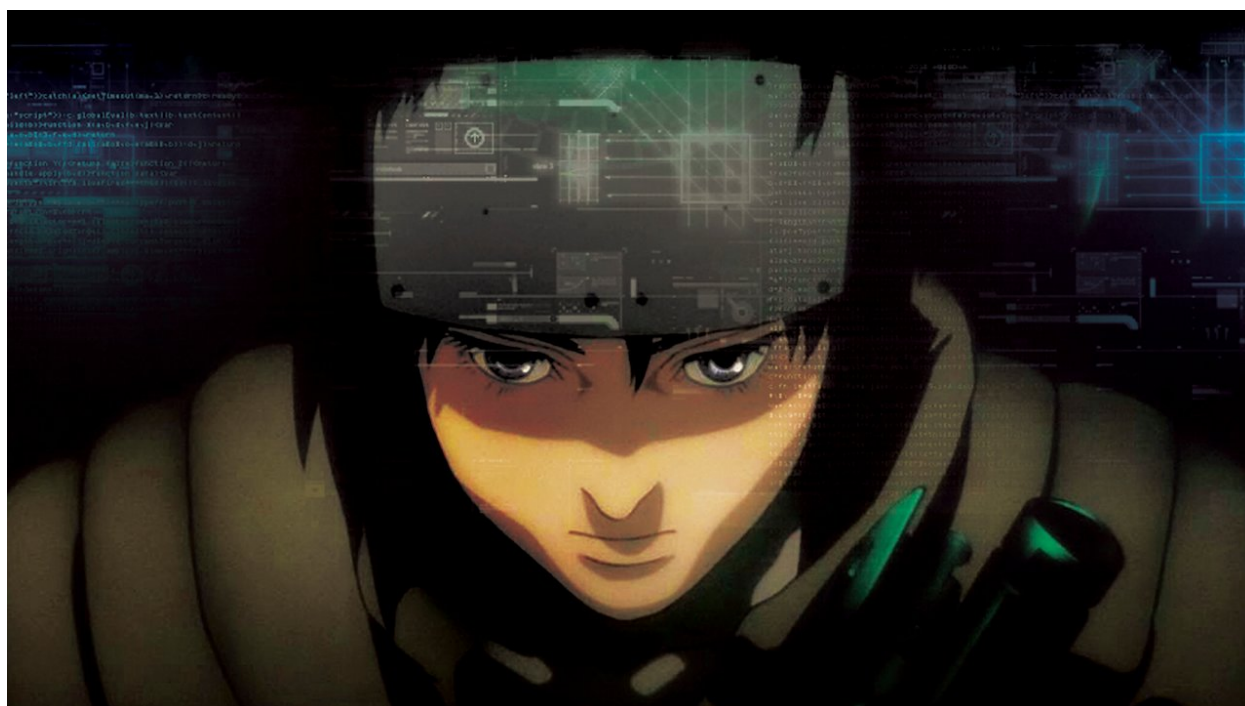Alex Huynh

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The Cyborg in our Shells: A Critical Analysis of Ghost in the Shell (1995)

I'm a life form born from the sea of information. - Puppet Master

The Cyborgs of Our Past and Present

Have you ever thought about what lies ahead for humanity in terms of human evolution? Taking into consideration the rate of development of modern technology, many believe that the sci-fi beings known as cyborgs are the near future of human evolution. But what if I told you that we were already living in an era of cyborgs? To explain this line of reasoning, we would first have to go back six decades to the origin of the word. The term "Cyborg" was coined by Manfred E. Clynes and Nathan S. Kline in 1960 when they published an article called "Cyborgs and Space" in the scientific journal *Astronautics*. Combining the words Cybernetic and Organism, Cyborgs refer to individuals that combine machine and organism, most commonly referring to human-like individuals with robotic body parts. The initial usage of "cyborg" was purely conceptual, as technology in the 1950s was not capable of producing functional cybernetic organs or limbs. Clynes and Kline saw fit to give a name to the concept because they imagined a human individual that would not be inhibited by his environment, as the man had yet to venture to space during the 1950s: "The purpose of the Cyborg, as well as his homeostatic systems, is to provide an organizational system in which such robot-like problems are taken care of automatically and unconsciously, leaving man free to explore, to create, to think, and to feel" (Clynes and Kline, "Cyborgs and Space"). In their explanation of the concept, Clynes and Kline went to great lengths to emphasize that the cyborg had its own existence, indisputably separated from the realms of man and machine as a hybrid of the two.

Sixty years from the initial birth of the concept of Cyborgs, the line between man and machine draws closer with every technological advancement. Top-of-the-line prosthetics have

become the future of the medical field, and artificial organs are soon to follow suit. In 2014, a man named Neil Harbisson became the world's first legally recognized cyborg when he installed an antenna in his head that allowed him to see color; he was born without the ability to see. He had initially created an apparatus that would transmit color from his eye to a pair of headphones that would translate that color to sound through a form of neurological conditioning known as sonochromatopsia. According to an interview conducted by The Guardian, the device, known as the "eyeborg," rested on Harbisson's head until he decided to make it more compact and install it directly into his skin, with the assistance of Bluetooth for network connections. When an outside assistance apparatus (like a pair of glasses) becomes an artificial part of human physiology for the purpose of human enhancement, that fits Clyne and Kline's definition of the word Cyborg very well. Cyborgs are not to be confused with Androids, who are autonomous beings designed to look like humans.

