Establishing a Post-human Identity through Mamoru Oshii's *Ghost in the Shell* and *Innocence* Films

by

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Introduction

Shortly before the turn of the century, the Internet revolutionized the way humans exchange information. In many respects, mankind managed to create a world parallel to our own, composed entirely of binary code, red/blue/green displays and unquantifiable amounts of data. In order to access this wealth of information, machine technology must serve as mediator, presenting us with a triumvirate – man, machine and information technologies– that pushes traditional Western humanist politics and philosophies to their breaking points. In the formerly fantastical cyborg, we see a fractured fusion of man and machine.

Cyborgs and Information Systems

If knowledge is power, then in a post-human realm of technologically mediated relations, older hegemonies of power are unsettled. For example, minority groups not only emerge as historical actors, but through "seizing the tools to mark the world that marked them as other" (Haraway 141), gain power and authority through increasingly large information networks. Donna Haraway outlines these changes in her seminal Cyborg Manifesto (1985). But, while Haraway uses cyborg imagery as an empowering metaphor for pluralistic political identities, there lies an unsettling notion of the death of metaphysical humanity in equating people with cyborgs. Humanism holds the (false?) promise of a return to "innocence," a world order where human will and rationale possess inherent worth higher than the coding that controls organisms and matter. But humanism also marks "the old dominions of white capitalist patriarchy" (148), emphasizing white male ownership of the globe via physical colonization. Moving away from humanism and into the realm of the post-human cyborg throws

Western thought into ontological disarray; as Haraway states in her cyborg manifesto, "Organisms have ceased to exist as objects of knowledge, giving way to biotic components, i.e., special kinds of information-processing devices... Biology here is a kind of cryptography" (131).

As Haraway correctly observes, "the translation of the world into a problem of coding" (130) marks the cultural shift allowing her cyborg discourse to take place. At the heart of these cultural changes was the Macy Conferences on Cybernetics (1946-53), a series of interdisciplinary academic discussions following World War Two which unveiled "that three powerful actors—information, control, and communication—were now operating jointly to bring about an unprecedented synthesis of the organic and the mechanical" (Hayles 8). Information had become something which could flow from one substrate to another – humans were part of this equation. First-wave cybernetic theory outlines that homeostasis is the ability for organisms to maintain equilibrium when resisting harsh environments; environment and organism were two separate systems that constantly exchanged information flows. Because of the ontological implications that come with eroding the boundaries between organisms and the systems they occupy, Norbert Weiner, the "father of cybernetics," ardently held the rationality and ordering power of organisms in higher regard, preserving the liberal humanist subject and reinforcing his ability to reason and filter through the information his environments deliver (Hayles).

Information, however, is only useful in context; someone or something must do the interpreting, and the same codes can mean very different things to different systems. Second-wave cybernetic thought introduces the notion of reflexivity, where an organism's

"...one and only goal is continually to produce and reproduce the organization that defines them as systems. Hence, they not only are self-organizing but also are autopoietic, or self-making... We do not see a world 'out there' that exists apart from us. Rather, we see only what our systemic organization allows us to see" (Hayles 10).

This has biological implications of course, but also connotes that systems of thought and even perception find themselves hermetically sealed and unique to each individual, a move that acknowledges the futility of seeking an "objective" lens through which the world can be studied. With the introduction of reflexivity, we can observe the frameworks for post-structuralist theories (Derrida's deconstructivism, second-wave feminism, queer theory et. al) to emerge in the mid-twentieth century. Man can no longer ascribe meta-narratives when semantics and language are very much relative, when "innocence" has become a political myth reflective of capitalist leaders who control the flow of information. Our political experiences of the world are reproduced by those who wish to maintain the status quo. Even further, our views on life are subject to the nature of our bodily experiences.

A Springboard of Emergence

Although third wave cybernetics will find more relevance later in this essay, it should be mentioned briefly here that the third wave presents reflexive self-organization as the "springboard to emergence." This realization is of utmost importance for those who see that in a universe governed by information, adaptable computer programs constitute life forms because information is the essence of material things (Hayles 11). Biologist Thomas S. Ray, for example, attempted demonstrating the evolutionary potential of software programs forced through recursive loops: the programs (organisms) would manifest deviations (mutations) over time, and a reaper program (extinction) would choose which programs were better at successful execution of functions (replication, reproduction) (Hayles). While artificial intelligence research is still ongoing, cybernetic theories' overarching implications – that through information man is closer to the world of objects than we like to think – allows for

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machines and everyday objects to participate in information flows between systems, or as Bruno Latour might argue, they become agents that break down the subject-object narrative of liberal humanism, instrumental parts to our social systems.

It is out of this milieu that a newly found focus on materialism forms in the latter half of the twentieth century. In the same way Donna Haraway evokes cyborg imagery to give voice to formerly mute and invisible minority groups within the political sphere, so do thing theorists use cybernetic thinking to construe objects as vital to not only modern social relations, but all of mankind's interactions with all other humans and non-humans. Bill Brown's "Thing Theory" (2001) and Bruno Latour's actor-network theory as outlined in *Pandora's Hope* (1999) threaten the liberal humanist subject by placing man on equal terms with the objects he relates to on a daily basis [relates is the keyword here], for these objects are anthropomorphized to an astounding degree. Objects now possess biographies as ordinary people do: a development process and a birth, a career and retirement, and a death (which by all means is metaphorical considering most non-perishable items can be appropriated for other means.) Humans, once superior to everyday items because of the creator-created dyad, are recognizing that items play a vital role in shaping social interactions, even participating in them as non-human agents working within a cybernetic network. Thing theory can unduly threaten humanism through a narrowly skewed existential nihilism, using anthropomorphic rhetoric to ignore very real, non-theoretical limits that face non-humans.

Lest it sound like thing theory thoroughly mitigates humanity's significance as sentient beings, this essay will examine this ontological crisis as it is treated in Japanese culture; more specifically, as it is framed in the Japanese animated films *Ghost in the Shell* (1995) and *Ghost in the Shell 2: Innocence* (2004) (simply known as *Innocence* in Japan). Directed by Japanese auterur Mamoru Oshii, they engage currently debated issues in the realms of trans-humanism, liberal humanism, interspecies

solidarity and the role of non-humans in shaping social networks. Contemporary systems thinking and thing theory mirror views of Shintoism, Buddhism and animism, and the larger Japanese tradition of regarding environments and embodied space as critical to a sense of personal identity. Technology, though a human construction, is part of our social environment, which grants it the power to affect people's lives. In Oshii's words, "...technology has a huge influence on Japanese society... I think it's because before, people tended to think that ideology or religion were the things that actually changed people, but it's been proven that that's not the case. I think nowadays, technology has been proven to be the thing that's actually changing people" (AVClub).

The Question of Technology

Oshii's work is also ripe for dialogue with the writings of Martin Heidegger in "The Question Concerning Technology" (1949), a critical influence upon the thing theorists: to what extent does technology help humanity act within the world and help to posit his own worth? As *Ghost in the Shell* and *Innocence* illustrate, increased intimacy with digital and material realms complicates human ontology unto death; it reduces the difference between humans and non-humans. It presents an uncanny recognition of said differences, and engenderes "the danger" of losing human dignity that Heidegger feared. This danger also is found in Donna Haraway's cyborg, which contains the frameworks for the death of humans and the rise of non-organic objects: man has lost an original state of nature, a state of "innocence" that situates him as being superior to the world of animals and objects. Given Haraway's unique use of the term "innocence" and a brief nod to her in the film *Ghost in the Shell 2: Innocence*, we still wonder what connotations does the term hold for Mamoru Oshii.

Uncanny fears of living objects are explored not only through narrative in Oshii's work, but also

manifest in the visual landscapes of both Ghost in the Shell films. Scholar Miho Nakagawa observes that Oshii's animation approach involves the traditional Japanese concept of layering to create depth, a unique expression of dimensional space Nakagawa associates with use of screens within Japanese homes, and reflected in ukiyo-e and uki-e art. Oshii's early 2D animations use three layers (foreground, middle, background) to achieve this effect: the foreground is where characters interact and drama unfolds, the middle-ground is where non-diegetic "reality" is represented, and the background is typically a vision of the future and capitalist success. Oshii claims that "animating can transform anything into a character"; his middle and background environments, then, may also be vital to the unfurling of events within his narratives. Nakagawa limits her discussion to Oshii's 2D works, which use physical cels to delineate layers, a practice that is fading thanks to the proliferation of 3D CGI in animation. Her writings will therefore be applied to the 1995 *Ghost in the Shell*, although the significance of environments in Oshii's work certainly doesn't end with the birth of CGI.

Related to thing theory's concern with environments and the psychological uncanny is Oshii's use of Surrealist Hans Bellmer's adolescent dolls in *Innocence*. Dolls have also been embraced by Japan for centuries, used in religious practices to stave of demons and bring good luck (Gerbert 62), and as gifts for promoting international diplomacy (Gerbert 79). The doll, Elaine Gerbert contends, not only holds an uncanny aura that can be attributed to the possession of a soul, but even holds the potential to make one aware of his own consciousness and sense of self (Gerbert 62). The use of Bellmer's dolls bridges the histories of early psychoanalysis, Dada and Surrealism to the utopian cyberpunk trope of bodies as shells to be cast aside or advanced indefinitely while holding the human mind in high regard.

Trans-humanism often suggests humanity is little more than a brain within a jar, to be taken with us as we eventually place our minds within a Hans Moravec supercomputer; however, this rejects

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the basic fact that our minds are physiologically hardwired to our nervous systems and may not be able to operate the same way - if at all – when removed from a specifically human embodiment. Alternative modes of consciousness and the fear of inanimate objects coming to life, while destructive to a liberal humanist subject that wishes to maintain hierarchical dominance over objects and animals, does not have to mark the end of humanity so long as humans act within the world in a way only humans can. Oshii takes a unique stance on the subject while discussing *Innocence*:

"The message of this movie is your body," he says simply. "As I get older, nowadays I make a film that is good for my body, but before that I used to make a film only using my brain. When I made the first Ghost in the Shell, I thought about what really makes your body your body. If you lose your arm, and you keep losing body parts, what is the last part that still makes you unique? The conclusion I came to at the time was your brain, and more specifically, your memory of life.

"When I made Ghost in the Shell 2," he continues, "my conclusion changed. This time I thought it's your body, and it's not anything specific, like your arm or your leg, it's the body as an entire [entity], and more than that, it's really the relationships you have with other people. When I was making this film, I came to one conclusion: maybe the brain or head isn't that special. If you are accused of something and you are executed for it, that's when you lose your head, but when you go and take the responsibility voluntarily, more honorably, that's when you do hara kiri and cut your body, and I think that's representative of the fact that you cannot actually 'sever' your body" (IGN).

Oshii's Lead into the World of Cyborgs

Machine Age Mechanics

Western and Eastern cultures have drawn post-human narratives extensively from one another, resulting in a hybridity of cyborg fantasies for the future. The cyborg of contemporary culture (i.e. a human electrically hardwired using principles outlined by computer science; capable of telecommunication feats via intimate contact with computer interfaces (jacking-in) or wireless connectivity; experiencing sensory hallucinations influenced by direct interaction with a digital information matrix) arguably comes to fruition in William Gibson's *Neuromancer* (1983), who himself saw Japan as the vision for technological prowess. Shirow Masamune, creator of the original *Ghost in the Shell* manga (1989) Mamoru Oshii later adapts to film, embraced the Gibson cyborg and the spread of global information networks, though it cannot be said Masamune directly looked to Gibson for influence. Cyborg and mechanical humanoid imagery, however, appears throughout Western and Eastern cultures since the industrial revolutions, if not before.

