

***Human Ghosts and Hybrid Machines:
The Identity of the Cyborg as a Reflection on Human Anxiety***

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Abstract

Today's modern society, enriched with technology and digital information, has already introduced numerous social pressures and concerns over our usage with certain devices, pressuring people to feel anxious and uneasy about their connection to both an offline and virtual environment. As our culture evolves and embraces this technical advancement, incorporating it into not just our private lives but also our very biological make up, will this strengthen our confidence? Allowing society to become increasingly more powerful? Or will it begin to deconstruct our traditional perceptions of culture and leave us as a fragmented society, lost and uncertain. What constitutes the identity of an individual when one can enhance almost any part of their 'self'? When humans have undergone such radical bodily transformation, augmenting not just their physical exterior but also their mind and cognitive ability, are they more content, confident and satisfied?

Human Ghosts and Hybrid Machines: The Identity of the Cyborg as a Reflection on Human Anxiety

‘Without a transcendental belief, each man is a mean little island. Since we cannot expect the necessary change in human nature to arise by way of natural means, we must induce it by artificial means. We can only hope to survive as a species by developing techniques which supplant biological evolution.’

Arthur Koestler, *The Ghost in the Machine*

Introduction

A main concern faced by society has always been the idea of evolution for our race. With the ever-increasing power and influence technology has in our daily lives, humans began to realise the potential of infusing both human and mechanic components to create a being that was a hybrid of both, significantly extending not just human life-span but also their intelligence and capability. Improving the weak condition of the human race was no longer just a fictional tale. The term ‘Cyborg’, derived from ‘cybernetic organism’, introduced to us the futuristic possibility of becoming technically enhanced beings, a hybrid of organic and artificial materials combined, paving the way for future possibilities of an evolved race.

As the figure of the cyborg began to encroach on our perception of a postmodern environment it calls into question the culture that surrounds the hybrid being and how it relates to its environment. Today’s modern society, enriched with technology and digital information, has already introduced numerous social pressures and concerns over our usage with such devices, pressuring people to feel anxious and uneasy about their connection to both an offline and virtual environment. As our culture evolves and embraces this technical advancement, incorporating it into not just our private lives but also our very biological make up, will this strengthen our confidence? Allowing society to become increasingly more powerful? Or will it begin to deconstruct our traditional perceptions of culture and leave us as a fragmented society, lost and uncertain. What constitutes the identity of an individual when one can enhance almost any part of their ‘self’? When humans have undergone such radical bodily transformation, augmenting not just their physical exterior but also their mind and cognitive ability, are they more content, confident and satisfied?

For the purpose of this thesis, the research carried out was focused around the figure of the cyborg and exploring the issues and concerns surrounding its identity as depicted through Japanese Anime. Animation produced from the east has a passionate relationship with the figure of the cyborg as it feeds on social issues such as liberation and empowerment, representing the hybrid being as a figure of possibility and hope rather than the pessimistic, doomed approach by the West. It is this eastern mentality of the opportunities presented by the cyborg that is highlighted throughout this paper, where they explore the culture of these mechanic beings through their anime.

There were two primary sources analysed for the purpose of this research paper, Haraway's seminal essay "*A Cyborg Manifesto: Science, Technology and Socialist-Feminism in the Late Twentieth Century*" (1985) and Mamoru Oshii's film "*Ghost in the Shell*" (1995) drawing references from both to illustrate the extent of the relationship between the two. Haraway's portrayal of the cyborg is examined and contrasted against Oshii's depictions. In order to approach the subject, a definitive analysis into the history of the cyborg figure was carried out, in order to gain an understanding of the general preconceptions of the posthuman figure from different cultural perspectives. The presence of 'non-human' beings throughout sci-fi literature was studied to compare the traditional attitudes of these beings at the time. The fusion of science and man has always produced mixed feelings among spectators. The idea that science, and currently, technology could alter the human form to such an extent that it is unrecognisable produced emotions of fear and apprehension in looking towards the future.

In order to understand what the identity of the cyborg symbolises the hybrid subject is dissected into four primary aspects. The cyborgs relationship to concepts such as embodiment, freedom and liberation, gender and its posthuman presence are analysed in order to achieve a wholesome view on the politics of the posthuman being. Another primary source used is the book '*Anime and Philosophy: Wide Eyed Wonder*' by Steiff and Tamplin. Consisting of a range of essays examining the philosophical content of certain anime, *Ghost in the Shell* was examined on more than a few occasions, highlighting the ambiguous existence of the cyborg and its search for an identity under a humanist framework.

The concept of identity is then analysed through various examples of secondary sources. What constitutes the entirety of an identity? As McBlane argues, an identity is a set consciousness which defines someone as a 'me' or an 'I'. By examining additional secondary sources, this notion of identity is compared against other scholarly works from authors such as Hayles, Le and Corbett. In

addressing the question of the individual self, the character Kusanagi (the protagonist of *Ghost in the Shell*) is analysed and referenced throughout this paper. Her character is examined and compared to Haraway's vision of the cyborg. She embodies the tension and anxiety that society faces and lives an ambiguous existence, unable to relate to the environment or culture that surrounds her. The relationship between her physical body, her consciousness, and her informational presence is broken down to examine the relevance of each for the creation of an identity.

Haraway's concept that the posthuman figure is one that has the ability to transcend previous conceptions of identity is addressed. Traditional notions of gender and race are discussed in terms of how these concepts are now eradicated when defining a posthuman being. To further highlight the issue of these boundaries being crossed by the posthuman subject, examples are taken from another Japanese anime source, *Metropolis*, a loose adaptation based on the influential sci-fi film of the same name by Fritz Lang 1929. The two protagonists share the same confusions about their identities and what it means to be human.

Drawing from examples in *Ghost in the Shell* and numerous secondary sources, the idea of the anxious, and apprehensive posthuman subject is then addressed. The notion that the cyborg's ambiguous existence stems from modern societies' concerns and apprehensions about future technology is examined, highlighting Kusanagi's philosophical journey throughout the film. The liberation of the cyborg is its rejection of traditional humanist ideology, transcending itself into a higher realm of existence. Not having to identify with conventional ideas for the meaning of the 'self', paints an image of modern society needing to embrace the idea of change and evolution. As technology advances at an overwhelming rate, rapidly changing our environment, society at some stage needs to adapt to different notions of life and existence, placing aside traditional conceptions of what it means to be 'human'.

Chapter One

Augmenting the Human Subject

The year 1929 saw the first serious proposal for a Cyborg where British Scientist J.D Bernal, recognised the limitations of the human self in the prolonged exploration of space. He realised that long-term space travel could only be achieved through adaptation of the human race. In his writings, he mentioned both prosthetic surgery and a hard-wired man-machine interface. The idea was extended and the term Cyborg was then coined in 1960 where Malfred Clynes and Nathan Kline proposed that the '*successful exploration of space depended on a vision of human and the spacecraft as interpenetrated systems which shared information and energy*', when attending a NASA conference. (Brake and Hook, 2007, p200). Clynes and Kline, who both worked at the US Rockland State Hospital's Research Lab, concluded in their influential article that cyborg developments "*will not only make a significant step forward in man's scientific progress, but may well provide a new and larger dimension for man's spirit as well*". (Clynes and Kline, 1960, p33).

- Calling for Haraway's Cyborgs

These mechanic hybrids or cyborgs began to take a prominent place in the visions of many for the future of society. In 1985 Donna Haraway furthered the idea of a cyborg environment by writing her seminal essay '*A Cyborg Manifesto*'. Haraway argues that as a constructed part-human/part-machine, the cyborg transgresses the boundaries of humanness (Barber, Bryce, Davis, 2010, p14). This transgression also involves blurring the conventional distinctions between male and female. She argues that as the cyborg environment develops, humanity, or post-versions will exist in a genderless world, free from discrimination, bias or prejudice. Her cyborg is a '*creature in a post-gender world*' (Haraway, 1990, p192), which does not fit within the boundaries set by conventional methods of being. Haraway views the cyborg as being a symbol of liberation from western patriarchal society where technology is increasingly being used to control, dominate and exploit the boundaries between established positions and identities. When adopting the politics of the Cyborg, one is liberated from "*the tradition of racist, male-dominated capitalism; the tradition of progress; the tradition of the appropriation of nature as resource for the productions of culture*" (Haraway 1991, p150).

Haraway's Cyborg, a combination of Western and Japanese, organic and artificial, invoked many people to question the subject of human identity, "*we are [all] cyborgs*" (Haraway, 1991, p150). The way in which humans conduct themselves seems to have already prepared for cyborgisation: we write our memories down, build shelters and reshape the fabric of the world around us (Clark 2003, p3). Cyborgs serve not only as transitional figures of human-machine hybridity, but also as a representative of this shift if it comes to pass. (McBlane, 2010, p27). These mechanic hybrids embody the societal tensions around technological beings and the question of embodiment. These questions or fears centre on the consideration of new modes of being, what is accepted as human, and ultimately what makes up an individual identity.