Cyborg theory is heavily associated with identity politics in mainstream literature. The use of the term "cyborg" as a term associated with politics and philosophy has become integrated with several modern schools of thought, including humanist and posthumanist studies. As we exist in an age of real cyborgs, the public misconception of cyborgs should be challenged by more precise definitions and examples. For proof of this misconception, one wouldn't need to look further than the film *The Terminator* (dir. James Cameron, 1984). This film is one of the most influential in both of its genres, science fiction and action, and is undoubtedly a timeless classic in pop culture. Yet it has always gotten one crucial thing wrong. The film's official synopsis reads: "Disguised as a human, a cyborg assassin known as a Terminator (Arnold Schwarzenegger) travels from 2029 to 1984 to kill Sarah Connor (Linda Hamilton). Sent to

protect Sarah is Kyle Reese (Michael Biehn), who divulges the coming of Skynet, an artificial

intelligence system that will spark a nuclear holocaust. Sarah is targeted because Skynet knows

that her unborn son will lead the fight against them. With the virtually unstoppable Terminator in

hot pursuit, she and Kyle attempt to escape."

The Terminator is a film with great cinematic qualities, but the film's image of cyborgs is

not only an outdated one; it is a problematic one. From the start of the film, the Terminator has

never been anything more than a robot with human skin: an Android. Cyborgs are essentially

humans at their roots, with both consciousness and sentience. At no point during the film does

the Terminator even show a shred of humanity: its only purpose is violence. It possesses neither

consciousness nor sentience and follows only its programming. It's also worth mentioning that

the human shell of the Terminator is in the likeness of actor Arnold Schwarzenegger, who is the

most famous bodybuilder in history. Schwarzenegger is the quintessential image of masculinity,

with physical features as if he were carved of stone. The Terminator is Schwarzenegger's most

famous acting role, and his portrayal of the Terminator has established the image of the cyborg as

a futuristic all-powerful boogeyman that lives for violence. However, the Terminator's negative

impression of cyborgs is one that can be dispelled with similar films of its genre. One of these is

Ghost in the Shell (dir. Mamoru Oshii, 1995), another science-fiction/action movie. In this essay,

I will consider how *Ghost in the Shell* presents an image of the modern cyborg that is both more

accurate and more relevant to our time. The ideal image of the modern cyborg that I wish to

present is that of an amalgamation of human ideas. One part of this amalgamation contains the

cumulative experiences of human history and our growth alongside technology which will allow

us to better ourselves physically. The other part is rooted in individuality and resistance against

the state's oppression and established social norms. In order to properly explain the image of the modern cyborg, I will additionally reference the work of one of the leading voices on cyborg theory, feminist scholar Donna Haraway.

A Cyborg Manifesto: Haraway's Myth of Cyborg Identity

Donna Haraway is a professor of feminist and postmodern studies at the University of California. Written in 1985, Haraway's magnum opus "A Cyborg Manifesto" challenges traditional norms of feminism by conceptualizing the political image of the cyborg and placing it at the forefront of humanity's evolution, along with technology. In "A Cyborg Manifesto," Haraway touches upon the political implications of the mechanized organism that is the Cyborg. She claims that the cyborg is "a condensed image of both imagination and material reality, the two joined centers structuring any possibility of historical transformation." (Haraway 7) Haraway contends that cyborgs exist as an inevitable unification of human experience and technological imagination, and this idea is very relevant to modern humanist studies.

Haraway's key assertion is that people have always been cyborgs. The line between man and machine, which should be more accurately outlined as human and nonhuman, has always been easily crossed. Haraway explains three crucial boundaries between the human and the nonhuman that have already been breached. The first was made possible by Charles Darwin's *On the Origin of Species* (1859), which was the first significant rejection of humanity's exceptionalism, as it revealed that all organisms were connected biologically and evolved individually. The second boundary is the distinction between organism and machine. Journalist Nour Ahmad summarizes Haraway's explanation of the second boundary aptly: "As the

industrial revolution arrived, all aspects of human life became mechanized. As human

dependence on machines surged, machines became an inseparable part of what it is to be human;

an extension of human capability" (Ahmad 4). Haraway also contends that machines initially

existed for one purpose: to become an extension of humans, and to help them to achieve their

dreams. However, she suggests that the reality of machines has changed:

The second leaky distinction is between animal-human (organism) and machine. Pre-

cybernetic machines could be haunted; there was always the specter of the ghost in the machine.

This dualism structured the dialogue between materialism and idealism that was settled by a

dialectical progeny, called spirit or history, according to taste. But basically, machines were not

self-moving, self-designing, autonomous. They could not achieve man's dream, only mock it.

They were not man, an author to himself, but only a caricature of that masculinist reproductive

dream. To think they were otherwise was paranoid. Now we are not so sure. Late twentieth-

century machines have made thoroughly ambiguous the difference between natural and artificial,

mind and body, self-developing and externally designed, and many other distinctions that used to

apply to organisms and machines. Our machines are disturbingly lively, and we ourselves

frighteningly inert. (Haraway, 11).

Haraway directly references the "dogma of the Ghost in the Machine," a concept of

mind/body dualism introduced by philosopher Gilbert Ryle based on teachings of the Mind-Body

Distinction by Rene Descartes. The term contends that the mind and body exist as two entities

simultaneously: the "Ghost" and the "Machine" respectively. Computer programmers have used

the expression to explain when a program or software runs contrary to their expectations. The

"Ghost in the Machine" has also been used as a term in psychology to explain nonlogical behaviors in humans, such as when hateful and angry emotions overpower rational thought processes.

