

## The Pinocchio Syndrome and the Prosthetic Impulse in Science Fiction

The desire to become human, henceforth referred to as the Pinocchio syndrome, is depicted frequently in literature, a desire expressed by Carlo Collodi's Pinocchio, a wooden toy boy who wished to become a human boy. This desire was also obliquely expressed by Nick Chopper, the Tin Woodman in L. Frank Baum's *The Wonderful Wizard of Oz*, who was cursed by the Wicked Witch of the East, such that his axe became enchanted and hacked him to pieces. His limbs were replaced by tin prostheses, as was his heart, preventing him from loving his fiancée. Consequently, his wish for a heart, and hence emotions, indirectly expresses a yearning to regain his humanity, a desire whose connotations will be amplified later in this paper. This trope is reiterated in Disney's films of *Beauty and the Beast*, *The Little Mermaid*, *The Princess and the Frog*, and numerous other tales wherein the main character has his or her humanity cursed away; indeed, the last film cited above features the song "When I'm Human"

On the other hand, the requirements for prostheses in order for one to continue functioning within society is as old as mythology, as evinced by Hephaestus, the son of Hera and Zeus, who was lame (possibly suffering from clubfoot, a form of talipes, a congenital malformation which causes internal rotation of the foot at the ankle joint), and who walked with the aid of a crutch, a primitive type of prosthesis. He also constructed golden maidens to help him in his labors in his forge, as well as Talos, a giant bronze proto-robot who guarded king Minos's Crete by circling the island's perimeter, throwing rocks with superhuman strength at threatening ships (Hard 167).

While prostheses may be essential for dealing with medical conditions, Smith and Morra have averred that "our modern western culture has a 'prosthetic impulse' (Smith and Morra 4), an urge to augment the human body, which N. Katherine Hayles refers to as our "original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born" (3).

The notion of such transhuman transformation was famously mooted by the British scientist John Bernal who proposed that

[n]ormal man is an evolutionary dead end; mechanical man . . . is actually more in the true tradition of a further evolution . . . Connections between . . . minds would tend to become a . . . permanent condition until they functioned as dual or multiple organisms . . . , barring cataclysmic accidents, immortality . . . consciousness itself may end or vanish in a humanity that has become completely etherialized, losing the close-knit organism, becoming masses of atoms in space communicating by radiation, and ultimately perhaps resolving itself entirely into light. (42–43)

One potential route or intermediate step for such transformation is through cyborg transformation, that is, cybernetic organisms, organic creatures that exploit technology in order to utilize mechanical parts that enhance their abilities. The term "cyborg" was popularized by Clynes and Kline, who pragmatically opined that

[a]ltering man's bodily functions to meet the requirements of extraterrestrial environments would be more logical than providing an earthly environment for him in space. . . . [a]rtifact-organism systems . . . are one possibility. (26–27, 74–75)

The concept was further popularized by the publication of Donna Haraway's "Manifesto for Cyborgs," and ever since, the cyborg has evolved in diverse disciplines including literature, film, sociology, cybernetics, and medicine. The cyborg questions and assimilates the differences between the sentient and the nonsentient, the human and the nonhuman, and epitomizes the demolition of the frontiers between social, ethical, legal, and technological issues ranging from disability to genetic engineering to computer privacy (Haraway "Manifesto" 65–108), to "an erasure of individuality and mortality" (Bernal 47).

Fredric Jameson notes that our potential transhuman

transformation, one in which "some altogether unrecognizable 'human nature' would take the place of this one" has caused humanity significant concern (174), an apprehension reflected in science fiction. Smith and Morra have amplified this belief, stating that

to a perhaps worrying extent, "the prosthetic" has taken on a life of its own. Following closely on the heels of . . . Haraway's . . . "Cyborg Manifesto" in the 1980's, as well as by developments in the cultural studies of science and technology, science fiction cinema and literature, transplant technology, artificial intelligence, virtual reality, postmodern warfare, and so on—"the prosthetic" has similarly begun to assume an epic status that is out of proportion with its abilities to fulfill our ambitions for it. (2)

This paper will show that while sf has depicted the extreme embracement of the "prosthetic impulse," most notoriously in *Star Trek's* "Borg," this is used as a warning of the potential Faustian consequences of such tendencies. The franchise has also highlighted the converse, the Pinocchio syndrome, a reverse prosthetic impulse, most notably, in Commander Data. (The Pinocchio syndrome described in this essay is not to be confused with the disease envisioned by David Zeman, a fictional condition which causes paralysis and fusion of the extremities such that they resemble hooves.)

