Autonomy, Functionality, and *Ghost in the Shell*

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The 1995 film *Ghost in the Shell* and the 2004 film *Ghost in the Shell 2: Innocence* (both directed by Mamoru Oshii) look at the cyborg body as the central location for defining what consciousness means when that consciousness is housed in an artificial body. Through these two films, we can do a deep analysis on the nature of being and determine the function of a body, organic or otherwise. As will be discussed, to have an artificial body has implications on ability, politics, economic status, and technophilic connotations about the direction organic life is heading. This examination of *GitS* and its sequel, contextualized by Donna Haraway's "Cyborg Manifesto" and an expanded philosophical discussion regarding anatomy, will explore the competing approaches to adopting artificial bodies as the next step in human evolution, as popularized by the transhumanist movement.

As defined by Haraway, a cyborg is a "cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction."[1] Though in fiction the cyborg is taken to technological extremes, the social reality inherent in its existence presents investigations to what a body means because a cyborg is made, not born. Understanding that cyborgs navigate blurred lines of organicness and artificiality within a post-industrial society is important in our discussion of *GitS*. Meaning the cyborg is created in a world that does not rely on an organic workforce, or at least an organic workforce that is not assisted by artificial beings. When a human is "upgraded" with biotechnological enhancements this becomes a cyborg. However, this definition can be broadened when looking at the ideological practice of eugenics. In their chapter "Should the human race be improved?", Laurent Alexandre and Jean-Michel Besnier discuss how medicine has become so advanced that it looks towards not repairing but improving the human race. While most living things are born as "fully and immediately what they will be at the moment of death,"[2] humanity has the distinct drive to repair itself. Making the cyborg, as well any other organic-machine hybrid, a distinct novelty of humanity.

This unique quality is at the heart of much criticism aimed at turning humans into cyborgs, mainly as another form of eugenics. This thesis of going beyond the human form is what an ideology such as transhumanism rallies behind. Alexandre and Besnier investigate the kind of eugenics associated with altering humans when looking at the abortion rate of embryos pre-diagnosed with Down Syndrome. "There is strong social pressure to 'eradicate' the disorder from society, and few people receiving a Down's syndrome diagnosis for their unborn child are able to resist this pressure."[3] One's ability (even before birth) dictates what society has deemed as worthy of existence, the *right* way to live. Following this logic perhaps the cyborg could be the *optimal* way to live.

Major Motoko Kusanagi, one of the central characters of the *GitS* franchise, embodies the optimality an artificial body affords whilst being distinctively *still* human. Kusanagi leads Public

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[1]Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature*. (New York; Routledge, 1991): 149-181.

[2] Laurent Alexandre and Jean-Michel Besnier, "Should the human race improve?" in *Do Robots Make Love?: From AI to Immortality – Understanding Transhumanism in 12 Questions*. (Octopus Books, 2019): 8-15.

[3] Alexandre and Besnier, 11.

Security Section 9 of the Japanese police, made up of various members with scientific and military backgrounds. Notably, most of them have been given augmented bodies from their employers, the government. These cybernetic enhancements are given to them at the cost of what was their original human bodies, and all that remains is their organic brain. Because of her employment with the Japanese government, Kusanagi is forever tasked to be the Major, and her cybernetic body is completely owned by the state. It is this captivity that drives Kusanagi to investigate what her body can and cannot do, pushing it to its limits as it takes minimal effort to maintain her body. In a scene with her teammate Batou, Kusangi describes her fondness of regularly deep sea diving and how diving in the water to emerge feeling like a new person.

> Just as there are many parts needed to make a human a human, there's a remarkable number of things needed to make an individual what they are. A face to distinguish yourself from others. A voice you aren't aware of yourself. The hand you see when you awaken. The memories of childhood, the feelings for the future. That's not all. There's the expanse of the data net my cyber-brain can access. All of that goes into making me what l am.
>
> - Motoko Kusangi (*Ghost in the Shell*)

Kusangi compares the artificial parts that make up her cyborg body are just as artificially put together as a human; she identifies the particular relationship her individuality has with her body. Section 9 is tasked to find the Puppet Master, a mysterious hacker that has been hijacking people's bodies and making them commit fraud and violent acts. After capturing an android taken control by the Puppet Master, Section 9 learns the Puppet Master is an AI wishing to break free from their formless existence as a neural network. Knowing Kusanagi's dreams of being free of her cyborg body, the Puppet proposes they fuse together. The technological reproduction they perform creates a hybrid of cyborg and AI; Kusanagi dies to give birth to a new breed of machine life.