- The Anime Machine

"[Japanese] anime is a particularly rich medium for exploring cultural attitudes towards the posthuman, as the representations of the posthuman are extremely abundant in anime, perhaps more abundant than in any other medium".

Heinricy, *Take a Ride on the Catbus*, p4.

While western societies have been slow to adapt to the idea of enhancement and change to the human form to advance and evolve, the Japanese were quick to depict their personal visions for the future of the human race, embracing any technological enhancement needed or desired. Japanese culture embraces the idea of 'becoming', welcoming the idea of morphing bodies and changing forms into something that is both fictional and reality. "*The mythology of changing bodies along with the technological development of japan has created a cultural site for anime to show morphing creatures and cyborgs as possibilities, rather than monsters*". (Heinricy, 2010, p3).

Anime has an important relationship with this particular mecha genre, as animation itself is a medium based upon the fusion of technology and art. Manga and anime address our present world where "*the difference between human and machine is increasingly amorphous*" (Susan Napier, 2001, p11.) The figure of the cyborg is continually redefining itself, "*Standing at the crossroads of multiple genres, politics, temporal and spatial movements, the cyborg is a cipher for the ever-changing relationships between humanity, technology and politics*". (Austin Corbett, 2009, p43), and Japanese anime is aiding this transformation.

Anime has been integral at advancing this genre of sci-fi as the medium is not restrained by the same boundaries and limitations as other forms of narrative. There have been numerous non-animated films produced which depict a futuristic dystopian setting focusing on a human/machine protagonist, however these films have more-or-less portrayed the character as an evolved monster. The western approach viewed cyborgs as human beings intersecting with technology to become something entirely different, for example, Terminators trying to destroy life on earth. However, Japanese anime, due to their passion for technology and their unique approach to sci-fi narrative, they present these futuristic environments in a completely different manner.

- *East vs. West – The ‘Japanimation’ domination*

There are several reasons why Japanese anime overshadows any other medium at highlighting the possible outcomes of posthuman environments. In her book *Anime from Akira to Princess Mononoke*, Susan Napier argues that Japanese culture sees possibilities rather than fear in new technologies and changing forms. She argues that the combination of the two is due to Japan’s collective experience of warfare and history of competition with the West. After World War II, Japan became concerned with differentiating itself from the West. As Japan was unable to develop its military, money that would have gone towards strengthening it’s armed forces and acquiring new warfare tools went towards developing consumer technologies. “*Japan, which used to serve as the exotic Other of the West through its image of anachronistic spiritualism, now became the global icon of cutting edge high technology ranging from robotics and fuel-efficient cars, and Nintendo and Sony, to anime and manga today*” (Kumiko Sato, p1).

When Haraway’s Cyborg Manifesto spread, it reinforced the general mood for a post human identity that was counter to western thought. 10 years later with the release of Mamoru Oshii’s animated film *Ghost in the Shell* (1995), building on the success of Katsuhiro Otomo’s earlier film, *Akira* (1988), Japanese culture and identity became heavily rooted in future technology. The idea of techno-Orientalism was born. “*If the future is technological, and if technology has become ‘Japanised’, then the syllogism would suggest that the future is now Japanese too*” (Morley and Robins 1995, p168). However this vision of Japanese control over the future of technology and their techno-orientated identity, created a fear in the West which clouded Western understanding of Japan. This Western response reinforced the ‘*image of a culture that is cold, impersonal, and machine-like*’ (Morley and Robins, 1995, p172).

This misunderstanding, highlighting a particular contrast between the human and machine, Japan and the West, resonates profoundly in how each side envisioned future posthuman worlds, and how they portrayed their visions through anime. The stereotype of Techno-orientalism, which saw Japan as the new home of the Cyborg, gave Japan a new dream for human identity; infusing the weak human condition with the strength and power of technology seemed only the right path for human evolution and Japanese anime began painting the screen with images of what they envisioned. In contrast, Hollywood in the 1990's continued to portray the cyborg as it had been for the last century, 'male' and violently dominant, through characters such as Darth Vader, the Terminator, Robocop, and the Cybermen of DR Who. Furthermore, these cyborgs continued to be posited as non-human 'creatures', and the desirability of rejecting cyborgisation was routinely brought to the forefront. (Corbett, 2009, p43)

- *The Ghost behind the Cyborg*

The cyborg, as portrayed through Japanese Anime, was given a heightened identity, one which began to shake the foundations of people's understanding of what it means to be human, or more importantly, what it means to have an identity. This study is focused on *Ghost in the Shell* as it has displayed a close relationship to the visions and cyborg culture as described by Haraway. The manga (Japanese comics) and film also presents an image of a society on the edge of 'madness' and on the cusp of postmodern destruction. It portrays a world inhabited by humans and cyborgs alike, and forces the viewer to question the relationship between human, machine and information.

Ghost in the Shell illustrates the posthumanist perspective in how it portrays the limitations of the human body and by highlighting the advantages of leaving the material body altogether. It demonstrates the idea where "human consciousness could be transferred to a machine, thus negating the necessity of the human body and all the frailties that go with it". (Heinricy, 2010, p7). Here we meet, Major Kusanagi Motoko, the protagonist of *Ghost in the Shell*, who's talent lies in investigating sophisticated cyber-crimes and leads a secret group of para-military police called Section 9. The Major is nearly 100% cybernetically enhanced with only certain parts of her brain and consciousness remaining from her previous human form. Kusanagi embodies Haraway's depiction of the cyborg and personifies the idea that "the machine is not an 'it' to be animated, worshipped and dominated. The machine is us, our processes, as aspect of our embodiment" (Haraway 1991, p180).

The film follows Kusanagi's and Section 9's search for the mysterious hacker known as the 'Puppet Master'. However as the plot develops the viewer is drawn to the major's search for her own uncertain identity as she struggles to identify with anything around her. Her identity as human is closely tied to her possession of a 'ghost' however certain events in the film cause her to question her own existence and the authenticity of her ghost. As a full cyborg, save part of her consciousness, she continually battles with the idea that her entire identity may be fabricated, and she feels constrained by the limitations placed on her by her cyborg body belonging to Sector 9.

The final climatic point of the film sees Kusanagi merging her consciousness with the Puppet Master, who she discovers is an intellectual life form, born throughout the vast network of data. From this merger, she experiences a freedom unlike anything she's ever experienced while she was still tethered to her body (Heinrich, 2010, p7), ultimately creating a new mode of being, one which does not require a 'shell' to exist. *Ghost in the Shell* embraces the possibilities that exist through completely merging with technology to exist only as a consciousness (Heinrich, 2010, p7). Their representation of cyborgs pushes the boundary line between natural and artificial in posthumanist thought, and forces the viewer to question traditional ideas of what it means to be 'human'.

Chapter Two

Literature Review

The aim of this research paper is to discuss the representation of the posthuman cyborg and how its disconnection to human culture and politics defines its identity. As societies relationship with technology intensifies, and humans begin to welcome this idea of augmenting themselves mechanically, the line between human and robot is becoming blurred. The image of the cyborg, a hybrid of both organic and artificial, is viewed throughout much of pop culture as the figure of the future, the prediction of an evolved mankind as we adapt to our technological environment. The goal of this research paper is to discuss how the identity of the cyborg is one uncertain and confused. However through this futuristic hybrid figure we also see a reflection of societies unease with its dependence on technology. Through it, we see a figure of anxiety and uncertainty, as the cyborg is unable to relate to environment or identify with a culture.

Popular culture was instrumental in depicting the visions of posthuman beings however there was a significant difference in the representations between west and east. Napier's book highlighted the significant cultural differences between East and West; how the Japanese welcomed visions of the technological future and the impact it would have on society. Heinrich's essay agrees with Napier as she discusses how due to this Japanese techno-advanced mentality, anime offers more insight into posthuman theory than any other medium.

There is a distinct connection between the ideas of Donna Haraway's seminal essay '*Manifesto to Cyborgs*' and Mamoru Oshii's film '*Ghost in the Shell*', and the way each narrative portrays their vision of the cyborg. Haraway's essay primarily stands as a critique to the traditional notions of feminism, challenging the politics of Western patriarchy and the limiting structures of today's society. Her figure of the cyborg was one to motivate feminists to move beyond the boundaries and limitations of traditional structures such as gender, race and politics. However, aside from describing a feminist agenda, it also displayed the need for a modern politics and culture focused for the identity of the cyborg. By concentrating on the advanced and liberated identity of the cyborg, her ideas were influential to many modern portrayals of this posthuman being.