This naturally raises the question as to what it means to wish to become human. SF seems to focus on two aspects: the biological component, that is, the actual replacement of original body parts (limbs, organs, and senses) with human counterparts; and the mental and psychological component. Ned Block succinctly summarizes the dilemma since

[t]he root of the epistemic problem is that the example of a conscious creature on which the science of consciousness is inevitably based is us (where "us" can be construed to include nonhuman creatures that are neurologically similar to humans). But how can science based on us generalize to creatures that do not share our physical properties? It would seem that a form of physicalism that could embrace other creatures would have to be based at least in part on them in the first place, but that cannot be done unless we already know whether they are conscious. (407)

This paper will not dwell on the concept of epiphenomenalism, that is, the view that one's actions are not caused by one's thoughts and that we are simply passive spectators laboring under the illusion that we are in command of our behavior and destiny.

The mental and psychological aspects that define man include at least three components: the desire to acquire "qualia"; the expression of intentionality; and an application of an Abraham Maslow-type motivational pyramid, with a desire for self-actualization that embraces the desire to attain humanity. These three facets will be briefly described, and will then be demonstrated through Data in *Star Trek*.

The concept of "qualia" was first presented by Clarence Irving Lewis who opined that

[t]here are recognizable qualitative characters of the given, which may be repeated in different experiences, and are thus a sort of universals; I call these "qualia." But although such qualia are universals, in the sense of being recognized from one to another experience, they must be distinguished from the properties of objects. Confusion of these two is characteristic of many historical conceptions, as well as of current essence-theories. The quale is directly intuited, given, and is not the subject of any possible error because it is purely subjective. (121)

The subject and its very definition are fraught with contention, and "we lack a principled basis precisely because we do not have an explanation for the presence of conscious experience even in ourselves" (Levine 79). The dilemma increases when we consider "the problem of attributing qualia

to other creatures, those that do not share our physical organization. I take it that there is a very real puzzle whether such creatures have qualia like ours or even any at all. How much of our physicofunctional architecture must be shared before we have similarity or identity of experience"? (89) Hence, for the purposes of this paper, qualia will be described simply as subjective conscious experiences.

Yet another concept propounded by sf is the notion of intentionality, the ability to truly understand and comprehend and react to surroundings and stimuli, as humans do, and to attribute this capacity to created beings, whether mechanical and computer powered, or biological. This was famously expressed by John Searle in the Chinese Room *gedankenexperiment*. Searle contends that a machine may respond to, for example, written language, such as Chinese, through a computer program, without actually understanding Chinese, even to the extent of passing a Turing test. Searle calls this "weak artificial intelligence," as opposed to a true comprehension of Chinese, which Searle calls "strong artificial intelligence," which is the type of intelligence that is most often posited in sf (26–27).

Arguably, the third aspect that sf advocates is the most important, a motivational hierarchy of personal needs such as that described by Abraham Maslow. These hierarchies are often depicted as pyramids, with the most basic needs at the bottom, rising to more abstract aspirations at the apex of the pyramid. Briefly, the most basic needs are physiological, "primary drives" that are absolutely required for survival, such as air, food and water (20). Next come safety needs, including a yearning for predictability and protection, such as job security and insurance (39). The third layer is referred to as love and belonging, and reflects the need for belonging and acceptance (43). The fourth level is esteem, the need for self-acknowledgment and self-respect (45). Self-actualization comprises the apex and implies that even if all of the previous needs are satisfied, it is possible that

a new discontent and restlessness will soon develop, unless the individual is doing what he, individually, is fitted for . . . if he is to be ultimately at peace with himself. What a man can be, he must be. He must be true to his own nature . . . man's desire for self-fulfillment, namely, to the tendency for him to become actualized in what he is potentially . . . the desire to become more and more what one idiosyncratically is, to become everything that one is capable of becoming. (46)

It is important to point out that higher, more abstract levels may overturn needs at lower levels. The Maslow pyramid is frequently but indirectly alluded to in sf, such as Captain Picard's description of "[t]he potential to make yourself a better man. And that is what it is to be human. To make yourself more than you are" (Baird). All three components are depicted in the Pinocchio syndrome, as shall be demonstrated.