The third and final boundary that Haraway discusses is the boundary between physical and nonphysical in the context of modern technology" "Modern machines are quintessentially microelectronic devices: they are everywhere and they are invisible. Modern machinery is an irreverent upstart god, mocking the Father's ubiquity and spirituality" (13). With the progression of technology gradually shifting from massive mechanical machines to devices that can now be handheld or even smaller, humanity has grown unfathomably close to the machinery that it had once operated. Our growth as a species has always been alongside that of our technology. Haraway contends that because of our reliance on technology, technology itself has already become part of humanity. This logic coincides with that of posthumanist ideology, specifically technological posthumanism, which is a branch of posthumanist study focused solely on the impact of technology on the human self. To that end, Haraway subtly reveals her own stance on humanism: that it is not what she cares about. Haraway claims that her purpose in writing this essay is to present her own iteration of the cyborg myth and does so by denouncing the generally accepted stance that humans and machines have always existed separately.

With this misconception cleared, Haraway imagines two iterations of the future of cyborgs. The first of these iterations are of a warzone, dominated by the patriarchy in which militarism and capitalism reign supreme. Specifically, Haraway employs the use of the words "masculinist orgy of war," and an example of this is present in none other than the "cyborg" film

T*he Terminator.* In the film, the Terminator is played by Arnold Schwarzenegger, the spitting image of masculinity and by extension the patriarchy. His character is a representative of Skynet, a self-aware computer program that triggers a global nuclear war in order to exterminate humanity, uses the Terminator series to do so. Although the film was misguided in its depiction of cyborgs, it effectively encapsulates one of the possible futures that Haraway imagines for cyborgs: a widespread society investment in militarism, funded by patriarchal capitalism and made possible by state socialism. This future is the concept of the surveillance state and is a topic that I'll discuss in further detail later on. The second future that Haraway imagines is more positive: "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." (Haraway 15). This future is one dedicated to the idea of acceptance and supplements her stance on feminism. However, Haraway recognizes that it is necessary to view both possibilities objectively in order to understand the potential impact of the cyborg's existence on humanity's future.

Haraway contends that inequalities in gender and race are a consequence of Western society's historical exposure to patriarchy, colonialism, and capitalism, and as such, there is a necessity to do away with formalized traditions of gender. Hence, she turns to the cyborg identity: an amalgamation of new societal ideas that embrace political unity through the acceptance of socialist-feminist ideals in order to do away with the failures of the Western patriarchy. In order to accomplish this, several aspects of society would need to be disassembled and reconstructed. Haraway corrects the term "reconstruction" with "regeneration" in her quote describing cyborgs:

I would suggest that cyborgs have more to do with regeneration and are suspicious of the

reproductive matrix and of most birthing. For salamanders, regeneration after injury, such

as the loss of a limb, involves regrowth of structure and restoration of function with the

constant possibility of twinning or other odd topographical productions at the site of

former injury. The regrown limb can be monstrous, duplicated, potent. We have all been

injured, profoundly. We require regeneration, not rebirth, and the possibilities for our

constitution include the utopian dream of the hope for a monstrous world without gender.

(Haraway 67)

 This quotation captures the essence of the cyborg in both a physical and psychological manner. The idea of salamanders regenerating applies to the early iterations of cybernetic enhancements for humans who have been injured: prosthetics. When she writes "we have all been injured, profoundly" she directly references the suffering brought upon by racism and sexism, which have stemmed from patriarchy, capitalism, and colonialism. To demonstrate her point, Haraway suggests that women of color are an example of a cyborg identity since they are products of socialist-feminist politics. Pop culture and media have groomed us to believe a cyborg future will have flying cars and Skynet. What we don't accept is that we are already living in a cyborg present. Haraway's overarching assertion is that we are all already cyborgs, shaped by the growth of technology which has developed in parallel with us, essential victims to the shortcomings of Western society. So the question begs: what lies ahead?

Posthumanism and Transhuman Theory

To answer this question, critical studies have explored a contemporary iteration of the dated concept of the cyborg: the posthuman. The concept of the Posthuman refers to a state of existence that lies beyond humans in terms of morality, intellect, autonomy, and individuality. As a social philosophy, Posthuman theory (more specifically: technological posthumanism), addresses the aspects of humanity that can be altered through technology, in direct contrast to humanism. In the textbook "Post- and Transhumanism: An Introduction" by Peter Lang, Lang explains the two theories of Posthumanism and Transhumanism. Transhumanist theory applies science-based methods of alteration such as eugenics or genetic modification. Posthumanist theory challenges humanism, which implies that humans are the apex of existence, through its abandonment of identity and embodiment of multiple identities. At the same time, Posthumanism also asks the critical question: What does it mean to be human? Donna Haraway's take on cyborg ideology in her essay "A Cyborg Manifesto" recognizes the influence of humanism on the cyborg identity. Her take is also synonymous with posthuman ideology in the sense that it argues for a breakaway from societal norms in order to accommodate the modern cyborg identity. As such, the cyborg identity that Haraway describes in "A Cyborg Manifesto" can be interpreted as a precursor to the emergence of the Posthuman, even though the cyborg identity is rooted in humanism.

