanoids, even though they are usually linked as variations of a basic category, such as with media professor Mark Crispin Miller's term "humanoid robots." Granted that the humanoid is essentially robotic, its physical appearance is quite different from that of a robot and, therefore, so is our potential reaction to and interaction with it. Although a robot may and often does perform human functions and may even be likeable for its animate cuteness, as with R2-D2 of *Star Wars*, the robot is clearly a manufactured object, visibly a machine.

While a robotic automaton can mimic human actions, it is still a mechanical device with a combination of gears, springs, cams, and levers, such as the sixteenth-century mechanical monk built by Juanelo Turriano for Phillip II of Spain. This 15-inch toy still navigates today on wheels hidden by its monk's robe and can imitate walking with artificial feet. Even its eyes, lips, and head can move to suggest prayer. The monk and similar devices

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amaze and amuse because they are miniature novelties more admirable for the cleverness of their makers than for their relationship to humanity.

Beyond these physical versions of a clockmaker's skills, it's only been in the computer age that life-size, far less machine-like humanoids have existed. However, the human imagination has long anticipated their coming, folklore and fiction conjuring up a variety of disturbing non-humans, such as the golem of Jewish mythology or Victor Frankenstein's creature created from an assemblage of body parts. Note that "creature" is the term used by Mary Shelley in her novel *Frankenstein*. "Monster" comes from the movie and from the jerrybuilt look of the lumbering form in the movie. The original creature on Shelley's page evokes both fear and pity because his murderous revenge is the result of his tortured awareness of his incompleteness and of his craving to be fully human.

The movie monster—nameless in the film, but often mistakenly called by the name of its creator—is borderline robotic, given the bolts in its neck, yet it has glimmerings of emotional sensitivity. The reader of the Shelley novel, however, may experience a much greater empathy for the creature because its physical appearance is only hinted at, while its inner life is revealed. It longs to be like the rest of us, but lacks some essential quality—not merely a body part, some quality unavailable and unknown to Victor Frankenstein in his laboratory. In such a lacking the creature shares the mystery of psychopathic torturers and mass murderers; humans also missing something vital.

Today's technologies can turn Victor's fictional process into a literal one that produces an actual physical manifestation. Our fascination with literary non-human likenesses suggests a longstanding anxiety about their potential powers and our limitations. The message many take away from Mary Shelley's *Frankenstein* is "don't mess with Mother Nature," fear of forces that science may unleash, humanoids as a recent example.

Although he does not distinguish robots from humanoids per se, Professor Miller does explain the source of our radically different reactions to, say, the mechanical monk and Frankenstein's creature. "Once the creature ceases to be dependent, its cleverness 'creates a feeling of unease in those who witness it,'" Miller writes (quoting Jasia Reichardt, who in 1968 curated a show and published a magazine special edition on *Cybernetic Serendipity*). Miller continues:

> [T]he phrase "clever mechanism" no longer refers to the inventor's talents, but to the thing itself, with its unnatural abilities and its will to power. Thus the ventriloquist's dummy turns monstrous once it appears to take command, as in so many films and television shows; and the full-sized autonomous robot, approaching humanity as if on equal terms, is never funny, because it seems intent on taking over absolutely, irreversibly.

"Approaching humanity" is what makes the humanoid even more threatening than demonstrably "other" mechanical robots. With Frankenstein's ungainly movie monster, we know from the start to be on our guard.

Humanoids, in contrast, assume convincing human form and emulate human behavior. Portrayed for most of a film by actors and actresses as normal-looking people, they may morph into reptilian monsters or hideous globs of protoplasm. The ultimate betrayal may be the beautiful, seductive woman transmogrified into vicious ugliness, *La belle dame sans merci*. Such transformations can evoke two forms of fear. A being in human guise suggests that someone just like us, perhaps even someone we love, can be revealed as an evil "force," especially treacherous because of its convincing deception. Perhaps an even more disturbing fear arises from the possibility that the evil is not that of an alien presence but a manifestation of a dark capability within human beings; the humanoid represents the worst that lies within us.

The 2015 film *Ex Machina* avoids such ugliness and from the first identifies the female, Ada, as a humanoid. The movie is subtle in depicting the transformation from her robotic remnants. The plot involves a young innocent coder named Caleb who is brought into the remote domain of an eccentric techie billionaire, Nathan, ostensibly so that he can administer a "Turing test" to Ada. The test is to determine whether the machine's intellectual behavior is indistinguishable from that of a human. In the case of Ada, can she think on her own, exceeding the parameters of her coding?