However, it must be pointed out from the outset that not all non-human sentient creatures in sf experience the Pinocchio syndrome. We should note as a realistic different approach Clifford Simak's story "Desertion" (1944). In it a man and his pet dog, Towser, metamorphose into alien beings that survive comfortably and enjoy the surface of the planet Jupiter, experiencing incredible sensations through alien sensory systems, that is, alien and exotic qualia. Both find themselves unwilling to return to their original forms, concluding the story:

"I can't go back," said Towser.  
"Nor I," said Fowler.  
"They would turn me back into a dog," said Towser.  
"And me," said Fowler, "back into a man."

### The Pinocchio Syndrome in *Star Trek: Data*

Data is a sentient android and a full member of the *Enterprise* crew in *Star Trek: The Next Generation*. Data is initially emotionless and possesses a computer (a typical Tuckerism) brain (positronic) with eidetic memory, and is physically much faster and stronger than man. Although designed to blink, breathe, and have a pulse, Data can actually survive underwater or in a vacuum, and was created in the likeness of his inventor, Dr. Soong ("Birthright").

Data is the successor of the Vulcan Spock from the original series of *Star Trek*, a half-human half-alien hybrid who strove to

master his human emotions. However, while Spock is broodingly charismatic, Data is more of a nerdy engineer who lacks Spock's magnetic appeal.

It is made explicit from the very first episode of the seven year series *Star Trek: The Next Generation* that Data has a Pinocchio complex, constantly "endeavoring to become more human" (*First Contact*), a fact that is pointed out by his superior officer, Riker. When Data is asked "Do you consider yourself superior to us?," Data replies "I am superior, sir, in many ways. But I would gladly give it up to be human." To which Riker replies "Nice to meet you . . . Pinocchio" ("Encounter at Farpoint"). Data "had to search the ship's data banks for the reference, but when he found and accessed it seconds later, even though Riker passed it off as a joke, he was stunned at being compared to the subject of a story about the magical power of love" (Lorrah, *Survivors* 129). Clearly, Data expresses anti-self actualization in that he is superior to mankind in abilities and immortal, and yet, he still desires to become human.

Data is the main protagonist in several episodes, chapters that explore his quest to become more human. "The Measure of a Man" is one such, wherein Starfleet proposes to disassemble Data to allow scientists to determine the nature and construction of this unique android, in the hope that they would be able to duplicate him. However, the procedure is hazardous to Data and a legal injunction is brought forward, preventing him from resigning from Starfleet and hence avoiding disassembly—the argument being that Data is physical Starfleet property. This is an indefensible proposition since "naturalism (and physicalism) give us no good reason to doubt the consciousness of Commander Data" (Block 415).

Part of the prosecution's argument is that Data is a machine that can be switched off. This is vividly demonstrated during the trial; the prosecutors declare "Pinocchio is broken; its strings have been cut," further dehumanizing Data with the use of the genderless pronoun. His captain, Picard, successfully defends him, declaiming:

Data is a machine. Do we deny that? No, because it is not relevant—we too are machines, just machines of a different type. . . . Data was created by a human; do we deny that? No. Again it is not relevant. Children are created from the "building blocks" of their parents' DNA. Are they property?

In truth, "[o]ur lack of knowledge is no argument against the consciousness of Commander Data" and similar creations (Block 416).

Sexuality is an inextricable part of humanity, and Data's sexuality is explored in several episodes. In "The Naked Now" (1987), Data has sex with the *Enterprise's* inebriated security officer, who precedes the intimate encounter by coyly but pointedly asking him: "you are fully functional, aren't you?" to which Data replies "of course . . . in every way, . . . I am programmed in multiple techniques, a broad variety of pleasuring," a trope repeated in feminist novels such as Piercy's *He, She, and It* (1991), wherein an artificial being is portrayed as the perfect lover, hygienic, obedient, indefatigable, and considerate.

Readers' assumptions of normative heterosexual relationships are further challenged, with such relationships initiated both by Data and by second parties. In "In Theory" (1991), Data deliberately and experimentally cohabits with a human female crewmember, an arrangement that fails as Data cannot respond emotionally. Conversely, in "The Ensigns of Command" (1989), an alien humanoid female develops romantic feelings for Data but soon realizes that Data is incapable of any reciprocation.

