Mamoru Oshii's Exploration of the Potentialities of Consciousness in a Globalised Capitalist Network

Artur Lozano-Méndez, Postdoctoral Fellow, East Asian Studies, Department of Translation, Interpreting and East Asian Studies, Universitat Autònoma de Barcelona [About | Email]

Abstract

This paper offers a classification of imaginative approaches to the possibilities of transhuman and posthuman forms of life and the potentialities they entail regarding sentient, intelligent consciousness. The analysis focuses on the speculative work and proposals by director Oshii Mamoru in his *anime* film adaptations of the *manga Ghost in the Shell*. Building on a postmodern sensibility regarding politics, economics, social organisation, history and the concept of humanity, Oshii explores all the dimensions that come into play in building a person's subjectivity as he wonders where people would turn to if the modernist markers of selfhood stop being relevant: body, mind, the Subject, national history and culture. With or without transhuman enhancements, regardless of the modality of consciousness, Oshii implies that self-consciousness implies a degree of anxiety (不安, *fuan*) and each individual has to do their own exploring and reach an awareness that enables them to escape an alienated existence.

Keywords: transhumanism, posthumanism, consciousness, anime, science fiction.

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Introduction

The aim of this paper is to consider Oshii Mamoru's[1] production of meaning and knowledge regarding the Subject and the consciousness of the Self. To that end, we will examine various thematic motifs and recursive aesthetic choices that Oshii puts into play in his exploration of various modalities of consciousness. While much has been written about new modes of consciousness in cyberpunk science fiction, both from an epistemological and cognitive approach, and from an ontological and philosophical perspective, this paper will draw attention to the epistemological, ethical and behavioural options enabled by these potentialities of consciousness in Oshii's speculative fiction. Thus, we will also pay attention to character development and dialogue. Furthermore, we will draw attention to the historically situated stance adopted by Oshii when it comes to consider all the factors weighing in the emergence of modalities of transhuman consciousness. Finally, we will foreground how Oshii keeps a modicum of individual agency, however embattled, in these explorations of participant evolution. The arguments presented will draw conceptions from critical theory and a variety of disciplines. The works reviewed here do not constitute the totality of Oshii's *oeuvre*. The main focuses of this study are *Ghost in the Shell* (1995) and

Ghost in the Shell 2: Innocence (2004), while I make reference to other works in order to trace the continuity of motifs.

Oshii is one of the handful of directors whose *anime* output has enjoyed attention from academia. There is already an extensive literature that studies Oshii's body of work, especially GITS.[2] This text revisits various elements of Oshii's work that have been thoroughly studied in the past. However, we will stress the overlaps and dynamics of these different elements that often have been studied separately. These elements are:

- The exploration of new forms of consciousness and subjectivity in a transhuman and posthuman social context.
- Political configurations and political interventions in the context of a globalised capitalist network economy.
- Explorations of psychic and emotional transformations regarding the Subject individually.

In GITS and *Innocence*, Oshii lays down his own rendition of the environments, characters and narrative material of the *Ghost in the Shell* universe. Even if the *manga* creator, Shirō Masamune, granted him freedom to make the work his own (Horn, 1997 in Ruh, 2004: 120), the difference between the rendition by the *mangaka* lies more in the mood and the focus than in a drastic divergence of fictional plots. Funnily enough, those differences in approach may carry more weight in setting Oshii's world apart than plot discrepancies themselves would have. Consider for a moment Hesiod and Homer: more than the differences in the rendition of certain myths (e.g. Aphrodite), what sets each other apart are their own particular approaches to the mentalities, personal quandaries and environments of the figures depicted.

Set in an unspecified year of the near future, the 1995 film *Ghost in the Shell* pivots around the character, Major Kusanagi Motoko, a cyborg with a body fully prosthetic except for her brain. Kusanagi leads Public Security Section 9 under Lt. Col. Aramaki Daisuke's supervision. Other characters of Section 9 are introduced in this film, such as Batou, Togusa and Ishikawa. Section 9 operates within the Ministry of Home Affairs and specialises in cybercrime and terrorism. Since most of the cases that they are involved in have a transnational nature, they have had frictions with Section 6 of the Ministry of Foreign Affairs on occasion. Currently, Section 9 is investigating a case involving an individual under the alias "Puppeteer,"[3] who has hacked brains of high government officials and powerful figures of the economic world to perpetrate crimes. As the investigation progresses, Kusanagi starts to question her circumstances and even her being, which leads to transcendental decisions. To escape her perceived ontological confinement, Kusanagi willingly agrees to meld her consciousness with that of the Puppeteer.

In *Innocence* (2004), the action is set a few months after the disappearance of major Kusanagi. Her comrades at Section 9 carry on with their jobs, and soon Batou and Togusa are involved in a case concerning gynoids involved in the assassination of high officials. The case soon unfolds in an intricate network of connections amongst the yakuza, the political world and a large corporation, Locus Solus. While carrying on their investigation, Batou proves prone to violent outburst, and Togusa and Ishikawa, suspecting a mind-hack, manage to stop their colleague before he causes irreparable damage to others and to himself. The second half of the movie involves a thorough exploration of questions regarding the definition and meaning of different modes of existence.

