

**Man in the Age of Mechanical Reproduction:  
Variations on Transhumanism in the Works of Smith, Delany,  
Dick, Wells, and Gibson**

By

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A Thesis Submitted to the Faculty of  
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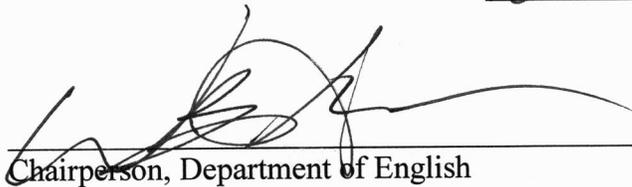
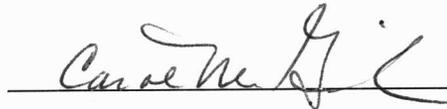
Charles Barry Herzek

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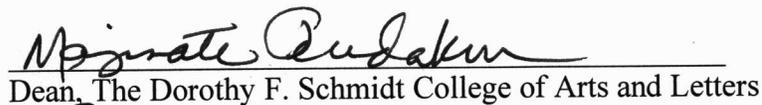
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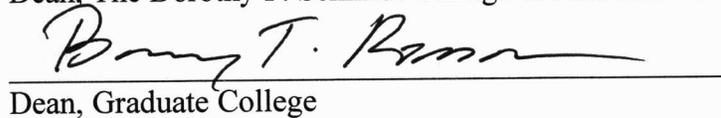
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## Abstract

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Science fiction identifies three characteristics as definitive of and essential to humanity: 1) sentience or self-awareness, 2) emotions, and 3) most importantly, the capacity for sociability. Through the vital possession of these three traits any entity can come to be called human.

In the first chapter, I examine Cordwainer Smith's "Scanners Live in Vain" and Samuel R. Delany's "Aye and Gomorrah..." two stories in which human subjects become Other than human. In the second chapter, I explore the prospect of creatures, not biologically human who gain human status through an analysis of Smith's "The Dead Lady of Clown Town" and Philip K. Dick's *Do Androids Dream of Electric Sheep?* In the third chapter, I investigate the uniquely science fictional notion that "humanity" does not require biology through a comparison of H.G. Wells's *The Island of Dr. Moreau* and William Gibson's *Idoru*.

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## **Introduction:**

### **We, Human**

Whether you hold Mary Shelley's *Frankenstein* or H.G. Wells's *The Time Machine* as the first work of science fiction, one important point cannot be denied about the genre: from the beginning science fiction has always been concerned with the notion of defining what it means to be human. Why were early science fiction authors so concerned with this question? Why does it remain a major theme in the genre to this day? And finally, has our definition of "human" changed, and if so, how?

Science fiction authors were and continue to be interested in defining humanity for many different reasons. In her essay "Views on Human Reproduction and Technology in Science Fiction," Valerie Broege explains that the popularity of science fiction has a "great deal to do with the fact that it offers a kind of mythology of technology, exploring in many varied scenarios how our machines and science can influence our lives for good or ill" (197). More specifically than simply providing a mythology of technology, science fiction provides a unique opportunity to consider human nature through thought experiments that stay ahead of societal and technological developments. Only in science fiction, where humans can be taken out of their ordinary surroundings and placed in all manner of extraordinary new ones, can we truly explore the ephemeral essence of human nature. Only in science fiction can we ask the questions: "Is a human still human when

it lives on Mars?” “Is a human still human even if it has cybernetic implants?” “Is a human still a human even though it is just a mind copied on to a machine?” Science fiction authors such as Ursula K. LeGuin, William Gibson, John Kessel, James Patrick Kelly, and Robert J. Sawyer to name a few remain committed to examining humanity and human nature because our understanding of what it means to be human is so highly dependent on society and our technological progress; so long as society and technology continue to evolve, apparently so too will we and how we define ourselves.

If humans grow socially and technologically, to what degree will we continue to possess the same defining characteristics? In his book *Our Posthuman Future: Consequences of the Biotechnology Revolution*, social philosopher Francis Fukuyama argues against biotechnology, claiming that such power over our own evolution would compromise the already remote possibility of universal human rights. In his attempt to define what it is to be human, Fukuyama identifies several criteria that he labels “Factor X”: “Factor X cannot be reduced to the possession of moral choice, or reason, or language, or sociability, or sentience, or emotions, or consciousness. ... It is all of these qualities coming together. ... Every member of the human species possesses a genetic endowment ... an endowment that distinguished a human in essence from other types of creatures” (171). While Fukuyama’s concept is thought provoking and provides an entry point into the discussion of human nature, it is critical that I distinguish my use of the term “essence” from his. Fukuyama implies a biological imperative: only biological humans are capable of possessing this special and unique essence. His understanding of human essence and human beings runs contrary to beliefs expressed in a substantial

amount of science fiction literature. When I use the terms “essence” or “human essence” I am not referring to biological determinate; rather, I imply intangible, ephemeral characteristics that may exist independent of biology—learned qualities.

If we were to rigidly stand by Fukuyama’s definition of what it means to be human, we must ask: what of a disabled person—would they be considered any less human because they may be limited in mental capacity or communicability? What of human beings five hundred or a thousand years ago? Would they be considered human when comparing their morals to the moral standards of today or testing their rational faculties against our own? Although Fukuyama claims that his goal is to promote universal human rights, it is clear that his definition is extremely limiting and may promote the opposite of what he intended. Still, one may wonder, could the introduction of non-biological components into the human organism make people less human? This is a question often rehashed again and again in science fiction: is a human that has been altered still to be considered human, or have the changes rendered it something else, something other than human, posthuman?

In her monumental essay “A Manifesto for Cyborgs,” Donna Haraway offers the cyborg as an alternative to the human/machine and human/animal binaries. Rather than looking for universal human characteristics, Haraway proposes, “a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints” (2275). Theoretically, the cyborg would exist as a constantly liminal figure able to transgress and transcend virtually anything, because it is a mixed

entity, not bound by some arbitrary biological essential. Haraway's opinion, like Fukuyama's, is rather extreme, though it represents the opposite and optimistic (or even utopian) end of the same spectrum. We see throughout science fiction, however, that the cyborg is not always embraced as the transitional, inorganic organism able to bridge the gap between all persons, sexes, animals, and machines. In many cases (though not all) not only does society reject the cyborg because of its unnatural origin, but the cyborg rejects itself and/or the society that has identified it as Other. Cyborgs in science fiction are often represented by contrast as an affront to mankind illustrating those qualities that are uniquely human—ideally, humane behavior. In those cases where a creature of inhuman origin—an anthropomorphized animal, machine, computer program, or an extra terrestrial—is accepted by society, it is not accepted as a cyborg, but as a human. These transhumans are allowed into society and considered members of the human collective because they embody an intangible human essence, whatever that may be.

In her book *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, N. Katherine Hayles proposes another possible solution to the question of human essence—the posthuman:

The posthuman does not require the subject to be a literal cyborg. Whether or not interventions have been made on the body, new models of subjectivity emerging from such fields as cognitive science and artificial life imply that even a biologically unaltered *Homo sapiens* counts as posthuman. The defining characteristics involve the construction of subjectivity, not the presence of nonbiological components. (4)

If wearing glasses, using a telephone to have a conversation, or simply reading a book can make someone posthuman by altering his or her subjective understanding of reality, is the posthuman really anything new? By this definition each new generation could be considered “posthuman” in comparison to its predecessor based on its altered subjectivity.

The purpose of this study is not to define what it means to be human or what humanity is outside of literature. As Hayles remarks, “the meaning of the human has never been entirely stable or universally accepted” (“Commentary” 333). I simply aim to identify qualities that science fiction uses to define humans. What separates man from all other creatures he encounters? What does science fiction require beings to possess in order to be called human? Within science fiction a “human” status can, and is often, ascribed not only to humans as we understand the word, but to creatures that are not biologically human, and occasionally to those beings that possess no biological functions. I propose that humanist science fiction (as exemplified by the six stories I analyze in this thesis) identifies three characteristics as definitive of and essential to humanity: 1) sentience or self-awareness, 2) emotions and the prospect of emotional development, and 3) the capacity for sociability. It is through the possession of and relationship between these three traits that any entity—animal, machine, human, and perhaps even vegetable—can come to be called human.

Why are these three things, and nothing else, essential to science fiction’s definition of humanity? As I explained earlier, Fukuyama’s Factor X may contain more qualifiers than necessary to create a universal definition of humanity, but it does provide

a gateway for further discussion. By eliminating some of his criteria, we can see that the definition of humans can be expanded to include the science fiction notion of transhumanism—the transformation of animals and/or machine into humans, and the transformation from human to animal or machine.