Data also demonstrates intentionality in his attempts to procreate by fashioning another android, Hephaestus-like and single-handedly crafting a sentient female android. Captain Picard is naturally apprehensive with regard to Starfleet's reaction to this unauthorized fabrication leading to a humorous dialog regarding android reproduction between Picard and Data. Picard asks "Data, I would like to have been consulted" to which Data appropriately and correctly replies "I have not observed anyone else on board consulting you about their procreation, Captain" ("The Offspring"). This attempt eventually fails, emphasizing the usual hubristic cautionary trope that sf so frequently enjoins.

Interestingly, Data is offered the option to be instantaneously

made human, an offer that he rejects, affirming as his reason that in “this above all, to thine own self be true” (“Hide and Q”). In Jean Lorrah’s tie-in novel *Metamorphosis*, Data actually does become a living and breathing human for a few days, a transformation achieved by alien technology, and the novel explores Data’s adaptation to a new life on board the *Enterprise* as an ordinary and emotional human being, before returning back to androidhood.

Data further approaches humanity when he deliberately installs an “emotion chip” that allows him to experience feelings and emotions, thus demonstrating intentionality and attaining qualia. This initially leads him to lose control of his emotions, to the extent where he actually asks the Captain to be relieved of his duties, revealing his quest for feeling to be a double-edged sword (*Generations*). Data’s emotions are again highlighted when, during a hazardous situation, he confesses to Captain Picard that he is “feeling . . . anxiety . . . an intriguing sensation . . . distracting.” Picard advises him to temporarily deactivate his emotion chip, and when Data confirms that he has done so, Picard wistfully remarks “Data, there are times that I envy you” (*First Contact*).

In the same vein, in the episode “Datalore,” we learn that Data has an android “brother,” “Lore,” another Soong-type android who, under the effects of emotions, becomes evil, causing general mayhem, once again depicting emotions as potentially liberating the latent evil aspects of the psyche in a Jekyll and Hyde confrontation with Data.

### The Prosthetic Impulse in *Star Trek: The Borg*

The inverse of the Pinocchio syndrome, the prosthetic impulse is arguably best exemplified by *Star Trek’s* Borg, who constitute a relentless inhuman tide that threatens to violently overwhelm every species by assimilating all individual beings into the Borg collective, stifling their *élan vital* and incorporating them as part of a hive mind, an inexorable “insect mentality” (Gross 179–180). The Borg are cyborg drones who are ruled by the Borg Queen. Indeed, individual Borg drones do not emit individual life signs such that a scan of a Borg vessel cannot result in a head count (“Q Who”). This is perhaps the most terrifying aspect of the Borg Collective,

their destruction of the individual and the self. . . . [t]he Borg destroy freedom of choice, and any ability to act independently of the collective mind. That alteration is allegedly worse than death for the individual involved. (Consalvo 193)

“The Borg, our most lethal enemy” (*First Contact*) are an uncompromising horde, “profoundly challenging the notion of an embodied and discrete masculine identity, . . . penetrated, ungendered, and unfamiliar” (Fuchs 282), inevitably losing the individual’s self actualization (and indeed, selfhood itself) for the gain of the collective.

The Borg were originally purely biological beings, who “evolved to include the synthetic. Now . . . use both to attain perfection” (*First Contact*), a process that has been “developing for . . . thousands of centuries” (“Q Who”). The collective inhabits spaces that are postmodern in their portrayal of “darkness, warmth, and dampness” (Balinisteanu 409). The Borg clarion call chillingly evinces the potential Faustian nature of these prosthetic compulsions:

We are the Borg. Lower your shields and surrender your ships. We will add your biological and technological distinctiveness to our own. Your culture will adapt to service us. Resistance is futile. (*First Contact*)

The Borg almost poignantly fail to understand the opposition that they encounter; in their quest for perfection, they sincerely, almost wistfully ask “Why do you resist? We only wish to raise quality of life, for all species.” To Picard’s reply of “I like my ‘species’ the way it is,” is dismissed as “a narrow vision” (“The Best of Both Worlds”).

