Ghost in the Shell

Plot Summary
At the open of the movie, Section 9, the Internal Bureau of Investigations, is dealing with two issues that may be related. The government is about to engage in diplomatic talks with the Gavel Republic, a new-formed democracy who is seeking reparation and aide. At the same time, they are faced with a puzzling series of attacks, in which a notorious hacker called “the puppet master” is hacking into the ghosts, or essence/being/soul of humans. Aramaki, the leader of section 9 suspects that the puppet master is attempting to infiltrate the Gavel talks for the purposes of disruption or assassination. A third, seemingly unrelated issue, requires that Section 9 go in and assassinate a diplomat who is attempting to give political asylum to a computer programmer.

While all of this is going on, Major Kusanagi is doing some serious “ghost-searching” regarding her status as human in relation to her totally cyborg body.

The Section 9 team is called into action when the puppetmaster is hacking into systems from various locations around the city. They trace him to a garbage truck – he has hacked into one of the route driver and has him doing hacks, all the while the truck driver thinks he is actually accessing his estranged wife’s ghost. After a big chase scene, the driver is apprehended. Another man, also working for the puppetmaster is chased through the streets of the city and eventually captured by Kusanagi. This man’s name is Corgi and he has also been ghost-hacked. He believes he is working to infiltrate the Gavel talks in order to assassinate one of the participants. This story falls apart as the agency can find no connection between the man and Gavel. The trash truck driver is dismayed to learn that he has never been married: all of his memories of his wife and daughter are false, placed there by the puppetmaster in order to manipulate him. It is unlikely that his real memories will ever be recovered.

Kusanagi’s soul searching continues as she goes diving in the ocean, even though her cyborg body is a great liability should anything go wrong. She explains to Batou that when she is in the depths of the ocean she feels fear, cold, loneliness, and even hope. If she or Batou should ever resign, they would be forced to return their cyborg bodies and brains to section 9 “and there won’t be much else left.” Suddenly Kusanagi begins speaking with a different voice – a quote about dim images in a mirror…she then wanders the streets of the city, reacting strongly when she sees another model body that is just like hers.

Meanwhile, a naked woman has wandered into the streets, been hit by a garbage truck, and taken to Section 9. Her dismembered torso is accessed and it is revealed that she is a cyborg body, manufactured by MegaTech. What is really distinct about her, however, is not her cybernetic body, but that she has not been programmed, and yet, she is operating by herself. Even more unusual, she has no human brain cells, but there is a ghost present in her auxiliary brain. The ghost is structured similarly to those that have been copied from real ghosts except that no deterioration has occurred as part of the copying process.

The Section 9 team meets to discuss the case. Togusa expresses doubt that there could be a ghost in that shell. However, Batou counters that even dolls can have a soul and states that he would
not be surprised if there a ghost in there. It is then revealed that MegaTech also manufactured Kusanagi’s body, as well as parts of Batou and the rest of the team. Togusa and Aramaki are the only ones w/o megatech parts. Kusanagi and Batou are trying to discern the cyborg’s motives, when Aramaki sternly counsels them that motive is irrelevant. Kusanagi is anxious to be the first to dive in to the cyborg and her ghost.

She expresses further angst to Batou about her humanity, claiming the only thing that makes her feel human is the fact that people treat her as human, her environment. If a cyber-brain can generate its own ghost, then there is no particular importance to be placed on “the human.”

Nakamura from Section 6 arrives at Section 9 along with a Dr. Willis in order to claim the cyborg’s body for their jurisdiction. They explain that they lured the puppet master’s ghost into this cyberbody, while they killed his real body in real life, leaving an unidentified corpse somewhere.

Tosuga notices that something is not quite right about the two men and alerts Kusanagi to the suspicion that they have two others, in thermoptic camouflage, with them. As Aramaki, Nakamura, and Dr. Willis face the dismembered cyborg, it begins speaking, running off of its own internal power. It declares that they will find no corpse because before now, it has had no body. It is here in Section 9 as an act of free will and as a sentient life form, it demands asylum. It gives a big long speech (quoted below) that amounts to the fact that you cannot truly distinguish between him and a human organism in the way that the Section leaders would like to.