Haraway's call for a 'culture' and politics for the cyborg, likely envisioned the fragmented existence the cyborg would lead, in conflict with the identity of the human. Throughout *Ghost in the Shell*

there is the underlying theme of the search for identity and the fragmented existence a posthuman cyborg leads in a postmodern environment.

There are four aspects of the cyborg which are central to the representation of its identity. The first aspect concerns the significance of the 'consciousness' and its relationship to its external body. Bodies that are cybernetically enhanced are becoming more and more apparent in our modern world. Hayles noted this as she points out the current existence of technologically enhanced humans in our society today. Andy Clark argues a similar point. He claims that humans are in fact already cyborgs. With this new generation of wearable computers, sensory augmentation, wireless devices, thought-controlled prosthetics, he views the distinction between the user and their technological tools wearing thinner each day, however he maintains that such a merger is entirely natural.

Corbett began researching the history of the cyborg figure, focusing on its 'non-human' status. Its identity is related to early gothic stories on the creation of such beings like Rabbi Loew's '*Golem*' and Mary Shelly's '*Frankenstein*'. Corbett notes how both stories explore the conflict between traditional conceptions of 'human' and the modernist scientific progress that was carried out at the time, focusing on the exploration and the transgression of human bodily boundaries (a concept that we associate heavily with the 'make-up' of cyborgs. His analysis of *Ghost in the Shell* in his research not only agrees with Clark and Hayles' point of view but also reiterates how close to this 'mecha' societal shift we are. In examining *Ghost in the Shell* and its protagonist Kusanagi, he concludes that we are on the cusp of this postmodern shift "*These characters radically open up Haraway's vision of the cyborg, extending it in all directions to encompass new forms of life*". (Corbett, 2009, p48)

Embodiment and the relationship between the mind and the body came under speculation regarding the identity of the cyborg. Many theorists welcomed the idea that this new technological era brought about the possibility that humans would not be restricted to the limitations of their physical bodies. *Ghost in the Shell* regards this as a central characteristic of the cyborg, giving their characters the ability to transfer the consciousness to different bodies or 'shells'. Hayles criticises this notion as she believes consciousness is heavily dependant on the physical body.

This idea of freedom and liberation from previous limitations is represented in Haraway's vision of a 'genderless world'. This idea that cyborgs embody both male and female traits is central to the politics of these man/machine beings. Kusanagi's character personifies this concept effortlessly. Carl Silvio discusses this ability of cyborgs to surpass concepts such as gender and nationality in his paper. "*The Cyborg... embodies the capacity of information technologies to erase gender and racial*

boundaries". (Silvio, 1999, p54). An essay by Barber, Bryce and Davis took a deep look at the representation of female cyborgs in Japanese animation drawing references from Haraway's feminist agenda. This research was complimented by Dinello's essay which reiterated this vision of blurred lines between male or female attributes. This essay was particularly pertinent as it discussed the relevance between Haraway's vision, the ideology of posthumanism and the world presented by *Ghost in the Shell*. "Unlike most science-fiction films that valorize maleness and prioritize the human while devaluing females and demonizing technology, *Ghost in the Shell* uniquely advocates a vision of the posthuman future that exalts technology and renders humanity and its gender prejudices obsolete". (Dinello, 2010, p276)

The most fundamental concept that was explored during this research was the identity of the cyborg in a posthumanist environment. McBlane's paper provided a rich examination into the existential crisis potentially faced by postmodern beings. What components make up the identity of these postmodern beings? McBlane looks at the idea that the body is a circuit embodying posthuman activity however "there is still a 'consciousness' which defines her [Kusanagi] as a 'me' or an 'I'. (McBlane, 2010, p36). S. A Le's essay similarly discusses the concept of existence and how postmodern subjects will feel disconnected and fragmented from their society. By analysing the merger between Kusanagi and the Puppet Master in *Ghost and the Shell*, Le concludes that only through abandoning tradition concepts of individuality, authenticity and essence is one able to fully appreciate and acknowledge their own existence. Hayles' opinion sides with Le in contrast to McBlane as she argues that with regards to the posthuman subject, we are no longer able to assume that consciousness guarantees the existence of the self.

The figure of the cyborg presents humanity with opposing emotions in envisioning the future. It represents the transition from postmodern to posthuman and highlights the significance of technology designing our future. This research paper is an analysis into the identity of the cyborg, and how this figure represents not only future possibilities of life-form but it also acts as a reflection on societies unease and uncertainty with technologies increasing influence into daily life. From analysing Haraway's manifesto and exploring all the themes and ideas presented by *Ghost in the Shell*, this research is to reveal how this powerful and liberating image of a cyborg also stands as a figure of anxiety over the transition from postmodern to posthuman.

Chapter Three

Embodying the Future

“Visual representations of cyborgs are... not only utopian or dystopian prophecies but rather of a contemporary state of being. The image of the cyborg body functions as a site of condensation and displacement. It contains on its surface and in its fundamental structure the multiple fears and desires of a culture in the process of transformation”

Jennifer Gonzalez, 1999, p58

The notion of the cyborg is one that has been looming over our society for decades, giving humans an alternative possibility of life, one which pushes the boundaries of the natural organic form of the human body. Technology has allowed humans to augment themselves cybernetically, enhancing their abilities, intelligence and power. Donna Haraway suggested that *“By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs.”* (Haraway, p150). An increasing number of people have undergone technological augmentation, having vital body functions cybernetically controlled, particular senses digitally enhanced, and certain body parts replaced by robotic prosthetics. In the early nineties, Hayles noted, *“cyborgs... already exist and are not particularly uncommon. About 10% of the U.S population are cyborgs, including people with prosthetic limbs, artificial joints, pace-makers, artificial skin.”* (Hayles, 1990, 277). This is indeed true today with people such as Kevin Warwick, professor of cybernetics at the University of Reading, who is, by his own admission, the world’s first cyborg. In one of his experiments he planted a RFID chip under the skin of his forearm, where he was able to control lights, heaters and computer equipment without having to physically touch such devices around him. Another example, Rob Spence replaced one of his damaged eyes with an eyeball-shaped video camera in 2008. (Lanxon, 2012)

In Japanese popular narrative, compared to Western perspectives, the issue of rejecting the ‘cyborgisation’ of society is rare. The image presented to us of a ‘cybernetic organism’ (Haraway, p150), was heavily adopted by Japanese anime as it reflected their societies’ own anxieties and hopes about future life. Orbaugh discusses the Japanese representation of the cyborg *“the emphasis is not on the cyborg as a threatening presence antithetical to humans but rather on the nature of the cyborg*

(or android) subjectivity experienced from the inside, and the ramifications to society of our impending (or already accomplished) posthuman condition” (Orbaugh, 2005, 63).

This perspective is expressed clearly throughout Oshii’s *Ghost in the Shell* films. A film “*all about the nature of sex/identity and self-identity in general in a future world, where sexual reproduction has given way to mechanical replication.*” (Orbaugh, 2005, p67) The types of cyborgs depicted in *Ghost in the Shell* vary from humans with only subtle cybernetic upgrades right up to full body and mind replacements. These mind augmentations includes digital ‘e-brain’s’ allowing for “*invisible connections to other e-brains and direct connections to the films versions of cyber space, or body modifications that enhance kinaesthetic response and musculature*” (McBlane, 2010, p32). The remaining ‘organic’ parts left from the previous human form amounts to how cybernetically enhanced a being is.

The female protagonist, Kusanagi embodies the marker of a full self-replacement cyborg, as her ‘mind/body’ is nearly 100 percent technological. *Figure 1* shows the artificial make up of Kusanagi, her exterior however, being almost indistinguishable from a biological construction.