Examples of Western cyborgs extend as far as Mary Shelley's *Frankenstein* (1818), a tale which came to fruition after Shelly saw a collection of animated dolls owned by famous Swiss inventor Jaquet-Droz (Gerbert 77). Edgar Allan Poe's "The Man that was Used Up" (1843) offers General John Smith, a man whose body is greatly prosthetic; he must be reassembled with the aid of his black servant Pompey daily. During the early twentieth century Italian Futurist artists take a reverent stance regarding the machine age and its enhancement of wartime destruction; the movement came to an end when many of its constituents died during World War One. Dadaists such as Marcel Duchamp, on the other hand, recognized that the war had broadcast many of humanity's absurdities: his

works reduced people to mechanical, violent sex devices, as the title of one his most famous works, "The Bride Stripped Bare By Her Bachelors, Even" (1915-23) suggests. Bellmer, subject of much inquiry because of his invocation in Innocence, similarly construes sex and beauty as ugly and violent, reacting in part to the fascist influence rising in Nazi Germany during the eve of World War Two.

As the reception of mechanical humanoids vacillated, so did the desire for machines to mimic human form and behavior. The destructive female android of Fritz Lang's *Metropolis* (1927), who hid her metal chassis within a hologram of a woman, finds a kindred spirit in the gynoid of *The Twilight Zone* episode, "Lonely" (1959), who superficially was composed of skin-like materials. Both characters are made ripe for the projection of male desire, as their differences from organic women are all but undetectable. Extensively mechanical humanoids who can hide among the populace, such as Jaime Sommers in *The Bionic Woman* (1976-78), are at times traded for explicitly robotic humans, like *Neuromancer*'s Molly Millions (1983), who wears surgically implanted silver lenses that display data to her. The human-like replicants of *Blade Runner* (1982) are visually tame in comparison to the enslaved human race in *The Matrix* trilogy (1999-2003), who have obtrusive sockets for machine interface throughout their bodies.

The Japanese Cyborg

Western conceptions of cyborg begin to incorporate Japanese aesthetics particularly around the heyday of cyberpunk in the 1980s, as Japan becomes a vision of successful modernization during the post-war period, and the site for an emerging techno-orientalist interest soon popularized by Gibson's *Sprawl* trilogy and Ridley Scott's *Blade Runner.* Japan's own exploration of animated automatons begins long before the reopening of its seas and the Meiji Restoration in the late 1800s,

however, through its longstanding cultural interest in dolls. For the Japanese, dolls could be used in innumerable ways: serving to transport good luck from shrine souvenir shops to one's home (62), and casting spells and curses reminiscent of voodoo practice (63). During the Heian period, the emperor would rub a doll over his body to rid himself of his iniquities (66). In more secular practices, costumed dolls were often given to commoner children to teach them about higher-class royalty; the dolls meticulously replicated the regalia of the nobility (68). Such intimate engagements with dolls in the spiritual, imperial and familial realms supports the assertion that human-like puppets are "not simply metaphors for the human but actually compose a world of their own, a parallel world bridging the domains of the humans and the divine" (Gerber 68). Naturally, this profound interest in dolls would lead to attempts at mechanical dolls tasked with animating social chores such as serving tea during the Edo period (1603 – 1868) (deFren).

The Japanese tendency to include dolls in important social customs as if they were imbued with spiritual power, although strongly reflective of traditional Shinto and animist practice, found further validation and influence in Western fiction of the twentieth century. The film *The Golem* (1914, 1920) made its way to Japan during this time, as did Fritz Lang's *Metropolis* (1927), and contributed to a "robot boom" in popular culture of the period (Gerber 77). The Japanese interest in mechanical dolls shortly before the Meiji era coincides with the emergence of the industrial revolutions in the West; animated *ningyo* formerly powered by springs and other mechanical forces soon used electricity to come to life. While some Japanese intellectuals retreated to vitalist philosophy to reclaim an intangible force unique to living organisms (77), this clearly did not reduce popular interest in mechanical dolls, evidenced by the "uncanny valley" hypothesis eventually posited by Masahiro Mori in 1970 and Japan's current reputation for advanced robotics research.

It comes as no surprise, then, that among the earliest pop culture robots to emerge out of the

chaos of World War Two Japan is the benevolent manga hero *Tetsuwan Atomu* (Astro Boy) in 1952, and an animated series about crime fighting robot *Tetsujin 28-go* (1956). Both figures, in addition to oddly appropriating mechanical and atomic advances that wreaked havoc in Hiroshima and Nagasaki, were also successfully adapted into toy productions, continuing the Japanese tradition of dolls and miniaturization. *Astro Boy* would be followed by a host of other robot shows such as the *Cyborg 009* (1964) and *Casshern* (1973) franchises, whose characters were no longer in the ilk of androids, but cyborgs that "deliberately incorporate[s] exogenous components extending the self-regulatory control function of the organism in order to adapt it to new environments" (Astronautics). To be clear, the heroic crime-fighting of children's heroes like Astro Boy and Casshern did not mark an end to technological violence, but retooled it for peace keeping purposes and protecting the interests of humanity. The *Mobile Suit Gundam* series (1979) and *Robotech* (1985), by comparison, regarded machines and mecha (giant robot fighters) as weapons for wars between human factions and extraterrestrial invaders.

The Rise of Oshii

In 1988 creative team HEADGEAR, in collaboration with animation studios I.G Tatsunoko and Studio DEEN, would mark the distinct move from violent robot shows targeted at younger males to meditative dramas about technology, with the OVA ("original video animation," direct-to-video) series *Mobile Suit Patlabor*. HEADGEAR was composed of five creators: among this team was Kazunori Ito and Mamoru Oshii, who would collaborate on future projects for the next fifteen years. Mamoru Oshii would also come to develop a lasting relationship with I.G , as they were repeatedly contracted for work on the *Patlabor* OVAs and the first two *Patlabor* films.

Mamoru Oshii already had an established career in the animation and live-action film industries before *Patlabor.* After graduating from university he began a career in storyboarding for animation studio Tatsunoko Productions until 1980, when he moved on to working for Studio Pierrot. Pierrot would go on to produce *Dallos* (1983-84), the first anime series to use an OVA format; Oshii was director of the series. Whereas *Dallos* was a science fiction series focusing on humanity's colonization of the Moon, at around the same time Oshii was directing the television series *Urusei Yatsura* (1981-84), a light comedy series featuring high school antics, Japanese mythology and a humorous engagement with aliens. Oshii's iconic interest in the liminalities between dreams and reality emerge strongly in *Urusei Yatsura*'s second feature film, *Beautiful Dreamer* (1984), as its characters discover their world has been transformed into a living dream by a Japanese demon.

Oshii soon leaves Studio Pierrot to create an independent film, *Angel's Egg* (1985), produced by Studio DEEN and Tokuma Shoten. *Angel's Egg* adapts the surreal themes from *Beautiful Dreamer* and morphs them into a moody contemplation of Christianity and self-delusions, set within what may be Earth following the Biblical deluge of Genesis. The home the girl protagonist occupies appears to be a giant ark; the girl herself may be an angel or even the virgin Mary, evidenced by a statue in her likeness cradling the film's eponymous egg, as Mary would the baby Jesus in art of antiquity. A large eye-like structure, which houses a pantheon of sculptures including the one of the girl and egg on its surface, sharply recalls Odilon Redon's *Eye-Balloon* (1878), and brings Oshii's interest in symbolism and surreal art into sharp focus.

Although distinct from *Urusei Yatsura* and *Angel's Egg* in many respects, Oshii delves into the realm of cyberpunk through *Patlabor* and continues to develop his exploration of hyperreality and the limitations of human knowledge. *Patlabor* focuses on society's dependence on large robots used both in heavy construction work and police missions, investigating not only "how people are changed and

affected by technology, it explores the idiosyncrasies that make us all human" (Ruh 79). I.G. and DEEN certainly weren't the first Japanese animation studio to engage in the hugely popular giant robot phenomenon, but *Patlabor* puts its armored machines to use within a non-military context for the enhancement of everyday society. The atmosphere of the *Patlabor* OVAs is rather humorous and very human-centric, distinct from the themes writer Bruce Sterling outlines as usual cyberpunk trajectories: "the theme of body invasion; prosthetic limbs, implanted circuitry, cosmetic surgery, genetic alteration. The even more powerful theme of mind invasion: brain-computer interfaces, artificial intelligence, neurochemistry – techniques radically defining the nature of humanity, the nature of the self" (Ruh 126). Oshii's distinct attention to everyday technological impact can be, in part, traced to his involvement with the 1960s student protest movements in Japan, many of which focused on Japan's stationing of American troops despite the creation of a postwar constitution that banned militarization. Super destructive mecha has no place in Japan, realistically or fictionally; these technologies have very real implications that giant robot anime, with a penchant for laser explosions and space colony warfare, diminish for the sake of glorifying battle (the revolutionary genius of *Neon Genesis Evangelion* (1995) manifests in this light).[1] While the *Ghost in the Shell* films Oshii later works on emphasize an explicitly invasive technology, in *Patlabor* humans are at the fore and technology allows for its characters to carry out law enforcement in a manner that lets them keep pace with criminals illegally acquiring Labors and other weapons.

Patlabor's emphasis on a human presence is a comparatively realistic response to technology, especially when regarding the ambiguity many fictional works of the 1980s had towards a digital future. Cyberpunk works such as *Neuromancer* focused on deconstructing liberal humanism's facade of autonomy for all people, depicted urban life as a conflagration of high-tech capitalism and low quality

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1   *Neon Genesis Evangelion* is a clever examination of the mecha genre of anime. Fourteen year olds pilot mecha to save the world from invading monsters, but at the great cost of the psychological degradation of the pilots. This is an alternative account, and likely more realistic one, of how mech battles would unfold.

of life, and rejected the material world for a digital realm free of carnal woes. Compare

1988's *Patlabor* with *Akira*, the world renowned anime cyberpunk film of the same year: *Akira*'s

fixation with technologically created super-humans capable of inducing atomic war reminds audiences

that there are natural and technological forces mankind is not capable of understanding despite all our

perceived scientific progress. *Patlabor* treats technology with just as much gravitas, but adopts an

attitude of practical acceptance rather than paralyzing fear. To echo the words of *Patlabor* director

Mamoru Oshii, "Humans are always changing, and they need to change, with the development of

technology. However, they should not fear change or evolution, but rather accept it and learn to live

with it" (Eye).

Oshii Plants Cyborg Seeds in Production I.G

I.G Tatsunoko, who worked extensively with Oshii during the studio's early years, is the most

obvious inheritor of Oshii's vision for technology and mankind. After managing to separate itself from

parent animation studio Tatsunoko Production, I.G Tatsunoko would be renamed Production I.G, a

studio whose name is almost synonymous with Mamoru Oshii and continues to work with him even

into the present day. I.G produced Oshii's seminal *Ghost in the Shell* feature film adaptation in 1995,

and its original sequel, *Innocence*, in 2004. *Ghost in the Shell* is an often violent but jarring meditation

on the significance of human consciousness and identity when encroached upon by non-human forms

of intelligence, and suggests that the internet's massive data resources are fundamental to furthering

understanding of our place in the universe. Reflective of Oshii's change in attitude towards human

ontology and consciousness, *Innocence* posits that perhaps there is nothing wrong with our human

limitations. As a pair, both films confront artificial life and its consequences in a future Japan that has

already advanced so far as to place human consciousness within mass produced cybernetic bodies. The differences between life and death, animate and inanimate, and human and non-human states of consciousness are questioned to the point of meaninglessness. As one character states in *Innocence*, "Humans are nothing but the thread from which the dream of life is woven. Dreams, consciousness, even ghosts are no more than the rifts and warps in the uniform weave of the matrix."

Oshii's *Ghost in the Shell* inspired director Kenji Kamiyama (who consciously tries to emulate Oshii) while working on *Ghost in the Shell: Stand Alone Complex* (productionig.com) and *Eden of the East*. Particularly with *Eden of the East*, the term "cyborg" evolves from its expected 'man made of metal' connotations and grows closer to validating Katherine Hayles' notion that mankind is already post-human, as the protagonist Akira uses a cell phone and an internet connection to stimulate economic growth in Japan, and unify groups of differing socioeconomic status to enact social change.