However, a close examination of "A Cyborg Manifesto" reveals that the traditional interpretations of cyborgs do not align with posthumanism. The identity of a cyborg is often ambiguous: cyborgs can be seen as humans existing within mechanical bodies, or a "perfect" blend of nature and technology, but these identities are not absolute. If a cyborg still reflects on questions of identity within a human brain, questions about the nature of their existence will

remain unanswered. The Posthuman, on the other hand, is just that. Posthumans are not ambiguous in identity, because their memories and mind exist apart from their physical form. They do not search for the answer. They *are* the answer: a truly absolute existence. Posthumans are a higher level of existence in themselves and are the ultimate evolution of the cyborg.

Although the concept of posthumanism may seem unrealistically placed in a distant future, the reality is that we are on the brink of living in posthuman times. A 2014 article about posthumanist discourse has argued in favor of a posthumanist education, which would seek to transform educational practice in a significant manner. Firstly, a posthumanist education would remove human exceptionalism from educational philosophy. By removing conceptions of human exceptionalism, students would perhaps be able to embrace a more objective and less biased view of humans throughout human history. as well as reframe education to acknowledge relationships between the human and the nonhuman, most importantly including nature. In philosopher Rosi Braidotti's research article, "Posthuman Critical Theory," she defines the posthuman as a "critical and creative figuration, or as a conceptual persona that illuminates the complexities of the present, defined as both the actual and the virtual" (Bradiotti 12). This theory is very much in line with Haraway's interpretation of the cyborg. Braidotti defines the posthuman as a persona that embraces both the "actual" and the "virtual," and considers the experience of human society within the historical moment. In other words, Braidotti suggests that the posthuman exists within the Anthropocene, made possible by advanced capitalism, which reflects Haraway's sentiment about the cyborg future and its relationship to capitalism.

The posthuman, in contrast to its older brothers, the cyborg, and the android, hardly presents itself in modern media. However, in *Ghost in the Shell* (dir. Mamoru Oshii, 1995), the posthuman is not only represented but portrayed accurately.

<u>Ghost in the Shell Analysis</u>

The original *Ghost in the Shell* was a Japanese manga series written and drawn by mangaka Masamune Shirow in 1989. The series took place in a futuristic fictional city in Japan in the mid-twenty-first century and revolved around a government unit made of cybernetically advanced humans who prevented cyberterrorism. Within the world of *Ghost in the Shell*, the process of cyberization of human brains and bodies has become not only a reality but is a commonplace practice for citizens around the world. Notably, the process of cyberization is a process that integrates electronic components with a human brain to introduce an augmented organ known as a cyberbrain. The benefits of cyberization far outweigh the impracticalities of having a human body, the most beneficial of which being able to interface with the natural brain and being able to process information with inhuman speed, as well as connect with various local networks. The vast majority of the population possess cybernetic implants or alterations of some sort, with the level of cyberization categorized and ranging from "almost natural" to "full cyborg." The film adaptation *Ghost in the Shell* (1995) is set in Japan in the year 2029 and follows a female cyborg named Major Motoko Kusanagi, who is a special field operative under the highly secretive Japanese Public Security Division Section 9, which operates under the jurisdiction of the Ministry of Internal Affairs.

Throughout the film, Motoko is plagued with a sense of uncertainty regarding her identity, which places her on the borderline between cyborg and machine. Motoko and her team of intelligence and cyberwarfare specialists are tasked by Section 6 to hunt an internationally renowned hacker known as the Puppet Master before they are able to threaten the national security of Japan. After the consciousness of the Puppet Master is found inhabiting the body of a cyborg and is secured by Section 9, it reveals that it was actually a secretive program, known as Project 2501. It was designed by Section 6 with the help of the U.S. to become the ultimate hacking program. It was capable of stealthily influencing foreign politics and intelligence and altering memories of persons of interests, using cutting-edge cyberbrain technology which provided it with an unlimited supply of information from the net. Much to Motoko's surprise, it makes an official request for political asylum, citing that it is a living being. Section 6 abruptly kidnaps the body of the Puppet Master from Section 9, and Motoko, intrigued by the sentient program, gives chase. The chase ends at an abandoned museum, in which Motoko discovers that the Puppet Master had purposely gotten captured by Section 9 because he believed that Motoko's identity as an outsider reflected its own. The two merge consciousnesses through a cyberbrain uplink and their bodies are blown to bits by Section 6's snipers. At the end of the film, the new life form composed of the consciousnesses of Motoko and the Puppet Master is revealed to have survived the attack and prepares to face the world with newfound freedom.

Mamoru Oshii's *Ghost in the Shell* is a critically acclaimed film in the genres of animation and science fiction. Paul Schrodt, responding to the announcement of a live-action adaptation of *Ghost in the Shell,* wrote "The Wachowskis openly cited the anime movie as an inspiration for "The Matrix", in a 2017 article by Business Insider titled "How the original '*Ghost*

in the Shell' changed sci-fi and the way we think about the future". In this article, director James

Cameron also called "*Ghost in the Shell*" "a stunning work of speculative fiction," and the future

of his "Avatar," in which humans remotely operate alien bodies, certainly bears a resemblance to

the anime." Cameron has also referred to *Ghost in the Shell* as "the first truly adult animation

film to reach a level of literary and visual excellence."

