Technology, Art, and the Cybernetic Body: The Cyborg as Cultural Other in Fritz Lang’s "Metropolis" and Philip K. Dick’s "Do Androids Dream of Electric Sheep?"

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Published by: Universitätsverlag WINTER GmbH

Stable URL: http://www.jstor.org/stable/41157479

Accessed: 20/12/2014 16:52
Technology, Art, and the Cybernetic Body: The Cyborg as Cultural Other in Fritz Lang’s Metropolis and Philip K. Dick’s Do Androids Dream of Electric Sheep?

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ABSTRACT

Taking the latest development in the production of military weapons, the cloning of so-called “virtual officers,” as a point of departure, the essay examines this project not only in the light of cyberspace and the proliferation of artificial bodies (cyborgs) but also with a backward glance at the history of metaphorical encodings of technology in Western culture at large. I will argue that the way in which we confront technology is determined by much more than just the efficacy of the machine itself. It is equally determined by a symbolic investment, that is, the desire to construct human identity as basically different from the realm of the technological. While my theoretical frame of reference includes psychoanalytic and recent anthropological theory (Lacan and Taussig), the two major representations of technology which will be discussed in detail are taken from the world of art: Fritz Lang’s now classic silent movie Metropolis and Philip K. Dick’s science fiction cult novel Do Androids Dream of Electric Sheep?

Is it too wild a thought, that my fate may have assumed this image of myself, and therefore haunts me with such inevitable pertinacity, originating every act which it appears to imitate, while it deludes me by pretending to share the events, of which it is merely the emblem and the prophecy? Nathaniel Hawthorne, “Monsieur Du Miroir”

The essence of the technical is by no means itself technical.

Martin Heidegger

According to a recent report on CBS, the American military dedicated a considerable multi-million slot of its 1996 budget to the development of so-called non-lethal weapons.1 Designed to confuse, disable, or disintegrate rather than to destroy their targets, these weapons include such futuristic appliances as sticky foam, an adhesive chemical that will lead to exhaustion by impeding a person’s bodily movements; or the deployment of sound and electromagnetic waves, a veritable multi-purpose weapon that can both wreck the enemy’s machinery (tanks, trucks, etc.) and affect his or her physical condition by causing headaches, discomfort and severe forms of sickness. The most spectacular field of research, however, is related to the cloning of so-called “virtual officers.” By recreating the voices and images of adversarial commanding personnel, the military plans to infiltrate, modify, and thus control the opponent’s strategic infrastructure. Apart from its widespread military, political and ethical significations, this project might also be taken as the latest reenactment of the desire, ram-

1 “60 Minutes,” CBS 11 February 1996.
pant in technologically advanced cultures, to couple the human and the machine, to cross the borders between the "natural" and the technological, between the animate and the inanimate. Inasmuch as it replicates the human voice/image by technical means, rather than—as in the various Golem myths—through alchemy or witchery, the "virtual officer" epitomizes a discursive field that brings together issues of power and technology, of how we handle and with what we invest the increasing technologizing of the modern world. True, the imitating of audio-visual features of human beings does not necessarily relate to the topic of the virtual body, the uncanny space that confronts the living with the non-living. Since mimicry has proved to be a potent means of strategic warfare among both human and animal predators, the improvement of those means by way of computer technology appears to be somewhat less than striking. Yet if we read this project not just in the light of the ongoing information revolution and its corollaries, cyberspace and the proliferation of artificial bodies (cyborgs), but also with a backward glance at the history of metaphorical encodings of technology in Western culture at large, the "virtual officer" takes on a different and more complex meaning.

As Constance Penley and Andrew Ross pointed out, modern technology has come to penetrate Western society to such an extent that "the environments [it has] created seem almost second nature to us." The interstices of technology and culture these critics perceive are thus "located as much in the work of everyday fantasies and actions as at the level of corporate or military decision making" or, put differently, technological cultures are defined best by way of their representations in media, film, and fiction rather than by way of their strategic commitment to the uses and abuses of specific technologies. By the same token, to speak of a society as "technological" refers to the dominance of technology only insofar as we consider its symbolic value within the framework of an increasingly standardized culture. According to the French sociologist Jacques Ellul, the psychological attitudes ensuing from our encounter with, as well as the symbolic status that we ascribe to, technology are perhaps of much greater consequence than the practical effects of its application. With a Nietzschean thrust Ellul describes modern society as a system of widespread techniques that follow their own logic and that create not only a material but also psychological, mythical environment of their own. In his influential book The Technological Society (1964), he expounds at length on the fatal encroachment on the psyche by technology:

Nothing belongs any longer to the realm of the gods or the supernatural. The individual who lives in the technical milieu knows very well that there is nothing spiritual anywhere. But man cannot live without the sacred. He therefore transfers his sense of the sacred to the very thing which has destroyed its former object: to technique itself. In the world in

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4 Constance Penley and Andrew Ross, eds., Technoculture (Minneapolis: U of Minnesota P, 1991) xii-xiii.
which we live, technique has become the essential mystery, taking widely diverse forms according to place and race. Those who have preserved some of the notions of magic both admire and fear technique. Radio presents an inexplicable mystery, an obvious and recurrent miracle. It is no less astonishing than the highest manifestations of magic once were, and it is worshipped as an idol would have been worshipped, with the same simplicity and fear.5

Fear and admiration, euphoric immersion in and paranoid withdrawal from the encompassing technosphere, are indeed the two major stances associated with modern technology. Yet in both cases, the way in which we confront technology is determined by much more than just the efficacy of the machine itself. It is evenly determined by the desire to construct human identity as basically different from the realm of the technological, either in the sense that we experience the staggering advancement of technology as a threat to the culture of humans or that we think of machines as dumb, unintelligent tools which are created and controlled only by the superior mind of the engineer.

The machine, especially in its cybernetic representations in modern art, thus has come to function as the cultural Other of technological society. Only by using the symbolic complexity of the cyborg figure as a foil onto which we project both the desire to improve our biological condition, that is to become more machine-like, and, at the same time, the anxiety about machines replacing the human body altogether, are we able to negotiate the increasing technologizing of the modern world. In order to discuss the technological encroachment on the body in more detail, I will first turn to Fritz Lang’s cinematic adoption of this topic in Metropolis (1927). In the second half of this essay, I will then discuss recent critical assessments of the cybernetic body as the epitome of our so-called postmodern identity and of the confusion following the technological demotion of traditional boundaries of biology and the social order. And finally, I will offer some of the ideas expressed in French psychoanalytic theory, namely in the work of Jacques Lacan, as a heuristic tool to investigate the psycho-historical layerings of the imagery of the man-machine as it foregrounds the ongoing realignment of discourses on technology and the human body in Western culture.

**The Vamp, the Virgin, and the Machine**

In his now classic silent movie Metropolis, Fritz Lang has created what might be called the archetypal modern cityscape, an urban wasteland reverberating with images of transgression between man and machine, between culture (as denoting the life-world of human beings) and technology.6 Even at a cursory glance, this masterpiece of

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6 *Metropolis*, which Lang had outlined in 1924 during his visit to the United States (including New York), clearly reflects the modernist cityscape dominated by what David Nye has called the “geometrical sublime”: the towering, neo-gothic tallness of the skyscrapers that evokes in the
early cinematography seems to foreground a world completely dominated by technology. By opening on a sequence of close-ups of the throbbing machinery of Metropolis, the film virtually hones in on the subject of technological encroachment from the very beginning. Machines are everywhere in Metropolis and their omnipresence is not restricted to the enlarged machine room that reaches down into the bowels of the city. The central control and communication center, where the Master of Metropolis resides over his work force, literally bustles with technological icons of modernity: it features a telegraph and a telephone, various writing and recording machines, electric lights, doors automatically sliding back and forth, and a huge, elaborate control panel that looks like the dashboard of a futuristic starship. The uses and the control of technology are therefore firmly stratified according to class and social status. Because of its pre-Fordist approach towards industrialization, the rhetoric of Metropolis still hinges on the imagery of a society divided by the capital/labor conflict: the upper few—in both the metaphorical and topographical senses of the term—represent leisure and abundance, while the workers are shown to pine away in the subterranean machine room, a barely camouflaged modern limbo dominated by the inexorable rhythm and noise of machinery.