The Production I.G series *PSYCHO-PASS* (2012) is inextricably tied to the original *Ghost in the Shell* through its similarities to *The Matrix* franchise (*Matrix* directors Andrew and Lana Wachowski cite the film as a major source of inspiration), and *PSYCHO-PASS* shares a post-cyberpunk atmosphere similar to Kamiyama's *Stand Alone Complex*. *PSYCHO-PASS* takes a critical perspective on trans-humanism: its society is governed by a network of 247 brains that embraces our cognitive processes as capable of infinite perfectability, and justifies rule over the majority using numerical values and information with little emotional consideration (individuals with disturbed psychological states are regarded as dangerous and are swiftly dealt with). This calls into question whether or not bodies are of consequence at all in *PSYCHO-PASS*; I would argue that they are not, and that the transhuman neglect of the body is what causes much of society's woes throughout the series.

Ghost in the Shell: Essence and Environment

Although Western audiences were vaguely aware of anime for a number of decades (*Speed Racer* (1967), *Battle of the Planets* (1972) and *Robotech* (1985) enjoyed widespread popularity in the United States), during the late 1980s and into the 1990s anime and other forms of Japanese popular culture exploded onto the global scene. *Akira* (1988), animated by Tatsunoko Production and TMS Entertainment, was a successful film in the Japanese domestic market, received a limited international theatrical run afterward, and established a large cult following in the international home video market. Based on a long running manga by Katsuhiro Otomo, *Akira* follows adolescent misfits Kaneda and Testuo as they resist authority figures and establish dominance over the streets in post-WWIII Tokyo. After a motorcycle crash one evening, Tetsuo is taken to a government hospital and becomes the unwilling participant of psi-powers research; similar research brought about the city's destruction decades earlier when Akira, an incredibly gifted psi-user, lost control of his power. When Testuo's power begins to manifest, he is regarded as the second coming of Akira by the city's fanatics, and Kaneda makes it his mission to stop his best friend from accidentally wreaking havoc on Tokyo once more. As Charles Paulk notes, "*Akira* became the de facto face of anime outside Japan, spawning a niche market for 'Japanimation' … as Western distributors scrambled to fill a demand for more films like *Akira*, however, the medium did acquire a reputation as something like cartoon cyberpunk. (494)." Akira's fixation with technologically created super-humans, and mankind's futile attempts to understand and control natural forces, helped to ground anime internationally as a medium for exploring cyberpunk; many anime that came after *Akira*, such as *Battle Angel Alita* (1993)

and *Armitage III* (1995), are lucid examples of the film's influence (Paulk).

Perhaps spurred on by the success of *Akira* and similar works, Bandai Entertainment eventually asked Oshii to direct a film adaptation of *The Ghost in the Shell* (1989), a cyberpunk manga created by Shirow Masamune. Shirow had established his own unique style through three manga series previous (*Black Magic* (1983); *Appleseed 1 – 4*, (1986 – 89); *Dominion*, (1986)), and even had an OVA under his belt (*Black Magic M-66*, (1987)). His penchant for creating rich and complex police stories with moments of slapstick comedy was an appropriate fit for Oshii following his run on *Patlabor*. This exceptionally good fit, however, had the potential to run into problems when considering Masamune's fixation with bluntly sexualized female characters and dense conception of the universe in Buddhist terms in *Ghost in the Shell*.

Despite any stylistic differences that Oshii and Masamune may have run into, the two got along well and Oshii was granted free reign of the film project. Oshii veered from Shirow's complex weaving of karmic processes as dictating the universe, and dissolved the manga's sexual explicitness (which included a graphic lesbian orgy) and buddy-cop humor. Oshii's final product would turn out to be a distilled examination of rampant computerization and its potential effects on the human existential crisis. When protagonist Motoko Kusanagi is unable to shake the angst surrounding the government's ownership of her prosthetic body, she questions if she is human at all, or merely sophisticated software made to think it is human. During a police investigation, she encounters a computer program claiming to be a sentient being manifested within the net; Motoko hopes to find the answers to her identity crisis through this mysterious entity. The film *Ghost in the Shell* (1995) would go on to be the first anime to open to international release, solidifying its place among the most influential examples of Japanese animation of all time.

Ghost in the Shell (1995): Synopsis

Directed by Mamoru Oshii and with a screenplay by Kazunori Ito, *Ghost in the Shell* takes place in Hong Kong during the year 2029 (the manga takes place in the fictional Newport City, Shinhama Prefecture, Japan). At this point in time humans have successfully joined flesh and consciousness to machinery en masse, so much so that even the least cyberized people have e-brains connecting them to external information networks. The story revolves around Public Security Section 9, an anti-terrorism police unit whose chief operative is Major Motoko Kusanagi, a near fully prosthetic cyborg who excels at computer hacking and solo combat missions. The film opens with her atop a high rise building, spying on a conversation between a foreign diplomat who has lost control of a digital program called Project 2501, and a classified computer programmer the diplomat is offering political asylum in exchange for help. As chief Nakamura of Section 6 (a police unit operating under the Ministry of Foreign Affairs) storms the room with a group of officers and makes ready to arrest the diplomat for his illegal dealings, Motoko simultaneously leaps from the rooftop and shoots the diplomat from the window. Before she can be identified by the police, she activates her thermal-optical camouflage and vanishes from view.

The opening credits reveal the creation and maintenance of Motoko Kusanagi's body, an intricate mass of synthetic muscles, skeletal system, skin and hair (and despite the depiction of an electronic brain scan, even the presence of an organic mind, which is never exposed but entirely encased in metal, is suspect). When the plot resumes, we learn Section 9 as of late has been tracking the movements of the Puppet Master, a prolific hacker whose latest crime involves "ghost hacking" (controlling another's body via illicit e-brain access) the interpreter for the Foreign Affairs minister;

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Section 9 chief Aramaki assumes the interpreter would have been used to kill multiple delegates at a secret meeting. Following the trail of computer terminals the Puppet Master is hacking from leads Section 9 to a garbage disposal truck, whose operator has unknowingly had his memories and actions manipulated by the Puppet Master as he hacked from terminals along the pick-up route. When a random gunman attacks Section 9 during the hunt, Kusanagi and squad mate Batou take him down, only to discover that he too was hacked and robbed of his original memories.

After the investigation slows down, Motoko and Batou take a boat out to sea, where Motoko engages in recreational diving despite Batou's insistence that her cyborg body would drown if her flotation device fails. Batou doesn't know what to make of Motoko's behavior and assumes she's distressed and wishes to quit Section 9. Her concerns are much larger, however, as she questions whether leaving Section 9 is even possible considering the government owns her cyber-brain and body. Motoko's existential inquiry roams into what individual identity and consciousness are composed of, and how she feels "confined, only free to expand myself within boundaries." The conversation is interrupted by an ominous voice resonating within Batou and Motoko's cyber-brains, promising that their concerns shall be clarified soon enough.

The next scene begins a montage interlude (now a trademark of Oshii's films) that follows Motoko as she rides a public boat transport through the city. Consumer detridus such as bikes and clothing pollute the water. Myriad commercial signs are suspended over the water and throughout the streets. Buildings everywhere are covered in scaffolding and wires. Storefronts are occupied by mannequins sporting clothing. We catch a glimpse of a basset hound looking over a bridge and into the water (the dog is another Oshii motif and is based on his own hound, Daniel). And in several of the store and restaurant windows, we see women who look like Motoko Kusanagi; Motoko's appearance is purposely designed like a mass produced prosthetic body as to avoid attention.

The second half of the film begins with a female prosthetic body wandering onto the streets and getting hit by a truck. Construction of the body took place at Megatech, a government manufacturer, but wasn't authorized. A human consciousness should not be within it, but its machine brain exhibits activity similar to a copied ghost* (explained in the original manga and Ghost in the Shell 2: Innocence, "ghost dubbing" is a process by which a "soul" or consciousness can be duplicated into information degraded copies, but this eventually kills the original host) (Masamune, 138). As Section 9 looks into the matter, chief Nakamura of Section 6 visits Aramaki, claiming that within the female cyborg is the hacking program the Puppet Master has been employing throughout the film, and that the original criminal has been killed. The body begins to speak, revealing that it is Project 2501; the Puppet Master never existed as a human body, but was spawned within the net and that now wishes to claim political asylum as a sentient being. Before the matter can be investigated, the research laboratory housing 2501 explodes and two men drive off with the body. Motoko Kusanagi, moved by the 2501's affirmations, vows to find it the body and unveil what is within its e-brain.

In the film's endgame, Major Motoko Kusanagi pursues the kidnappers to an abandoned building at the edge of the city. Lying in wait atop the escape car is a quadrupedal tank, invisible due to its thermal-optical camouflage. Kusanagi and the tank square off, but Motoko's submachine gun is no match for the tank's high caliber ammunition and armor. It seizes her by the head with extended limbs and attempts crushing her skull. Batou arrives in the nick of time with anti-tank weaponry and stops the machine. Still curious about 2501 despite the damage her body has incurred, Batou connects Motoko's mind to 2501's body via cable link: 2501 divulges its origins as a program meant to infiltrate systems and people in order to gather data and manipulate circumstances towards favorable outcomes. At some point, 2501 became self-aware and wished to be recognized as a sentient life form, but realized that the most detrimental difference between itself and other life forms is

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the ability to sexually reproduce and engender genetic variation. 2501 seeks to fuse its being with the consciousness of Motoko Kusanagi, who it deems psychically similar to itself, and the two will spread their offspring throughout the net. As this conversation goes on, a group of unidentified helicopters with orders to kill both Kusanagi and Project 2501 take aim at the two, but are held off by the Puppet Master's hacking prowess just long enough for the fusion takes place. The helicopters fire and Batou raises an arm to protect Motoko, but her head is severed from her body due to the sniper fire.

The last scene reveals that Motoko is alive and has been in Batou's care, inside one of his safe houses. She occupies a child prosthetic body since Batou couldn't find anything else on the black market. The Foreign Affairs minister resigned, Section 6 chief Nakamura is being questioned, and Section 9 is to officially treat the Puppet Master incident as a case of terrorism, nothing more. When Batou asks if Project 2501 is still inside of Motoko, she tells him that she is neither Motoko nor Project 2501. As she leaves the house, Batou offers her a car to use from his vast collection, and they promise to use the number 2501 as a code whenever they need to contact each other. Motoko stands outside, gazing at the city below, and comments, "The net is vast and infinite."

Representing Inorganic Intelligences

Ghost in the Shell primarily concerns itself with one particular mode of consciousness that invades the humanist subject: the inorganic sentient being; the term "artificial intelligence" implies falseness or replica, which is not what the film posits Project 2501 to be. "Inorganic sentient being" is, in fact, an appropriate term precisely because its uncanny connotations can be construed as greater than organic intelligence, which fits the god-like persona granted to Project 2501, and conforms to the early

cyberpunk tradition of disposing with organic embodiment altogether. As 2501 divulges his (it uses a masculine voice) reasons for calling himself a "living, thinking entity," Donna Haraway's description of bodies as "information-processing devices" is the implied rhetoric: DNA is analogous to a program designed for self-preservation – or an autopoetic system struggling to maintain homeostasis as it receives external data. If genes are essentially a memory bank system – or accumulated data resisting degradation – then computers, with their access to incalculable amounts of data, should be able to create forms of inorganic sentience. Mentioned earlier in this essay was the advent of third wave cybernetics and its implications for artificial intelligence. If information is in fact the "springboard of emergence" for autopoetic life, then an accumulation of information, as Project 2501 attempts to explain, could result in an emergence of new modes of consciousness.