Of the three elements required to be(come) human the most easily defined is sentience. Sentience, for the purpose of this paper, is not simply the act of being self-aware: “Human sentience is not that of a pig or a horse, because it is coupled with human memory and reason” (Fukuyama 172). Even those life forms that are not human (or are no longer human), such as Cordwainer Smith’s Scanners, Samuel R. Delany’s Spacers, Philip K. Dick’s Androids, and Wells’s Moreau’s Beast-people are aware of their existences and the fact that they are (or have become) Other than human. If these non-humans are sentient, is human sentience significantly different from the self-awareness they possess in any particular way? They possess both reason and memory, but their sense of self is not only shaped by their memory and reason; it is also formed through emotional connections and social interaction. Therefore, these creatures project society’s views onto themselves, which thus impedes their emotional development and prevents them from seeing themselves as human.

According to Fukuyama, the most unique human characteristic is our emotions:

[I]t is the distinctive human gamut of emotions that produces human purpose, goals, objectives, wants, needs, desires, fears, aversions, and the like and hence is the source of human values. While many would list human reason and human moral choice as the most important unique

human characteristic that give our species dignity, I would argue that possession of the full human emotional gamut is at least as important, if not more so.” (169)

While emotions do have their roots in instinct and evolution, the human emotional range has evolved beyond those utilitarian, primitive, and instinctual emotions of animals:

“Some of these emotions encompass the simple pains and pleasures of the utilitarians, but others reflect more complex social feelings, such as the desire for status or recognition, pride in one’s ability or righteousness, or shame at having violated a social rule or prohibition” (Fukuyama 117). Fukuyama is not denying that animals possess emotions, he is simply stating that human emotions differ from those of animals because they are more than simple fear of pain, happiness in eating a meal, and arousal when we see a prospective mate; Fukuyama asserts that humans have developed more (and more complex) emotions because human society is more complex than the social situations an animal may encounter. As Hayles explains, “if feelings and emotions are the body murmuring to the mind, then feelings are ‘just as cognitive as other precepts,’ part of thought and indeed part of what makes us rational creatures” (*Posthuman* 245). Emotions are an integral component to our rational faculties as well as our social identity: “Our ability to experience these emotions is what connects us potentially to all other human beings, both living and dead” (Fukuyama 173).

By using the term “sociability,” I do not simply mean the capacity for conversation; sociability is the most complex of the three human traits defined in science fiction. Sociability is sculpted by, and conversely sculpts, an entity’s sense of self: “We

are social and political animals not merely because we are capable of game-theoretical reason, but because we are endowed with certain social emotions” (Fukuyama 172). Fukuyama further explains, “human beings have been wired by evolution to be social creatures who naturally seek to embed themselves in a host of communal relationships” (125). In the end, humanity cannot be defined by any one of these three characteristics alone; all three are integral in shaping the self and determining whether or not society is willing to accept a being as “human.” Humanist science fiction does not define humans through arbitrary biological essentials; it identifies human essence as a learned behavior, as the act of being humane.

In the pages that follow, I present this argument in three chapters. In the first chapter, I explore the very possibility of humans. Can a human ever lose its status as human? I examine two stories in which human subjects, by way of cybernetic augmentation, become Other than human. In the second chapter, I explore works in which creatures that are not biologically human gain human status. In the third chapter, I investigate the uniquely science fictional notion that humanity does not require biology, nor does it require a physical body.

## **Chapter One:**

### **Man Modified:**

#### **Smith's Scanners and Delany's Spacers**

In their short 1960 article "Cyborgs and Space," Manfred E. Clynes and Nathan S. Kline propose that "solving the many technological problems involved in manned space flight by adapting man to his environment, rather than vice versa, will not only mark a significant step forward in man's scientific progress, but may well provide a new and larger dimension for man's spirit as well" (33).<sup>1</sup> Clynes and Kline are not the only ones who perceive cyberization as a positive step in human evolution. As I explained in the introduction, Haraway's "A Manifesto for Cyborgs" (1985) describes the cyborg as a liberated and liberating figure: "cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves" (2299). For Haraway, the mixed origin of the cyborg allows it to transgress traditional binaries.

Haraway proposes that within a cyborg, "a stressed system goes awry; its communication processes break[s] down; it fails to recognize the difference between self and other" (2285). Yet this is not necessarily the case. Throughout the corpus of science fiction, the cyborg has and continues to be used to illustrate Otherness. As Clynes and Kline suggest, mechanically, chemically, physiologically, and psychologically altering

humans may create people better suited to functioning in space, but there is no guarantee that the resulting creatures will remain human. Thus, Fukuyama argues, and in this case rightly so, that “the most significant threat posed by contemporary biotechnology is the possibility that it will alter human nature and thereby move us into a ‘posthuman’ stage in history” (7).

The purpose of this chapter, is twofold I lay the foundation for the later chapters by examining the mutability of human essence found in science fiction; I aim to prove that when human beings are dramatically altered—altered to such a degree that they lose either their sentience, capacity for sociability, and/or their affective responses are dampened or changed—they are not longer human. This change is not based on biological imperatives, as Fukuyama would suggest; rather, as Hayles explains, the change is precipitated by radically altering the creature’s subjectivity. Second, I consider Haraway’s notion that the cyborg is immune to desires of wholeness and freed by the diversity and ambiguousness of its origin. Both Cordwainer Smith’s “Scanners Live in Vain” (1950) and Samuel R. Delany’s “Aye and Gomorrah...” (1967) focus on just this sort of posthuman creature; the Scanners and the Spacers have been optimized for space work to the point that they can no longer be considered human; they are tragic posthuman entities.<sup>2</sup>

Both Smith and Delany construct similar scenarios in which the task of space travel poses great risks to the human body. Interstellar travel, has become a necessity in both their universes, and measures must be taken to enable man to safely traverse the depths of space. Smith’s Scanners are examples of the traditional, mechanically altered

cyborg. Each Scanner is equipped with an instrument box through which they monitor and regulate their vital functions. To resist the “Great Pain of Space,” Martel, the main character, and the rest of the Scanners, have been cut-off from all of their senses, except sight (Smith, “Scanners” 68). While not cyborgs in the traditional mechanically altered sense, like Smith’s Scanners, Delany’s Spacers are posthuman and have also undergone modifications to be suited to a space environment; they have been stripped of their gender to such a degree that they are regarded as “not even androgynous” (Delany 323). While readers, and the other non-altered inhabitants of both stories, perceive the Scanners and the Spacers to be different, how do they see themselves?

While the Scanners may be machines, they are certainly sentient beings, and at least Martel is cognizant of the state of his own sad and painful existence. As “Scanners” opens, Martel is arguing with his wife, begging, pleading with her to let him cranch—a process that allows Scanners to temporarily regain their senses, in which they must still monitor their chest-boxes to regulate bodily functions. Trapped within his own horrible, mechanized body and unable to connect with those around him, Martel painfully acknowledges the truth of his existence, “I’m human only when I cranch. The rest of the time – you know what I am. A machine. A man turned into a machine. A man who has been killed and kept alive for duty” (Smith, “Scanners” 70). In his own eyes he is less than a machine: Martel sees a life without feeling, without senses, without human contact, as equivalent to having no life at all—being dead. Despite the Scanners’ liminal status—not quite dead, not quite alive—they are completely conscious of what Adam Stone’s invention would mean to them—obsolescence, since if Stone has succeeded, then

“Scanners live in vain!” (Smith, “Scanners” 82).<sup>3</sup> The council’s vote to kill Stone is more than the shocking “judicial murder” Martel understands it to be; it is a misguided and extreme act of self-preservation (Smith, “Smith” 85). While it could certainly be argued that this is an emotional and therefore human action, in reality it is no different than a cornered animal attacking its oppressor; self-preservation is by no means a strictly human reaction. Although the Scanners do not see themselves as human, they understand that their existence—painful as it may be—is about to end. Martel displays a tragic and agonizing self-awareness—aware that he is not human, and equally aware that what little being he has may soon be terminated. Only because Martel is crunched can he see things differently from the rest of the Scanners.

Similarly, the Spacers no longer see themselves as ordinary human beings. Throughout the whole story our Spacer narrator does not refer to or think of himself as human; rather, the narrator only refers to himself as a Spacer. Stripped of his gender—no longer man or woman—he can only see himself as one thing, “lonely” (Delany 327). His inability to group himself among normal humans, while stifling his social-sexual development, reaffirms his awareness of self; to put it simply in Cartesian terms: the narrator thinks, therefore he exists. Although the Scanners and the Spacers no longer see themselves as fully human, they are very much self-aware. Through their own acknowledgement of the loss of their humanity we see two things: first, that despite extreme alterations to their bodies, they remain complex beings sentient of their own existence. Second, that both the Martel and the Spacers are pained by the loss of their senses and not “resolutely committed to partiality, irony, intimacy, and perversity,” as

Haraway proposes a cyborg would and should be (2270). Martel and the Spacers desire human wholeness and feel inadequate when they compare themselves to those full humans around them. Clearly, these modifications have taken a heavy toll on both the Scanners' and Spacers' sense of self. Their sense of self is only one element of their emotional and psychological state that has been affected.