Borg are seen as amoral, “the ultimate users” (“Q Who”) who brook no opposition in their drive, viewing guilt (“Data’s Day”), pleasure (“The Raven”), comfort (“Revulsion”), taste (“Year of Hell”), personal opinions (“Vis à Vis”), chance (“Night”), designation (“Drone”), feelings (“Nothing Human”), compassion (“Equinox”), personal plans (“Dragon’s Teeth”), practice (“Pathfinder”), feelings (“Child’s Play”), parents (ibid), friendship (“Unimatrix Zero”) and

fame (“Inside Man”), as all being “irrelevant.”

The Borg maintain that mundane humanity is “erratic, conflicted, disorganized. Every decision is debated. Every action questioned. Every individual entitled to their own small opinion. You lack harmony, cohesion, greatness. It will be your undoing” (“Scorpion”). However, the Borg are willing to go to great lengths in order to assimilate humanity, despite humanity’s perceived limitations: “flawed, weak, organic” (*First Contact*), “physiology inefficient, below average cranial capacity, minimal redundant systems, limited regenerative abilities” (“Dark Frontier”), unequivocally exhibiting an unquenchable desire and drive for the forcible conversion of humanity from individuals to into the collective.

An adult human female, designated “Seven of Nine,” who was assimilated by the Borg as a child, is recaptured by the *Voyager* Starfleet crew, and is slowly divested of her Borg prostheses, thereby regaining her humanity. Seven is “a character on the verge of humanity, whose aspirations to become more human . . . illuminate important questions . . . a perpetuation of modernity’s most highly valued precepts of human nature, namely progress, self-improvement, and individualism” (Graham 153).

She initially complains that she would have preferred to remain Borg as “the lure of perfection is powerful” (“Drone”), and that “the prospect of becoming human is unsettling” (“Hope”), but she is eventually shown to be willing to explore her humanity, exhibiting the full version of the Pinocchio syndrome, entering into complex relationships with her *Voyager* crewmates, and eventually even falling in love. During her time as a Borg drone, Seven had unwittingly “helped assimilate many civilizations” and her work on *Voyager* helps her assuage her guilt and to atone for these misdeeds, an experience she finds “gratifying” (“Dragon’s Teeth”). Over the course of the *Voyager* series, Seven embodies Gene Roddenberry’s driving idea behind the *Star Trek* concept, “the quest to discern some degree of purpose to the universe amid the complexity and fragility of everyday experience” (Graham 153).

Other individual Borg units are also sometimes shown to escape or be rescued from the collective and re-attain individuality, and once started on this course, such new individuals pursue their Pinocchio syndrome relentlessly, even to the extent of becoming belligerent toward other, still-assimilated drones (“I Borg”).

On the other hand, the different assimilated species that constitute the Borg collective are sometimes shown to revert back to type, violently squabbling over limited sources when their individuality is regained after becoming freed of the hive mind but stranded on a planet. The only solution, as suggested by a peace-loving human faction, is to reestablish the hive mind, a procedure abetted by the *Voyager* crew, and this restores peace, albeit at the cost of subjugating them to a hive mind, thereby losing individual self actualization (“Unity”).

### Data vs. the Borg

In Frakes’s *Star Trek: First Contact* (1996), “[t]he Borg stand for the ultimate threat to the *Star Trek* vision of human progress and individual integrity” (Graham 133). The collective, led by the Borg Queen, attempt an invasion of Earth. In this setting

the Borg Queen figure stands out as a particularly dangerous opponent. She does not simply threaten to overtake human technology, but to assimilate it into what may be a superior technological structure; . . . with reintegration within a collective form of social organization . . . she is not simply driven by instinct, an ungovernable force of nature, but she has a purpose that endows nature with cultural significance. (Balinisteanu 404)

Data is captured by the Borg and, in a subversion of Data’s self-protective actions, the Borg Queen re-engages his emotion chip, causing Data to feel apprehension and even fear, clearly proving that qualia in the form of human-type emotions may not always be desirable.

The Borg contain biological components, and Data does not. It is almost ironic that Data, a completely artificial being, repudiates the Borg’s ideal of perfection through the fusion of the biological and mechanical, stating that “believing oneself to be perfect is often the sign of a delusional mind.”