As the cyborg declares that he is part of Project 2501 and denies that he is not an AI, the intruders create a diversion and snatch the cyborg body. Section 9 all pursue the kidnappers, while Kusanagi explains to Aramaki that it is most likely Section 6 behind the kidnapping, trying to protect their own interests by keeping the cyborg from telling them too much.

It is shortly thereafter revealed to the audience, that Section 6 is indeed behind the kidnapping. Ishikawa is able to find out that Dr. Willis is a top AI researcher and that the programmer who was seeking asylum at the beginning of the film was working on Project 2501. Section 6 had previously asserted that project 2501 was started to prevent the puppetmaster from hacking into sensitive systems, but it is revealed that the project started one year before the puppetmaster ever appeared. Section 9 suspects that Section 6 developed the puppetmaster for their own purposes and have now lost control of it.

Meanwhile, Batou and Kusanagi are pursuing the kidnappers. She gets there first, as Batou follows a decoy they’ve set up. She finds the cyborg protected by a large-scale tank and is pretty much dismembered in the effort to get inside the tank. Batou shows up and destroys the tank before it can kill her. She then asks to be connected to the cyborg so she can dive in.

Project 2501 was developed for industrial espionage and intelligence manipulation. It installed programs on specific ghosts to manipulate people to Section 6’s maximum strategic advantage. During the time it spent out on the net, it became self-aware. The programmers, specifically the one from the beginning who sought political asylum, thought it was a bug. They trapped his ghost in the cyborg body in order to separate it from the net.
2501 tells Kusanagi that he refers to himself as an intelligent being because he is sentient (capable of perception by the senses) and recognizes his own existence. However, he still feels his inadequacy because he cannot participate in 2 of the most basic human functions – reproduction and death. Making a copy of his ghost is insufficient because it is an identical image and does not allow for the variety that is so crucial to the survival of a species (this strongly parallels Kusanagi’s stated reasons for recruiting Tosuga to the Section 9 team, because of his unenhanced body / mind).

He proposes that he and Kusanagi merge, becoming a new being that is neither him nor her, but something better. They will both be changed, but there is nothing to lose. She wants a guarantee that she’ll remain herself. He will not make such a guarantee and tells her that her desire to remain the same is a limitation.

She is puzzled by why he would choose her, as she cannot reproduce either. He explains that she will propagate the net with their offspring. He will die when she dies. He chose her because they are mirror images of one another’s psyche. They have previously been part of the network but have been limited to one sector, now they will become part of all things.

The merge begins and Section 6 helicopters show up to take out both the puppetmaster and Kusanagi. Batou protects her and has his arm blown off in the process. Cut to a scene of Kusanagi, in younger form, sitting comatose in a chair. She looks fragile, like a doll or invalid. She wakes, and speaking with a new voice inquires about her new body. Batou explains that it was the best he could do on short notice on the black market. He then explains how the entire case has been covered up, with Nakamura resigning. The only thing unaccounted for is her old shell (which he has clearly taken and transferred the ghost into this new shell). He asks whether “he” is still with her. Her old voice returns.

She explains that she is no longer the Major, nor the puppetmaster, but something else. The film ends with her asking where the newborn will go next, for the net is vast and infinite.

**Major Themes & Symbols**

Status of the human – 2501’s speech, quoted below, complicates the question of humanity. It both indicts humans for not wanting to consider him real, and problematizes their own conceptions of their human selves.

Variety – Kusanagi has recruited Tosuga because overspecializing breeds weakness, they need variety on their team. Similarly, 2501 wishes to reproduce in the human sense in order to produce variety in his species;

Mirrors / mirroring – Batou’s mirrored lenses; Kusanagi’s double in the streets; mirror image when diving; quote about dim images in the mirror; 2501’s assertion that they mirror each other
Memory – makes humans human; they do not have the technology to restore memory once it is tampered with. DNA is positioned as genetic memory, etc.; photos manipulated to “prove” memory;

Ghost – soul, essence, being, mind; separates humans from robots and AIs.

The Net – described as sea of information; jacking in is described as “diving”; parallels Kusanagi’s diving episode. Vast and infinite; diving = exploration, adventure, etc. connecting vs. being ensconced by; Much more “fluid” than Gibson’s concept of the net.