As Andreas Huyssen has pointed out, historically and stylistically, "Lang’s Metropolis . . . is a syncretist mixture of expressionism and Neue Sachlichkeit, and, more significantly, a syncretist mixture of the two diametrically opposed views of technology we can ascribe to these two movements."7 In his ingenious reading of both Thea von Harbou’s original novel and Lang’s movie version, Huyssen singles out the woman-robot as the most important theme of the story, thus contradicting the traditional view which maintains that the creation of a female robot by the inventor Rotwang is detrimental not only to the story line but to the film as a whole.8 The different attitudes towards technology that Huyssen attributes to expressionism and Neue Sachlichkeit respectively, and which were both part of Weimar culture and Modernism in general, are basically those of technophobic anxiety versus technophilic euphoria. After World War I with its mechanized battlefields, which left hundred of thousands of veterans suffering from the impact of newly invented “scientific” weaponry (tanks, chemical warheads, etc.), the prevailing view of technology was a rather somber one. Only later, when the

spectator a mixed feeling of reverence and wonder. This quasi-religious awe induced by technology fits perfectly the medieval-alchemical subtext of the film (as represented by the inventor Rotwang). For an interesting reading of modernist American technology (including its manifestation in metropolitan architecture), see David Nye, American Technological Sublime (Cambridge, MA: MIT Press, 1994).


8 Although the robot appears to be designed as a weapon to subvert the political efforts of Maria, the blonde virgin who preaches peaceful rebellion to the workers while nurturing the children of those crushed by the relentless regime of Metropolis, a psychoanalytic reading would be equally possible. In the reconstructed version, released by Giorgio Moroder in 1984, Rotwang’s creation of a woman-robot is directly related to the death of his daughter Hel who had been married to the master of Metropolis. In an even more romantic desire for doubling and artificial replacement, Rotwang wants to resurrect Hel by transferring Maria’s bodily features onto the robot. For a full analysis of the reconstructed version, see Enno Patalas, “Metropolis, Scene 103,” Camera Obscura 15 (Fall 1986): 165-72.
Weimar Republic was solidly stabilized and the belief in technological progress as a means of social improvement slowly resurfaced (as can be seen in the modern idea of social engineering), did a more optimistic attitude towards technology once again come to the fore.9

Both of these sentiments vis-à-vis technology are embedded, according to Huyssen’s reading, in the central metaphor of recreation and doubling as represented by the woman-robot and the various techniques of mirroring and projecting applied in the film. Since the robot has been exclusively designed to satisfy the male drive for control and power (in the twofold sense that it is man-made and that its main purpose is to subjugate the workers), it is a compelling symbol of man’s ability to construct “technological artifacts which are to serve him and to fulfill his desires.”10 Being clad in the bodily features of a woman, however, the robot also signifies that which is different from man (and therefore threatening), that is the feminine or, in psychoanalytical terms, the otherness of woman. This otherness, if we follow Huyssen’s argument, is meant to replace the otherness of technology, thus allowing for its control by way of symbolic substitution: the power over machinery is confirmed by way of enforcing man’s power over woman. In this regard, it is important that Maria’s reincarnation as a female android also implies a change of character: from virgin to vamp, from a nurturing mediator of social conflict to an aggressive agitator of revolutionary struggle. Hence the threat of the frenzied, sexually potent woman (in a crucial scene, the robot performs a seductive striptease in front of a lustfully gazing male audience) comes to represent the threat of the machine unleashed, the powers of creation turned loose against their creator.

Although Huyssen’s interpretation of the role of technology and women in Metropolis is largely convincing, its claim that the woman-robot functions as a symbol for the deep “libidinal desire to create that Other, woman, thus depriving it of its otherness” needs to be amended. Otherness, in this view, is wholly dependent on the female capacity to reproduce, a capacity, Huyssen maintains, “which has always eluded technological man”:

In the drive toward even greater technological domination of nature, Metropolis’ master-engineer must attempt to create woman, a being which, according to the male’s view, resists technologization by its very “nature.” Simply by virtue of natural biological reproduction, woman had maintained a qualitative distance to the realm of technical production which only produces lifeless goods. By creating a female android, Rotwang fulfills the male phantasm of a creation without mother; but more than that, he produces not just any natural life, but woman herself, the epitome of nature.11

9 This latter technology-oriented movement (Neue Sachlichkeit) can be seen as a curbed, politically correct version of the Futurists’ earlier redefinition of war as an intrinsically aesthetic moment. It should be noted that the Futurists’ embrace of technology also involved a misogynist stance. As Marinetti writes in the manifesto of 1909: “We [as Futurists] will glorify war—the world’s only hygiene—militarism, patriotism, the destructive gesture of freedom-bringers, beautiful ideas worth dying for, and scorn for woman” (F. T. Marinetti, “The Founding and Manifesto of Futurism of 1909,” Futurist Manifestos, ed. Umbro Apollonio [New York: The Viking Press, 1973] 19-24; 22 [my emphasis]). The Futurist “machineworks” are comprehensively discussed in Marjorie Perloff, The Futurist Moment (Chicago: U of Chicago P, 1986).