Initially, despite the very human face and voice, the actress playing Ada is given visibly artificial characteristics: transparent limbs that reveal inner mechanisms. But, by the end of the film, she aces the Turing test and displays greater intelligence than the two men, assuming full human form by taking an arm, hair, and simulated flesh from other experimental humanoids. Empowered, she causes the stabbing death of Nathan and the permanent entrapment of Caleb so that she can flee into a city where no one will suspect she is not a real person. Are her actions evil, or does she just want to escape imprisonment in a research facility? The movie ends with Ada out in the world with who knows what mischief ahead. She is a projection of our fears of artificial intelligence run amok.

An apparently less threatening non-human female is RealDoll, a concept formerly limited to fiction and film, now actually existing as a life-size humanoid with all the pulchritude of an airbrushed *Playboy* centerfold. According to a video in *The New York Times* online Robotica series, "In just two years, the creator of RealDoll says he will sell a robotic version with convincing artificial intelligence, blinking eyes and a mouth that moves." She talks, too, with a voice, that, at this point, sounds something like that of a GPS. But two years of development will no doubt lead to seductive breathlessness and a phone-sex vocabulary. Still, voice will be just one aspect of RealDoll's commercial function. She is a literal sex object, multiply orificed, and perpetually willing and available, never with a headache, never needing or wishing to say "No" or "Not tonight, dear."

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Commented [PP22]: Is this her only purpose: sex object? And will she offer tactile pleasures or "penetrability," as I believe some blow-up or plastic dolls do?

I'm reminded of a song from the 1940s, "Paper Doll." Unlike "a fickle-minded real live girl," the paper doll can be "my own"; she's a woman "other fellows" cannot steal. RealDoll could be substituted for that lyric. Much more substantial than paper, she is the closest simulation of an actual live female possible given the current state of technology and artificial intelligence. Now, in not many months, every home, and perhaps every man's bed, can have one. Crude blowup dolls will end up relegated to attic trunks. RealDoll may not—in the present incarnation—return embraces, but she will utter words of satisfaction. In addition, a product line called Wicked RealDoll offers a "new articulated spine, which allows for completely realistic and natural torso positioning and range of motion."

RealDoll may be extreme, but she (it?) serves as a symptomatic embodiment of humanoid possibility and of the potential consequences for the human relationship to the real live world, including transforming our relationships with one another. The (for some) male attitude toward women has already been revealed by the use of the "date rape" drug or induced pass-out drunkenness that results in the sexual use of an unthinking object. In not too long, women are likely to have their own humanoid alternative to sex toys. Once the RealDoll technology is perfected, the designers may create a masculine counterpart similar to Barbie's Ken, perhaps called HunkDoll. In fact, a male RealDoll is already available, but the Web description emphasizes its "oral capacity," not another attribute.

For all her apparent similarities to a human woman, RealDoll is best explained by Jean Baudrillard's 1981 theory of simulacra:

> [T]he era of simulation is inaugurated by a liquidation of all referentials. . . . It is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for the real, that is to say of an operation of deterring every real process via its operational double, a programmatic, metastable, perfectly descriptive machine that offers all the signs of the real and short-circuits all its vicissitudes.

RealDoll lacks an authentic referential beyond the conjuring of male fantasies, the perfect, perpetually compliant sex partner, all vicissitudes erased, that never actually existed. Unlike the treacherous humanoid beauties of film, RealDoll won't suddenly transmute into a gelatinous slug-like being or, Ada-like, kill and imprison. Her threat may lie in continuing to be herself, a source that causes the man who uses her to lose his own humanity for immersion in a tangible unreal. In a narrow sense, she mirrors the simulated erotic make-believe of pornography and the performing prostitute. In a wider sense, she is just one more example of the abundance of artificial pleasures mushrooming from a host of technologies, such as substituting e-friendship and e-dating for friends and romance, or substituting concocted foods for real nourishment. Perhaps the RealDoll owner would be better off amusing himself with the cams and levers of a mechanical monk or with cutting out paper dolls.

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Commented [PP25]: of how humanoids may, someday, transform our relationships with one another

Commented [PP26]: It might be said that, gruesomely (and illegally) some men have been seeking to create low-tech RealDolls by slipping their dates drugs or plying them with alcohol.

I can't help noting that, apparently, some of Cosby's young women knowingly accepted the Quaaludes he was proffering. At the time they were looking to turn themselves into RealDolls. They thought this was in their interest. Something they have clearly come to regret later.

My point here is that this is not a one-way street. The women are not only, and not all, passive victims. It's more complicated than that. Or they are victims of their psyches and social conditioning, for which the Cosby's of the world cannot be blamed. PARDON THE MINI-RANT.

Robotics and artificial intelligence are now in the news almost every day, and at the movies and on TV. Some hi-techers believe we have entered into new relationships with our digital devices. The boundaries between Us and Them may be vanishing. If we are becoming "transhumans," is it more threat than benefit? This is the second in a series of posts that explore—from an amateur's perspective—a few of the actualities and possibilities. The first: Where Do Humans End?

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