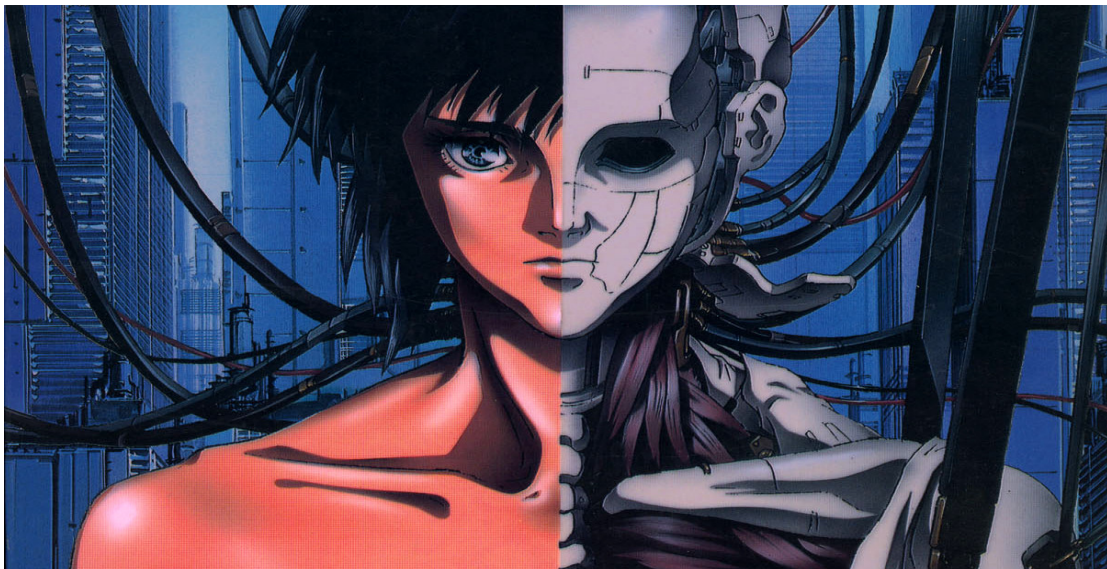


Figure 1: Major Motoko Kusanagi, Full Replacement Cyborg, Ghost in the Shell

The only remaining organic material is her brainstem and certain parts of her brain. Her augmented mind and cyborg body give her enormous power and strength over her adversaries, and her partnership with Batou, (her cybernetically enhanced colleague) makes them an unstoppable team. Throughout the film, Oshii presents a dynamic relationship between the cyborg community and human society. Togusa, the third member of the team is only nominally connected to the cyborg

world, having just slightly augmented his brain to contain a neural implant. This device allows constant connection to the police force and the other team members while also giving him access to the vast databases of information.

It is exactly his lack of technological enhancements that Kusanagi selected him to be a part of the team. Cyborgs are still presented as somewhat vulnerable beings, susceptible to a 'ghost-hack'. As Togusa does not possess an e-brain, the threat of someone hacking his mind or body is minimal.

- Refiguring the Shell

The idea of embodiment for cyborgs is central theme in analysing the meaning of existence. Cyborgs' search for an identity emphasises their focus on their mind as being the missing link. The mind contains the consciousness and the soul, requiring a body for its existence in the physical world.

The movie places a great importance on the relationship between the body 'the shell' and the mind 'the conscious', i.e, the ghost. As Orbaugh suggests "*Possession of a Ghost, rather than a particular kind body is what determines the legal and social status of a being as human – the nature of the body is irrelevant in determining ontology*" (Orbaugh, 2002, p447). Although when focusing on the mind/soul as being the identifier of 'being', the idea that it depends on an external physical body for existence shows how the 'ghost' does not make up the entirety of selfhood. Embodiment is still essential to the core element of identity.

This reoccurring theme of embodiment is highlighted right from the opening sequence. The opening credits show the protagonist, Kusanagi being created. The heroine possesses a body in which technology and biology are so intricately woven together that it is impossible to separate the human from the artificial. Haraway notes "*the cyborg has no origin story in the Western sense*" (Haraway, p149). This mentality is certainly visible in Oshii's depiction of cyborg construction. The heroine is denied the specificity of time and place of birth, the imagery focusing on her mechanical make up. We observe how she is assembled from her robotic interior to her external synthetic skin. However this scene creates a sense of tension for the viewer as it contradicts Kusanagi's robotic construction with a creation that seems wholly associated with birth. *Figure 2* reveals this contradiction as it shows Kusanagi, right after her mechanical construction, floating in a tube full of liquid lying in the

foetal position. This image gives the viewer a contradictory introduction to the protagonist but also creates uncertainty about her alignment between machine and man.



Figure 2: The opening sequence of *Ghost in the Shell* showing Kusanagi's construction

The Cartesian “*distinction between a self (characterised as *res cogitans* or ‘thing that thinks’) and not-self or ‘bodies’ (*res corporea/res extensa*, ‘corporeal thing/extended thing’*” (Nicolas Theisen, 2013) is a central idea to *Ghost in the Shell*. The awareness that the mind and body are separate, yet functional only when unified as a whole drives the protagonist’s quest for her identity. Kusanagi’s connection to her shell is an integral part of her ‘self’. At the beginning of the film, the audience is made aware only of the practical use of cyborg shells, as a container for the mind/spirit. The mind was thought to hold the key to identity, specifically located within the consciousness, being able to distinguish one being from the next. However, with Kusanagi’s ‘self’ being nearly entirely cybernetically enhanced, confirming the authenticity of her ‘ghost’ troubles her throughout the film and becomes a source of constant anxiety for the protagonist.

As the narrative continues the audience is aware of how inseparable the mind and the body are when defining a person. We begin to understand the major’s strong dependence on her ‘body’ when she talks to Batou on the boat discussing the relevance of her shell to her identity. “*We do have the right to resign [from Section Nine] if we choose, provided we give the government back our cyborg shells and the memories they hold.*” (Kusanagi, *Ghost in the Shell*). Without the use of her shell, Kusanagi has no memories of her former existence. And what is identity without memories? Kusanagi is trapped within her own container for her ghost, whilst still left searching for her individual identity.

Through this elusive separation between mind and body, Kusanagi wonders where her ghost stands in relation to these two elements.

Kusanagi: *Maybe all full replacement cyborgs like me start wondering this. That perhaps the real me died a long time ago and I'm a replicant made with a cyborg body and a computer brain. Or maybe there never was a real 'me' to begin with.*

Batou: *You've got real brain matter in that titanium skull of yours. And you get treated like a real person, don't you?*

The second form of embodiment that Kusanagi experiences, is represented by her fusion with the Puppet Master at the end of the film. Kusanagi's organic brain matter/consciousness is merged with the Puppet Master to form an entirely new being, creating "*a new entity of distributed cognition, enabling multiple consciousness's and multiple bodies to simultaneously emerge, and access to Being (the abstract as is) expands from the purely 'human' into the technological and informational*" (McBlane, 2010, p34). This climatic point in the film is discussed in more detail later, however this fusion between two beings to form a new conscious entity, highlights the ability to transcend the former barriers and bodily limitations previously encountered. This merger presents the formation of an entity of data, where shells no longer exist and it lives through the Internet, leaving behind the constraints associated with depending on a physical body for existence.

However, as Batou wishes to save his colleague from destruction, he transfers her ghost into the shell of a little girl, displaying not just another form of embodiment but the powerful capabilities of this new entity. Having transcended to a higher realm of existence, the new being no longer conforms to previous limitations, simultaneously embodying the physiological, technological and the informational elements of life.

This idea of a 'body' can no longer be viewed as mutually exclusive category, as the informational 'mind/body' works without the boundaries formally experienced. It transcends the original humanist conceptions; "*the informational mindbody is not limited by a Cartesian split of consciousness being viewed as the 'seat of identity'. Rather, the informational mindbody forms a unity not only within itself as circuit, but also expands to encompass the environment, either the material environment of physical existence or the so-called 'immaterial' environment of digital space*" (A. McBlane, 2010, p30).

The Puppet Master questions the humanist notions of subjectivity and embodiment in *Ghost in the Shell*. Born from a 'sea of information', he does not possess a 'body' in the organic biological sense.

The Puppet Master has materialised to become a data body of pure information, alive and conscious. “*I am not an AI . . . I am a living, thinking entity that was created in the sea of information.*” (Puppet Master, *Ghost in the Shell*). In the search for Kusanagi in the physical world, the Puppet uploaded its consciousness into a physical body/shell, embodying the transition between ‘immaterial’ information into a ‘material’ physical form. The Puppet’s physical and informational existence reinforces Kusanagi’s insecurities about her own identity, and the real existence of her ghost within her mechanical artificial shell.

- *Haraway’s Second Leaky Distinction*

“*The second leaky distinction is between animal-human (organism) and machine*”
(Haraway, p152)

Haraway’s idea of the ‘second leaky distinction’ between humans and machine is a reoccurring theme throughout pop culture and especially science fiction. Technological advancement has given society the opportunity to build and create mechanical robots which would be able to perform the same tasks as a real human being, in order to ease workload. However as this system progressed, humans began to entertain this desire to replicate human form. This objective has been illustrated through the medium of science fiction and animation, where futuristic mechanical beings are portrayed closely to what a human body resembles. The artificial beings would be able to perform duties based upon their programmed abilities created by a human. “*They could not achieve man’s dream, only mock it*” (Haraway, p152).

“*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, p193)

This blurred line in defining the identities of both machines and humans is prevalent throughout *Ghost in the Shell*. It presents a complex and controversial perspective on what is regarded as ‘human’ when the body and the mind have been technologically enhanced to such a degree that you can no longer be identified as natural and organic. While the first film concentrates on this transition from humans to machines, the second film, *Ghost in the Shell 2: Innocence* shifts the focus to

exploring the notion of machines to humans, embodying the very essence of Haraway's second leaky distinction.