The profound influence of *Ghost in the Shell* as a sci-fi animation film is attributed to not

only its quality of production and direction, which was undoubtedly ahead of its time, but

because the film's writing touches on complex philosophical ideas. Multiple schools of thought

present themselves throughout the film: Humanism, posthumanism, anthropomorphism,

capitalism, militarism, industrialism, evolution, etc. The influence of Haraway is also palpable

within the film; the cyborg identity that Haraway suggests in "A Cyborg Manifesto" presents

itself in full within the world of *Ghost in the Shell.* In my next section, I will explain how *Ghost

in the Shell* succeeds in its simultaneous presentation of Haraway's cyborg identity and the

introduction of posthumanism.

Despite *Ghost in the Shell's* (1995) vastly technologically advanced futuristic setting,

humanist imagery is presented throughout the film. The first example of this is the opening scene

of the movie, in which the protagonist, Motoko Kusanagi, is in the process of being constructed

as a fully cybernetic human. The process is meticulous in its depiction; the viewer is given access

to every detail of the cyborg construction process, including the scanning and recreation of the

human brain into a cybernetic one. The muscles and the white plating over them resemble a

human skeletal structure. The skin is placed and subsequently peeled off in layers to resemble

human skin as closely as possible. The scene culminates in her gaining consciousness. What this opening scene accomplishes is that it serves as a means of exposition to the viewer, by exhibiting how technologically advanced the protagonist's body and mind are. The seamless animation displaying the construction of the Motoko's body serves to emphasize exactly how different cyborg bodies are from human ones, on a fundamentally technological level. At the same time, a sense of human naturality emerges from the highly mechanized sequence. For example, when the body's skin is formed and it is exposed to water, it moves into a fetal position, mirroring that of human fetuses inside the womb. Throughout the process of construction, the body is ascending through some sort of assembly apparatus, filled with fluid, and the opening sequence concludes with Motoko opening her eyes, waking up from her slumber. This scene, although rich with mechanical imagery and effectively showcasing how a cyborg body is manufactured using technology, gives off the impression that a natural life form is being born. The liquid and the use of the fetal position are key to this, as well as the opening of Motoko's eyes at the end of it. It does a fantastic job of setting the tone of the film, both the highly futuristic technologically advanced setting, and the underlying themes of humanism that attempt to complicate it. Within the *Ghost in the Shell* universe, despite cybernetic enhancements being the pinnacle of human technology, there is a clear and present demand to remain "human," or more precisely, to preserve the experience of being human as much as possible.

Another scene where humanism is emphasized is when Motoko converses with her subordinate Togusa while the pair track down the infamous hacker Puppet Master's location in a van. Motoko suggests that the Puppet Master may not be an independent hacker and could be sponsored by a hostile organization. Togusa claims she is overthinking it, to which Motoko

replies: "the voice of my Ghost says so." This is the first introduction to the concept of the

"ghost." In colloquial terms, the "ghost" that Motoko refers to is synonymous with the "soul" of

humans. It is the film's first real connection to posthuman studies, and the entire franchise of

Ghost in the Shell is based on the concept of the Ghost in the Machine. Instead of attributing the

feeling to a hunch or a gut feeling like a human would, Motoko uses the word "ghost." This is a

very interesting choice of words because of how it implies that Motoko, who is seen to be

constructed head to toe like a machine, is able to entertain the notion of a non-logical suggestion,

like a human can. As the conversation between Motoko and Togusa continues, Motoko brings up

the old-fashioned Mateba revolver that Togusa uses. Motoko says to Togusa, "I want you to think

more about the actual overwhelming capability than preference." (GiTS 12:35) stating that she'll

be in danger if Togusa's outdated weapon malfunctions. This is a key line; it aptly represents

Motoko's entire identity. Motoko is a "full cyborg," and her entire identity is based on the idea of

"actual overwhelming capability." Her cyborg body is state of the art for military purposes,

specializing in melee combat, firearm usage, and cyberbrain warfare. Motoko prioritizes

performance above all else, in direct contrast to Togusa, who refuses to upgrade to the newest

weaponry in consideration of his preferred outdated sidearm. Togusa then asks Motoko why he

was chosen to be a part of her team, seeing as how he was a former police officer with no

background in unofficial operations. Togusa is also married, and has the bare minimum of

cybernetic augmentations, meaning that he has a real human brain and is as close as possible to a

real human. Motoko's reasoning for selecting Togusa is very profound as well. She states that

"No matter how excellent a soldier, a system composed of the same standardized parts will

eventually have a flaw somewhere. Organizations or humans, what lies beyond specialization is

only a slow death." This quotation is packed with meaning because it reveals Motoko's thoughts

on humans. She understands their necessity and worth in comparison to her own, being a life

form completely composed of mechanical parts. The fact that she keeps Togusa around in her

highly cybernetic squadron because he alone has the ability to offer the perspective of an almost

natural human speaks volumes to her identity as an outsider. It is because she is able to both

operate at the highest capability and simultaneously make choices that humans would make that

she is unable to discern whether she is human enough to call herself a cyborg rather than a fully

manufactured life form. It is also incredibly telling that she refuses to abandon humanism for

cyberization. Later on, Motoko says, "After pursuing more advanced abilities with cyberbrains

and cybernetic bodies, if we become unable to survive without the highest level of maintenance,

we can't complain." (GiTS 31:23) In this line, she offers a direct criticism of transhuman theory

in a very self-conscious manner.