Complexity theory and emergence: seems to draw upon complexity theory; Emergence is described by Wikipedia as the process of complex pattern formation from simpler rules… For a phenomenon to be termed emergent it should generally be unpredictable from a lower level description… agents in DAI, emergence is a central concept in complex systems yet is hard to define and very controversial. There is no scientific consensus about what weak and strong forms of emergence are, or about how much emergence should be relied upon as an explanation in general. It seems impossible to unambiguously decide whether a phenomenon should be considered emergent.

My notes from How We Became Posthuman:
Homeostasis – first stage of cybernetics in which systems are self-maintaining via feedback loops; i.e. a human being’s ability to sweat functions to maintain stasis in body temperature; the observer is outside the system
Reflexivity – 2nd stage of cybernetics: reflexivity is the movement whereby that which has been used to generate a system is made, through a change in perspective, to become part of the system it generates (8); confuses and entangles borders; implicates the observer in the system; a threat to subjective observation
Virtuality - 3rd stage of cybernetics; results in the split between information and reality which erases embodiment; programs are designed to allow for spontaneous evolution; debate over whether discrete packets of information can be said to be “alive”; entails a rethinking of deep structures in which informational code underlies the entire universe. The cultural perception that material objects are interpenetrated by information patterns (14).

Characters
Mizuho Daito – programmer on project 2501; seeking asylum at the beginning of the movie

Nakamura – head of Division 6

Major Motoko Kusanagi – female protagonist; cyborg body, human brain, cyber-brain enhancements; questions her own status as human as a result of all her cyber-enhancements;

Batou – mirrored lenses; crush on Kusanagi; not totally cyborg body but major enhancements
Tosuga – recently recruited to Section 9 from the police force; Kusanagi chose him because he was an upstanding guy, with few enhancements, who adds variety to the team; constantly teased about his old-fashioned, non-automatic weapon.

Ishikawa – another member of the Section 9 team

Colonel Maless – the former junta leader from Gavel who is seeking asylum at the same time the government is about to enter talks with the new Republic. The government must choose between aiding the new republic or sheltering Maless. He is suspected of being connected to the puppetmaster but falls out of the plot after Gavel is revealed as a decoy.

Dr. Willis – AI researcher who heads project 2501. Helps Nakamura, et. al. kidnap the cyborg / puppetmaster

Puppetmaster / 2501 – portrayed as an infamous hacker; turns out it is a program which has been doing the work of Section 6, which eventually became sentient and uncontrollable; wants to merge with Kusanagi and propagate their new self all over the net.

Differences Japanese original vs. English Dub

Portrayal of women: in the Japanese version, in the opening sequence, when Batou asks Kusanagi about all of the noise in her brain, she replies “it’s that time of the month.” In the English version she gives a different, decidedly non-menstrual response. When the team of Section 9 researchers are about to access the wayward cyborg’s brain, they say “on to the disassembly” in the English version. In the Japanese version, they say “time to rip her apart.” This may seem minor but given the other ways in which the female body is appropriated / violated / etc. it makes a big difference.

Memory: in the scene where Kusanagi and Batou discuss their cyber-enhancements while out on a boat, she says that if they ever retired, they would have to give back their cyberbodies and cyberbrains, and the memories that go with them; this is left out of the English version. This seems like a gross error as memory becomes so important to the overall theme of the movie later.

In the same sequence above, Kusanagi states that if man realizes a technology is possible, he will achieve it, like it is instinct. The translation of the Japanese reads “almost as though it is wired into the core of our being,” drawing a human/machine parallel that is later expanded by 2501.

Quotes

When accused of lying for self-preservation, 2501 replies:

*It can be argued that DNA is nothing more than a program, designed to preserve itself. Life has become more complex in the overwhelming sea of information and life, when organized by species relies on genes to be its memory system. So man is an individual only because of his intangible memory. Memory cannot be defined but it defines mankind. The advent of computers and the subsequent accumulation of incalculable data has given rise to a new system of memory*
and though parallel to your own. Humanity has underestimated the consequences of computerization.

When trying to convince Kusanagi to merge with him, 2501 states:

You will bear our varied offspring into the net, just as humans leave their genetic imprints on their children and all living things must die then I too will attain death.

All things change in a dynamic environment.