Ghost in the Shell: Innocence, released 9 years after the first film, is set in 2032, featuring Batou as the new protagonist. He has been assigned a new case in which sex gynoids (female androids) have been mysteriously killing their owners right before they self-destruct, an action which they have obviously been programmed against. These machines, designed for a particular purpose, were engineered not to contain a ghost or spirit or to exert any sort of individuality. *Figure 3* reveals the mechanical engineering of the life-sized sex dolls, which are modelled upon young Japanese girls.



Figure 3: Gynoids under construction, Ghost in the Shell: Innocence

During his investigation, Batou determines that the dolls have been 'ghost-dubbed', where the souls of young girls have been removed and transferred into the dolls where they are physically trapped and imprisoned. This method of organically augmenting the robotic dolls is something which is highly forbidden. Batou eventually reaches the Locus Solus where the ghost-dubbing activity was located, and he finds himself facing an army of gynoids when attempting to shut down the manufacturer's operations. In order to aid her former colleague and help defend against the attacking gynoids, the Major downloads part of her consciousness into one of the gynoids. These gynoid dolls embody the blurred distinction between what is human, with an interesting perspective focusing on the opposite direction of embodiment, the transition from machine to man. It also highlights the control Kusanagi has over her 'self', being free to live on the net and having the ability to transfer part of her 'consciousness' into a particular physical body at any given time.

To highlight the *'leaky distinction between human and machine'* Oshii used dolls as recurrent imagery, emphasising human's desire to replicate us in mechanical form. Drawing specific reference to the erotic grotesque dolls constructed and photographed by German surrealist Hans Bellmer (1902-75), these dolls *"are not made in the image of human ideals . . . what is portrayed there is the essentiality that the human body possesses"* (Oshii).

Dolls are important figures in *Innocence* and many are believed to have 'spirits', but at the same time they remain just replicates of humans. *"They want to become fully human – but they can't. That dilemma becomes unbearable for them. The humans who made them are to blame. They try to make a doll that is as human as possible – but they don't think of the consequences"*. (Oshii, 2004) They are as lifeless as a corpse while paradoxically endowed with the evidence of life. These dolls from *Innocence* represent perfectly Haraway's vision of how our *"machines are disturbingly lively, and we ourselves frighteningly inert"* (Haraway, p152). During the final battle scene, Kusanagi and Batou battle countless numbers of gynoids, each of which possess the stolen soul of a young girl who had been kidnapped and trafficked by the Yakuza. These dolls have been designed so that they replicate human appearance right down to the very last joint. Now having been endowed with a real human spirit, the dolls are no longer their artificial lifeless selves. As each doll has received a stolen soul, one might expect the gynoids to convey some kind of individuality. Instead, as they are being controlled by a higher power they act collectively. In contrast, when the major downloads part of her consciousness into one of the gynoids to aid Batou, she still thinks and acts like an individual. The transition of machines to human and the importance of embodiment is central to not only the film but to the culture of the cyborg. These questionable boundaries which are central to posthuman activity are aspects which further suppress the figure of the cyborg and the understanding of it's identity.

Chapter Four

The Lure of Freedom

As the figure of the cyborg became more influential throughout anime narratives, some theorists began to welcome the idea that its identity embodied the notion of freedom and liberation. This was in stark contrast to how the West had negatively portrayed the mechanic being. The cyborg signified the idea of a new technological era where people would not be restricted by the limitations of their human body, where people would not have to suffer from pain or the same emotional constraints. Hayles, when discussing the relevance of the body to unifying an identity critiques the view of cyberneticists supporting the belief of the separation between the mind and body. She believes that human consciousness is dependent on embodiment. She argues that consciousness is heavily dependent on the body itself, as when one is substituted for another, the consciousness dramatically changes. She maintains that the mind and body are not separated but are a unified whole.

'My body creates my moods, my pain, my energy. Consciousness IS embodied. I see many cultural reasons to long to be without a body. Imagine what it would be like to no longer feel pain of to be limited by a frail feeble body'.

(Hayles, 1999)

Kusanagi's organic 'ghost' is enclosed within a manufactured body, a composite of organic tissue and machinery complete with senses, strength and reflexes, produced by Mega Tech (a corporation specialising in the manufacturing of high-tech cyborg 'shells'). Through various fight scenes we witness how the protagonist is free from any source of pain. During the first film, we observe Kusanagi's shell being repaired numerous times after strenuous battle sequences. The final battle scene in *Ghost in the Shell* portrays the clear emotional detachment from body and soul where she destroys her shell while in combat with the spider shaped mechanic tank. *Figure 4* displays Kusanagi's torn body, her mechanical interior protruding viciously through her legs and torso, and her arm eventually being severed from sheer brute force.



Figure 4: Revealing Kusanagi's mechanical make up

The major is oblivious to any pain or emotions throughout these fight sequences, destroying her body in the process. The viewer observes the re-enforcement of this mind/body dualism in the major's physical and mental battle of force and the way the two are unified. While fervently trying to open the tank's locked door, she severs her masculine limbs by sheer force of will (her force of mind).

- *Cyborg Goddesses*

The characteristics of cyborgs have led some to believe that human beings will be able to transcend not only their vulnerable mortal bodies, leaving them unsusceptible to pain, but also able to surpass concepts such as gender and nationality. To Haraway, *"The cyborg.... Serves as a representational figure that embodies that capacity of information technologies to erase gender and racial boundaries and the structures of oppression which have historically accompanied them"* (Silvo, 1999, p54). Particularly, as a feminist, Haraway hoped that the cyborg will liberate the self from gender categories and gender norms which she feels were created by the controlling figures in society. Concerned with the feminisation of cyborgs, Japanese anime presents the viewer with contrasting ideas of feminine freedom and liberation, some tends to present femininity as 'hypersexualised', exaggerating body parts which represent aspects of stereotypical feminine traits, and traditional notions of sexual appeal are honed in on. However, in terms of the mecha genre, alluding to female cyborgs, this exaggerated transformation corresponds with increasingly 'masculine' personality traits, further blurring the traditional distinction between male and female and transgressing conventional boundaries of humanness.

As Dinello notes ‘*The female cyborg, an unnatural, bionic body without ovaries or womb – undermines conventional understandings of biology as the site of essential, unified, natural gender identity. The boundary-breaking, hybridised female machine obliterates sexual directions and liberates us from female stereotypes based on bodily functions*’. (Dinello, 2010, p277) Major Kusanagi seems destined to fit within Haraway’s depiction of a futuristic hybrid being. Her character, form and personality are in complete contradiction to her strength, power and ability. She personifies both female and male attributes, perfectly representing Haraway’s ‘blurred distinctions’. The opening sequence emphasising her mechanic make-up, also places a big focus on accentuating her female form, highlighting the contrast between physical masculine strength and the soft, warm curves of the female shape.

Kusanagi’s hybrid body boasts the exaggerated female proportions common to many anime heroines. We see her graphically presented without clothing numerous times throughout the film although it is never displayed in an overtly sexual manner. Straight after the opening sequence, where we are first properly introduced to the major, she strips off her clothing and dives backwards off a building, revealing her slender feminine form. Of her unique enhanced abilities, Kusanagi’s shell also features a skin-tight semi-transparent thermoptic suit which renders her invisible in both visible-light and infrared. In *figure 5*, you are able to witness the initial coloured static effect of her skin before she is completely concealed. The only part of her body that is not covered by the thermoptic layer is her face, however she overcomes this by wearing a mask which she pulls across her face when necessary. Attached to this mask is a thin thermoptic veil, seen in *figure 6*, which then renders her entirely invisible.

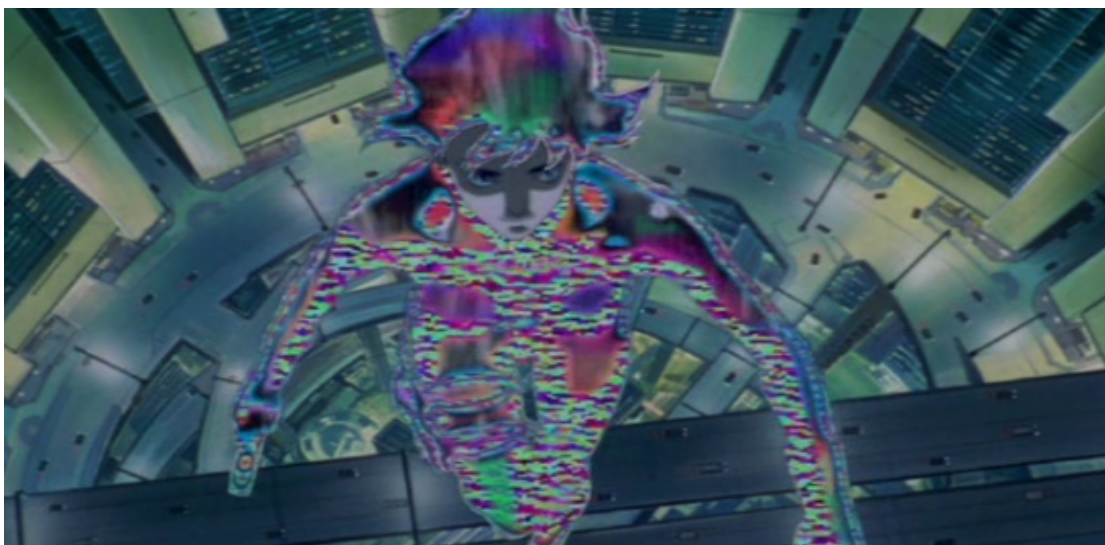


Figure 5: Kusanagi as she uses her thermoptic camouflage skin layer



Figure 6: The thin thermoptic veil which covers Kusanagi's face and renders her invisible