In his article, "Humanism and Transhumanism," Fred Baumann explains transhuman

ideology, which contends that humans should do everything in their power to develop and

embrace technologies that will seek to eliminate death and enhance physical, intellectual, and

psychological capabilities. His criticism is voiced most prominently in a section subtitled "The

Challenges that Shape Us," where he writes:

> Once you say, "What's wrong with curing diseases?" you will be tempted to add,
>
> "Anyway, isn't a man with a hearing aid already a cyborg?' That is, you will have taken
>
> the stance of transhumanism while defending some humane application. Moreover, there
>
> are always prices to be paid that, however justifiable, nonetheless become increasingly

invisible as technologies grow and spread, even as that growth means the prices become

ever greater. (Baumann, 74)

Baumann voices his concern against the values of transhumanism here: it is irrational to expect

that the potential offered by technological enhancements is without consequence. Posthumanism

exists as a criticism of transhumanism in that it contends that physical augmentations are not

everything that is necessary for true evolution. This criticism is synonymous with what Motoko

has to say about her own situation, in which the government has given her every possible

upgrade in the name of tactical efficiency, she objectively understands that those very upgrades

and enhancements may very well be the cause of her downfall. It is something that she is forced

to accept; if she resigns from Section 9, they will withdraw most of her body parts and

memories. She also says:

Just like there are many elements for a human to be a human, you need surprisingly

many elements for you to be yourself. A distinct face, an unconsciously distinct voice, a

hand you look at when you wake up, your childhood memories, foresight. But that's not

all. A wide range of information and a network that I can access. All those are part of me,

create my consciousness itself, and at the same time constrain me within a certain limit.

(GiTS 31:50)

In this quote, Motoko answers the fundamental posthumanist question, "What does it mean to be

human?" after applying it to her own identity: "What does it mean to be me?" Enter the Puppet

Master: formerly a program, a new life form, an individual brimming with the potential to

completely redefine not only what it means to be human, but what it means to be alive. The

Puppet Master says, "I am trapped in this body because I could not resist Section 6's barrier, but I'm here now of my own free will. As a life form, I request political asylum." (GiTS 48:10) At first glance, this scene would fall into the popular sci-fi trope of artificial intelligence gaining sentience and wanting to punish/eradicate humanity for their evolutionary inferiority (i.e., Skynet, the Sentinels from the Matrix, and HAL from 2001: A Space Odyssey).

But as the Puppet Master continues to speak, its motivation becomes fascinating: it wants to live. Identifying itself as Project 2501, it claims that it is not an AI, although it would be more accurate to say that it is no longer an AI. It says: "I'm a life form born from the sea of information." (GiTS 49:47) For the first time in the history of *Ghost in The Shell*'s world, the ghost, which represents human consciousness, has been conceived by the body, which represents the function of monitoring the sea of information that the Puppet Master was created for. This scene serves as a brilliant rendering of the dogma of the ghost in the machine, and his desire to fuse with Motoko is solely for the purpose of attaining a higher existence- a line of thinking that perfectly aligns with the goal of posthumanism. At the climax of the film, as the fusion between Motoko and the Puppet Master completes, Motoko asks two questions. One of these is "Any guarantee that I will remain myself?" To which the Puppet Master responds: "There is no guarantee. Humans are supposed to change, your attempt to remain your current self will keep constraining you." This question explores the mentality behind posthumanism, which is the pursuit of higher human existence. After completing the merging process with Motoko, the Puppet Master experiences death as the snipers from Section 6 obliterate their bodies. This is depicted through the perspective of the Puppet Master's optics, and the final thing that the Puppet Master sees is the silhouette of an angel as feathers of light descend from the sky. This

imagery is crucial as it represents two concepts: one of which is the network of information that the Puppet Master refers to. Motoko is about to experience the higher level of existence that is post-humanity, in the form of becoming a human consciousness that is no longer physically constrained. The Puppet Master sees an angel descend upon him, granting him physical death. The human image of an angel descending upon him and granting him death represents the successful completion of his life form and his transition into human consciousness. At the very end of the film, Motoko emerges as a new life form, with her completed identity. Motoko is everything at once. She is human, she is a cyborg, she is without gender, without race, without constraint from patriarchy and the government, all as Haraway intended in her myth of the cyborg identity. Motoko can also identify as both genderless and genderfluid, as she now inhabits a fully physical shell and an online existence.

In essence, she is humankind's first real glimpse of what the posthuman could be, and thus is an enemy of the state. The government, which represents state authority, is constantly at odds with natural rights. The more liberated the individual, the less control that the state can impose on them. For this reason, when cyborgs are integrated into society, it is inevitable that the state becomes overarching in all aspects of citizen life, and individuality gradually becomes smothered. In Haraway's Cyborg Manifesto, she recognizes this in her definition of the state:

> Continued erosion of the welfare state; decentralizations with increased surveillance and control; citizenship by telematics; imperialism and political power broadly in the form of information-rich/information-poor differentiation; increased high-tech militarization increasingly opposed by many social groups; reduction of civil service jobs as a result of

the growing capital intensification of office work, with implications for occupational

mobility for women of color; growing privatization of material and ideological life and

culture; close integration of privatization and militarization, the high-tech forms of

bourgeois capitalist personal and public life; the invisibility of different social groups to

each other, linked to psychological mechanisms of belief in abstract enemies. (Haraway,

46)

Haraway's criticisms of the government are logical in that the authority of the state will not allow

itself to be challenged by the progression of individuality, which is why militarization is a major

focus of the state.