The Spacers are left emotionally crippled from their lack of social-sexual identity. That is not to say that they do not have emotions, but they have problems expressing their feelings to non-Spacers and they all seem to try filling the emotional void with material objects. Perhaps "the alteration," which would likely inhibit normal chemical development, plays an additional role in stifling their emotional development (Delany 323).<sup>4</sup> Haraway claims that "the cyborg is a creature in a post-gender world; it has no truck with bisexuality, pre-Oedipal symbiosis, unalienated labors, or other seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity" (Haraway 2270). The Spacer narrator of "Aye and Gomorrah..." does not illustrate this point: "there are times when yelling and helling won't fill the lack. There are times when you must walk by yourself because it hurts so much to be alone" (Delany 321). The Spacer clearly has feelings of loss and desires both wholeness and unity, but cannot describe these feelings to unaltered people. Throughout his encounter with the Turkish (female) Frelk, the narrator repeatedly asks for "something," "something that you like, anything of yours that means something to you" (Delany 325).<sup>5</sup> The narrator does not desire money or an item for its material value; he wants the Frelk to share an emotional connection, wants her to give him an object that carries an emotional value.

The Spacer is incapable of making a connection without the crutch of material goods; here the Spacer is like a child who measures love by the toys he gets. That is not to say children are not human; rather, the narrator is stunted in his emotional growth because he has been de-gendered. Unable to bridge the insurmountable gap between them, he is incapable of expressing his emotions and the rationale behind them, and the Frelk is incapable of understanding the Spacer's emotional needs.

Whereas the Spacers are incapable of expressing their emotions in a manner clearly understood by other people, the Scanners' mechanical components have severely limited the emotional range they are capable of experiencing. This separation from their feelings allow them to "manage the body, rule it coldly even in the enduring agony of Space" (Smith, "Scanners" 69). As Clynes and Kline explain, "if man in space, in addition to flying his vehicle, must continuously be checking on things and making adjustments merely in order to keep himself alive, he becomes a slave to the machine" (31). Although Martel's modifications allow him to survive in space, he is slave to them; his actions, even when on earth, are governed and restricted by his machine components. Scanners are primarily creatures of logic: Martel equates them to machines. Martel provides a unique contrast to the rest of the Scanners' cold logical thought process. Attending the Scanner meeting crunched, Martel notes, "if the others were all crunched, as I am, they would see it in a human way, not with the narrow crazy logic which they used in the meeting" (Smith, "Scanners" 87). Thus, when the Scanners are ruled by their machine components, they perform just as a machine would: in a manner cold, emotionless, mechanical, dead.

While the Scanners and Spacers are similar in their dampened affective responses, the Scanners are significantly different for two reasons. First, the Scanners are allowed a temporary return to full human functions through the use of the cranching wire. The second, more striking difference is the method of selection. Spacers are chosen from “children whose sexual responses are hopelessly retarded at puberty” (Delany 324). Scanners are volunteers. Unlike the Spacers who have little or no say in the process of their dehumanization, the Scanners make the conscious decision to subject themselves to augmentation for the betterment of mankind: “All mankind owes most honor to the Scanner, who unites the Earths of Mankind. Scanners are the protectors of the habermans.<sup>6</sup> They are the judges in the Up-and-Out. They make men live in the place where men desperately need to die” (Smith, “Scanners” 76). Martel’s motivation to volunteer is a sense of duty toward fellow man. In her essay, “Never Never Underpeople: Cordwainer Smith’s Humanity,” Karen Hellekson observes that, “To be human, Smith implies, calls for more than intelligence. To be human requires a heart, love, freedom of choice, and vitality. This transcendent definition of humanity is implicit in all Smith’s work” (124). At the heart of Martel’s decision lies a strong emotional and social connection. Although the Scanners were initially motivated by a desire to protect and preserve humanity even in the harshest and most uninhabitable of environments, and though they are granted a temporary return to normal human sensations, the Scanners’ lack of affective response distances them from the ordinary humans they are supposed to protect and situates them among machines and not mankind.

Fukuyama argues that it is our emotions that make us unique and distinguish us as human. While emotions are, as Fukuyama postulates, the defining human characteristic most often and assailed and easily modified by biotechnology (170), sociability is equally important to emotions. The relationship between emotions and sociability is interdependent; normal psychological and emotional growth is fostered through regular human interaction, and human interaction is built on psychological and emotional bonds. Additionally, social comparison plays an integral role in the development of the self. Thus, we must examine the role that the Scanners' and Spacers' capacity for social interaction and plays in determining their humanity, or lack thereof.

As I explained in the introduction, sociability is more than the simple act of conversing or communicating. Sociability is the ability to form interpersonal bonds based on emotional connections and understanding. Sociability is a necessary component in determining what we are willing to accept as human. An entity's capacity for socialization shapes its perception of self and its emotional development. Sociability determines how capable a creature is of transcending the line that separates cyborg, animal, and/or machine from human.

More than simply affecting their sense of self and emotional range, the Scanners' cybernetic components have compromised their ability to socialize with others and changed the way that people interact with them. While Scanners can talk, they cannot control the volume or pitch of their voices; rather than speaking, Scanners use their "talking nail" to write their thoughts on a small tablet attached to their bodies. Scanners are so very awkward in so many different ways that "ordinary people did not like to be

around groups of haberman or Scanners” (Smith, “Scanners” 72). As a result of their cybernetic augmentation, the Scanners’ communicative faculties are extremely limited. Furthermore, Scanners are so called because their eyes are the one sense they still possess; Scanners cannot feel physical contact, nor can they hear aural stimuli, nor can they smell or taste. Cut-off from their own bodies, the Scanners are effectively cut-off from any possibility of human contact, except for when they cranch. This inability to function among other non-mechanized people renders the Scanners no longer “suited to life on earth” (McGuirk 170). Martel and the confraternity of Scanners no longer belongs in the natural human habitat; they are no longer human. In *his* “natural” Scanner state, Martel resists Haraway’s concept of the cyborg as a perfect, post-gender mixture of heterogeneous parts; as a Scanner he is not a homogeneous mixture of man and machine resulting in some new and superior life form. Although contained within flesh, when a Scanner is not crunched, he is all machine. Instead of promoting the transgression of “boundaries, potent fusions, and dangerous possibilities,” non-cranched Scanners operate within the existing man/machine binary (Haraway 2274). Thus, the Scanner comes to represent that which is not human: dead, mechanical, devoid of free will, and unfeeling.

The Spacers have been physically modified as well, though not through machine components: they have been stripped of their gender. Thus, Capper Nichols asserts, “Delany effects the kind of destabilizing strategy that [Judith] Butler advocates” (152). However, in destabilizing traditional gender identification new binaries arise; as opposed to the traditional male/female binary, the reader is presented with the Spacer/Frelk binary. While this binary is certainly different from the traditional gender binary that Haraway’s

cyborg would undermine and obliterate, the formation of the new binary functions to illustrate the failure of these cyborgs to successfully bridge gaps and overcome desires for wholeness. Rather than enabling the Spacers, their lack of gender prevents them from being accepted by either sex. Edward Chan notes, that Delany “manipulate[s] the body in relation to social categories, thus tinkering with the particular symbolic system associated with the body, the very machinery of identity” (Chan 183). More than simply not being accepted by either sex, the Spacers escape any sexual grouping whatsoever. Because the Spacers do not fit into any standard sexual group, they are equated to “a bunch of corpses” (Delany 324). The Spacers’ non-existent socio-sexual identity places them at a distance from anything human, thus rendering them figuratively dead, or literally not human.

Although the Spacers may be capable of conversing, are capable of reasoning, and possess some emotions, their inability to identify with unaltered people leaves them socially, intellectually, and emotionally crippled by normal standards. They can converse, but they cannot interact naturally; they can think, but they cannot understand; they can feel, but are limited by all these inadequacies: “communication is at best a chancy business” (Schuyler 72). By the end of the Spacer’s encounter with the female frelk, the two are no closer to understanding each other than they were at the beginning of their conversation. Unable to offer the support, acceptance, bond, and respite from loneliness that the Other needs, she directs the Spacer towards a place known as “the Flower Passage [...] a spacer hangout” (Delany 328). In the end, the void between them is insurmountable and the Spacer must return to its own kind; it must continue to exist

separately from ordinary gendered people to remind them of the ever present Other outside the self. Spacers have been modified to the point that others cannot and do not see them as human, and they no longer see themselves as human. While it may not have been Delany's intent to portray the Spacers as less than human, he effectively illustrates the dangerous nature of Self/Other binaries that allow prejudices to develop.