10 Huyssen 227.

11 Huyssen 227.
Not only does the equation of woman and nature appear to be rather problematic in the light of more recent feminist theory, but the opposition of woman and technology, which is at the core of Huyssen’s argument, seems to fall short of capturing the complex skein of signification that informs the Western idea of technology and the body.12 This holds especially true if we look at the early stages of industrialization when women were not construed as the opposite of the technological but rather as its embodiment, as an icon of material, and therefore technological, production as such. During the early nineteenth century, literary authors often conflated the reproductive capacities of women with the productive power of machinery, thus trying to come to terms with the increasing technologizing of the modern world. By adopting the feminine as a symbol of mechanical reproduction rather than organic growth, writers of the American Renaissance, for example, effectively negotiated their status as authors (which in turn depended on their ability to put forth an original work of art) against the “productivity” of the larger technological system.13

Technology and the Proliferation of Cyborgs

What might be gleaned from Huyssen’s reading of Metropolis, however, is the fact that technology—like the feminine or the body—appears to be not so much a substance, something that is distinct and therefore clearly distinguishable from other social/cultural phenomena, but a site where various discourses converge, a semantic construct which seems to be at once inside and outside (as just another icon of otherness) of human culture. Its utilitarian etymology notwithstanding, technology is not primarily about a method or a tool or a new way of doing things, in other words, something that is practical and applicable. Rather than seen as marking merely a set of different techniques, technology ought be examined instead as a powerful way of world-making, a means of symbolically coming to terms with the modern environment. This idea of technology as symbolic appropriation of the real has recently been taken up in an important book by historian David Channell. From Channell’s perspective, the many contemporary discourses concerned with the breakdown of the boundaries between the technical or artificial and what is still misleadingly called the natural are but an offspring of the much older dichotomy of mechanical versus organic world-views.


Taking the philosophies of symbolism by Ernst Cassirer and his disciple Susanne Langer as a point of theoretical departure, Channell looks at how the mechanical world-view proffered by such proto-modern figures as Descartes, Hobbes, Boyle, Newton and numerous others came to provide “a model for understanding organic life that differed from the model provided by the [older] organic world view.”14 By turning a specific technology, the clockwork, into a symbol for all sorts of natural phenomena, mechanical philosophy, especially during the eighteenth century, laid the groundwork for the ongoing technologizing of the modern world. According to the mechanical world-view, as Channell rightly observes, “there is no conflict between actual machines and organic processes.”15 On the contrary, mechanical philosophers tend to project their understanding of machinery onto the organic world, thus creating what Channell calls “mechanical organisms.” As with many shifts of epistemic paradigms, however, one must be aware that there is often no clear-cut distinction between the two world-views and that the established “organic” model was never replaced completely by the symbolic significations of the machine. This can be seen, I would argue, not only in the continuing presence of organicist tenets in modern philosophical and literary discourses (Romanticism, Vitalism, Heideggerian Existentialism, etc.) but also in the emergence of hybrid symbolic figures such as the man-machine or, in its more recent variant, cybernetic organisms.

There is little doubt that the eighteenth century’s restructuring of the “natural” body, which culminated in Julien Offray de La Mettrie’s controversial concept of the man-machine, directly ushered in the rising cultural importance and discursive ubiquity of mechanical creatures or cyborgs.16 Yet in addition to its function as a marker of the ongoing replacement of the organic by the technological, cybernetic imagery also provided spaces for the staging of both the pervasiveness of modern technological paradigms and the nudging anxieties concurrent with the increasing dominance of the machine. Allowing to represent such complexity, the cybernetic body finally developed into a powerful metaphor of technological culture; a metaphor, one should add, that writers of fiction found increasingly appealing when it came to represent the paradoxical status of the human body within the technological framework of modern society. From John Cleland’s scandalous Fanny Hill (1794), which was directly influenced by La Mettrie’s machinist physiology, E. T. A. Hoffmann’s “The Sandman” (1817), Poe’s “The Man That Was Used Up” (1839), Samuel Butler’s Erewhon, Or Over the Range (1872) to Arthur C. Clarke’s 2001: A Space Odyssey (1968) and the latest resurgence of the cybernetic body in cyberpunk novels, numerous authors have adopted