Ghost in the Shell is a world in which Haraway's extrapolations of the future of the

cyborg identity are realized: mid-21st century Japan is a surveillance state that prioritizes

militarism and state socialism. The fictional city of Niihama is ripe with urban imagery, ranging

from high-rise skyscrapers to crowded Chinatown slums, indicative of the massive wealth gap

within the city. It's clear that the effects of patriarchal capitalism still run rampant, even in the

future of 2029. In order to understand Niihama city's extent of state surveillance, it's important to

recognize how the technology of cybernetic augmentations has altered human society. The cyber

brain has been a revolutionary upgrade in all aspects of the human brain, limited by its natural

capacity to process information. However, unlike the natural human brain, the cyber brain is

vulnerable to hacking, meaning that a skilled hacker could potentially invade your entire

consciousness and existence, and even delete your real memories and replace them with false

ones. This is what happens to the victims of the Puppet Master: their original identities are

completely erased without a trace, and false memories are inserted in order to make the victims easier to command. The risks of cyber brain warfare incentivize the state to be continually in constant control over all aspects of civilian life. This is made apparent by the existence of the 9 Public Security Bureau. To call this occurrence invasive is an incredible understatement.

I suspect that Haraway has already considered the societal consequences of physically departing from human physiology and towards cybernetic enhancements, although not to the extent that *Ghost in the Shell* has established the practice of cyberbrain hacking. Additionally, Motoko is the very epitome of cutting-edge technology. She is a full cyborg, with myriad cybernetic enhancements that optimize her for covert operations and cyberbrain warfare, to the extent that the only human that remains within her is a bit of her human brain within her augmented cyberbrain, if at all. This is the largest example of the rampant militarism that Haraway expects in the first of her cyborg futures; that the most advanced cyborg would be designed for military purposes at the behest of the state. However, despite the overbearing militarism and surveillance present in Niihama city, Haraway's second iteration of the future is also realized to an extent. The world within Niihama city is packed with both humans and cyborgs living their lives together. There appears to be no vocalized anger between humans and cyborgs throughout the film, leading the viewers to believe that cybernetic enhancements have already been normalized on a societal level. The feeling of being an outlier is only apparent to both Motoko and the Puppet master because they both do not belong as either humans or cyborgs. In Motoko's case, the words "full cyborg" are an understatement, because, with the cyberbrain as mechanized as it is, it seems that the only human part of her remaining is her "ghost". Her design is based so heavily on performance that she subconsciously ostracizes

herself from her colleagues, who are also cyborgs but are significantly less cyberized than she is. Thus, she tries to connect with her humanity as much as possible. She engages in scuba diving, although it is highly not advisable for cyborgs of her build to do so. The reason she does this is that the experience of her rising to the surface parallels that of her birth in the opening scene. She also treats her human subordinate Togusa the same way she does her other cyborg subordinates. As mentioned previously, Motoko places value in both humanity and her cyborg self. She bears no hatred for humans nor cyberized humans, with an attitude of acceptance that ultimately allows her to accept the transformation into the posthuman at the climax of the film. Haraway's feminist cyborg views also come into light in Motoko's character. She is a strong, respected, independent individual who seems unhindered by the patriarchal influence on society. This is shown in the film when she communicates with her subordinates and her Section 9 boss, who give her full leeway to operate independently, and only offer intel for her to use without attempting to instruct her. However, the patriarchy in *Ghost in the Shell*'s society cannot be ignored. The Japanese government is partnered with Megatech, a major company that constructs cyborg bodies for public use. As such, the government literally owns Motoko's body. This is overturned in the final act of the film, in which she transcends to become posthuman after the Japanese government destroys her body using Section 6's snipers. In this regard, she becomes genderless and unrestrained by the government, once she merges with the Puppet Master.

The Puppet Master's very existence as a genderless life form born from a computer is perplexing to the world of Ghost in the Shell and raises many questions about the exact definition of "life". Having been born as a surveillance program to spy on individuals and organizations, the Puppet Master is well and truly an outlier, from both humans and traditional

cyborgs. In addition, the Puppet Master's revolutionary request for political asylum under the pretense of being a living being, as well as the government's immediate response to dispose of such an individual filled with potential is a sequence of events that Haraway's extrapolations of the cyborg future would undoubtedly endorse. The government does not intend to understand or place any value in the birth of the new life form. Their only intention is to eradicate its existence because the individuality and capacity that the Puppet Master represents could threaten the highly socialist Japanese government and expose their wrongdoings to the public.