Despite the threat third wave cybernetics seems to pose to the human subject, the issues it addresses resonate strongly with enlightenment humanism of the seventeenth and eighteenth centuries. The early writings of Rene Descartes (who is later invoked in Innocence) theoretically leaves room for intelligences to occupy almost any shell, namely through his introduction of cognition as evidence of a "thinking thing." Proponents of artificial intelligence research revel in the idea that consciousness and rationality are not specific to organic life; the impact of the first *Ghost in the Shell* film hinges entirely upon it. In the film, Major Motoko Kusanagi refers to her "ghost" on a number of occasions, an allusion to her soul or self-conscious. The choice of the word "ghost" is a powerful symbol for the dilemma Motoko faces: "ghost" refers to organic beings that are deceased, dead and long gone. She doesn't know if she is alive or dead, if her thoughts are really hers or the remnants of who she was before cyberization. She may even be an autonomous program made to believe she is human (Shirow Masamune's manga states that she possesses her original brain and part of her spinal chord, but that the name "Motoko Kusanagi" is an alias). She can be reasonably called a *ghost within a shell*.

Nevertheless, Motoko is human enough so that Project 2501, a completely inorganic being, sees fusion with her as a means of attaining the next stage of intelligent evolution. Motoko Kusanagi goes through the radical experience of "outgrowing" her cyborg form, and by extension relinquishing any traditional understanding she had of human consciousness. While on the boat with Batou in Ghost in the Shell, she groans about feeling confined within her body; in light of her comments about how individuals store information to use in unique ways, and when considering Oshii's emphasis on the mind being the locus of humanity in this film, one conclusion to be drawn is that for Motoko to become enlightened she must acquire infinitely more information than is available to humans. This figures Project 2501 as a messianic god-consciousness, reinforced in several moments throughout the film.

After Motoko's confession to Batou on the boat, the Puppet Master speaks to Batou and Motoko in Motoko's voice, as a ventriloquist would do with his marionette. Puppet Master quotes from 1 Corinthians, verse 12 of the New Testament: "What we see now is but a dim image in a mirror. Soon we shall see face to face," which is itself a concealed promise to clarify Motoko's concerns. Towards the end of the film, the tank protecting 2501 from Motoko shoots up the walls of the abandoned building they occupy: at the top of a staircase Motoko retreats to sits a relief of an evolutionary tree of life, beginning with Latin names of aquatic life forms and terminating with hominis (man). After Motoko finally connects to Project 2501 with Batou's aid, feathers from a descending angel come into view, as 2501 declares he has access to a network too overwhelming for humans to comprehend; fusing with Motoko will elevate their consciousness to a higher plane of existence. This plane of existence is presumably one where Motoko's incomplete understanding of her own ontology are addressed. Once Motoko is safely back in Batou's home and occupying a child chassis, she, as both Motoko Kusanagi and Project 2501, invokes Corinthians again: "When I was a child, I talked like a child, I thought like a child, I reasoned like a child. When I became a man, I put

the ways of childhood behind me" (1 Cor 13:11, NIV). The entirety of 1 Corinthians 13, in fact, is a passage about love's ultimate significance to the Christian faith, and recalls a separate statement that "God is love" in 1 John 4:8. Project 2501 offered Motoko something only God could fulfill: a love that makes her whole.

This incident between Major Motoko Kusanagi and Project 2501 seems to offer a positive (if not downright religious) attitude towards computerization and its ability to enhance lives. Indeed, stemming from the very first mechanical dolls of the Edo period up to the introduction of Sony's AIBO toy dog in 1999, this relatively simple acceptance of technological progress in Japan is what allowed cyberpunk techno-orientalist fantasies` to flourish in the West. Japanese incorporations of non-human entities into the cultural sphere invoke what anthropologists Casper Jensen and Anders Blok call "techno-animism," which takes as its subject "a vivid sense of the pragmatic interplay of human and non-human agencies" (Jensen 102).

Japanese Culture and Animated Environments

Casper Jensen and Anders Blok take up the curious task of associating Bruno Latour's actor-network theory with techno-animism as expressed in Shinto cosmograms, which cite various examples of non-modern Shinto practices in contemporary Japan; "non-modern" refers to cultural practice that "does not conform to the ontological separations of society, nature and religion" (Jensen 87). Some examples of this Japanese hybridity include the annual monkey memorial services at Kyoto University where primate research is conducted (Jensen 100); a robot priest in Yokohama cemetery performing consecrations in Shinto robes (85); and the success of Hayao Miyazaki's *Princess Mononoke* (1996) and *Spirited Away* (2001) (Jensen 101). Japanese techno-animism, for Jensen and Blok, hold the ability

to expand upon actor-network theory, which they feel is limited by Bruno Latour's concern with Western cultures. The mechanical, animal and digital presence find dynamic interplay in Japan that complicates assumptions that the Japanese simply worship nature: this reverence is particular to "specific place-based ecologies of humans and non-humans, including their pragmatic and vital interdependencies, in life *and* death" (106).

Both the *Ghost in the Shell* franchise and much of cyborg literature thrive in the uncanny haze between the environment and culture, between human souls and what new materialist theories would refer to as *thingness*, or the uncanny character of objects. While the idea of thingness deviates slightly from the inorganic computer sentience issues facing Project 2501, both the concept of soul and thingness implies animation, imbuing beings otherwise benign and innocuous with a spark of life. As of the last few decades (since the 1980s, really, which coincides with the emergence of cyberpunk) systems theorists have been rethinking the relationship between men and machines, taking into account the key role technology plays as fulcrum in our modern social interactions. While new materialists such as Bill Brown and Bruno Latour are careful not to state objects are outright sentient beings or artificially intelligent, one can imagine the sentiment, "Objects and things are alive!" sitting on the tips of their tongues; the connections to techno-animism seems especially apparent here.

Japanese philosophy has curious connections to systems theory in that Martin Heidegger, who is invoked as the critical influence upon various systems thinkers and new materialists, had numerous interactions with Japanese philosophers in the early twentieth century during the inter-wars period. Heidegger may well be called the most influential Western philosopher in Japanese modern history (Parkes 155), and one must also wonder what effect Japanese philosophers had upon Heidegger and those implications for his later writings, particularly "The Question Concerning Technology" (1949). Yasuo Yuasa argues that Heidegger's early writings on identity mirrors the

traditional Christian logic of Western philosophy that marks Being as an ego-centric temporal act, while many Asian philosophies view the self as receding when considering their relation to the spaces they occupy. These thoughts are also reflected, according to the writings of Miho Nakagawa, in the 2D animations of Mamoru Oshii, which use simplied renderings of humans to enact drama framed by their much more detailed environments.

Bill Brown's seminal essay, "Thing Theory" (2001), opens by recalling A.S. Byatt's *A Biographer's Tale* (2000) and its account of a doctoral student overwhelmed by theory, longing for concrete "things." He chooses a dirty window as his fixation, significant in that clean windows are portals into the world, helping us see through and beyond the window itself. Whereas a transparent window is a benign object, the dirty window is a thing; its "thingness" is apparent because it obscures our normally undisturbed conception of what windows functionally do, and reveals its use-value in society. We cannot look past it, but must now meet it face to face as an aberration, as a "thing" no longer ignored. If Brown's quotation of Merleau-Ponty has any merit and the human body is reducible to "a thing among things," then the opaque window as a thing occupies the same space as we do, no longer a subordinate but an equal. This parallelization of things and people threatens John Locke and Descartes' humanist conception of selfhood, of man as literally a "thinking thing." Bill Brown echoes the uncanny fear that seemingly inanimate objects can possess living characteristics and vice versa, which is not within the intellectual grasp of many people (Jentsch). By extension, parallelization of people and things also threatens the longstanding humanist tradition of "manifest destiny" Locke and Descartes inadvertently began. Things men conquer are not desolate and untamed, left out by God in order to be reclaimed; rather, our non-human environments are occupied by voiceless participants in our daily struggles.

In the essay "Mamoru Oshii's Production of Multi-layered Space in 2D Anime," Miho Nakagawa argues that Oshii in fact recognizes the influence of objects within our environments on human interactions, using this as an animated spark capable of and underscoring narrative points within film. Nakagawa outlines a uniquely Japanese trajectory that contributed to Oshii's philosophies in 2D animation (before the advent of 3D CGI). Layered perspective, Nakagawa claims, may have been inspired by both the design of Japanese buildings (which separated rooms by sliding screens) and the layered nature of their calligraphic writing system; this idea of space finds its most obvious manifestations in ukiyo-e and uki-e woodcut through use of a three part dimensional structure: a contextualizing landscape; the main figure and the immediate space he occupies; and the artist's signature. "In Japan, where visual images are dominant in culture, the overlapping or layering technique has been used for 2D representations of 3D space" (Nakagawa 79), with contemporary examples resonating in the art of Takashi Murakami's SuperFlat. If we consider that "in both woodblock prints and anime, each layer indicates or implies a different meaning rather than representing the real world in the unified principle of perspective" (Nakagawa 79), and if we recall Oshii's philisophy that "animating can transform anything into a character," what are the tripartite environments of *Ghost in the Shell* trying to convey? What role does the environment play in shaping the lives of our protagonists in *Ghost in the Shell*, and how does this address both Jensen and Blok's techno-animism and Heidegger's philosophy?

We can gain a greater understanding of Oshii's artistic processes based on Nakagawa's summation of the art of the *Patlabor* series:

The foreground contains anything dramatic (he [Oshii] also speaks of anything manga-tic) since it is a kind of stage; the midground is the world of reality, symbolised for instance by painted dilapidated tenements, in which the realistic presence is projected and the expression of air is presented as seen in photographs; and the painted background is merely an ideal or fantastic world, i.e. a future world symbolised by high-rise buildings in Patlabor 1 (Oshii, 2003: 162). In the foreground, the drama

is actually enacted by simply drawn characters with dialogues, gestures and actions in front of spectators as if it were on a theatrical stage. The midground shows the subsequent shots of demolished fragile wooden buildings in the 'bubble economy' period (1986–1991), while the background presents an image of a future world with robust-looking high-rise buildings by means of relatively simple paintings. (69)

Curiously, Oshii designated the middle-ground, occupied by "dilapidated temements," as the purveyor of non-diegetic reality in *Patlabor* and not the more impressive urban background; the franchise is set during the turn of the 20th century, and Oshii viewed luxurious urban skyscrapers as far-future, idealistic, and too removed from the turmoil of Japan's real-life stock market crash. *Ghost in the Shell* hyperbolizes this distinction between reality and technological future through its setting in the year 2029. Mentioned earlier in the film's synopsis was the lengthy montage sequence as Motoko Kusanagi floated by boat throughout the city; the background skyscrapers, undergoing perpetual construction, are juxtaposed against a middle-ground environment that resembles parts of Hong Kong today, rampant electronic signage and storefronts and capitalist excess assaulting the eyes. These associations with Asian (particularly Japanese) capitalist power, technological futurism and an often ignored low quality of life are invoked at the very inception of cyberpunk through *Neuromancer*'s Ninsei district in Japan, which featured tech as being accessible through shady black market deals, and *Blade Runner*'s shocking disparity between the Los Angeles skyline and its gritty underbelly. These shot of urban excess and decay in *Ghost in the Shell* belie the opening shots of the film, which evidences a relatively advanced civilization – tall skyscrapers and office buildings, and highway systems that seem to extend infinitely through the maze of architectures. These lie in the far background, painted in gouache, without contours, and immobile save for the myriad lights of passing cars (69).

People, it should be noted, aren't visible in the opening shots of the city in *Ghost in the Shell*, obscured within a landscape engulfed by artifice and metal. It isn't unreasonable for Western eyes to

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mistake the buildings, highways and roads as being masters over the imperceivable humans. Motoko Kusanagi and her cyborg counterparts have been subsumed by this environment, products of this technological boom and capitalist enterprise. If capitalism finds its roots in the liberal humanist desire to own property as an assertion of power, as an ultimate expression of the superiority of entitled rational beings, then Motoko posits the concept of people as commodities as well through their continuous flirtation with invasive technologies. The idea of people being comparable to objects, each bought and sold, is nothing new (slavery has done it for centuries). But in the context of a world that increasingly compares the human body with the rest of the universe's matter, organized through atomic order and protein sequencing, the ontological status of humans is increasingly confounded – if such a thing is still relevant at all.