Although Kusanagi's feminine figure is displayed at times in what some would remark as a sexualised way, it is never seemingly provocative. Scenes where she strips herself of her clothes in order to make use of her invisibility mechanism only highlights further the practical sense of her robotic body and also her complete inability to be the object of anything sexual. Her character demands attention, loyalty, and most notably respect. She seems to embody the "*partial, fluid, sometimes aspect of sex and sexual embodiment*" (Haraway, 1991, p180). Her colleagues admire her skills and dedication; Batou always covers her naked form with his jacket in both respect and admiration. The major always appears as a figure in control, directing the investigations and organising the other members of the team.

The film presents many contradictions on the aspect of gender for cyborgs, emphasising the release or freedom from conventional traditions. In relation to Kusanagi, noting that she contains both male and female attributes, it is difficult to fully decide upon her gender. At the very beginning of *Ghost in the Shell*, after we see the construction and assembly of the major's shell, she wakes in her apartment with the camera focusing on her face where it is particularly difficult for the viewer to establish if the protagonist is male or female. Straight from the beginning, the viewer is unsure of her identity and the truth to the protagonist's gender, creating a tone of uneasiness for the rest of the film.

Again at the beginning, when she is told over the internal radio that she has a lot of static on the brain today, she sarcastically responds, "*Yeah, it's that time of the month*". This scene contrasts our vision of Kusanagi and reveals a number of contradictory elements embodied through Kusanagi's mind and body. The theme of sex and more importantly reproduction is placed directly in the foreground. "*The cyborg has no origin story in the Western sense*" (Haraway, p149). The natural organic process of

life is not applicable to posthuman beings. Orbaugh, whilst critiquing the film's sexual subjectivity she notes "[this is] one of those odd breachings of body boundaries that [...] alerts the viewer to the fact that reproductive sexuality is at the heart of this film" (Orbaugh, 2002, p445). Kusanagi's post-modern, artificially created body is produced to maximize her usefulness to the state. This juxtaposition between her comment of human reproduction and her complete inability to perform such a task immediately highlights the "*problematic of reproductive sexuality in a posthuman subject*" (Orbaugh, 2002, p445).

As reproduction is not a general concern for cyborgs, it further distinguishes Kusanagi as an empowered figure. Her body, never explicitly sexualized, is viewed as a powerful weapon, integral to her work for Section 9. This image of Kusanagi is noticeably related to Haraway's vision of female empowerment through her solid integration of the biological, technological and informational. Kusanagi's blurred distinction between male and female however, adds even more uncertainty over her identity. This insecurity, the blurred lines between male and female, creates a tension in the mind of the viewer and promotes the ambiguous identity of Kusanagi.

To highlight the blurring distinctions between the male/female identities of posthuman figures, the film, *Metropolis* (Katsuhiro Otomo, 2001) provides another firm context for analysis. Similar to *Ghost in the Shell*, *Metropolis* is a futuristic city in which robots and humans coexist. This film (loosely based on Fritz Lang's movie of the same name), offers a very personal exploration of what it means to be human, where it focuses on a conflict between two societal classes. Robots having been blamed for stealing human jobs - as many humans are left poor and unemployed, are discriminated against and forced to live in the lower levels of the city. The self-proclaimed ruler of *Metropolis*, 'Duke Red' has ordered the construction of a giant skyscraper called the Ziggurat which he claims will give mankind the ability to further extend its power across the planet. Duke Red has hired a mad scientist, to construct an advanced robot modelled after his deceased daughter, Teema. Teema's existence, unknown to herself, is solely to act as a central control unit for a secret weapon hidden inside the Ziggurat.

Teema and Major Kusanagi share similar characteristics. Both figures are "*artificial females who are simultaneously feminine and masculine, strong and vulnerable*" (Park, 2005, p63). The two are presented as powerful weapons. The Major is a cyborg government assassin, with unique abilities such as hacking into computers and cyborg brains. Her powerful body is the prized possession of Section 9 as it is their most dangerous weapon. On the other hand, Teema is the missing piece to the Ziggurat, and is required in order to activate the most powerful weapon on the planet. In both cases,

each cyborg is never hypersexualised. As previously discussed, Kusanagi is presented as a somewhat non-sexual character. As Park notes, *“Teema’s femininity is imbued with the charming androgyny of childhood: when we first see her, she looks like a fairy or alien surrounded by fantastic blue light; her hair is short and flows up from her face, like flames (figure 7); eventually, she assumes the appearance of a prepubescent human girl, and Kenichi (her friend and protector throughout the film) clothes her in baggy men’s trousers (figure 8). (Park, 2005, p63). Teema’s childlike character and vulnerable appearance allows her never to be viewed in a sexualised manner.*

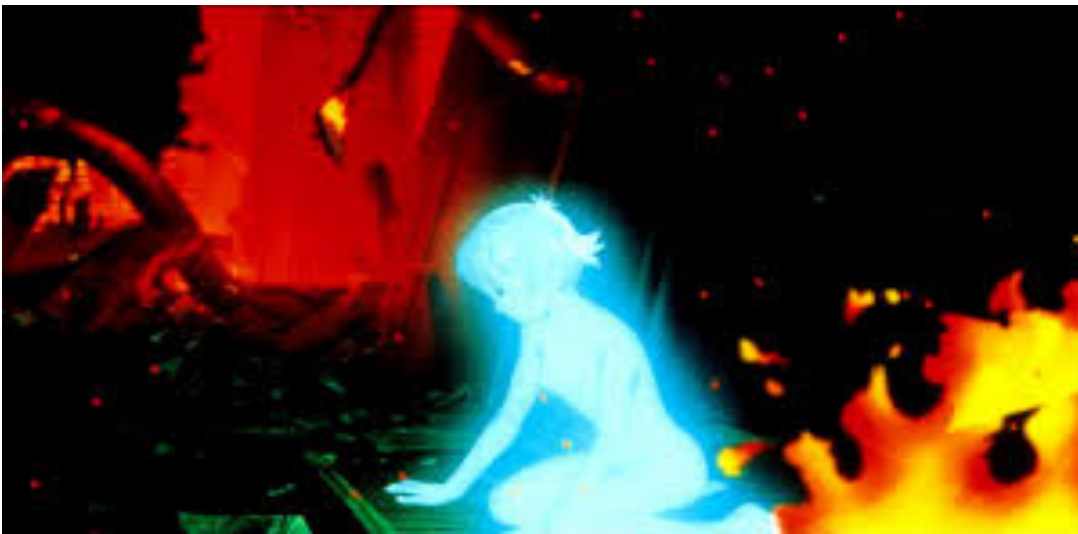


Figure 7: Teema emerging from the flames

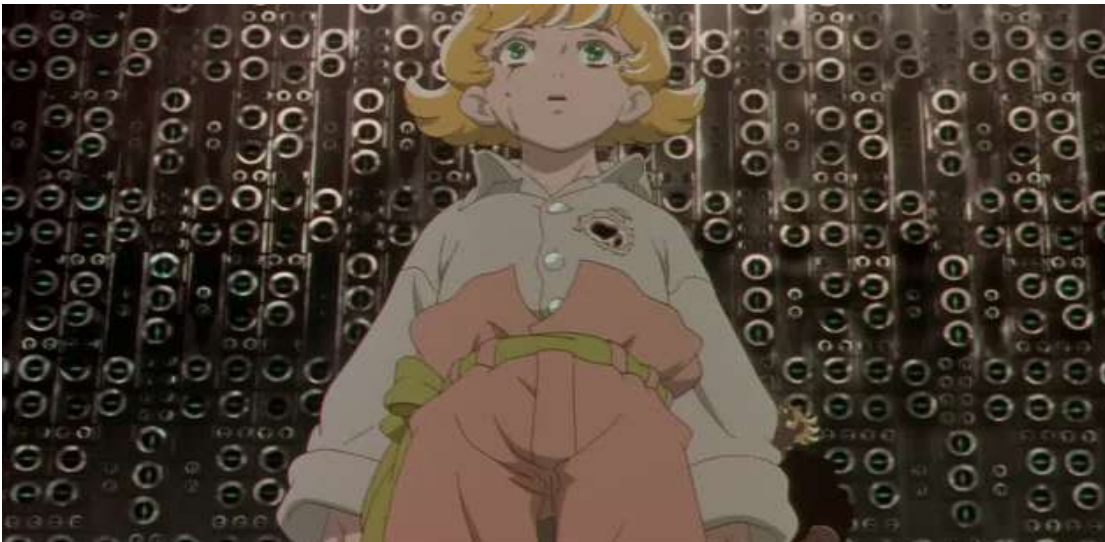


Figure 8: Teema resuming the form of a little girl, dressed in male clothes, never sexualised.