15 Channell 9.
16 According to La Mettrie’s physiological theory, man is a mechanical entity which should be addressed only in terms of exactly measurable quantities and motions. With his method of investigation of the human body firmly grounded in the natural sciences, the notorious French physicist and philosopher eventually came to conclude that, like the cosmos at large, “l’homme est une machine” (Julien Offray de La Mettrie, Man a Machine [1748; La Salle, IL: Open Court, 1991] 80).
the imagery of the man-machine as a pliable symbolical grid on which various forms of socio-cultural commentary would readily thrive.\footnote{The structural similarities between the view of sexuality in \textit{Fanny Hill} and the view of human nature propagated by La Mettrie's \textit{L'homme machine} are discussed in Leo Braudy, "Fanny Hill and Materialism," \textit{Eighteenth-Century Studies} 4 (1970): 21-40.}

In a seminal essay, Katherine Hayles has noted that the cyborg today has finally left the realm of the purely grotesque and of science fiction: “Made flesh and blood by colonizing [that is bio-genetic] techniques that earlier ages could scarcely have imagined, it is no longer a xenophobic monster but a designer organism whose natural habitat is the laboratory cage.”\footnote{N. Katherine Hayles, “Postmodern Parataxis: Embodied Texts, Weightless Information,” \textit{American Literary History} 2.3 (Fall 1990): 404-405. \textit{Webster's New World Dictionary}, on the other hand, still defines the term according to its usage in SF literature: “cy-borg (si’borg) n. [cyb(ernetic) org(anism)] a hypothetical human being modified for life in a nonearth environment by the substitution of artificial organs and other body parts.”} Yet it is not only with reference to the artifactual bodies of the laboratory (chimeras, as they are called in bio-engineering lingo) that we can speak of the emergence of cyborgs as postmodern reality. “By the late twentieth century, our time,” claims Donna Haraway, “we are all chimeras, theorized and fabricated hybrids of machine and organism; in short we are cyborgs.”\footnote{Donna Haraway, “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century,” \textit{Simians, Cyborgs, and Women} (New York: Routledge, 1991) 149-81; 150. See also “Cyborgs at Large: Interview with Donna Haraway,” \textit{Technoculture}, ed. Constance Penley and Andrew Ross (Minneapolis: U of Minnesota P, 1991) 1-20. An interesting account of what it means to work and live in the virtual (cyber)space of electronic media is Allucquere Rosanne Stone, “Will the Real Body Please Stand Up?: Boundary Stories about Virtual Cultures,” \textit{Cyberspace: First Steps}, ed. Michael Benedikt (Cambridge, MA: MIT, 1994) 81-118.} Clearly, Haraway does not want to say that all of postmodern men and women have actually turned into the kind of “Maschinenwesen” that readers of science fiction are so well acquainted with. Rather, she points to the fact that the cyborg has finally captured much of the contemporary cultural imagination at large. Spawned by a flourishing industry of what Gabriele Schwab has dubbed “imaginary cyborgization,” the cybernetic, artificially manipulated body by now “affects practically all social spheres.”\footnote{Gabriele Schwab, “Cyborgs and Cybernetic Intertexts: On Postmodern Phantasmgs of Body and Mind,” \textit{Intertextuality and Contemporary American Fiction}, ed. Patrick O'Donnell and Robert Con Davis (Baltimore: Johns Hopkins UP, 1989) 191-213; 193-95.} As leading characters in blockbuster productions such as \textit{Robocop}, digitalized techno-mutants in avant-garde performances (Laurie Anderson), executive cybernauts doing business in the world-wide web of electronic marketing, or as the distorted physiognomies/bodies of cosmetic surgery, cyborgs simultaneously represent and interrogate the dwindling boundaries of postmodern identity. Since their existence can only be credited to technological manipulation, they make apparent in unmistakable terms the power of advanced technology to challenge the limits and definitions of the organic or natural body. On one of its various semantic levels, then, the proliferation of cyborgs in postmodern technocultures such as the United States refers us once again to the Western epistemological tradition of construing the body as a living machine, as a bio-chemical entity that can easily be subjected to technological transformation.
On yet a different level, however, the preeminent place that cyborg creatures occupy in contemporary culture might also be read as an indication of a more liberating development. Intrigued by its symbolic potential, radical feminists like Donna Haraway have adopted the imagery of the cyborg as a means of envisioning a world beyond the limitations of race, class, and gender. For Haraway, who was trained as a biologist and is now heading the History of Consciousness Board at the University of California at Santa Cruz, the innate heterogeneity of the cybernetic organism—as well as its representations in popular and commercial culture—is apt to demythologize the biological markers of what is natural and what is not. Since the cyborg is essentially a hybrid figure, a being/sign that is at the same time real and fictional, human and nonhuman, natural and technological, it may well be taken to represent the artificiality and constructedness of the various concepts (e.g., nature, humanity, bestiality, technology, etc.) which it incorporates. Nature, for example, should no longer be simply related to humans or organic species in general. As Haraway points out, nature for us [as humans] is made, as both fiction and fact. If organisms are natural objects, it is crucial to remember that organisms are not born; they are made in world-changing technoscientific practices by particular collective actors in particular times and places. . . . If the world exists for us as “nature,” this designates a kind of relationship, an achievement among many actors, not all of them human, not all of them organic, not all of them technological. In its scientific embodiments as well as in other forms, nature is made, but not entirely by humans; it is a co-construction among humans and non-humans.21