Yasuo Yuasa, in his essay "Modern Japanese Philosophy and Heidegger," speaks of the engagements with Martin Heidegger Japanese philosophers had during the early to middle 20th century; Tetsuro Watsuji and Kiyoshi Miki are strongly invoked by Yuasa for their uniquely Eastern stance that recognizes man finds much of his self-identity through his surroundings. Watsuji particularly found Heidegger's assertions in Being and Time problematic, and saw that subjective human existence as it relates to death is meaningless since social networks and environmental factors remain after death. Ethics begins with the relationship between man and women, the fundamental unit for human existence to occur. Communities arise as a result, eventually forming economic policies, culture and the state. "The personality is not a mere spirit but a spirit that is concretized in the body. This is because the possibility of human life exists only in space, and for this the body is the indispensable condition... Life always displays an inseparable union between nature and mores, just as climate and history, nature and culture, and body and mind are not separate in the everyday life-world" (171).

Watsuji and Miki were criticizing Heidegger's *Being and Time* in particular, which was published in 1927. By the time "The Question Concerning Technology" is presented in 1949, however, Heidegger's inquiry into human ontological understanding expanded to include the role technological advances held in transforming the world into a state of "standing-reserve," as a resource to be mined for use-value indefinitely (Welch). Everything has become commodity, and the particular existential situation of man as dasein, as beings who uniquely assert themselves and posit questions to the world, is closed off from us once we fall into the realm of becoming standing-reserves ourselves (Godzinski).

It would seem that Motoko Kusanagi, then, who lives in a cyberpunk realm of hyper-consumption with no end to capitalism in sight, appropriately doubts her ontological status as an assertive human being. Her body is not even hers to wield, but is on loan from Section 9 who properly owns it. Technology in *Ghost in the Shell*, as an intrinsic aspect of the human environment, has framed our perceptions of human existence by making us commodities, manipulable in myriad ways for use-value. Motoko's intrinsic value, her "dignity," lies in the networks she is a part of. She has been, arguably, changed from a human being to an object in standing-reserve, used to seek knowledge as not a means to an end, but simply an infinitely useful means. The challenge, of course, lies in what stance one takes towards the idea of the standing-reserve. Does inserting humans into the role of standing-reserve in fact remove Motoko's human dignity, or is it an affirmation of Jensen and Blok's techno-animist project, which does not assign values to its observations of human and non-human interactions?

The Displacement of Human Souls in
Ghost in the Shell 2: Innocence

Mamoru Oshii's vision for *Ghost in the Shell* solidified him career as a cinematic auteur. Although he had directed both live action and anime films previous, *Ghost in the Shell* received simultaneous international release, and enjoyed critical success. Roger Ebert rated the film "3 stars out of 4" and praises it despite his fear that it is too inaccessible for mainstream audiences (rogerebert.com). Director James Cameron (*Titanic* (1997); *Avatar* (2009)) called it "a stunning work of speculative fiction . . . the first to reach a level of literary excellence" (theguardian.com). In light of Oshii's newfound international appeal, it seems odd to note he did not direct another film until *Avalon* (2000), instead serving as scriptwriter for *Jin-Roh* (2000), an animated installment of his Kerberos multimedia saga; and was creative consultant for *Blood: The Last Vampire* (2000), which eventually became a successful television and film franchise.

Avalon marks a return to the cyberpunk themes Oshii left off with in *Ghost in the Shell*. Protagonist Ash is a top ranking solo player in the virtual reality multiplayer game Avalon, a feat she achieved after her former team disbanded. Like Motoko Kusanagi in *Ghost in the Shell* and Neo in *The Matrix* (1999), Ash was searching for something (or someone) during her online experiences, seeking to satisfy an ill-defined angst with a higher truth. Ash learns that her former teammate Murphy has been lost to Avalon; his body vegetates in a local hospital while his mind wanders Avalon. She makes it her mission to find Murphy's mind, which is captive within a surreal level of Avalon only the greatest players can reach.

Oshii follows *Avalon* with a long awaited sequel to *Ghost in the Shell*, titled *Innocence*.

Innocence is a personal, noir meditation on the displacement of the human soul in a not-so-far future, and several of *Avalon*'s themes carry over into Innocence. Protagonist Batou is the loner central character, who monotonously goes about his day in quiet mourning for former partner Major Kusanagi (she merged with Project 2501 in the first film and vanished into the net). Batou, as Ash did in *Avalon*, owns a basset hound, a seemingly trivial fact that is magnified in both films through extensive shots of the dogs. Oshii has claimed that *Innocence* is truly about him and his own basset hound, who helps to ground his sense of identity in a world where the human body is subsumed by non-human forms.

The first *Ghost in the Shell*'s grandiose idea of computer intelligences claiming sentient human rights is traded in for a much more somber tale that seeks what is left of the human soul in our technological present, and whether any substantial understanding of humanity's place in the world is marred by the shortcomings of our subjective consciousness. Oshii does not offer an explicit answer to our post-human dilemma, except to say that while being threatened by alternative forms of consciousness is a natural reaction for some people to have in today's world, it is certainly not the only way to view a post-human age. Again recalling Japan's affinity for hybrid forms of consciousness, and remembering some of Oshii's own words on technology, maybe we "should not fear change or evolution, but rather accept it and learn to live with it" (Eye).

Innocence (2004): Synopsis

Innocence opens with a a helicopter soaring above, and relaying information to Batou as he drives to a crime scene below. A suspect has killed several people and is hiding within a building recess. Batou walks into the dark alley alone, a shotgun in tow. Batou finds several decapitated police corpses before encountering a gynoid (female humanoid robot) holding the head of another officer. It

attacks Batou, who punches it into a wall. The gynoid whispers, "Help me... please help me," before tearing off its artificial flesh and ejecting its chest and face plates, exposing its internal pseudo-organs and muscles. Batou fires a shotgun shell into its body, and the screen fades to black.

The film's title sequence begins, mirroring *Ghost in the Shell*'s introductory construction of Motoko Kusanagi in its construction of a gynoid. One doll, composed of a stomach and two legs on either side, splits into two complete dolls and the two float to each other, reflections of the same doll within an underwater environment. A doll floats to the surface as Motoko does in the first film's title sequence, and slowly opens its eyes to reveal microscopic text circling its iris, which partially reads, "Hadaly Logic System type 2052."

The narrative begins with Section 9 chief Aramaki assigning Batou and his partner Togusa to investigate the recent occurrence of high-profile officials being killed by their gynoids; the gynoids usually commit suicide after the killings. All families involved have settled lawsuit cases outside of court with the gynoid manufacturer, Locus Solus, who has failed to identify any design flaws that would cause the malfunctions. As Batou and Togusa drive to the forensic lab analyzing the doll Batou shot eariler, Togusa brings up Major Motoko Kusanagi in conversation, wondering where she might be. Batou assures him Kusanagi is still missing, and that the only people interested in finding her are the "government brass" that want the data stored in her electronic brain (referred to as *e-brain* from now on).

Batou and Togusa arrive at the crime lab and are greeted by Dr. Haraway, a visual fascimilie of the real-life feminist critic. She metions that the renegade gynoids are "sexoids" (androids equipped for sexual functions), which explains why the families of victims settled secretly out of court. The e-brains of the gynoids reset after ceasing to function to protect Locus Solus software, but a single audiofile is

left in the e-brains. It says, "Help me." Batou and Togusa leave; we learn Dr. Haraway is in fact a cyborg as she removes her eyes in order to continue her work.

Batou and Togusa immediately head towards a new murder scene, where fellow Section 9 cop Ishikawa awaits. The victim is named Volkerson, a cosignment inspector for Locus Solus killed by local yakuza mob Kojinkai. Batou lifts a conspicuous book off the victim's shelf titled, "The Doll," with an image of a Hans Bellmer doll on the cover. Inside the book is a hologram with a girl on it. Batou decides to pocket this. Batou and Ishikawa drive home together, and Batou buys dog food along the way. Ishikawa insists Batou change his dog's diet, but Batou pays him no heed. Section 9 later discovers that the yakuza was avenging the death of their boss, who was killed by a Hadaly gynoid. Togusa and Batou raid the Kojinkai hideout for answers, but none are found. Batou and Togusa are chewed out for their antics by Aramaki, and the two part ways for the night.

Before going home, Batou stops for dog food again. A person in the store brushes by and warns Batou, "You've entered the killzone," before exiting. Heeding the warning, Batou turns around quickly to check his surroundings, but is mysteriously shot before he can react. His visual field grows scrambled and he runs towards the store owner who is wielding a shotgun in self-defense. Batou draws his gun on him, and is ready to shoot until Ishikawa appears and stops him. Within the confines of Secton 9 headquarters later on, Ishikawa reveals Batou was hacked into and made to assault the grocery store and himself so that the investigation Section 9 was conducting would be halted; Ishikawa's hint about changing Gabriel's diet was meant to break Batou out of routine and make hacking intrusion harder to pull off. Ishikawa informs Batou and Togusa that they're being sent away far north to where Locus Solus is, but will no longer recieve official support from Section 9.

Once Batou and Togusa arrive north, we witness a montage interlude involving heavily

ornamented parade floats riding down the streets, colossal mechanical animals and humans waving to massive crowds below. Every one of the citizens wears a mask in celebration. The precession's splendor is juxtaposed against the obelisk-like towers that rise above the urban smog, industrial neo-Gothic structures marking a city consumed by corporations and capitalist neon and LCD excess. While traveling along an empty canal in the city, Batou and Togusa run into a masked man who is alarmed at the sight of Batou and tries to flee. Batou catches the man, whom he seems to know, and reminds him of the favors he is owed; the man refuses to help Batou find a former intelligence officer turned hacker named Kim.

Batou and Togusa eventually find Kim, a man who has transferred his e-brain into a rudimentary marionette body. Upon interrogation, Kim divulges that Locus Solus has been producing gynoids on a factory ship in international waters to avoid local regulations. Kim doesn't acknowledge the rumors of gynoid murders, but argues that he can't understand why anyone would build dolls who can kill, because perfection for Kim involves dolls that are soulless and without human desires – it is for these reasons Kim turned himself into a doll. The conversation begins to loop several times until we discover Batou and Togusa have been trapped within an e-brain maze designed by Kim. With the aid of an unidentified "guardian angel" in the guise of a little girl, Batou manages to snap out of the maze, free himself and Togusa, and learns that Locus Solus has been orchestrating the events throughout the film to muddy the gynoid investigation, including having Kim hack into Batou at the grocery store. Unfortunately, Batou and Togusa need physical evidence to nail Locus Solus for their crimes, so they head for the factory ship for hard proof.

Batou dives into the ocean and sneaks onboard the Locus Solus ship while Togusa uses Kim's e-brain information to guide Batou. Locus Solus soon overcomes Togusa's efforts and nearly fries his brain; Kim isn't as fortunate and is instantly killed. Meanwhile, the ship's abundance of Hadaly dolls is

mysteriously activated, and begins attacking Locus Solus' armed security forces. Batou runs into the dolls and has to fend them off as well, until a single doll takes his sidearm and assists him. The single doll turns out to be Batou's "guardian angel," Major Kusanagi/Project 2501. Motoko and Batou access a ship terminal that allows them to gain control of the entire ship's network and shut down Locus Solus' defenses.

With no enemies remaining, they proceed to a room where dozens of little girls are being housed. Locus Solus has been ghost-dubbing (reproducing consciousness from living beings, at the expense of the original host's life) the girls and infusing souls into the gynoids; the local mob responcible for killing the cosignment inspector was providing Locus Solus with the girls. Batou hears a girl cry, "Help me," from one of the dubbing vats, and it is the same girl from the hologram in the Bellmer doll book; Volkerson had rewritten the ethics code of the gynoids to allow them to harm humans, which would bring attention to the plight of the girls. Batou openly laments not only the girls caught up in Locus Solus' dealings, but the myriad gynoids now imbued with human souls and suffering because of it. With the Locus Solus ship in tow, Batou and Togusa have enough evidence to incriminate the manufacturer. Batou and Motoko exchange a few words, and she promises to watch over him before vanishing into the net once again.