In a reverse prosthetic impulse, the Borg Queen attempts to subvert Data by appealing to his Pinocchio complex, grafting him with biological skin and thereby allowing him to enjoy the sensation of biological touch, a specific quale which initially overwhelms Data. This is unsurprising as “[w]ithout going into the difficult issue of what it is that makes two realizations fundamentally different, we can stipulate that our physical realizations of our conscious states are fundamentally different from Commander Data’s physical realizations of his analogs of these states” (Block 411). When he tries to escape, he wounds his new biological implants and experiences physical pain, another new quale which overpowers him as his “programming was not designed to process these sensations,” terminating his escape attempt. The Borg Queen taunts him:

[I]s it becoming clear to you yet? Look at yourself, standing there cradling the new flesh that I’ve given you. If it means nothing to you, why protect it? . . . [t]ear the skin from your limbs as you would a defective circuit. Go ahead, Data. We won’t stop you. Do it. Don’t be tempted by flesh.

She also promises even more biological grafts, and being physically attractive, a “monolithic . . . techno-bodied femme fatale” (Consalvo 179), has sex with Data and also hints that Data will rule the Borg collective with her as she has “found an equal,” blandishments that Data rejects, ultimately aiding in her destruction since clearly, “[t]he Borg represent the antithesis of *Star Trek* values . . . their corruption . . . of the body is achieved by means of invasive technological implants, and the mind by immersion of the individual in a collective consciousness” (Graham 133). The feminist interpretation of these events is that “the Borg Queen is repudiated as an illegitimate version of the female in order to establish a legitimate version of the male: Picard as warrior and leader and Data as master of reason” (Balinisteanu 411). Thus, in both physical sensation and in sex, Data attains and experiences new qualia.

### Discussion

This reading has shown that in *Star Trek*, the Pinocchio syndrome, the wish to somehow attain humanity, has been depicted as a patchwork that consists of the acquisition of a biological human body, in addition to intentionality, as well as the desire to experience qualia. Since most of the beings in sf who express this desire have physical and/or mental powers that are superior to mundane humanity, this anthropocentric aspiration is arguably a reverse self-actualization, a negation of the apex of Maslow’s pyramid, resulting in the deliberate abandonment of inhuman abilities. However, not all imaginary beings suffer from the Pinocchio syndrome, outright rejecting anthropocentrism upon the realization of their superiority to mankind.

We have shown how Data strives to acquire humanity by way of several methods, that is, the occasional appropriation of biological parts, the attainment of qualia and the clear expression of intentionality. His search for the latter, notably through the implantation and activation of his emotion chip, also demonstrates Daniel Dennett’s four properties that are often attributed to qualia. These are that qualia are ineffable and can only be comprehended through a direct experience; that qualia are intrinsic; that qualia are private and impossible to compare interpersonally; and that qualia are instantly apprehensible to consciousness, such that once experienced, one instantly knows that one has experienced a quale (Dennett 46).

This syndrome is often depicted in sf, and not just in *Star Trek*, and the regularity with which the desire to become more human (or even fully human) is so frequently restated in sf that it smacks of an overweening sense of hubris, particularly since this anthropocentric desire is often expressed by beings who are superior, physically and/or mentally, to mere humanity.

On the other hand, the dystopic futures that the Borg depict warn against a too-trusting embracement of the ultramodern, which may decompose into the “postmodern . . . an aesthetic of decay, exposing the dark side of technology, the process of disintegration. Next to the high-tech, its waste. It is into garbage that the characters constantly step” (Bruno 63). SF also enjoins us to heed the plight of

Frankenstein’s monster, as such beings offer a glimpse of a liberated and empowered humanity, which could be realized thanks to the wonderful possibilities of technology; but so too, they indicate the terrible price of that seductive empowerment in the substitution for our humanity of the qualities and characteristics of the machine. (Fitting 345)

SF thus cautions against an exaggerated prosthetic impulse and extreme prosthetic makeovers, leaning more toward the Pinocchio syndrome of anthropocentrism and encouraging us to abandon any Faustian pacts that we may be tempted to make with technology. This trope is exemplified by the Borg, who through the dispassionate infliction of great pain (“Repentance”), “reproduce themselves by assimilating bodies . . . by literal physical penetration” (Fuchs 282). As in many narratives, the Borg represent a metaphor of what we might become, because “if the Borg are transgressive and integrated, they are also demonized, representing fear of multiple losses, of choice, individual identity, and morality” (Fuchs 298).