By calling thus into question the founding myths of Western identity, the man-machines of late twentieth-century discourse function in a twofold way: First, they lay bare the composite artificial structure of naturalized oppositions such as nature/culture, human/non-human, male/female, etc., and they serve as utopian projections of a world in which these oppositions have been resolved into patterns of cooperation and partnership. And second, cybernetic bodies seem to provide a site of cultural indeterminacy which calls forth radical ideological concepts and which allows for the constant reenactment of the many fantasies and fears associated with the shaky status of “posthuman” identity.

It is this latter function of the cyborg as the focal point of contemporary debates over defining the self in a highly technological environment which is important here. Since cyborgs, as I have pointed out earlier, act as synecdochic representations of technology, they fulfill, above all, a symbolic function. From this perspective, as Schwab argues, the cyborg body “becomes a text, a screen onto which cultural fantasies, desires, fears, anxieties, hopes, and utopias are projected. Cybernetic organisms in-

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21 Donna Haraway, “The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others,” Cultural Studies, ed. Lawrence Grossberg, Cary Nelson, and Paula A. Treichler (New York: Routledge, 1992) 295-337; 297. Haraway takes pains to explain that this is a vision different from postmodern reductionism, which holds that there is no nature but only representations and copies of it, an endless play of signifiers which defer rather than produce a meaningful picture of a world full of “cacophonous agencies.” “The commonplace nature I seek,” Haraway contends, “a public culture, has many houses with many inhabitants which/who can refigure the earth. Perhaps those other actors/actants, the ones who are not human, are our topick gods, organic and inorganic” (Haraway, “The Promises of Monsters” 297).
spire such projections because they are products of a technological, or artificial, manipulation of the body."22 In order to probe the psycho-historical dynamic of the various discourses over technology (an approach that tries to go beyond the traditional dichotomy of utopian vs. dystopian readings of the technological), Schwab looks at the artificial body as "a field of cathexis, an imaginary screen onto which psychic energies from the most archaic to the most current may be projected."23 The way in which we approach the cyborg is therefore largely independent of its so-called "real" implications for quotidian life. Instead of being judged according to what they are, namely an icon of the ongoing encroachment of the technological, cyborgs figure as actants in the increasingly complex process of defining subjectivity in the electronic (posthuman) age. By the same token, cyborgs can be seen both as symbolizing "collective fantasies" (Schwab) and as products of the individual imagination. In each case, they fulfill their symbolic function through a strategy of doubling and mirroring, that is, in a very literal sense, by means of fiction. As distorted representations of both the human and the technological, cyborgs expose the ideological foundations of these concepts by transferring them onto the level of pure signification. Put in a different way, they allow us to articulate metaphorically what cannot be articulated literally: the concept of human identity.

Cyborgs as the Other of Technological Man

Since identity (personal, cultural, professional) has no essence of its own, it can only be grasped indirectly, that is, by way of projecting an Other or double of the original self. If it is true, as the Swiss philosopher Hermann Lübbe argues, that the concept of identity and the concept of fiction are closely related in that they both rely on the construction of stories—without the fictional framework of collective or individual storytelling, such as myth, history, autobiography, etc., the concept of identity would be impossible—then we are hard pressed to acknowledge the symbolic universality of the cyborg as a continuing dramatization of the modern self vis-à-vis the technological system.24 Apart from their historical and cultural specificity, cyborgs—because of their composite nature—illuminate the limits and the ideological character of Western notions of identity, and they bring to the fore the mimetic processes that are at work in the formation of the subject. As projected mirror-images of technological man, cybernetic bodies ideally encapsulate what postmodern historians and psychoanalysts have singled out as the notorious Other of human identity.