Both characters are presented as empowered feminine cyborgs, both portraying various masculine abilities and strengths. These two figures, both share the same confusion about their identities and

what it means to be human. Teema, suffering from the same existential insecurities, asks Kenichi “Who am I?” before she slips and falls to her death. In *figure 9*, we see her awareness of her lack of identity as she questions her ambiguous existence.



Figure 9: Teema questioning her identity as she falls to her death

Both cyborgs are represented as uncertain figures as they deal with the subject of their own individuality, unable to find meaning to their existence.

Chapter Five

Postmodern Woes for an Existential Crisis

As human culture becomes more and more intertwined with technology it is important to focus on the narrative of the technological body that these cyborg figures present. Within the image of this mechanic being, people's anxieties of technology are deeply embedded and engaged. Rooted within these feelings of anxiety is the state of unease society feels about future possibilities for the human race and how much influence technology wields over people's lives. This apprehension is projected into the figure of the cyborg, symbolising in some respects the strength and power of a human figure mechanically enhanced, but also representing the stress and anxiety of a nation, not ready for this transition between humanist and posthumanist, and the transgression of natural boundaries it ultimately involves.

Exploring the possibilities of a transition to a posthumanist society is a main focus of the Japanese mecha-anime genre. Society, when faced with the onset of postmodern life, begins to develop concerns over what boundaries shall be broken down and to what extent shall human lose the feeling of 'wholeness'. The postmodernist agenda essentially rewrites the discourse of modernism in terms of how a society now views the assumptions associated with human values. Le proposes the questions "*Who or what defines who or what I am? Is what I call 'me' constituted by my environment? Do I have a core essence?*" (Le, 2002).

This anxiety, witnessed over the potential death of the human subject is a central theme of *Ghost in the Shell*. The film consistently calls to the forefront modernist and postmodernist assumptions which coexist and clash in an endless questioning of the nature of identity. The crisis of the 'ghost', in affirming their identities, the anxieties over essences, and understanding their reason for purpose, is replayed throughout the film. The integration of the postmodern and posthuman, blending human elements with the technological is represented as the end of the unified, individual human subject. Nowhere in this film is this representation more apparent than in the character Kusanagi. She herself is the essence of the clash between postmodernism and posthumanist assumptions.

Throughout the film, she questions her existence and is troubled by her lack of identity. What forms the true basis to establishing an identity in a posthuman society? As technology's influence over society intensifies and the line between human and machine is increasingly blurred, it calls into

question the relevance of 'organically human' with regards to formulating an individual self in a postmodern society.

"Just as there are many parts needed to make a human a human, there are 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 I am. Giving rise to the consciousness that I call 'me'. And simultaneously confining 'me' within set limits."

(Motoko Kusanagi, *Ghost in the Shell*)

In this statement, Kusanagi realises that there are many components for creating a 'self' or a 'consciousness'. *"The body becomes a circuit embodying the physiological, technological, and informational. The seat of posthuman activity is distributed throughout body, mind and environment. Yet paradoxically there is still a 'consciousness' which defines her as a 'me' or an 'I'.* (McBlane, 2010)

The possibilities and projections of a posthuman environment are embedded within the identity of the Puppet Master. Born from a 'sea of information' he does not possess an organic biological body as defined from a humanist perspective. *"The Puppet Master . . . can be read as a less equivocal representation of how technology can enable one to transcend the prescriptive limits of our contemporary social environment"* (Carlos Silvo, 1999, p59). The Puppet Master or Project 2501 from Sector Six (referred to as 'he' in the film for simplicity's sake) is a computer program that has become self-aware. After roaming the net relatively unhindered it has developed a consciousness and an ability to think for itself. This contradicts the humanist notions of the human consciousness or soul being an indicator of identity. As Katherine Hayles notes *"We can no longer simply assume that consciousness guarantees the existence of the self. In this sense, the posthuman subject is also a postconscious subject"* (Hayles, 1999, p280).

The Puppet Master questions the issues surrounding subjectivity and embodiment, highlighting Kusanagi's inability to move beyond her limitations.

Kusanagi: *You talk about redefining my identity. I want a guarantee that I can still be myself.*

Puppet Master: *There isn't one. Why would you wish to? All things change in a dynamic environment. Your effort to remain what you are is what limits you.*

The Puppet Master downloads his consciousness into a cyborg shell in order to meet Kusanagi, defying the boundaries between the physical and immaterial. His transition from existing as a being of ‘immaterial’ information to a ‘material’ physical body shows the lack of limitations his environment forces upon him. When Section 6 recaptures the shell used by the Puppet, the Puppet Master demands asylum as he proclaims himself a sentient creature (*figure 10*). As the Puppet states “*I am not an AI . . . I am a living, thinking entity that was created in the sea of information*”. It argues that it’s self-preserving programming is no different to organic human DNA.



Figure 10: The Shell used by the Puppet Master

“By that argument, I submit the DNA you carry is nothing more than a self-preserving program itself. Life is like a node which is born within the flow of information. As a species of life that carries DNA as its memory system, man gains his individuality from the memories he carries. While memories may as well be the same as fantasy, it is by these memories that mankind exists. When computers made it possible to externalise memory, you should have considered all the implications that held”

(Puppet Master, Ghost in the Shell)

When the Puppet Master is asked to prove whether he is indeed a life form he responds, “*It is impossible to prove such a thing. Especially since modern science cannot define what life is*”. The Puppet Master, like human ghosts, is said to have free will and memories. However his existence is an affront to the idea that every living entity each has a unique, individual human essence. He

represents a threat to the humanist ideas portrayed throughout the film. By existing, the Puppet is affirming that there can be no way to judge the authenticity of a 'ghost', that "*ghosts are no more a function of humanity than they are of a machine, that they are not tied to individual subjectivities*" (Le, 2002).

A second underlying notion of posthumanist thought is presented in how the film revolves around the idea of change and continuity. When the Puppet Master and Kusanagi meet at the end of the film the Puppet reveals how he explicitly sought out Section 9 to become acquainted with her. He discloses how, although a conscious living entity, he is hindered by his inability to carry on his spirit and reproduce in the biological sense, continuing on this new form of life.

"A copy is merely a copy. There's the possibility that a single virus could utterly destroy me. A mere copy doesn't offer variety or individuality. To exist, to reach equilibrium, life seeks to multiply and vary constantly, at times giving up its life. Cells continue the process of death and regeneration, being constantly reborn as they age. When it comes time to die, all the data it possesses is lost, leaving behind only its genes and its offspring. All defence against catastrophic failure of an inflexible system".

(Puppet Master, *Ghost in the Shell*)

The Puppet is confined within the realm of the net but longs to transcend those limitations, as even "*a single virus could destroy it*". (Puppet Master). He insists that change is not only desirable for Kusanagi and himself but it is also necessary to ensure survival. As the Puppet Master is unable to pass its 'genes' on in biological terms, as "*a copy is just a copy*", there is no genetic variance. This scene highlights how the transition to a postmodern society is inevitable, and that in order to exist within this constantly changing environment, people need to adapt and adjust. Through this merging between the Puppet and Kusanagi we see the collision between the humanist and posthumanist perspective. "*The Puppet Master seeks to transcend the boundaries imposed on its subjectivity, yet it does so within a humanist framework: the Puppet Master seeks to become biological*". (McBlane, 2010) He desires to merge with Kusanagi, fusing with her biological organic components in order to create a new entity, an entirely posthuman being.

This newly created entity is now an unlimited being, one which expands to allow for multiple subjectivities. It is "*neither the program known as the Puppet Master, nor the woman that was called the Major*" (*Ghost in the Shell*). This fusion to create a new entity living within the realms of informational circuits, allows for the extension of the consciousness to exist within either the physiological, technological, or purely informational.

- *The Search for an Elusive Identity*

Cyborgs are the products of human's relationship with technology and the fascination humans have with the advancement of the self. However, being created by the hand of humans makes cyborgs subject to the modern politics of the day. What sense of purpose do cyborgs have in a postmodern society when the politics still revolve around a modern culture? And in a posthumanist society, if cyborgs and humans coexist side by side, do they still face the same ambiguous existence? They are hybrid beings, not able to belong to either category, human or fully android.