In the last scene, Batou picks up his dog Gabriel from Togusa's home, where it has lived while the two were away up north. Togusa brings his daughter a doll as a gift, and Batou and Gabriel look on until the screen fades to black.

Homo ex Machina

Although not intended as a direct sequel to 1995's *Ghost in the Shell*, *Innocence* continues to

question both the possibility of inorganic intelligence within a computerized world, and the Heidegerrian fear that humans will someday serve as standing-reserves, exploited in a way that removes any respect for human dignity. These issues of the first film ultimately manifest in *Innocence* through the creation of ghost-dubbed souls: the inherent value of a human being has been replaced through the use-value of people within a larger commodity system. The idea that souls can be reproduced at all equates man with machine and matter, for they are commonly united on the basis that all things rely on information patterns to exist.

Innocence also introduces a unique challenge to the perfect rationality of the liberal humanist subject through both the writings of Rene Descartes, and the imagery of Hans Bellmer's dolls. The dolls as narrative devices are effective in part thanks to their long-standing engagement with the psychological uncanny, marking the human body and mind as hysterical subjects and bringing awareness to its fragility, ephemerality, and its "thingness." Comparisons between dolls and people are certainly not new to Japanese culture either.

In the first *Ghost in the Shell* film (1995), upon learning of the Megatech prosthetic body that walked out of the factory of its own volition, Togusa scoffs when hearing that there may be a ghost inside of its e-brain, at the notion a lifeless machine can exhibit mental activity. Batou is not as quick to shrug off the idea. He remarks, "Even a doll can seem to have a soul. Consider all the neural med devices the machining cell crammed into that body. I wouldn't be surprised if there was some sort of ghost in there too." Togusa's disbelief and Batou's curiosity into whether or not this prosthetic body, this "doll" has a soul is mirrored in *Innocence* nine years later (2004) when the two visit Haraway's lab.

In a discussion with Togusa, Haraway parallels raising children to creating artificial life. Her

comments recall psychiatrist Ernst Jentsch's understanding that the uncanny feeling can be aroused in the presence of people with alternative mental states (Jentsch 1906); Dr. Haraway extends this notion to include children, who, for example, spend time playing with dolls and treating them as babies when they are clearly not. In the same way a child treats a doll as alive, parents treat children, whose behavior is far from what mature adults consider normative or sensible, as people. Scholar Elaine Gerbert validates this mode of thought when claiming part of the 'magic' of raising dolls is "due to the sudden omnipotence that such miniaturization bestows upon the viewer and handler. Dolls are manipulable and offer, even to those normally deprived of authority and circumscribed in the exercise of free will, an opportunity to exercise both over the form of a surrogate human being" (Gerber 61). Togusa is upset by Haraway's musings because he happens to have a child and does not agree with Haraway. Batou interjects:

"You see, Descartes didn't differentiate man from machine, animate from inanimate. He lost his beloved five year old daughter, then named a look-alike doll after her, and doted on the doll. The doll became a surrogate."

Comparisons between men as machines have, as discussed in "Oshii's Lead into the World of Cyborgs," been part of Western culture for centuries. Regarding Hans Bellmer and the tradition of dolls, the direct artistic precedents for himself and the greater Surrealist circle would have lied roughly with the Dada movement following World War One. Influenced by psychoanalytic studies developing out of the late 1800s, and the proliferation of semiotics and the breakdown of language, signs and their referents, Dadaists experimented with the absurdity of human behaviors, aiming to deconstruct traditional epistemological methods. These nihilistic tendencies found validation in the aftermath of World War One, when Dadaist Hugo Ball states, "The war is founded on a glaring mistake, men have been confused with machines."

The Dadaists carry this conception of man as machine throughout their work. The most famous artistic influence to emerge from Dada was Marcel Duchamp. Among Duchamp's few paintings is the landmark work, "Nude Descending a Staircase #2," displayed at the New York Armory Show in 1913. The painting observes influences from Cubists and chrono-photographic experiments, which break down the human subject into an assemblage of fractured parts captured through a mechanical lens. This practice would slowly be combined with Duchamp's conception of ready-made sculpture (use of mass-produced industry goods as finished works of art) to create a series of works that identified human subjects with commodified machinery and objects. The Bride (1912), Chocolate Grinder (1914), and The Bride Stripped Bare by her Bachelors, Even, (1915-23) appear to be incoherent, sterile, mechanomorphic assemblages. Their titles, however, have sexual connotations, as if the mechanization of humans has reduced us to "sexoids," acting out violent, carnal desires according to our program parameters. Chocolate Grinder is often interpreted as metaphor for masturbatory practice, for the bachelor 'grinds his own chocolate' and offers it to the bride (Cros 113); the insinuation of rape in The Bride Stripped Bare by her Bachelors is obvious enough. Duchamp would eventually come to create kinetic artworks which operated as ordinary machinery would, and then quit art-making almost entirely to pursue a life of chess playing.

Surrealism came to take up this Dada mantle of human absurdity during the 1930s and 40s. These artists resolved to capturing the elusive visions and thoughts of the subconscious mind using automatic drawing and writing, whereby one would attempt to scrawl uncensored thoughts or visions on a page. Phantasmagoria dominated creative processes in fervent desire to keep an account of the borders between reality and surreality, waking and dreaming. Among the movement's widely recognized patrons were Salvador Dali and Max Ernst, who would depict biomorphic landscapes, characters caught in transfigures states, and often allusions to the artistic female nude. Mankind was

becoming an object of pseudo-scientific inquiry, to be broken down and reassembled in unique fashions according to the contrivances of his fractured mind. Like his contemporaries, the art of Surrealist Hans Bellmer was interrupted by the growing popularity of the Nazi party in Germany, and although many fled the region for the United States, Bellmer would remain in Germany until the death of his wife in 1938.

During the Nazi rise to power Bellmer shut down his advertisement business to avoid supporting the party, and retreated into an art mode that addressed an erotic fixation with the adolescent female form (brought about in part by his love for his adolescent cousin Ursula), a longing for bygone childhood, and opposition to "the cult of the perfect body within fascism, as well as the more general appearance of a mechanized, spectacularized, and 'feminized' mass culture (deFren 427)." Indeed, a great deal of the Nazi party's success is attributable to its efforts to restore a sense of originality, innocence and transcendental virtues that could be found in the classical Greek and European cultures, but transplant them to present day using modern technologies. Hitler used art to evoke the sense of virtuous timelessness he envisioned for German culture, ousting modernist artists and promoting Renaissance style paintings of heroic Greek archetypes and delicate female forms ripe for child-rearing (Lichtenstein 156).

Bellmer's dolls are a strong remove from any Nazi idealized body. Made of papier-mache and wooden mannequin limbs, the dolls are often photographed in a state of fracture and disarray. At times the dolls are splayed out onto sheets in pieces, a torso without limbs beside a collection of glass eyeballs, unused thighs and lace clothing. When the doll is standing, she often leans against the wall coquettishly, clothing in the midst of slipping off and failing to conceal the sparse body parts she has. Among the most common orientations for the doll is a stomach ball joint attached by hips and two sets of legs at both ends; this is evoked briefly in the title sequence for *Innocence*. In addition to these

sculptures Bellmer illustrated extensively: the film's opening sequence, featuring the doll who pleads for Batou to help her before she tears open her chest cavity, directly recalls a Bellmer illustration titled "Rose ouverte la nuit" (1934), where a young girl stands with her skin removed and organs exposed.

The violence of the gynoids in Innocence upon their owners and themselves finds resonance with Therese Lichtenstein's analysis of adolescent female hysteria through Bellmer's dolls. Photographing hysterical adolescent patients found precedent in the work of French psychologist Jean-Martin Charcot, who induced his patients through hypnosis to perform in pantomine, and eventually coupled their erratic behaviors with the fits of epileptics. Sigmund Freud, who studied with Charcot, at first concluded that hysteria was induced by negative sexual experiences with one's father; later, his theory was refined to assume bisexuality in the adolescent female hysteric, and that their fits were rebellion against the gender roles society had for them. Lichtenstein eventually comes to claim that "if the hysteric does not emerge from her rebellion, she is locked within an emotional cul-de-sac, always out of control and unable to retain her passionate energy into a productive and creative force" (Lichtenstein 114). Oshii fittingly centers the film around the kidnapping of female children, with already fragile psychological states due to onset puberty, and places their ghosts within shells emblematic of paradoxical innocence and sexual desire. Other members of the Surrealist circle, particularly Andre Breton and Paul Eulard, took great interest in hysteria and announced its implications for automatic art making as "the greatest poetic discovery of the end of the nineteenth century" (Lichtenstein 119). Bellmer himself acknowledged that perhaps hysterics were tapping into a physical unconscious mode of communication, exposing relations between mental hallucinations and physical states (Lichtenstein 120).

Cartesian Dreams and Thinking Things

Whereas Bellmer's dolls during the rise of Nazism used jarring juxtapositions to reconfigure notions of idealized beauty and human identity, in the context of *Innocence* the uncanny nature of Bellmer's dolls is also abstracted to address the problem of juxtaposing one's perceptions not only onto other people, but onto all living and non-living entities. This problematizes Jensen and Blok's study of techno-animism through Shintoism in contemporary Japan, suggesting that any consideration of the social relations between humans and other beings is little more than a vain contrivance of an inherently flawed human consciousness. The scene where Batou and Togusa ask Kim about Locus Solus' activities is where this comes to light in Innocence; Kim finds it incredulous that Locus Solus would even attempt to imbue dolls with murderous intentions:

"I don't understand those who would want to replicate humans by breathing souls into dolls. The definition of a truly beautiful doll is a living, breathing body devoid of a soul. It's nothing but an unyielding corpse, tiptoeing on the brink of collapse. Humans are no match for a doll, in form or elegance... The inadequacies of human cognitive ability are the cause for the imperfection of reality. Perfection is possible only for those without consciousness or infinite consciousness – in other words, dolls or gods."

Kim's parallel between the failures of human cognition and the perfection of dolls recalls Batou's statement in Haraway's lab, namely that Rene Descartes was rumored to have replaced his dead five year old daughter with a surrogate doll. In the same scene, Haraway challenges Togusa to make a clear distinction between machines and human beings. One can argue that Descartes has proven Kim right in asserting a projection of his daughter onto an inanimate doll - the doll is not human, nor is it Descartes' biological daughter. As it turns out, Descartes's philosophy as outlined in *Meditations on First Philosophy* reveals that he greatly pondered the incongruities in human perceptions, and draws a conclusion that theoretically speaks to Kim's concern with soulless dolls and even Project 2501's

claims.

Among Descartes' early conclusions in *Meditations on First Philosophy* is the fact that perception derived from one's bodily senses can be warped, and even the confidence that one is conscious and acting within embodied reality is fabricated regularly by the mind during dreams. As he writes in his second meditation, "There exist no certain marks by which the state of waking can ever be distinguished from sleep, that I feel greatly astonished; and in amazement I almost persuade myself that I am now dreaming." (*Meditation* 196-197). Underscoring the shortcomings of human cognition, the sequence in the film where Batou and Togusa meet Kim unfolds as if it were a series of dreams within dreams, as Kim decides to trap the investigators within an elaborate e-brain maze, and the same scene of meeting Kim is repeated three times. The first time, Batou and Togusa stand outside the mansion beside a large statue of a lower leg and foot with machine components: its plaque reads Homo Exmachina ("man from machine"). Batou describes Kim's history as a military scout, which ended in his involvement in black market weapons deals and a sullied reputation. The two enter the mansion, and at the entrance sits Motoko/2501 in its *Ghost in the Shell* child's body, spelling out the phrase *aemaeth* ("truth of God") while sitting beside a basset hound; only Baotu sees the sign, but continues forward. After searching through many rooms, Togusa and Baotu find Kim, who gives his speech on dolls and gods quoted above, and as Togusa gets distracted by a miniature model of the mechanical leg statue outside, the scene loops. Batou is once again describing Kim's past to Togusa until he pauses, aware of his déjà vu experience. They enter the mansion a second time, where Batou sees that Motoko/2501 has dropped the first two letters of *aemeath* to spell *maeth* ("death"). He and Togusa run to Kim's room and are greeted by a Kim in the guise of a Togusa doll, who recites from Ernst Jentsch's "On the Psychology of the Uncanny" (1906), and further expounds upon the advent of machine technology challenging human ontology. After the

speech, Batou's faceplate burst off and exposes his metal skull, which frightens Togusa and triggers the final repetition. This time, Motoko/2501 is gone, but left behind on the ground is the number "2501."When Batou and Togusa get upstairs, Kim is now Batou. The Locus Solus factory ship that sits in the ocean opens fire on the mansion and critically injures Togusa. Togusa hits the ground and his until his torso tears open and exposes organs organized like those of the gynoids. Batou manages to snap himself and Togusa out of the virtual maze by reading maeth as a warning from Motoko/2501 that the experience wasn't real. In the spirit of surrealist art, the virtual maze ordeal unveils not only the subconscious apprehension many luddites held towards scientific progress during the 18th century, but also the uncanny fears Togusa (who is entirely human save for his e-brain case) might have held throughout the film.