Fascination and threat, attraction and denial, difference and sameness—oscillating between these conflicting coordinates, the postmodern, postcolonial concept of "alterity" seems to capture perfectly the symbolic function of the cyborg as mediator between the human and the technological. Studying the importance of cultural mimesis

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22 Schwab 194.
23 Schwab 194.
and reproduction, anthropologist Michael Taussig makes the following claim as to the paradoxical nature of the relationship between self and Other. As Taussig explains,

pulling you this way and that, mimesis plays this trick of dancing between the very same and the very different. An impossible but necessary, indeed an everyday affair, mimesis registers both sameness and difference, of being like, and of being Other. Creating stability from this instability is no small task, yet all identity formation is engaged in this habitually bracing activity in which the issue is not so much staying the same, but maintaining sameness through alterity.25

From yet another perspective, Jacques Lacan highlights “the startling spectacle” of the first encounter of the young child with his or her mirror image as an essential precondition for the construction of identity. In the Lacanian psychoanalytic framework, this moment of pre-conscious recognition of the I figures as a primordial form of that process of identification with an Other which eventually leads to the creation of the subject. Bound up with the formation of the subject in an asymptotical relationship, this earliest image of the self is located wholly in the realm of fiction, prefiguring, as it does, not just the mental permanence of the I but also, through the agency of its asymmetrical representation in the mirror, its alienation and distortion.26 Obviously, Lacan’s concept of the formation of the subject hinges on the following premises: First, there is the factitiousness of the controversial discourse of the self with his or her mirror image, an image which signifies at once similarity and difference and which is apt to produce an idea of subjectivity by relating the I to a distorted representation of its own. And second, the doubling and ambiguous encounter (tuché) of the self with its own image seems to be connected to what Lacan—following Freud’s mechanist approach in The Interpretation of Dreams—calls the automaton, that is, the coming-back or return of the repressed (as in a dream).27 In both instances, the formation of the self is mutually dependent upon the imagery of an Other, upon a negative double that constantly informs our search for identity by fixing personal (or cultural, racial, sexual, etc.) differences in a containable, visible object.

It is quite striking that the similarity between Lacan’s theory of the formation of identity and the fictional creature of the cyborg should, as of yet, have gone unnoticed. Because of their generic hybridity, cybernetic bodies, I would suggest, function precisely along the same lines as the inverted mirror images by which the self—if we follow Lacan’s analysis—continuously construes and reasserts its own subjectivity. As with the androgynous characters in Philip K. Dick’s science fiction novel Do Androids


Dream of Electric Sheep? (1968), which was later made into the cult movie Blade Runner (1982), we can neither be wholly assured of the visual markers of the human nor of those which define the identity of the cyborg. On the contrary, the very essence of the imagery of the man-machine turns on the fact that it resembles as much as it estranges the organic body. In dealing with the cyborg, we are therefore constantly engaged in negotiating the antagonist aspects of similarity and difference, of recognition and denial, just like the Lacanian I as it looks at its reflection in the mirror. Driven by the narcissistic desire to affirm its existence, the self sets out to identify what it is not; that is, it sorts out what it finds to be incongruous with the real of its perception, and then, in a second step, discards all of the inverted aspects of its image as foreign to its own identity, as something that belongs to a different reality.

This latter aspect of humans investing the cyborg body with manifold—and often unconscious—responses emanating from their own soul is one of the basic themes, I would argue, in Dick's novelette Do Androids Dream of Electric Sheep? Similar to Lacan's heterodoxical concept of identification, the machinal Other of this story appears to be but a doubling and distorted image of the spectator, a direct product and brainchild of the humans' mind. Moreover, Deckard's attempt to stalk and finally detect the technological Other through a combination of projections and "gazing" refers to the Lacanian emphasis on the gaze as marker of the child's fascination with his/her own mirror image. Set in the posthuman ambiance of the late twentieth-century American West Coast, this astounding story of biological indeterminacy centers in the dilemma of distinguishing the "perfect" replica or android from its human surroundings. Its narrative tension derives completely from the effectiveness of a single instrument: the so-called "Voigt-Kampff scale," an empathy test that involves an elaborate apparatus to record fluctuations of tension within the eye muscles. The prolonged gaze into the probationer's eye, which, according to one of the officers, is the only remaining analytical tool to assure the non-human identity of the android, serves as a powerful example of the complex dialogue between the human and the technological.