The stories' divergent endings underscore the importance of sociability once more. Unlike the other Scanners, Martel is aware of his fleeting humanity. Martel is one of only two Scanners we know to have regular contact with non-modified humans. Chang, the other Scanner to regularly interact with an ordinary human being, is in a different situation from Martel. Martel's situation is unique; he is the only married Scanner (Smith, "Scanners" 84). Whereas Martel's wife is both honored and pained by her husband's mechanization, Chang's father sees his son's modifications as "defects" (Smith, "Scanners" 74). Thus, Martel knows what it is to be loved by another human being while Chang only knows what it is to interact with humans. It is this unique situation that separates Martel from the rest of the Scanners and prompts his excessive use of the cranching wire. Cranched, Martel is more human than Scanner. Martel's closeness to normal people is what allows him to see the benefits of Adam Stone's invention, which will eliminate the need for Scanners. In Smith's literary universe "people are saved from psychological pain and defensive emotional constriction through the intervention of other living beings" (Elms 274). In the end, it is because of Martel's relationship that he and the rest of the Scanners regain their humanity.

Neither the Scanners nor the Spacers are human, and neither group presents the cyborg as the idealized creatures that Haraway envisions them to be. Is there any way for the cyborg to surmount the vast disparity between man and himself? Is there any way for Haraway's ideal cyborg to exist? Can a creature that transcends and transgresses all boundaries ever truly exist? While Haraway proposes that the cyborg does not seek wholeness or natural unity, for any being to transgress and transcend boundaries to such a degree as she imagines would in itself suggest wholeness. In his essay "Neither Gods nor Monsters: An Untimely Critique of the 'Post/Human' Imagination," Daniel O'Hara notes, "no one can ever know the answers about the whole, because no one, however enhanced by modern technology, can ever know the whole" (121).

Science fiction needs the presence of the Other if for no other reason than to highlight those qualities that we see as essentially human. Clynnes and Kline state, "if man attempts partial adaptation to space conditions, instead of insisting on carrying his whole environment along with him, a number of new possibilities appear," including the possibility that the modified person will no longer be human (30). Modifying humans to work in the harshness of outer space is an alienating process, by which man may become the cybernetic Other. Both Cordwainer Smith's "Scanners Live in Vain" and Samuel R. Delany's "Aye and Gomorrah..." focus on just this sort of posthuman creature; the Scanners and the Spacers have been optimized for space work to the point that they are tragically alienated from humanity. Scanners, haberman, Spacers, and all cyborgs for that matter, are not always the idealized creatures able to transcend all boundaries that Haraway envisioned them to be. Rather, the posthuman as Martel puts it trapped within

“the terrible prison of his own mechanified body,” which can only serve to illustrate that which he is not, human (Smith, “Scanners” 79).

If that which started as a human can lose its humanity, we must ask the next logical question: what of those creatures that were never human to begin with, can such a machine or animal ever achieve humanity? In the two chapters that follow, I examine science fiction stories that have portrayed the transcendence of both machines and animals to the status of being human.

**Chapter Two:**  
**'Droids, Dogs, and Gods:**  
**Dick's Androids and Smith's Underpeople**

In the previous chapter I illustrated how, through alteration—mechanical, psychological, chemical, or other—humans could be stripped of the ephemeral human essence. Having established the dangerous possibility that humans may become something other than what they started as, we are left to wonder whether or not it is possible for something else to become human. In this chapter I will take that next step and examine the science fictional, slippery definition of “human,” looking at creatures that are not biologically human that gain acceptance into the human collective.

In his essay, “The Android and the Human,” Philip K. Dick wrote that “as the external world becomes more animate, we may find that we—the so-called humans—are becoming, and may to a great extent always have been, inanimate in the sense that *we* are led, directed by built-in tropisms, rather than leading” (187).<sup>1</sup> In other words, like Hayles and Fukuyama, Dick believes that our technological evolution has been pushing toward the posthuman, making us more like the machines we use and our machines more alive. It is precisely under this circumstance that something other than human can become human. As the Scanners allowed me to illustrate in the previous chapter, when a person’s responses become mechanical and are motivated strictly by logic, he or she is no longer

human. When man and his machines begin to perform in the same manner—when humans begins to react in a uniform, mechanical, uncaring way—the two may become indistinguishable: when our machines come to possess the three elements of human essence that I have identified, these Others may become human.

In both Dick's *Do Androids Dream of Electric Sheep?* (1968) and Cordwainer Smith's "The Dead Lady of Clown Town," (1964) many aspects of human life have become highly dependent on, or more accurately, overrun by technology, altering human nature and pushing people dangerously close to a posthuman reality vastly different from anything we may be able to identify as human. In Dick's novel we are presented with a world where every person can easily, and regularly, regulates his or her mood by "dialing" a feeling into an external device known as a "mood organ" (*Do* 5). Similarly, and much more overtly, Smith presents a world in which human beings are becoming more machine-like. In "The Dead Lady," people are no longer conceived and born in the manner currently practiced; rather, people are ordered by the Instrumentality based on planetary need and designed by the "people programmer" (Smith, "Dead" 223). Clearly, within both stories human life is becoming mechanized, blurring the line between man and the Other and allowing for the possibility of successfully crossing the line.

In addition to obscuring the boundaries of humanity through mechanization, both authors introduce humanoid creatures that encroach upon and compromise human identity. Smith creates the "underpeople," a servant class made of various animals "brightened and cut and trimmed to look like" humans ("Dead" 246). Physically, most underpeople closely resemble humans, though some still possess characteristics which

clearly indicate their animal origins. Whereas the underpeople, like the trumen, are designed and programmed by the Instrumentality, they are considered less valuable and are thus not as well refined since less care goes into producing uniform physical characteristics among the underpeople. Nevertheless, this proves beneficial for the underpeople. Their individual physical imperfections allow each one to develop a unique sense of self. Most true humans, on the other hand, are so homogeneous and uniform that for the most part their sense of self is far less developed. Elaine, is an exception because she was accidentally designed according to inappropriate specifications. Dick's story also focuses on the relationship between man and this humanoid Other. Dick's androids are bio-organisms designed to look as much like humans as possible. The androids, like the underpeople, are also designed as servants for authentic humans.

While both stories revolve around these creatures' quest for acceptance into the human collective, the methods the underpeople and the androids use to acquire humanity are strikingly disparate and the results correlate perfectly. The underpeople perform in a truly human and even humane fashion, acting selflessly out of love and compassion for both human and underperson alike. The androids repeatedly assert their will to live and their "humanity" through force and manipulation, putting themselves before anyone and everyone else, including other androids (Dick, *Do* 101), displaying a total lack of emotion and sociability. Even though the androids arguably travel as a group, Roy Baty uses Pris Straton as a decoy, which leads to her destruction. The underpeople stage a non-violent protest relying on the media to gain human sympathies. The androids kill their human masters, come to earth masquerading as other humans they have killed, and in general

show a total disregard for life—human, animal, or android. Thus, the bounty hunters, Rick Deckard, Phil Resch, and Dave Holden must come in and “retire” these dangerous, inhuman creatures.

Much of the scholarship on *Do Androids Dream* identifies Dick’s blurring of the line that separates humans from other creatures, but occasionally this mode of criticism goes too far, suggesting that the androids are successful in achieving humanity.<sup>2</sup> In her essay “Entering the Posthuman Collective in Philip K. Dick’s *Do Androids Dream of Electric Sheep?*” Jill Galvan asserts, the android “capable of masquerading as non-android, it blends in with mainstream society, infringing upon the boundaries of the human collective” (413). Galvan proposes that *Do Androids* portrays a world embracing the posthuman—a world in which humans and machines “commiserate” (414). This, however, is not the case; a few key scenes illustrate that the androids are incapable of feeling empathy and are thus incapable of entering into the human collective. Even though the humans of Dick’s world are becoming more mechanical—able to modify their mood with the press of a button—in this world there also exists another technology altering the human perception of society and emotions: the empathy box, which allows the users to experience an emotional and mental fusion with all other humans using their boxes anywhere in the settled universe (22). The empathy box is a device that only humans can experience and appreciate; androids are incapable of experiencing this fusion since they lack the human capacity for both sociability and emotion regardless of their vast analytical capabilities.

Galvan only sees technology as an extension of the law and a method of “rupturing the human collective” through insulating people from one another intended to prevent public unrest (416). Galvan neglects two crucial facts. First, the empathy box allows a shared human experience, technology providing the human interaction limited by the environmental conditions of the novel’s world. The radioactive fallout subsequent to “World War Terminus” puts everyone at risk of both physical and mental deterioration, making leaving one’s home often dangerous, and thus large social gatherings are infrequent (Dick, *Do* 8). Second, Galvan neglects Dick’s own notion that people can co-opt the technology of the hegemonic structure and use it to subvert the powers that be (Dick, “Android” 194-7). While the empathy box may be government issued, Mercer’s message is humanitarian and not totalitarian; the experience is not regulated by the government, but shaped by all those sharing at any given moment. Mercer and the empathy box remain a uniquely human and humanizing mechanism separating humans and androids.