The question of identity: Does this mean I am no longer 'me'? That 'my unified I' is an illusion? Cyborgs will struggle with the realisation that they have lost their identity to the force of postmodern fragmentation. As communications major Sheri Le writes "*Nietzsche said that once the metaphysics of life are broken down, and the real is shown to be nothing more than the differential relations of forces, fully investing oneself in this 'non distinction' could lead to madness*". (Le, 2002)

The truth to her identity and the nature of her existence remains hidden from Kusanagi. The knowledge that she herself is only an imitation of a 'human' is both a source of empowerment and liberation yet also causes her much anxiety. She continuously struggles between the notion of her freedom where she does not have to suffer the limitations of the biological body, and the confusion and anxiety she feels over whether her cyborg body or 'ghost' contains any organic components at all. Major's uncertainties surrounding her identity are first revealed when we see her discussing her limitations with Batou after she goes diving in the sea. "*I feel fear. Anxiety. Loneliness. Darkness. And perhaps even . . . Hope. As I float up to the surface I feel as though I could change into something else*" (Kusanagi, *Ghost in the Shell*). Batou does not understand Kusanagi's obsession with diving as, should her floaters fail to work she would drown by the weight of her cyborg body (*figure 11*). However, this scene provides a glimpse of her personality, in contrast to her formally cold and calculating character. In a situation where she renders herself helpless, she leaves her fate up to chance and in turn experiences a sense of hope.



Figure 11: Kusanagi diving, although dangerous for her mechanical body

As she acknowledges that there are many components that make up her ‘being’, she reveals the constraints she feels forced upon her by her environment and situation. Although her cyborg body is a source of strength and power, the viewer observes her desire to become an individual capable of exerting free will. Her first interaction with the Puppet Master voices the uncertainties about her intense awareness of her lack of being.

“Maybe all full-replacement cyborgs like me start wondering like this. That perhaps the real me died a long time ago and I’m a replicant made with a cyborg body and a computer brain. Or maybe there never was a real ‘me’ to begin with [. . .] there’s no person who’s ever seen their own brain. I believe I exist based only on what my environment tells me [. . .] And what if a computer brain could generate a ghost and harbour a soul? On what basis then do I believe in myself?”

(Kusanagi, Ghost in the Shell)

The Major is painfully aware of her ambiguous status as a human and constantly seeks recognition to define her sense of identity. She strives for a liberating experience which would prove her own existence, however, this is limited by the control Section 9 exerts over her cyborg shell. The still darkness of the sea is unable to calm her anxiety, and her uncertainty drives her closer towards the Puppet Master. The Puppet is viewed as the answer to her uncertain existence. Although she is unable to judge from what means the Puppet Master came to exist himself, she feels drawn to him as though he can answer her questions about the nature of her identity. During their interactions the Puppet states *“for now we see through a glass, darkly”*, implying that Kusanagi will soon understand the true sense of her own being. The major, who still clings tentatively to her humanist values, has to realise that in order to evolve as a being, to transcend to a higher level leaving behind her current

restrictions and constraints, she must rid herself of the idea of the ‘human subject’. The ‘*authentic unified sense of individuality*’ (Le, 2002) i.e. the human ghost must be destroyed in order to realise this level of consciousness.

The merger at the end of the film between Kusanagi and the Puppet Master is presented as the liberating solution to the Kusanagi’s existential crisis (*figure 12*). The Puppet offers Kusanagi the opportunity to leave behind all her previous anxieties, her limitations and her constraints. By “slipping our bonds” Kusanagi and the Puppet Master break their bonds and shift towards a “higher structure”, a structure that is above humanity.



Figure 12: The merging of the Puppet Master and Kusanagi

“The word ‘higher’ connotes superiority, both superior value and evolutionary superiority. And thus is the ‘offspring’ that is produced from the merging: a being that is, it is implied, more capable of living in and coping with a postmodern existence and a posthuman self”. (Le, 2002). Merging his mind with hers would produce “a higher form of consciousness from the intermingling of human and machine intelligence” (Chute, 1996, p87).

Haraway wrote that “A cyborg body is not innocent [. . .] it was not born in a garden; it does not seek unitary identity and so generate antagonistic dualisms without end (or until the worlds ends)” (Haraway 2001, p83). The being, created from the merger between the Puppet Master and Kusanagi is freed from the limitations of origin. It no longer struggles with the contradictions of a postmodern, posthuman environment. By connecting herself fully to the net, “the major has not only evolved

herself, but has aided the evolution of the whole to which she belongs without being subsumed by it” (Penicka-Smith, 2010, p273).

Merged with the Puppet Master, combining her organic consciousness/brain stem with the Puppet’s purely informational body, the new being embraces the posthuman environment as a liberating experience, free from “*notions of individuality, authenticity and essence, but rather is able to move between, before and among the nodal points that give ‘shape’ to the postmodern society*”. (Le, 2002) This new being is cased in a shell of a young girl, the only body Batou was able to locate after their meeting was interrupted and battle ensued. The body of the young girl is symbolic of the posthumanist act that has just occurred. The young figure echoes the theme of a new birth, creating a new entity in the postmodern/posthuman paradigm (*figure 13*). Uncertainty is again created here, yet not for the protagonist. Batou is unsure whether he is having a conversation with the Major or with Kusanagi.

Kusanagi, for the first time in her existence, has found peace. As Hayles notes “*The contrast between the body’s limitations and cyberspace’s power highlights the advantages of [a body as] pattern over presence. As long as the pattern endures, one has attained a kind of immortality*” (Hayles, 1999, p81). She has abandoned her search for identity and individuality and has experienced a transcendence of the body, one where she is both a whole and an individual at any given time. She is not bounded by the same restrictions and has no limitations from the body she possesses. “*And where shall I go now? The net is vast and limitless*”. (Kusanagi, *Ghost in the Shell*)



Figure 13: The merged conscious of Kusanagi and the Puppet Master in the form of a young girl

Conclusion

Considerable attention has been paid to the appearance posthuman figure as technology increasingly seeps into the fabric of our existence. The vision that one day biology and technology shall be fused together to form a super being, one which is constantly connected to the virtual informational realm is frequently being addressed through various narratives of pop culture. These images of the posthuman portray a being who's adapted to both biological and virtual environments and whose figure represents overcoming the identity politics of the past. However, as society advances at a quickening pace towards a culture that not only embraces but also requires these posthuman beings, when then, does one analyse their meaning of existence and ultimately what their identity represents?

Cyborgs embody the modern day dualisms so prevalent throughout our culture. They are mechanically created under the supervision of humans, and have undergone techno-modification to enhance their capabilities, senses and intelligence. Modern society is rife with it's own psychological and mental problems; people experience loneliness, anxiety and pain and they recognise the image of the cyborg as a release from these human troubles. However, as society advances from one age to another, the problems shall not disappear but only begin to manifest in different forms. In a world where technology and virtual environments are infringing on daily life, society grasps onto this idea of their unique individuality to separate them from the techno-swallowing virtual world that surrounds them. However, this identity is increasingly being eroded by modern day use of technology.

The figure of the cyborg embodies this tension and anxiety. Although represented as a figure of liberation and power, it is still limited by the politics of its environment and the boundaries imposed by its body. Its sense of identity is clouded as it is no longer able to distinguish itself as a human, nor fully mechanical to be named an android. Haraway spoke of the "*informatics of domination*", meaning the "*rearrangement of world-wide social relations tied to science and technology*" (Haraway, p161). According to this, as Carl Silvio writes "*the constitutive components of our lives, including our identities, can no longer be thought of as natural entities, can no longer be defined by an ontology of essence. The world has, instead, become coded; its elements are defined, not by an inner/outer dichotomy, by their relational positions within larger systems of information*". (Silvio, 1999)

Haraway's influence through her vision of the cyborg's ambiguous identity can be observed through *Ghost in the Shell's* direct reference to Haraway. *Ghost in the Shell 2: Innocence* portrays a police

forensic officer named 'Haraway' who analyses the abrupt death of the gynoid dolls. She discusses with Batou how the dolls suffer from not having a meaning for existence, how these dolls are cast aside and unable to confirm their identity. *"It's because humans discard their robots once they're redundant. When owners trade up to newer models, some of those abandoned become vagrants, and degenerate. Perhaps it's a protest against their own obsolescence."* (Haraway, *Ghost in the Shell 2*).

Kusanagi's uneasiness and anxiety stems from her awareness of her lack of being. She is unable to verify the authenticity of her 'organic' matter and so lives in uncertainty over the very nature of her existence. Kusanagi's troubled consciousness and her uncertain awareness of her 'self' is a reflection of the similar concerns faced by present day society. This cyborg figure is a representation of how these concerns manifest over time, influencing the transition to a posthuman environment, yet these powerful beings are still restrained by its search for an answer to its existential crisis.

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