This brings to light the philosophical question of examining the body's function to define artificial life. Daniel Smith reinvestigates Deleuze and Guattari's concept of "the body without organs," which demonstrates a new way of understanding the organic and non-organic body. Smith alludes to the machine to be relative to other machines, they function in dialogue with other machines. Smith writes, "what is not predictable in advance are the *capacities* that a machine has, which only emerge once it enters into combination with other machines."[4] While machines are typically designed to have one purpose, their capacity for purpose expands with other machines. Machines do not have the capacity to reproduce as humans do, but when we recontextualize reproduction as an inter-relational system, machines are indeed capable of reproduction. Smith cites Samuel Butler's analogy from *The Book of Machines:* bees are not capable of reproducing without the queen bee, and the queen bee cannot reproduce without the other bees. This logic follows other natural phenomena, like how bees need flowers to make honey, and inversely, flowers need bees to pollinate other flowers. Thus, why are machines not thought of as inter-relational beings as well?[5]

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[4] Daniel Smith, "What Is the Body without Organs – Machine and Organism in Deleuze and Guattari." *Continental Philosophy Review* 51, no. 1 (March 2018): 99.
[5] Smith, 101.

Because Kusanagi is literally a body of the government, and the Puppet Master is an AI that has surpassed its masters to develop sentience, when they reproduce into a new hybrid we see the amalgamation of their desired freedoms. Haraway writes that "cyborg politics insist on noise and advocate pollution, rejoicing in the illegitimate fusions of animal and machine,"[6] but in the AI and Kusanagi's case, these two beings fuse to free themselves from the enslavement of their origins. Their action marks a break from a "story that begins with original innocence and privileges the return to wholeness."[7] The traditional nature of a story is bound to connotations of individualism and centered on the tragedy of losing individuality. One way to interpret the film is that losing Kusanagi to be fused with the Puppet Master is a tragic ending, ultimately signifying loss of individualism because she could not continue as who she was.

However, *Ghost in the Shell* does not present itself as a film to please classical stances of capitalism's phallocentric individualism, in that the greater systems of technology take up the most space visually and theoretically. From the opening credits to the last shot, the film fixates on how the body's anatomy relates to the greater space it inhabits—however individualism as we know it does not work the same way. For instance, the abilities and enhancements the cyborgs are capable of are interwoven with greater networks of the city they live in. By using the outlets at their nape, the Section 9 members are able to "jack in" to the systems that connect everything in the city; from building temperatures to exact vehicle location, the city knows it all. Aside from the intrusiveness of this pseudo-police state, the cyborg body is not one but many access points to the greater web of how this society works.

At the film's conclusion, the Puppet Master and Kusanagi's offspring leave a safehouse in a derelict section of the city to look out on the city skyline, as if it is an undiscovered new world. As a new type of artificial sentient being, "the possibilities for our reconstitution include the utopian dream of the hope for a monstrous world without gender."[8] The cyborg is born out of a fusion of militarism and capitalism to hold a certain function for the world they inhabit making any action towards their own autonomy is greatly significant. What comes out of the artificial offspring is a body that is neither a government tool or an experiment but an entity capable of exploring the available world without designated function.

While *Ghost in the Shell* lays a foundation for what the cyborg does when their existence is threatened to be limited, *Ghost in the Shell 2: Innocence* moves forward to visualize what could be a plausible yet contentious transhumanist vision: that "everything that is technically practicable deserves to be realized, whatever the ethical cost"[9] In *Innocence*, the hybrid Kusanagi is no longer the central character, and the film is primarily focused on Batou and Togusa, members of Section 9. After a string of rogue robots murdering people, the duo are investigating who—or what—are causing these malfunctions.