There are some who argue, as the novel invites, that the protagonist, Rick Deckard, is in actuality an android himself. However, Dick explains, “Androidization requires obedience. And, most of all, *predictability*. It is precisely when a given person’s response to any situation can be predicted with scientific accuracy that the gates open for the wholesale production of the android life form” (“Android” 191). Although not completely, Deckard rejects predictability. Rachel Rosen and the Rosen Association know that once Deckard sleeps with her, he will no longer be able to destroy androids, but she expects this to be an immediate effect; she expects that he will abandon his

mission to destroy the last three androids, or else die in a halfhearted attempt at confronting them.<sup>3</sup> Although he resigns his post as a bounty hunter, he first finishes his mission—being imperfectly predictable, and in his flaws, flawlessly human.

If, however, there must be one character who becomes an android, it is Phil Resch. Resch too is seduced by Rachel, but his socially programmed hatred for androids and his lack of empathy towards other humans removes his human essence and removes him from humanity; Resch, not Deckard, is a human android. As Dick says, “A human being without the proper empathy or feeling is the same as an android built so as to lack it, either by design or mistake. We mean, basically, someone who does not care about the fate that his fellow living creatures fall victim to” (“Man” 211). Deckard ceases to function as an automaton; he goes against all social programming and develops feelings of empathy for the androids he is meant to kill. Sherryl Vint observes, “Deckard’s discovery that he feels empathy for androids is the first sign that he is becoming a new sort of human, one who cannot separate cognition from affect, and thus is resisting becoming like an android himself” (116).

Unlike the Scanners and the Spacers, who possess some emotional capacity (limited though it may be), the androids were never human and do not understand how integral compassion and empathy are in sculpting social relationships, nor do they understand how social relations are integral to formation of the self. Toward the novel’s end, J.R. Isadore, a functional special, finds a spider.<sup>4</sup> Spiders, like all other animals, are extremely rare. Mercerism—the empathic religion which teaches compassion, kindness, and sympathy through the shared experiences of the empathy box and Wilbur Mercer—

regards caring for an animal as one of the most sacred and righteous activities every person should engage in (Dick, *Do* 11). Ecstatic about his find, Isadore shows the spider to the renegade androids residing in his apartment building. In their most brutal display of how inhuman and incapable of understanding humans they are, Pris Straton and the Batys cruelly torture the spider—removing several of its legs and then chasing it with fire. In her essay “Speciesism and Species Being in *Do Androids Dream of Electric Sheep?*” Sherryl Vint suggests that “this is typically described as the moment when the androids’ truly inhuman nature comes to the surface and all sympathy for them is lost. Another way of reading this scene, however, is as disinterested experiment rather than torture, mirroring the technique of scientists who were (and often still are) able to perform painful experiments on living creatures without any concern” (113). Vint’s alternative reading of this scene highlights the general cruelty of animal experimentation, but does not acknowledge the careful juxtaposition of this event against Buster Friendly’s exposé on Mercer.

Buster Friendly, the android television and radio show host, attempts to put a stop to the practices of Mercerism by revealing Mercer to be nothing more than a drunken, washed-up, B-list actor. As Pris, the Batys, and Isadore watch the report and Pris removes the spider’s fourth leg, Irmgard Baty says to Isadore, “without the Mercer experience we just have your *word* that you feel this empathy business, this shared group thing” (Dick, *Do* 209-10). This event is not only supposed to be read as commentary on the cruelty and disinterested experimentation of scientists; it is also the moment that Isadore and we the readers lose all sympathy for the androids. As Roy Baty remarks, “the whole experience

of empathy is a swindle,” we see that the androids’ problem goes beyond an inability to feel, they do not understand emotions altogether (Dick, *Do* 210). They stand there watching Isadore cry over the mutilated and dying spider, assuming that he is crying about Mercer being fake. The actions of this scene run counter to the words that the androids are speaking: as they assert empathy to be a fraud, their actions prove that they possess no capacity for it; as the androids claim that empathy is only proven by his (Isadore’s or any other human’s) words, Isadore exemplifies it through his actions. The message is that the androids will never achieve human status because they lack any understanding of human emotions whatsoever, and as Fukuyama pointed out, emotions are the basis of our social relationships. In his short, but influential essay “What Do You Mean ... Human?” John W. Campbell Jr. writes that “the essence of our actual definition of humanness is ‘I am human; any entity that *feels* as I feel is human also. But an entity that merely thinks, and *feels* differently is not human” (Campbell 219). Though they can socialize and converse, perhaps better and more rationally than some specials, they lack human sociability because they lack empathy and compassion; thus, they can never enter the human collective because they are incapable of feeling.

Klaus Benesch writes, “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” (Benesch 388). As I explained in the previous chapter, people are always at risk of becoming other than human—not through the loss of some biological determinate, but through strained social relations (often attributed to a dependence on technology)—but Dick dramatizes that in a

technologically advanced society “The android [already] lives among us; it is us, as long as we continue to separate ourselves from that part of our character that is human.” (Gillis 270). Dick believed that humans were already becoming socially inept and desensitized to the needs and desires of other humans. For Dick those who suffer from a flattening of affect are already on their way to becoming androids.

Such is the case that exists in Smith’s “The Dead Lady;” man has become alien to his own nature, more automaton than human. “Humanity has lost diversity and vigor; the people exist, but do not live” (Hellekson 126). On the other hand, when we—through Elaine, the human heroine—first see the underpeople, they are diverse, emotional, and caring; the underpeople seem genuinely human compared to the empty humans. Human beings are more like gods than men: every human lives for four hundred years (Smith, “Dead” 277); underpeople are worked until they die or get sick, and when they become ill they are put down by the Instrumentality (Smith, “Dead” 224). The Underpeople “are the driving force behind the Instrumentality and are more human than trumen, who, in their utopian world, have become uncaring as gods [...] Smith plays with the term ‘humanity,’ subtly implying that the trumen, not the underpeople, are inhuman” (Hellekson 124).<sup>5</sup>

When Elaine first encounters the runaway underpeople hiding in Clown Town, we see how humans typically place underpeople in the same category as “chairs or doorhandles,” regarding them as objects of utility and treating them as such (Smith, “Dead” 244). Although Charley-is-my-Darling threatens to kill her, afterward he tries to make her comfortable and give her the full respect a human would receive if they were in a place where the law of the Instrumentality still mattered: giving her a cup never used by

an underperson, call her “Lady,” and not looking at her with scornful eyes as her fellow trumen do. The respect and kindness that they show Elaine is eventually reciprocated changing her perception of them. As the underpeople direct her out of Clown Town, they insist that she take the doggirl D’Joan with her to meet the hunter. When Elaine becomes aware that leaving the protection of Clown Town poses a mortal threat to the underchild, Elaine responds with uncharacteristic compassion for an underperson, calling her a “little girl,” rather than a dog or underperson (Smith, “Dead” 246). Because the underpeople treat her kindly, she begins to see them as more than just animals and genuinely fears for the child’s life. Even before the psychic fusion with the doggirl, emotional connection builds the basis for social acceptance of the underpeople.

Rather than trying to denounce empathy, the underpeople use emotions to connect with mankind. They may even understand and express emotions more fully than the mechanized biological humans. Once Elaine is capable of seeing D’Joan as a human being, based on their psychic connection, she can see all underpeople as human. Upon returning to Clown Town from her meeting with The Hunter, Elaine no longer sees them as animals but as real people (Smith, “Dead” 255). Because one underperson and person can connect emotionally, the seeds are planted for all humans to see all underpeople as no less human than themselves. D’Joan’s “martyrdom to the underpeople’s cause in ‘The Dead Lady of Clown Town’ proves that ultimate self-sacrifice and love can lift an underperson, and even a Truman, to the status of human” (Hellekson 127). D’Joan’s death draws compassion from the human onlookers, whose “watching was not the witless boredom of people who never see a spectacle; it was the movement of living things,

instinctive and deep, toward the sight of another living thing in a position of danger and ruin” (Smith, “Dead” 283). The moment that the people open their hearts to the suffering, the moment they feel for her as they would for a suffering human, three things occur: they cease to be the unfeeling automatons Truman have become, and person and underperson join together, creating a new and unified human collective.

As I discussed in the previous chapter, emotion builds social connections, social connections allows for normal emotional development, and both of these things together create awareness and development of the self. Without the capacity for emotions the androids are incapable of human sociability. Although they may see themselves as equal to humans, they are certainly not. The underpeople, on the other hand, may not initially perceive themselves to be human, but once people realize their emotional depth, they are eventually accepted into the human collective.