Since the test is devised according to a preset notion of what it means to be a machine, that is, the lack of emotional responses, it is doomed to replicate endlessly the false premises of the human observer. As one of the principal androids points out, the whole design rests on an inherent paradox: by presupposing the disinterestedness and emotional aloofness of the experimenter, the Voigt-Kampff scale betrays the same psychological markers as the non-person it seeks to identify. The difference, then, between artificial and "natural" existence does not originate within the machine; rather it results from the paradoxical desire rampant in technologically advanced cultures to define humanity against the technological as Other and alien to human nature. It is thus, to modify somewhat the symbolic message implied in Dick's title, always the humans, and not the androids, who dream of electric sheep.

While the mimetic process may involve embodiment, that is, the re-construction or doubling of the body, it also involves a dis-embodying moment, and it is this aspect, I believe, that made the cyborg figure so appealing to the popular imagination. As Michael Taussig has suggested, the mimic faculty gives rise to a power relation between

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object and double, a symbolic manifestation of power that is often released through the subsequent destruction of the image (as in ritual burnings of likenesses, totems, etc.). The tendency to denigrate the corporeal grounding of human existence by turning it into a technological double that can easily be manipulated (or even destroyed) is visible in the symbolic concept of the cyborg in a variety of ways. According to recent scholarly work on the relation between man and machine, the Western approach to technology has always been marked by a paramount interest in what machines think or feel rather than in the physical likeness to their creators. “As the phrase ‘artificial intelligence’ implies,” Kathleen Woodward writes in her brilliant essay “Prosthetic Emotions,” “the debate over the increasingly blurred distinctions between humans and machines has been framed primarily in terms of a complex rationality.”

To this, Woodward adds the capacity for feeling that she sees at work in many of the fictional evaluations of the machine and its technological extensions: the android, the robot and, more recently, the microcomputer. What seems to be lacking in all of these techno-narratives, however, is the reality or presence of the body as a major ingredient of the technological Other. If machines are invariably comprised as technological prostheses that are designed to amplify the physical faculties of the body, they are also built, according to this logic, to outdo, to surpass the human in the sphere of physicality altogether.

The concern, then, whether or not technology would, in the long run, nefariously dominate human life was therefore always a concern that was based on the machine’s “character” or, in other words, on its very humaneness. If the “good” machine, as in Benjamin Rush’s eighteenth-century concept of republicans-as-machines, was used to invoke the repressive utopia of disembodied, perfectly controllable men, the “bad” guy, the machine out of control (as Clarke’s HAL or Dick’s Androids), was taken to affirm, if only through its negation, the autonomousness and otherness of the human self.

Cyborgs, real or imagined, encapsulate thus the emergence of a basic cultural conflict within modern society, namely the dichotomic tendencies of accelerated technological progress on the one hand, and the establishment of the individual as a self-reliant, autonomous subject on the other hand. Since the imagery of the man-machine seemed to work both ways, as glaring metaphor of the widespread fear of technological encroachment and, simultaneously, as epitome and affirmation of actual socio-cultural change, it developed into a powerful collective mirror image of modern technological man. What is more, it served well to negotiate the increasing number of antimodernist stances which sprang up during the early stages of industrialization, open-

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29 See Taussig’s chapter on “Alterity,” Mimesis and Alterity 129-43.
31 In 1786, Dr. Benjamin Rush, the first president and founding member of the United Company of Philadelphia for Promoting American Manufactures, extended the structural pattern of the machine into the realm of public politics: “I consider it is possible,” Rush writes in a proposal for American education, “to convert men into republican machines. This must be done, if we expect them to perform their parts properly, in the great machine of the government of the state” (“Of the Mode of Education Proper in a Republic,” originally published in Gentleman’s Magazine 56 [1786], rpt. in The Selected Writings of Benjamin Rush, ed. Dagobert D. Runes [New York: Philosophical Library, 1947] 92 [my emphasis]).
ing up spaces for the imaginative assessment of cultural anxieties. With the advancement of technology in full swing, the multi-faceted concept of the cyborg, which in various guises had populated the myths and fictions of Western culture for centuries, finally became an important tool to facilitate human accommodation to the rapid progress of technology, a crucial instrument, as Kathleen Woodward has put it, of "technological socialization."\(^3\)\(^2\)

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\(^3\) Woodward 103. For a historical survey of Golems, automata, androids, and other manifestations of the transgression of the fixed boundaries between the living and non-living in Western culture, see Derek J. de Solla Price, "Automata and the Origins of Mechanism and Mechanist Philosophy," *Technology and Culture* 5 (1964): 9-23.