While there lacks sufficient proof that Descartes indeed created a doll in the image of his daughter, if we consider what Dr. Haraway tells Togusa, someone can indeed raise a doll as if it were a cognizant being in the belief that cognizance is not specific to organic life, though such aberrant behavior would indeed stir uncanny sentiments. Even if all of one's experiences are dreamed and his physical senses deceptive, there is at least a consciousness that does the dreaming and perceives a false reality. In the words of Descartes, "But what is a thinking thing? It is a thing that doubts, understands, (conceives), affirms, denies, wills, refuses; that imagines also, and perceives." (*Meditation* 338-341). Among Descartes' famous contributions to Western philosophy is the phrase "cogito ergo sum," translated commonly as, "I think, therefore I am," or, "I am a thinking being."

Batou's anecdote on Descartes not differentiating man from machine, however, should be taken with caution. While the phrase "cogito ergo sum" doesn't specify what kind of being is doing the thinking, the human mind has yet to be removed from a body with any success and placed within

another vessel.[2] And considering the hysterical actions of the gynoids who had adolescent souls placed within them, *Innocence* doesn't make a compelling argument that such harmonies between man and machine are even possible. Kim's assertions that the only perfect modes of consciousness belong to those "without consciousness or infinite consciousness" – dolls or gods – keeps in mind second wave cybernetic's revelation of reflexive self-organization, and remind one that Jensen and Blok's attempts to bridge techno-animism and actor-network theory cannot escape one particular philosophical dilemma: our view of human and non-human relations is filtered through one's embodied experience of the world, and for humans, comprehending the totality of factors responsible for any particular worldview is all but impossible. In other words, epistemologically speaking, humans are irreconcilably different from other beings, and all humans are also separated from each other through the trappings of our own embodied subjectivity.

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2   Rene Descartes also believed self-awareness was only possible through divine revelation, which presents a problem for any being other than a human to claim sentience. "And., in truth, it is not to be wondered at that God, at my creation, implanted this idea in me, that it might serve, as it were, for the mark of the workman impressed on his work; and it is not also necessary that the mark should be something different from the work itself; but considering only that God is my creator, it is highly probable that he in some way fashioned me after his own image and likeness, and that I perceive this likeness, in which is contained the idea of God, by the same faculty which I apprehend myself..." (*Meditations* 707 – 711, Kindle Edition.) This is likely a conclusion Descartes drew from Genesis 1:26 "Then God said, 'Let us make mankind in our image, in our likeness, so that they may rule over the fish in the sea and the birds in the sky, over the livestock and all the wild animals, and over all the creatures that move along the ground.'" (NIV)

Motoko

Kim's statements on reflexivity incidentally frames the sexually progressive character of Major Motoko Kusanagi in a much different light. Kusanagi is by far the most powerful metaphor for exploring techno-animism in Oshii's *Ghost in the Shell* films, and her status as an Asian woman/cyborg/digital consciousness epitomizes the loss of innocence and embrace of multiplicity Donna Haraway spoke of in her manifesto. But this too cannot be examined without a turn towards reflexivity. The white male, liberal humanist subject might be operating under the recursive nature of his perceptions, but is this incorrect? Not for patriarchal humanists, of course, and in the same manner, neither is Haraway's vision for cyborgs incorrect for her. Cyborg constructions and virtual realms aren't necessarily an escape from the "maze of dualisms" we use to describe our minds and bodies (Haraway 147). As scholar Thomas Foster argues, "Denaturalization just means that social categories have to be actively produced and re-membered and cannot be taken for granted" (Souls 52).

The writings of Carl Silvio in "Reconfiguring the Radical Cyborg" provide a framework for the deconstruction of both traditional patriarchal limitations and feminist critique in Motoko Kusanagi; we will use such a methodology as well. To begin, it can be said that the entire *Ghost in the Shell* franchise holds Motoko Kusanagi as its focal point, even into Kenji Kamiyama's *Ghost in the Shell: Stand Alone Complex* television series from 2002 to 2006. The Major we are presented in 1995's *Ghost in the Shell* is a bastion for the rest of Section 9, especially Togusa, whom she selected for Section 9 because of his unique lack of cyborg augmentations. It is Kusanagi who takes on almost all the combat rigors in the film, from the assassination of the foreign diplomat, to the fight with the gunman who interrupts Section 9 as they chase the garbage truck, and finally the battle with the multipedal tank protecting

Project 2501 in the abandoned building. Kusanagi makes no attempts to preserve her body as Togusa and the other members of Section 9 do; she is claiming the usually white masculine capacity to elevate her mind over her ephemereal materiality, such as the character Case does in *Neuromancer*. Furthermore, "in a fictional world where strength, speed, and a killer instinct count above all else, it matters little whether one "has" a male or female body when either can embody these traits" (Silvio 64).

Motoko Kusanagi's lack of screen time in *Ghost in the Shell 2: Innocence* does not lessen the significance of her role in the film. As much as *Innocence* focused on unveiling the gynoid crimes and searching for identity within a surreal post-human realm, the film was also about the uncanny love between Motoko and Batou, two beings who were perhaps too distracted by their ontological problems to take solace in each other. Section 9 chief Aramaki early on in the film asks Togusa to keep an eye on Batou, whose moody behavior mirrors Major Kusanagi's before she vanished; this is most apparent in the scene where Batou dives underwater to reach Locus Solus, an act he scolded Kusanagi for in the first film because a cyborg is too heavy to resurface if diving equipment malfunctions. Coupled with the persistent references to Kusanagi as his "guardian angel" throughout the film, perhaps Batou thrust himself into danger in the hopes that someday, she would notice him and come down from the higher plane of existence she occupied to rescue him.

Along with these examples of Kusanagi's privileged role within the films comes the problem of being unable to truly break away from Donna Haraway's maze of dualisms, if only because Kusanagi's form of embodiment is deliberately and overtly female. We know nothing of who Kusanagi was before cyberization, or if she was even a male or female; on that point the manga is silent, and personal revelations of her past only manifest within the *Stand Alone Complex* series, released several years after the 1995 film. What Shirow Masamune's *Ghost in the Shell* manga does reveal is that cyborgs can

change from male to female prosthetic bodies at will: the original ending to *Ghost in the Shell* has Motoko/2501 occupying not the body of an adolescent girl but a male chassis, which surprised Batou because of its androgenous appearance.

The *Ghost in the Shell* film has a glaring fixation with Motoko's nudity, highlighted early on with the use of her flesh-colored camouflage suit. The gunman in the alley who also uses thermal-optic camouflage, by contrast, is fully clothed and even wearing an overcoat, making the necessity for Motoko to be nearly nude implausible. Despite Masamune's affinity for female eroticism, no such skintight camo suit exists in the manga. The other incidence of Motoko nudity in the film, namely the extensive title sequence where Motoko is being assembled, can also be construed as an objectification of female sexuality; the connotation, however, that even the female form is a construction cannot go unnoticed, providing one of the few viable examples of an escape from embodied male/female dualisms.

Carl Silvio makes the argument that because Motoko is figured as a woman who finds her most significant role in bearing the offspring of 2501 into the global information network, the radical potential of the cyborg is stripped away (Silvio 67). Author Brian Ruh, to the contrary, suggests that Motoko's female embodiment becomes secondary to what she does with it: at the end of the *Ghost in the Shell* she does not become a doting mother figure, but sets out to explore the world as she always did (Ruh 135). Project 2501, although invoking the rhetoric of sexual reproduction, actually *merged* with Motoko rather than simply mating with her, and the two evolved into a transcendent being (the "offspring" 2501 refers to doesn't come up again in the *Ghost in the Shell* or *Innocence* films, instead finding treatment in Masamune's manga sequel, *Man-Machine Interface)*. Ruh comments that Motoko's transformation is analogous to reaching buddhahood, a feat only possible by men in traditional Japanese Buddhism. Motoko's persistent ownership of a female form, then, is a symbolic move that

transgresses such older gender restrictions (Ruh 136). Ruh's point, eschews the fact that Motoko could only ascended with the aid of the masculine 2501. 2501 has no sex, of course, but the use of a masculine voice, coupled with the projection of his character as the Christian God (who is configured as a male biblically), grants him a male gender.

Never sure of her ontological status to begin with, Motoko ultimately becomes a ghost fused with an artificial intelligence, able to shift into any shell she pleases. In that respect, she indeed fulfills the liberating potential of the cyborg. Her female embodiment does not imply feminine or masculine traits, and does not limit what she can do mentally (or even physically, considering cyborg bodies can be augmented). Her sexuality becomes a moot point after her transformation, due to combination of herself with the masculine 2501; Oshii cleverly reframes Masamune's originally androgynous conclusion for Motoko as it was in the manga. Motoko is an impossible creature, so multifaceted that she is concievable only within the grandest dreams.

Post-humanity

You Are (Not) Special

What is it that keeps our fragile understanding of "humanity" together?

In *Ghost in the Shell*, Project 2501, a renegade computer program claiming sentience, marks humans as materially and essentially the same as other bodies in the world, due to reliance on and interactions with information. As he tells Section 9 Chief Aramaki, "Life has become more complex in the overwhelming sea of information… the advent of computers, and the subsequent accumulation of incalculable data has given rise to a new system of memory and thought parallel to your own." In *Ghost in the Shell 2: Innocence*, Locus Solus hires Kim, an expert computer hacker, to stall a police investigation of their company's malfunctioning dolls. Kim forces protagonist Batou to experience several hallucinations by confusing the signals delivered to his electronic brain. These attacks reveal that human cognition is ultimately unreliable as an objective source of knowledge; dreaming, sleeping and hallucinating are indistinguishable to the mind. Together, the accounts of 2501 and Kim suggest that the relationships we share with the world rely on information flows that humans cannot interpret with any semblance of epistemological certainty. Humanity has been robbed of its longstanding liberal humanist claim: objective rationality separates us from the rest of the world.

Actor-network theory and the new materialism frame objects as *facilitating*, *delegating* and *regulating* the activities of mankind through information exchange (Yaneva). The rhetoric of exchange traditionally belongs to the realm of living beings, but if cybernetic theories view all systems as transference of information flows between all things, life and non-life lose

meaning. As Kim states in *Innocence,* "Humans are nothing but the thread from which the dream of life is woven. Dreams, consciousness, even ghosts are no more than rifts and warps in the uniform weave of the matrix." Bruno Latour, attempting to demonstrate the role of objects in human activities, offers the seminal example of man as actor and gun as *actant* (non-human actor) combining to form a gunman. The gun has the physical capacity and functional purpose of shooting only in response to an external stimulant or agent, or as a result of unforeseen chemical reactions – it is not an automaton. Even so, a gun's design can be considered a form of will power, capable of transmitting information as to how it should interact with the world. In addition to a functional purpose, the gun can also have symbolic purpose (it may serve as a deterrent; it is the focus of social groups like the NRA, etc). Referring to the gun as an actant belies the fact that the gun is inanimate, a necessary abstraction that solidifies Latour's actor-network theory. But if the key to worldly interactions truly lies in information exchange, then are "living" and "non-living" irrelevant terms?