So far, it would seem as though out of the three authors whose works I have chosen to discuss only Cordwainer Smith’s embrace the possibility for non-humans to successfully transcend to bounds of their inhuman origins. This, however, is not the case. Even though Dick’s androids do not gain human status, there is one character in his novel that achieves humanity and more: Mercer. Despite the fact that Wilbur Mercer is revealed by the androids to be nothing more than a role played by alcoholic, actor Al Jarry (Dick, *Do* 208), Mercerism survives and Mercer becomes an even more powerful entity than perhaps if he were a real man. Why is it that Mercer is more acceptable than the androids? What allows him to survive the androids’ defamation of his being?

Mercer continues to exist because he is hyperreal: “When the androids reveal Mercerism to be an illusion rather than a real vision, they expect the entire practice of empathy boxes to disappear, but they base this analysis on a rational rather than affective assessment of the situation” (Vint 123). Postmodern philosopher Jean Baudrillard writes of the hyperreal, “It no longer needs to be rational, because it no longer measures itself against either an ideal or negative instance. It is no longer anything but operational. In fact, it is no longer really real, because no imaginary envelops it anymore. It is a hyperreal” (2). Thus it is the androids’ attempted destruction of Mercer that further empowers him. Freed from an existence as an entity referential of the human collective, freed from the imaginary, Mercer truly begins to exist as the god-like figure he is billed to be. The androids make the mistake of assuming Mercer masks the absence of empathy by replacing it with a simulation, and placing a lesser value on simulation because they assume a referent is necessary. They do not understand the operational value of Mercer; the simulated experience offered by the empathy box is no less real than the electric animals—the “reality” of the action is unimportant in relation to the actions themselves and their product. Interaction with people, either in person or through the empathy box, provides an outlet for human emotion.

Mercer is far more acceptable than the androids because he embodies humanity and the human essence. He is both a social being and a socializing mechanism; he provides emotional connections, is the embodiment of emotional solidarity and social connection, and ultimately makes people human. Mercer is “an extension of your body; it’s the way you touch other humans, it’s the way you stop being alone” (Dick, *Do* 66).

Mercer is universally accepted by both regulars and specials alike as human and more than human, as an “archetypal being” Mercer goes beyond human because he represents the spirit of humanity. Mercer is a god because he is the ultimate human, he provides all of humanity with an ideal to strive for.<sup>6</sup>

With the character Mercer is exactly where I would like to end this chapter because he provides an excellent segue into the next chapter. Like D’Joan, Mercer is a transitional and transcendent figure—not bound by inhuman origins. But he does not stop at being merely human. Mercer acts as a conduit for human connection and becomes the spirit of the human essence, going beyond simple human and even becoming a god. His role in the human collective opens the door for other non-entities to follow. It is this, that is the subject of the next and final chapter: the humanization of machines and computers. Even though the androids do not become human, Mercer proves that the possibility for machines to transcend their inorganic heritage and achieve humanity exists. In the final chapter I will pursue this discussion in greater detail, confirming that machines like animals can also be(come) human under the right circumstances.

## Chapter Three

### Holograms and Homunculi:<sup>1</sup>

#### Wells's Beasts and Gibson's Beauty

In the previous chapter I examined the possibility that creatures other than biologically human can achieve humanity and concluded with a discussion of Mercer's transcendence beyond normal human, as he transitions to the god-like embodiment of human essence despite the fact that he is a non-biological entity altogether. In this chapter I continue my analysis of transhumanism, by both organic and inorganic creatures, proving that within science fiction biology has little to do with defining humanity. My argument, in this chapter, is that an entity's humanity is not determined by its biological functions or simply the fact that it is self-aware, but by its ability to socialize and grow emotionally.

Although H. G. Wells's *The Island of Dr. Moreau* and William Gibson's *Idoru* are representative of vastly different generations, they deal with the question of defining what the human is. In "Art in the Age of Mechanical Reproduction," Walter Benjamin considers the possible benefits of mechanically reproduced, commercial art, specifically films. While traditional art was originally available primarily to the clergy and nobles, art in an industrial era could be made accessible to the rest of society through means of mechanical reproduction: democratized, providing the rest of the populace with the

opportunity for inspiration and appreciation. Benjamin also acknowledges the destructive power—the power for increased and more devastating war—power born of the ease of mechanical reproduction. In this chapter I apply Benjamin’s argument to the synthetic “humans” of these two tales, considering them as products of mechanical reproduction. Additionally, I will employ Baudrillard’s concept of simulation and the successive phases of representation to examine these human simulacra. Even though “The Beast People” in Wells’s *The Island of Dr. Moreau* are sentient, biologically functioning creatures, they still carry—to use Benjamin’s term—the “aura” Moreau’s of selfishness and depraved scientific ritual. Their inability to grow and learn beyond what Moreau has given them renders them less human than the holographic, hyperreal Rei Toei, the central figure of Gibson’s Bridge Trilogy.<sup>2</sup> Unlike “the beast people,” Rei Toei is able to transcend her status as art object and pop-culture icon; she can become human because of her unique unnatural nature.

Of three pairs of stories I examine here, *The Island of Dr. Moreau* and *Idoru* have the largest time span between them—100 years—and on the surface appear to be the most dissimilar. All the other pairs are clearly connected through similar settings or variations on a similar plot device. *Moreau* is set in the same time in which it was written—the late 1890s—and takes place on an island in the South Pacific. *Idoru* is set in a near future extrapolated from the 1990s, a future in which global corporations reign supreme and technology is everything—even to the homeless and destitute—and takes place in several cities of global significance. Although the settings are different, the plot devices and issues they raise about their eras contemporary science are quite similar. In

her essay “*The Island of Doctor Moreau, or the Case of Devolution*,” Pascale Krumm notes that *Moreau* stands apart from the rest of Wells’s work because it deals with “realistic topics such as biology, physiology, and evolution. The novel can better be described not as a precursor to science fiction but to another popular genre, the late twentieth-century techno-novel” (51). While the two novels seem very different at first glance, both are turn of the century novels that reflect their respective times’ shift in ideologies regarding technology and human nature.

Although they are somewhat similar in theme, the technologies and new scientific theories presented in each text reflect the prevailing ideas of each book’s time period. Writing closely following the publication of Charles Darwin’s *Origin of the Species*, Wells was heavily influenced by the theories of Darwin and Darwin’s most vocal disciple, T. H. Huxley. The Darwinist influence is present in most of Wells’s “science-romances,” as well as his numerous works of non-fiction. Gibson’s work follows a very different vein in scientific theory and progress. Starting his career in the 1980s, Gibson heavily influenced by the advent of the personal computer, the Cold War, the birth of the internet, early multimedia theorists, and the rise of a Japanese economy based on microchips and advanced technology. These different cultural influences are visible: Wells views man as nothing more than a complex animal; Gibson views man as a complex machine.

Rei Toei is an entertainer and thus part of the pop-art world, like any other musician. Furthermore, as a hologram, she functions as a representative image. In his warped and twisted mind, Moreau views his perverse creations as artifacts. Considering

their intended purpose as art objects, Moreau's beasts are reflective of his perception of reality; in other words, representative images. To understand why Rei is eventually accepted as human by Rez's fans and eventually the whole world, and why "the beast people" can never become part of the human collective, we must look at what type of art objects they are. Once situated within the realm of art, their representative natures become apparent as does their transcendent possibilities and limitations.

Benjamin writes, "Originally the contextual integration of art in traditions found its expression in the cult. We know that the earliest art works originated in the service of a ritual—first the magical, then the religious kind" (1171). Moreau views himself as artist and in some strange way a man of religion. He turns animals into humanoid creatures because, as he explains to the shipwrecked narrator, Edward Prendick, "there is something in the human form that appeals to the artistic turn of mind more powerfully than any animal shape can" (Wells 76). Moreau goes on to liken himself to God, saying to Prendick, "then I am a religious man, Prendick, as every sane man must be. It may be I fancy I have seen more of the ways of this world's Maker than you—for I have sought his laws, in *my way*, all my life" (Wells 77). Krumm notes that Moreau "is indeed presented not as a nineteenth-century biologist, but as a divine (or rather demonic) archaic and arcane designer who intentionally created his hybrid creatures for some mysterious and arcane purpose" (57). If Moreau is to be understood as an occult figure, then what is the ritual purpose of his "art"? How does the intended purpose of these creatures affect their aura? Moreau does not see himself as a man, but as a god. Moreau believes that he is superior to the rest of mankind, therefore his creations serve only one

ritual purpose: selfish and self-serving aggrandizement, asserting his god-like power over nature.