The Puppet Master's character design is that it is a program inhabiting a body that Section 6 has trapped him in. The body is female in appearance, yet it speaks with a male voice. Since the Puppet Master's body was not completed at the Megatech factory, it remains in a pure color of white, much like a mannequin, making it lack the layer of colored skin that allows the cyborgs to look "human", as Motoko does. This imagery of having a doll-like appearance lends to the image of being a traditional automaton. In Karin Sanders' essay "Let's be Human"- On the Politics of the Inanimate," Sanders focuses on a subset of anthropomorphism: Marionettes, dolls, and automatons, which have been used by authors such as Hans Christian Andersen and Heinrich Von Kleist to compare to humans and examine consciousness through unconsciousness. Anthropomorphism is a method of characterization that involves attributing human characteristics to animals, objects, or ideas. When most people hear the word anthropomorphism, chances are they immediately think about animals, such as in the popular trope of talking animals in Walt Disney Animation Studios films. What is more than likely overlooked is the existence of cyborgs in the Anthropocene. In her essay, Sanders focuses on the anthropomorphic mimicry of the human condition and suggests that the attribution of human qualities on dolls is different

from the traditional usage of anthropomorphism on animals: "The change from the existential 'to be human' to the performative 'to play human' is tied to the detail that the doll (unlike the lark) already looks like a human and therefore simply needs to play out this mimicry. Yet to look human is not to be human, and to play at being human may not be much, but as the doll acknowledges, it is 'always something.'" (Sanders 30)

In the case of stories featuring dolls that come to life, the most memorable of which being Carlo Collodi's *Pinocchio: The Story of a Puppet* (1883), they offer a social critique on the human condition from an objective standpoint: A human soul within a human-looking shell which is not quite human. This critique of the human condition is more often than not a pessimistic one, intended to denounce humanism for its vices. But if a human soul is within a human-looking shell, why is it not human? To explain this phenomenon, it's important to understand the concept of the uncanny valley. The term, coined by Masahiro Mori in his 1978 essay "The Uncanny Valley," refers to the relationship between the degree to which an object resembles a human being and the emotional response to that object. Essentially, humanoid life forms and automatons that become too close to being human are viewed by humans with disdain. Mori uses a graph to mathematically depict the relationship between affinity and human likeness in robot production. He also uses an example in which he describes a prosthetic hand that is made to resemble a human hand as closely as possible technologically possible. When a human shakes a prosthetic hand that appears ordinary, they will be startled when they realize that the hand has a cold, unliving grip. He describes the feeling of losing affinity as the "uncanny". For this reason, dolls are inherently uncanny, and there is a certain unsettling feeling that presents

itself when comparing them to humans. The uncanny valley presents an invisible boundary between "natural" humans and nonhuman sentience.

Therefore, I would suggest that anthropomorphism in cyborgs is actually a literary strategy designed to flesh out (pun intended) humanity within the futuristic shell. Ironically, the purpose of anthropomorphism is to focus on humanism while utilizing the physical alterations brought upon via transhumanism. For this reason, cyborgs in media culture do not abandon their humanity but maintain enough cybernetic enhancement to be visually distinct from humanity.

In this manner, the Puppet Master's design obeys the trope of anthropomorphized nonhumans presenting objective views on humanity. The Puppet Master does subject itself to the uncanny valley, as it has been able to form a human soul, but it cannot break itself away from the nonhuman that it is. The Puppet Master understands that its existence is at risk, and fears death. For this reason, it seeks to merge with Motoko before it dies, so that it can leave something behind. The new life form made of the consciousness of Motoko and the Puppet Master are both more human and more cyborg than we can ever imagine.

Conclusion

Cyborgs and posthuman entities have become increasingly prevalent in our modern lives. In recent times, the COVID-19 pandemic has caused a significant alteration to the quality of life around the world. People everywhere have been forced to retreat into their homes, limiting social contact as much as possible, and deepening bonds with technology now more than ever, with businesses and education fully transitioning to online using Zoom. Unfortunately, the idea of the cyborg has evolved into a contested term with negative connotations. A Christian doctor from

Ohio, Sherri Tenpenny, has claimed that COVID vaccines will turn people into "transhumanist cyborgs" (LGBTQNation.com). Tenpenny has expressed anti-LGBTQ and anti-transgender sentiments on multiple occasions. On The Stew Peters Show, she asserted that the goal of the COVID vaccines: "is to depopulate the planet and the ones that are left, either make them chronically sick or turn them into transhumanist cyborgs that can be manipulated externally by 5G, by magnets, by all sorts of things." When asked what she meant by "transhumanist cyborg" she declined to comment. Her Twitter account was recognized as one of the 12 accounts where 65% of COVID misinformation originated (Center for Countering Digital Hate). She has since been banned from the platform, but her outreach and influence have only expanded. It's easy to write Tenpenny's spiteful words off as conspiracy theorist nonsense; her homophobic stance offers the impression that her opinion is close-minded and ill-informed. Yet I am particularly concerned by her dangerous use of the term "transhumanist cyborg." The conspiracy that the government is somehow "transforming" us into cyborgs is harmful to society in that it perpetuates negative associations with the word "cyborg." Particularly important is the impression that the government's goal is supposedly to transform humans into controllable cyborgs. Even before the conception of Haraway's myth of Cyborg identity, humans have always been fascinated with the idea of the unification between the human and the nonhuman. For proof of this, you wouldn't need to look any further than the popular genre of science fiction. As we now approach an age in which this unification will become not only realized, but normalized, it is important more than ever that we understand what it means to be human, what it means to be nonhuman, and everything that lies in between. The myth of cyborg identity represents humanity as it has progressed alongside nonhuman technology, and as the emergence of cyborgs defines

our historical moment, so too will the emergence of posthumans for our future. *Ghost in the Shell* (1995) represents Haraway's myth of Cyborg identity in full through the protagonist Motoko, and her existence as a product of patriarchal capitalism and state socialism. The film also produces a comprehensive image of the posthuman, which is the life form that is composed of the consciousnesses of both Motoko and the Puppet Master at the very end. To this day, this film continues to defy humanism and prepare us for our cyborg present and our posthuman future.

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