Man's Best Friend

How does Mamoru Oshii react to these modern displacements of the human soul? His statements, when interviewed on his films, suggest that in the face of unrelenting ontological changes for humanity, humans should continue to strive for new relationships between humans and non-humans. Oshii confesses to Gilchrist of IGN that his locus for identity in *Innocence* is "the body as an entire [entity], and more than that, it's really the relationships you have with other people." This is not to suggest that Oshii eschews the topic of embodiment as it relates to humanity; rather, he frames it within the larger need for humans to emotionally connect to other beings in whatever way humans can. This concept is granted depth in a separate interview, when addressing whether or not the human form

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has become anachronistic:

… people are definitely losing their human forms. Animals have always stayed the same, and continue to do so in the years to come, but humans are always changing, and they need to change, with the development of technology. However, they should not fear change or evolution, but rather accept it and learn to live with it. (Midnight Eye)

This is both removed from and compliments the importance of the brain in the first *Ghost in the Shell* film. The human form, as Oshii says, is always changing: Motoko Kusanagi at the end of *Ghost in the Shell* doesn't need an organic body to exist. Her understanding of humanity never resided in fixed organic embodiment. When asked by Batou if existing within a vast information network made her happy, she responds, "A nostalgic value, I suppose, to be happy. At least I am free of dilemma now, and that's nice." If Motoko always felt closer to machines and computers than to man, then merging with Project 2501 is the only move that could have granted her solace.

Oshii, through the use of Batou in *Innocence,* demonstrates how the unchanging presence of animals helps to shape his own identity when technology and humans intertwine. When asked by Rucka of MidnightEye.com what his creative influence was for *Innocence*, he states, "My beloved Gabriel, my pet basset hound. This movie is about me and my dog." Fittingly, in the interview with IGN Oshii claims, "Without the existence of the dog that the protagonist keeps in his apartment, that world really would have been too inhuman." His understanding of humanity lies with the emotional connection he has with his dog, a permanent fixture in his life serving as an ontological compass. And in the same way as Motoko finds 2501 to identify with, Oshii sees himself as closer to dogs than to other people.

Every Ending is a Beginning

Techno-animism, as a methodology and not a solution, provides what might be the closest example of reconciliation between humanism's ontological elevation of man, and materialism's complete parallelization of man and the world. People are certainly different from non-humans in that we cannot communicate with them the way we do with other humans. Non-humans are inevitably factored into how humans maintain social structures; Japanese philosopher Tetsuro Watsuji argued, for example, that the monotheism of Judeo-Christian and Islamic practice was encouraged by a harsh desert environment: "Man in this zone must actively overcome nature so as to possess his life. This calls for a strict morality through which one obeys the will of an absolute god that transcends nature" Yuasa 166). If Watsuji is on the right trail, it would seem that humans have always taken into consideration their non-human environments when establishing what "humanity" is. Motoko Kusanagi and Mamoru Oshii supplement this idea that the emotional association people draw with their environment is how "humanity"situates itself ontologically.

Sometimes natural forces, animals and objects act according to their own devices, and sometimes humans act upon them, and sometimes they act upon us. While viewing society as part of a macrocosmic information network, we should not grow disoriented and lose sight of our own human capacities within the microcosm. We are both flesh-and-blood humans and emotional beings, and we rely on one aspect, or both, to identify ourselves in a post-human future.

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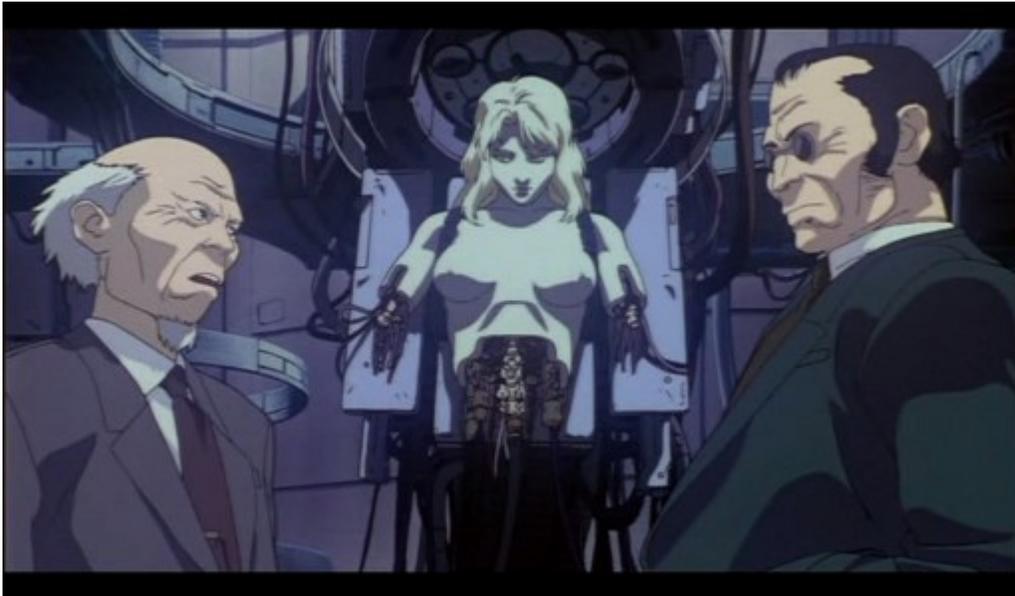
Film Photos: *Ghost in the Shell* (1995)

Motoko Kusanagi listens in on the foreign diplomat's coercion of a programmer. *Ghost in the Shell*. 1995. Dir. Mamoru

Oshii. Bandai Entertainment.

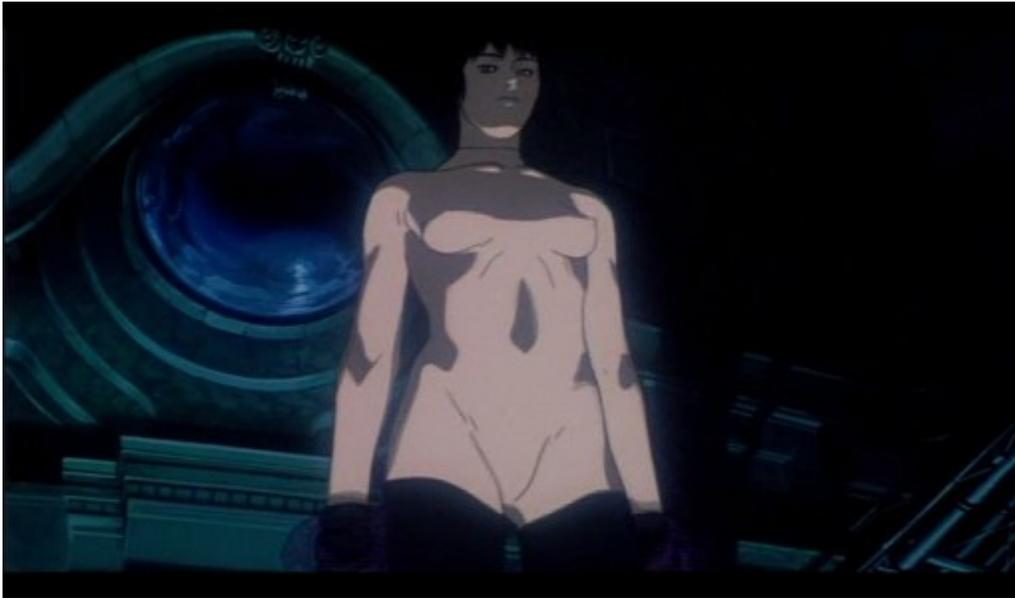Motoko Kusanagi's construction. *Ghost in the Shell*. 1995. Dir. Mamoru Oshii. Bandai Entertainment.

Chief Aramaki (left), Project 2501 (middle), and Chief Nakamura (right). *Ghost in the Shell*. 1995. Dir. Mamoru Oshii. Bandai Entertainment.

Motoko is defeated by the tank defending Project 2501. *Ghost in the Shell*. 1995. Dir. Mamoru Oshii. Bandai Entertainment.

Motoko undresses to use her thermal-optic camouflage. *Ghost in the Shell*. 1995. Dir. Mamoru Oshii. Bandai Entertainment.

Motoko and Project 2501 discuss merging. *Ghost in the Shell*. 1995. Dir. Mamoru Oshii. Bandai Entertainment.

Tree of Life. *Ghost in the Shell*. 1995. Dir. Mamoru Oshii. Bandai Entertainment.

Motoko/2501 in Batou's safehouse. *Ghost in the Shell*. 1995. Dir. Mamoru Oshii. Bandai Entertainment.

Innocence (2004)

A gynoid tears its chest cavity open before Batou shoots it. *Innocence*. 2004. Dir. Mamoru Oshii. Go Fish Pictures.

Batou walks through the surreal rooms of Kim's mansion. *Innocence*. 2004. Dir. Mamoru Oshii. Go Fish Pictures.

Dr. Haraway, the forensic investigator Batou and Togusa visit. *Innocence*. 2004. Dir. Mamoru Oshii. Go Fish Pictures.

Batou and his dog at the end of the film. *Innocence*. 2004. Dir. Mamoru Oshii. Go Fish Pictures.

Togusa is shot as part of Kim's hacking plot. *Innocence*. 2004. Dir. Mamoru Oshii. Go Fish Pictures.

Batou and Motoko/2501 reunite to battle Locus Solus gynoids. *Innocence*. 2004. Dir. Mamoru Oshii. Go Fish Pictures.

Kojinkai battles Batou in their hideout. *Innocence*. 2004. Dir. Mamoru Oshii. Go Fish Pictures.

Motoko/2501 and Batou say goodbye in the ghost-dubbing chamber. Innocence. 2004. Dir. Mamoru Oshii. Go Fish

Pictures.

Afterward

This paper had been in the works for about two years. It began in my junior seminar class, taught by Professor Elizabeth Guffey. She liked the idea of looking into cyborg depictions, and after I told her about the anime blog I had started a few months prior (http://www.anime-guardians.com/), she suggested I start making posts on anime cyborgs. Since then, I've watched *a lot* of anime, and reading various scholarly papers and books on the subject made the posts richer. This senior project is a much more polished evolution of those entries, which can be currently found on my blog.

I'd like to thank, first of all, Professor Guffey for her guidance and eagerness to assist me on this journey. It's been a rough ride, I know, but I appreciated the help and guidance. This is very much her project as it is mine. And Professor Genevieve Hyacinthe, my second reader, is probably the coolest teacher at SUNY Purchase College. Her words of encouragement and beaming smile were always uplifting.

Douglas Schules, through his comments on one of my posts, helped me to understand Descartes' "cogito ergo sum" statement, and properly ruffled my feathers so that I could deconstruct the notion that can roam anywhere it pleases.

Brian Ruh, coincidentally, was one of the people I followed on Twitter as I was writing the paper, and into the latter months of my writing I realized I knew an expert on Oshii the entire time! He posted the articles by Nakagawa and Jensen I used for the paper, and took the time to answer any questions I had. I even bought the book he wrote on Oshii, *Stray Dog of Anime*. Thanks for the support.

Daniel Welch, a fellow student at Purchase College, was someone I met at an awards ceremony for the Humanities department. Since Heidegger was such a key player in my studies of actor-network theory and thing theory, he forwarded me a copy of an essay he wrote on Heidegger, for which he won an award. High-five!

Friends, family, and the rest: thanks for the love.

Rolon, Nelson E. "Establishing a Post-human Identity through Mamoru Oshii's *Ghost in the Shell* and *Innocence* Films." Published at SUNY Purchase College. © Nelson Rolon. May 2013.

Nelson's writings on anime, including this senior thesis, can be found at http://www.anime-guardians.com/ . Reach Nelson at anime.guardians03@gmail.com; or through Twitter @AnimeGuardians.