Moreau is performing these experiments because he has devoted his life to the “study of the plasticity of living forms” (Wells 74).<sup>3</sup> Prendick responds to this with disgust saying, “the only thing that could excuse vivisection to me would be some application” (Wells 74). However, Moreau has no purpose in creating these creatures other to indulge in his own sense of superiority, his ability to manipulate nature. He says again with more conviction, as though that would create some purpose, “it was the only thing I wanted—to find out the extreme limit of the plasticity in a living shape” (Wells 78). According to Benjamin, “[i]t is significant that the existence of the work of art with reference to its aura is never entirely separated from its ritual function” (1171). In other words, art always remains in some way connected to its ritual/religious purpose. Benjamin refers to this connection as “aura.” Since Moreau’s experiments benefit no one and have no purpose other than to entertain his own desires, the “beast people” he creates are non-productive, non-beneficial additions to society. As Prendick says they are simply “monsters manufactured!” (Wells 74).

Furthermore, Moreau’s horrid experiments are not only frowned upon by society, but in his effort to raise animals to human status he loses his sociability in the eyes of his peers, transforms his emotional responses, and loses sight of himself as a human being. Moreau’s experiments not only fail to produce humans, but they dehumanize him as well. Krumm notes: “*The Island of Doctor Moreau* confuses, blurs, and even erases the long-standing dividing line between man and animal ... as Moreau is psychologically de-

humanised while the animals are physically humanized and anthropomorphized” (54). In his essay “‘The Plasticity of Living Forms’: Beasts and Narrative in *The Octopus* and *The Island of Doctor Moreau*,” Tim Youngs observes this relationship between Moreau’s actions and his fleeting human identity: “Through the person of Moreau, Wells is inviting his readers to contemplate the identity of the power that can, or will, change us. . . . It is not only living forms that are plastic but social and cultural ones too” (99). Like Dick’s androids, Moreau prides his analytical ability over anything else and assumes them to be the only difference between man and lower animals; his inability to understand the fundamental essence of human nature renders him just as much a monster as his creations.

Moreau and his assistant Montgomery are forced to leave England because of these experiments (Wells 32). Moreau’s and Montgomery’s experiments challenge late Victorian cultural values and, in their attempt to humanize animals, infringe upon human identity. Thus, the beast-people are, as Nick Redfern points out, examples of Kristeva’s abject: radically excluded by society “in order to assert its own identity, defining it by what it is *not*” (38). Redfern continues, “If, accepting Charles Darwin’s thesis of evolution by natural selection and (perhaps more importantly for Wells) Huxley’s teachings, we find no fundamental separation between man and ‘animals which immediately succeed us in the scale’ in terms of our physical being, then what elevates man above beasts is the culture” (42). Despite the fact that Moreau’s creations physically resemble humans, they can never become human. Why? The reason is simply that someone who has been removed from human society himself constructed them.

Moreau's creatures are doomed to fail because they are created through pain, through Moreau's desire to oppress and manipulate others. They are made from animals and must revert back to that state once Moreau abandons them. Created for his cruel and oppressive ritual, they bear the mark of that aura. Moreau's creatures are what Baudrillard would classify as the second phase of the image: they "mask and denature a profound reality" their appearance "is an evil appearance—it is of the order of maleficence" (6). Moreau attempts to prove that the line between man and animal can easily be crossed simply by physical modifications. Moreau's creatures distort Prendick's reality to such a degree that by the novel's end he must seclude himself from society for fear that they revert to animalistic ways (138-9). These creatures are not real humans; neither are they hyperreal since they obviously play at being one thing while they are clearly something else.

Krumm observes that "Moreau's newly 'evolved' species, who understandably have a hard time adapting to their sudden and unnatural new status, instead of dying off (a process Darwin would call natural selection), ultimately devolve and revert back to a former atavistic state" (Krumm 56). As obvious as it is to the reader that the animals cannot continue to masquerade as human, and will revert back to their natural states, it is perplexing to Moreau:

And least satisfactory of all is something that I cannot touch,  
somewhere—I cannot determine where—in the seat of the emotions.  
Cravings, instincts, desires that harm humanity, a strange hidden reservoir  
to burst suddenly and inundate the whole being of the creature with anger,

hate, or fear. ... First one animal trait, then another, creeps to the surface and stares at me. ... Each time I dip a living creature into the bath of burning pain, I say: this time I will burn out the animal, this time I will make a rational creature of my own. (Wells 81)

All Moreau can actually do is mask their nature, not change it. The Island Missionary's attempt to strip the animals of their animal-ness through laws, which as animals they cannot follow, causes them to resent and fear humans. They hate Moreau because he is cruel: he is not a god that they love; he is a god they fear. In their law they constantly repeat the words "House of pain" in reference to Moreau's laboratory (Wells 61). Thus the only "aura" they can possess is that of destruction and chaos, pain and hatred, evil and sadness. Because Moreau's experiments are seen as "an abomination" (Wells 78) in the eyes of society, then the creatures have no choice but to bring the pain, fear, and suffering which created them to others; they remain invariably connected to his socially unacceptable and violently oppressive ritual. As the products of someone who does not see himself as human, has no understanding of society or sociability, and has no compassion for other living things—as products of a monster—they stand no change at being human right from the start. Moreau is similar to the Gnostic demiurge, an imperfect creator only able to create other imperfect things. As Benjamin concludes, when technology grows beyond our needs it is put to unnatural utilizations which can only be destructive (1185-6).

On the other hand, The Idoru, Rei Toei is very similar to Mercer—created with the purpose of mass culture and art in mind from the start: she can achieve humanity

despite her lack of biological function because she possesses the human essence. Rei Toei is created to fit perfectly into the entertainment world, created using mathematical formulas and previous celebrities to determine what appeals to the masses. Yamizaki, the Japanese anthropology student studying her, explains, “she is a personality construct, a congeries of software agents, the creation of information-designers” (Gibson 121). The Idoru is similar to Benjamin’s description of a movie; she comes from no specific part. As Benjamin explains, film “consists of multiple fragments which are assembled under a new law. Thus, for contemporary man the representation or reality by film is incomparably more significant than that of the painter” (1179). Since she is created for the purpose of art, art comes from her. Benjamin writes, “the work of art reproduced becomes the work of art designed for reproduction” (1172). Kuwayama, the lead software engineer in designing Rei, explains that they “don’t make Rei’s [music-]videos. ... They emerge directly from her ongoing experience of the world. They are her dreams” (Gibson 312). Because she is created for inspiration and the sake of art, her “reality is the realm of ongoing serial creation” (Gibson 267). She is created from the art that came before her and art comes from her.

Kuwayama explains that Rei is “the result of an array of elaborate constructs that we refer to as ‘desiring machines.’ ... Not in any literal sense ... but please envision *aggregates of subjective desire*. It was decided that the modular array would ideally constitute an architecture of articulated longing” (Gibson 234). In a way, the formulas and algorithms she is based on give her a sense of self, a desire to grow; she is created for entertainment and inspiration, and she is not limited to any form of preprogrammed

animal instincts or the aura of any one creator's particular oppressive desires. As Graham Murphy writes, "Toei is virtual, a digital construct possessing depth and the ability to grow" (Murphy 77). Even though she lacks a true physical presence, she is not art without purpose like Moreau's beasts. She has a social function—as with Mercer, socialization and sociability are her purpose—she fuels human interaction.

The math that drives Rei has not produced virtual intelligence, rather artificial intelligence. Gibson explains that she is the one who determines what pieces of global culture she incorporates into herself:

If there were going to be genuine AI, the argument ran, it was most likely to evolve in ways that had least to do with pretending to be human. Laney remembered screening a lecture in which the Slitscan episode's subject had suggested that AI might be created accidentally, and that people might not initially recognize it for what it was. (Gibson 326)

People do not recognize Rei Toei as artificial intelligence because they do not expect AI to become human. Her choice to try and become more human is an illustration of randomness, of not conforming to any set programming like Moreau's beasts. Murphy explains, "Toei's acquisition of randomness (i.e., the "human thing") is a key element in her evolution toward a post/human virtuality/presence" (Murphy 77). Even though Rei Toei fills the much-needed purpose of public entertainment, she chooses to become more than just an icon or puppet, but a real human capable of much more. In the end it is her choice, not necessarily programming, that drives her to strive for humanity

Determining the state of Rei's being is central to the plot of the novel. Colin Laney, a media analyst, is hired by the popular band Lo/Rez skyline because the band's front-man Rez, an authentic human being complete with biological functions, has proposed to Rei. What Laney determines is that Rei connects to more "nodal points" than Rez; Rez is simply a persona designed for public appeal, while Rei is as she presents herself—she is genuine despite her artificial origin. Allan Weiss notes, "in all of Gibson's work the human and the technological become inextricably linked, raising as clearly as possible the question of where the human ends and the cybernetic begins" (Weiss 74). In this case, Rez is more of a projection into the cyber-world than Rei. Rez may be biologically human, but the Rez that is presented to the world is the product of a marketing apparatus. She does not play at being human; she is human. She is not like any other pop-star; because of her unique programming she is an individual, not simply a mass-marketed identity. The relationship between Rez and Rei is very similar to Baudrillard's description of the relationship between Disneyland and the rest of the United States (12-3). Disneyland does not play at being real, while the rest of the U.S. masquerades as a utopia still unachieved. It is in this sense that Disneyland is more real than the rest of the country surrounding it—it does not play at being something it is not; thus it is more truthful and more real. In the same way, Rez is less real than Rei because he is simply an image whereas she does not try to hide what she is.<sup>4</sup>