With the plot of *Innocence* centering on placing humans in artificial bodies known as dolls, Deleuze and Guattari's "body without organs" concept becomes more applicable. As Smith

[6] Haraway, 176.
[7] Haraway, 177.
[8] Haraway, 181.
[9] Alexandre and Besnier, 13.

describes, Deleuze and Guattari were looking away from how a body lives as a hollow vessel, but how the organs are rearranged to have different functions. When defining a machine, it should be noted on its function and not its form (a cup holds water.) But when examining organic beings' anatomy, the converse is applied: the form and not its function should be noted (the bones of your arm.) Therefore, the body without organs replaces form and function with new meanings altogether.

> [Its] non-mechanical mechanism, which is also a vitalism of the inorganic, highlights not the form or structure that bodies *actually have*, but rather the virtual capacities that bodies have to do something different. A body may be structured like an organism, but, since its organs are all machines, it will always retain the capacity to 'disarticulate,' as they put it, to cease to be an organism.[10]

As discussed earlier about humans' ability to alter themselves, the inorganic body can replicate organic function yet maybe dismantle to take on new forms. This is what the body without organs is, it is the limitlessness of the artificial body to take on different forms and functions. The theme of the body in *Innocence* is altered to replace organic bodies with *artificial* ones. Further, the body without organs is the name of the franchise: ghost in the shell, with "ghost" embodying the human soul and "the shell" personifying the non-organic body it is housed in. However, this premise becomes complicated in *Innocence*'s plot, which involves children who are being relocated into experimental sex dolls. The rogue dolls Batou and Togusa are tracking become violent due to the child vessels attempting to disconnect from the bodies they are linked to. As noted by a scientist (ironically named Haraway,) the dolls are initiating a type of self-destruction because their violence will destroy the connection. But this self-destruction is referred to as suicide, insinuating the tragedy that is casted across the entire film. This raises the question of transhumanism's ethics: is the ability for humanity to cheat death suited to be achieved when children are put into sex dolls? The film presents the ideological problems with experimenting with the body without organs verbatim.

Overall, *GitS* and *Innocence* navigate the implications of the cyborg body in dynamic possibilities. What can the human body be when disassociated with what is known as the organic origins? This is the tale of innocence that centers on the individualism persistent in humanity as we have known for most of our existence. Living a fifth into the 21st century, so many cybernetic aspirations are on the horizon, from articulate limb augmentations to cybernetic eyes, the realization of a sci-fi world is looming. Thus, looking at Mamoru Oshii's films—as prospective futures about the body's role in relation to artificiality and function—are useful to shed light on what realities are to come. The cyborg, though subtle, is alive in our world. The body as a platform to govern politics and belief systems is approaching our reality faster and faster every year.

In conclusion, the cyborg body recognizes it does not fit in traditional societal structures and sees that it is governed by a gendered hyper-individualistic capitalitic world, therefore it desires to break free. When the cyborg body is owned by a third party, and not the sentient being that lives inside, that cyborg will do anything in their ability to systematically free themselves from their shell. Additionally, *GitS* exemplifies what body a new lifeform would take: an AI with human

[10] Smith, 109.

consciousness, the closest humanity can reach to becoming omnipresent. This hybridity is what machine philosophers call “an event,” where objects of different functions create something new and transversely alter their own form. This prospect is further examined in *Innocence* where the machine and organic life are forcibly placed together. However the consequences are beyond unethical and question the nature of transhumanism to begin with.

This leaves us with two questions when asking if transhumanism is viable. Can organic life find a way to reproduce inter-relationally as bees and flowers do? Is it best to keep our organic bodies superior for as long as possible as to avoid the inevitable automation and organic extinction? The questions beg to be examined further when understanding what that future may look like. What these films (and this franchise, more broadly) scrutinize is the complexities of non-organic life taking shape to resemble what is also likewise complex: humanity.

Bibliography

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Filmography

Ghost in the Shell (Mamoru Oshii, 1995; animation)
Ghost in the Shell 2: Innocence (Mamoru Oshii, 2004; animation)