These prosthetic impulses may simply start as “a culture inhabited by posthumans who regard their bodies as fashion accessories” (Hayles 5). However, Baudrillard cautioned against excessive embracement of such artificial additions, averring that

[w]hen prostheses are introduced at a deeper level, when they are so completely internalized . . . when they impose themselves . . . as the body’s “original” model . . . this point means the end of the body . . . the individual is now nothing but a cancerous metastasis of his basic formula. (Baudrillard 119)

This may potentially lead to posthuman subjects that are constituted of “an amalgam, a collection of heterogenous components . . . whose boundaries undergo continuous construction and reconstruction” (Hayles 7).

Such posthumans, like the Borg, threaten to become ultimate Marcusians, as “the efficient individual is the one whose performance is an action only insofar as it is the proper reaction to the objective requirements of the apparatus, and his liberty is confined to the selection of the most adequate means for reaching a goal which he did not set” (Marcuse 142).

In conclusion, sf explores the possibilities of “a future society which blurs the line between human and machine, and it contains philosophical meditations on what it means to be human” (Kellner 7). The genre also enjoins caution with regard to the android, a sentient embodiment of technology which “inaugurates a crisis of subjectivity. What does it mean to be human in an era wherein human conjoins with machine, biology with technology, nature with manufacture?” thus blurring the implied hierarchy between man and machine (Galvan 18). With regard to humanity, however, any arguments for or against the modification of the body are almost moot, as “increasingly the question is not whether we will become posthuman, for posthumanity is already here. Rather, the question is what kind of posthumans we will be” (Hayles 246).

This brief reading has shown that narratives consider potentialities “about the situation of humanity in the age of science. The boundary between humans and machines is broken down” (Schelde 237), further emphasizing T. H. Huxley’s famous assertion, “[h]ow it is that anything so remarkable as a state of consciousness comes about as a result of irritating nervous tissue, is just as unaccountable as the appearance of Djin when Aladdin rubbed his lamp” (Huxley 193).

It is hoped that this essay has made it clear and it would behoove us to cautiously go where no man has gone before. ▲

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### Works Cited

- Star Trek: The Next Generation* Episodes  
“The Best of Both Worlds.” Dir. Cliff Bole. June 1990.  
“Birthright.” Dir. Winrich Kolbe. February 1993.  
“Datalore.” Dir. Rob Bowman. January 1988.  
“Encounter at Farpoint.” Dir. Allen Corey. September 1987.  
“The Ensigns of Command.” Dir. Cliff Bole. October 1989.  
“Hide and Q.” Dir. Cliff Bole. November 1987.

"I Borg." Dir. Robert Lederman. May 1992.  
 "In Theory." Dir. Patrick Stewart. June 1991.  
 "The Measure of a Man." Dir. Robert Scheerer. February 1989.  
 "The Naked Now." Dir. Paul Lynch. October 1987.  
 "The Offspring." Dir. Jonathon Frakes. March 1990.  
 "Q Who." Dir. Rob Bowman. May 1989.  
*Star Trek: First Contact* (feature film). Dir. Jonathan Frakes. 1996.  
*Star Trek: Generations* (feature film). Dir. David Carson. 1994.

#### **Star Trek: Voyager Episodes**

"Child's Play." Dir. Mike Vejar. March 2000.  
 "Dark Frontier." Dir. Cliff Bole. February 1999  
 "Dragon's Teeth." Dir. Winrich Kolbe. November 1999.  
 "Drone." Dir. Les Landau. October 1998.  
 "Equinox." Dir. David Livingston. May 1999.  
 "Hope and Fear." Dir. Winrich Kolbe. May 1998.  
 "Inside Man." Dir. Allan Kroeker. November 2000.  
 "Night." Dir. David Livingston. October 1998.  
 "Nothing Human." Dir. David Livingston. December 1998.  
 "Pathfinder." Dir. Mike Vejar. December 1999.  
 "Repentance." Dir. Mike Vejar. January 2001.  
 "The Raven." Dir. LeVar Burton. October 1997  
 "Revulsion." Dir. Kenneth Biller. October 1997.  
 "Scorpion." Dir. David Livingston. May 1997.  
 "Unimatrix Zero." Dir. Allan Kroeker. May 2000.  
 "Unity." Dir. Robert Duncan McNeill. February 1997  
 "Vis à Vis." Dir. Jesús Salvador Treviño. April 1998  
 "Year of Hell." Dir. Allan Kroeker. November 1997.