While Moreau's experiments are frowned upon by society, Rei Toei is a perfect human simulacrum. "The Beast People" in Wells's *The Island of Dr. Moreau* are biologically functioning creatures, but their inability to go beyond what Moreau has

imprinted in them renders them less human than the virtual, hyperreal Rei Toei of Gibson's *Idoru*. Moreau's beasts serve only his selfish and uncertain ritual purpose, while The Idoru—who serves no ritual purpose—still serves a purpose, the purpose of social connection. The Idoru makes it clear that an entity's humanity is not determined solely by its biological functions or sense of self, but by its ability to socialize and its capacity for emotional growth. Mechanically produced entities, such as artificial humans, can evolve into true humans so long as they possess the defining essence of human nature. In these two stories, as with the other four I have already examined, a creature's capacity for sociability plays a determining factor as to whether or not it can achieve human status.

**Conclusion:**

**Among Us:**

**Being Human, Doing Human**

In the works of science fiction I have covered in this thesis, humanity is constantly in flux: things can become human, and humans can become things. The constant in all these stories is that which defines a thing as a human being. Whether an entity starts as human, animal, or machine, it can become human (or maintain its humanity) so long as it possesses (or comes to possess) the intangible human essence I have discussed: sentience, emotions, and sociability. However, if any creature, regardless of its origin, lacks any of these three things, it is not human—it is the Other, some lower animal or machine or some monstrous combination thereof, and serves to illustrate the human essence through its absence.

Does science fiction always define humanity in the same way? While it is not within the scope of this thesis to discuss the consistency of the human essence throughout all science fiction, I would maintain that humanist science fiction (particularly the works of these five authors I have chosen so discuss) always defines humanity through a creature's possession of sentience, emotion, and sociability. In Frank Herbert's *Dune* series, people are at risk of becoming less human through mechanical and biological intervention, losing their affective responses and altering their ability to

successfully interact with other humans. In Isaac Asimov's classic *I, Robot*, it is through social relationships that robots develop emotional responses and gain acceptance into the human race. Science fiction films assume the same definition as well. From Steven Spielberg's *AI* to James Cameron's *Terminator* movies, those machines that learn to feel and interact can become human, and those that cannot remain Other. *Star Trek's* character Data is capable of transcending his non-biological origin and making the successful transition to human even before he obtains the emotion chip because he strives to understand sociability and emotions; even without feeling them himself, he comes to understand them and learns to act accordingly. In the popular anime *Ghost in the Shell*, Major Motoko Kusanagi behaves in a most human fashion despite the fact that she is an android.

Throughout the expansive body of science fiction literature, the posthuman, whether cyborg, robot, chimera, homunculus, or human in origin, becomes the binary opposite of humanity when it does not possess some semblance of human essence. When any creature is capable of doing as Campbell says and feeling as we feel, we can accept it as human (220). Fukuyama believes that biotechnology will produce a horrific posthuman future, a future "in which any notion of 'shared humanity' is lost, because we have mixed human genes with those of so many other species that we no longer have a clear idea of what a human being is" (218). While biotechnologies new dangers and risks pose for human identity, both science fiction and our lived reality are full of examples pointing to the contrary. Heart transplants, insulin pumps, and pacemakers do not make the wearers any less human; these technologies actually preserve the human essence just

as the cranching wire and the empathy box do. It is with these thoughts in mind that Hayles observes, “although some current versions of the posthuman point toward the anti-human and the apocalyptic, we can craft others that will be conducive to the long-range survival of humans and other life-forms, biological and artificial, with whom we share the planet and ourselves” (291). So long as we use our new technologies responsibly—so long as we do not let it dramatically alter our essence—the posthuman possibilities are nothing to fear. As long as we retain our humanity, allowing others to become human does not reduce either us or them to being posthumans. Rather, those transcendent creatures, or Transhumans, are elevated to human status—not existing in some liminal place like the cyborg, but accepted as true members of the human collective. Thus, science fiction does not simply define being human as a static state only achieved by those who possess biological functions, but as a dynamic act—acting based on perceptions of the self, social relations, and emotional stimuli. Being human is not merely a performance; it is a learned behavior shaped by social interaction—to be human is learning to be humane. Humanity is doing, not simply being.

## Notes

### *Chapter One:*

<sup>1</sup> In “Cyborgs and Space,” originally printed in *Astronautics* September 1960, Clynnes and Kline coined the term “cyborg.”

<sup>2</sup> Cordwainer Smith is the pseudonym of American science fiction author and CIA operative Paul Myron Anthony Linebarger. For further biographical information see: Alan C. Elms’s “The Creation of Cordwainer Smith” or Carol McGuirk’s “The Rediscovery of Cordwainer Smith.” “Scanners Live in Vain” was Smith’s first published science fiction story, and is part of a series of short stories known as the *Instrumentality of Mankind*. However, Linebarger had previously published two psychological novels under a different pseudonym (Elms 269; McGuirk 161).

<sup>3</sup> Stone’s invention employs the use of oysters in the hull of the ship. By putting the oysters on the outside he was able to protect the things on the inside. Additionally, he had planned ahead and created a method to return the Scanners to their prior state, but they are unaware of this at the time of their council (Smith 92).

<sup>4</sup> The Spacers are chosen from children who are slow to develop sexually. It is implied that given adequate time, they would have reached sexual maturity. However,

the de-gendering process they undergo stops the natural hormone changes that would have occurred from happening.

<sup>5</sup> While this Frelk is a female it is certainly possible for Frelks to be male (Delany 318).

<sup>6</sup> Scanners are volunteers, who have chosen to have their senses cut in order to protect those who are cryogenically frozen in space while traveling. Haberman are criminals who have been subjected to the same surgery as Scanners, but they are not allowed to monitor their own instrument boxes and are frozen when they are not working (Smith 75-6).

#### *Chapter Two:*

<sup>1</sup> “The Android and The Human” was originally delivered by Dick as a speech at the University British Columbia, Vancouver, in February 1972. Published in its current form in *SF Commentary* December 1972.

<sup>2</sup> Often these pieces of scholarship that present the novel as optimistic about the androids’ acceptance erroneously interpret the novel and its film adaptation, *Blade Runner*, as the same text. See: “Nigel Wheale’s “Recognising a ‘human-Thing’: Cyborgs, Robots and Replicants in Philip K. Dick’s *Do Androids Dream of Electric Sheep?* And Ridley Scott’s *Blade Runner*.”

<sup>3</sup> Rachel, an Android herself, acts under the orders of the company, not a genuine act of compassion as some critics have notes. The company must keep the public from

becoming aware that their product is dangerous. Therefore, they seek to disable the bounty hunters from performing their duty and tell the androids go undetected.

<sup>4</sup> A special is a person deemed genetically or mentally unfit and not permitted to emigrate to any of the colonies.

<sup>5</sup> The relationship between Smith's trumen and underpeople is reminiscent of Hegel's Master-Slave dialectic. The trumen's/Master's identity developed by his position of power over the underperson/Slave. The Slave/underperson has an identity independent of the Master/Truman.

<sup>6</sup> Mercer negates Sartre's understanding that all humans see themselves as subjects and others as objects. Through the empathy box's ability to create a shared experience that forces all people to become part of the same entity, all humans learn to see one another as subjects. This, however, creates a larger gap between humans and androids. Since neither human nor android can share this connection, androids remain objects to humans and humans remain objects to androids.

### *Chapter Three*

<sup>1</sup> The appropriate term to describe the "beast-people" would probably be Chimera, not Homunculi. Homunculus is a term from alchemy used to denote living dolls or people of diminutive stature.

<sup>2</sup> Gibson's Bridge Trilogy is comprised of: *Virtual Light*, *Idoru*, and *All Tomorrow's Parties*. It is identified as The Bridge Trilogy because a good portion of the action takes place in a squatter city build on the golden gate bridge.

<sup>3</sup> In 1895, one year prior the publication of *The Island of Doctor Moreau*, Wells published an essay entitled “The Limits of Individual Plasticity” in which he discusses uses of vivisection in reconstructive surgeries. A year later, in 1896, he published another scientific article, “Human Evolution: An Artificial Process,” again discussing forced evolution (Bowen 334).

<sup>4</sup> Although she remains a hologram, her marriage to the human singer Rez is accepted as legal and legitimate. By the end of the Trilogy she actually becomes human and obtains a physical body.