#### **Other Works**

Balinisteanu, Tudor. "The Cyborg Goddess: Social Myths of Women as Goddesses of Technologized Otherworlds." *Feminist Studies* 33.2 (2007).  
 Baudrillard, Jean. *The Transparency of Evil*. Trans. James Benedict. London: Verso, 1993.  
 Baum, Frank L. *The Wonderful Wizard of Oz*. Chicago: Geo. M. Hill Co., 1899.  
 Bernal, John D. *The World, the Flesh and the Devil* (1929). Bloomington: Indiana University Press, 1969.  
 Block, Ned. "The Harder Problem of Consciousness." *The Journal of Philosophy* 99 (2002).  
 Bruno, Giuliana. "Ramble City: Postmodernism and *Blade Runner*" *October* 41 (1987).  
 Clynes, Manfred E. and Nathan S. Kline. "Cyborgs and Space." *Astronautics* September (1960).  
 Collodi, Carlo. *Le Avventure di Pinocchio: Storia di un Burattino*. Florence: Felice Paggi, 1883.  
 Consalvo, Mia. "Borg Babes, Drones, and the Collective: Reading Gender and the Body in *Star Trek*." *Women's Studies in Communication* 27.2 (2004).  
 Dennett, Daniel. "Quining Qualia." *Consciousness in Contemporary Science*. Ed. A. Marcel and E. Bisiach. Oxford: Clarendon Press, 1988.  
 Fitting, Peter. "Futurecop: The Neutralization of Revolt in *Blade Runner*." *Science Fiction Studies* 14 (1987).  
 Fuchs, Cynthia J., "Death Is Irrelevant": Cyborgs, Reproduction, and the Future of Male Hysteria." *The Cyborg Handbook*. Ed. Chris Hables Gray. New York: Routledge, 1995.  
 Galvan, Jill, "Entering the Posthuman Collective in Philip K. Dick's *Do Androids Dream of Electric Sheep?*" *Science Fiction Studies*, 24 (1997).  
 Graham, Elaine L. *Representations of the Post/Human: Monsters, Aliens and Others in Popular Culture*. New Brunswick: Rutgers University Press, 2002.  
 Gross, Edward and Mark A. Altman. *Captains' Logs: The Unauthorized Complete Trek Voyages*. Boston: Little Brown & Co., 1995.  
 Haraway, Donna J. "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980's." *Socialist Review* 80 (1985).  
 Hard, Robin. *The Routledge Handbook of Greek Mythology*. London: Routledge, 2004.  
 Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in*

*Cybernetics, Literature and Informatics*. Chicago: University of Chicago Press, 1999.  
 Huxley, T. H. *Lessons in Elementary Physiology*. London: Macmillan, 1986.  
 Jameson, Fredric. *Archaeologies of the Future*. London: Verso, 2005.  
 Kellner, Douglas, Flo Leibowitz, and Michael Ryan. "Blade Runner: A Diagnostic Critique." *Jump Cut* 29 (1984).  
 Levine, Joe. *Purple Haze*. Oxford: Oxford University Press, 2001.  
 Lewis, Clarence Irving. *Mind and the World Order*. New York: Scriber and Sons, 1956.  
 Lorrain, Jean. *Metamorphosis*. New York: Pocket Books, 1990.  
 Lorrain, Jean. *Survivors*. New York: Pocket Books, 1989.  
 Marcuse, Herbert. "Some Social Implications of Modern Technology." *The Essential Frankfurt School Reader*. Ed. A. Arato & E. Gebhart. New York: Urizen Books, 1978.  
 Maslow, Abraham H. *Motivation and Personality*. New York: Harper and Row, 1954.  
 Piercy, Marge. *He, She, and It*. New York: Fawcett Crest, 1991.  
 Schelde, Per. *Androids, Humanoids, and Other Science Fiction Monsters*. New York: New York University Press, 1993.  
 Searle, John. *Minds, Brains, and Science*. Cambridge: Harvard University Press, 1984.  
 Simak, Clifford. "Desertion." *Astounding Science Fiction*. November, 1944.  
 Smith, Marquard and Joanne Morra. *The Prosthetic Impulse*. Cambridge: MIT Press, 2006.  
 Zeman, David. *The Pinocchio Syndrome*. New York: Doubleday, 2003.