The Exploration of new forms of consciousness and subjectivity in a transhuman and posthuman context.

Before we delve into different cybered configurations of being that problematise modernist normative biological, psychological and epistemological conceptions, we must draw attention to the fact that Oshii has problematised such conceptions from positions other than those normally enabled by cyberpunk explorations. One can draw parallels between Oshii's sensibility and that of authors such as Aldous Huxley

(consider especially his *Point Counter Point*, 1928) and Arthur Schnitzler (cf. *Traumnovelle*, from 1926); going as far back as the XIXth century, we can also find similarities with Dostoyevsky's (*The Brothers Karamazov*, 1880) and Guy de Maupassant's sensibility. The list could arguably go on with other narrators that share inclinations, concerns and a similar inquisitiveness as Oshii's:

- Joseph Conrad: *An Outpost of Progress* (1896), *The Heart of Darkness* (1889).
- Graham Greene: *The Heart of the Matter* (1948), *The Human Factor* (1978).
- J.M. Coetzee: *Waiting for the Barbarians* (1980).

We are not hinting here that Oshii has been influenced by any or a number of these authors—we are proposing that Oshii reaches the same levels of psychological complexity, restlessness and inquisitiveness that are displayed in the aforementioned works. He also displays a few thematic obsessions that are conspicuous in the aforementioned works too: configurations of spirituality and faith, and their effects on the individual; situations where there is no possible optimal outcome and there is no completely ethical course of action; the flimsy divide between dreams and reality (which resounds in the discussion about the virtual/real divide); what constitutes a subjectivity and a consciousness; the unreliability of perceptions and memory; the concept of Time and its malleability; the limits of communication and the shortcomings of language; the technological progress and the discontentment brought about by Modernity; the use of force or furtiveness (both in the national and international arena) by state actors and the consequences for the population and individuals inserted into the state apparatus, be it politics, bureaucracy, or the military. The recourse to literary works for comparative purposes also feels appropriate since the director (regardless of his talent for farcical and screwball comedy scenes), has devoted much energy to providing his films with a laden mood, crafting a narrative pace that allows for spaces of reflection and, most importantly, introspection.

Before more technologically advanced interventions in the mind/body binomial seemed to be within humanity's grasp, intellectuals, artists and philosophers had wondered about the nature of Reality and Subjectivity. I posit that Oshii's explorations must be considered within that long philosophical tradition—his quotations from the *Zhuangzi*, Urashima Tarō's folktale, the Bible, John Milton and other sources seems to prove this point.

One other venue through which Oshii explores alternative states of consciousness is by his consideration of animal life and especially dogs.[4] In the *Ghost in the Shell* universe, dogs seem to be the only beings capable of embodying the Buddhist adage of living in the now. Free of the overload of information to which humans willingly submit themselves via their cyber-brain enhancements, dogs live fully installed in an unmediated access to the reality surrounding them (more on this at section 3).[5]

Thus, the hard sci-fi context of GITS, *Innocence*, *Avalon* (2000), and *Assault Girls* (2009) is just another means through which to deepen the exploration of his thematic obsessions, as are fantasy (*Angel's Egg*, 1985), noir (*Twilight Q 2: Labyrinth Objects File 538*, 1987), space sci-fi (*Urusei Yatsura*, 1981-84) and alternative history (*The Sky Crawlers*, 2008).

Moving on to the cyberpunk genre of which GITS is considered paradigmatic, even if it was released when the genre was waning (Bould 2005; Player 2011), let us first review the different modalities of being and consciousness entertained by the genre. We will also consider which of these modalities are explored in *Ghost in the Shell* and in Oshii's body of work. Afterwards, we will consider the societal and political dimension of Oshii's work. Then, we will argue that the socio-political dimension is not a mere dystopian backdrop on which to stage an exploration of new forms of subjectivity. What Oshii implies is that, whatever evolutionary shift an individual may experience, it will be framed in a pre-existing socio-political fabric and thus it will demand that the individual takes a stance *vis-à-vis* the rest of the world and all living beings whatever their physical embodiment, if embodied at all.

Speculation regarding future configurations of humanity actually enable their creators to address and subvert current normative discourses and biopower configurations. By placing the critique within the context of a fiction that is regarded as subcultural genre, usually wrapped as a hypothetical exercise displaced to the future or to alternative dimensions, many issues that are only indirectly addressed in other venues are tackled head-on in science fiction. It is now a cliché to say that both historical and science fiction narratives actually speak about the present (by recourse to *ostrannenie* [Shklovsky 1917], "defamiliarisation," they force us to see the familiar in a new light) but what matters is what aspects of the present they bring to the foreground. Cyberpunk narratives are not an exception. They are not just about possible pathways for future human evolution, but about the actual diversity that exists right now. Sharalyn Orbaugh has argued that the exploration of the hybridity of bodies and subjectivities in GITS serves to disjoin both boundaries of singularity and what she calls the "Frankenstein syndrome" (2002: 439), a form of teratological auto-orientalism with dynamics similar to those studied by Iwabuchi Kōichi (1994) and Sakai Naoki (2007). These forms of hybridisation are based on available technologies (Google Glass, Oculus Rift, insulin pumps, cardiac pacemakers); they force the viewer/reader to consider "naturally-occurring anomalous subjectivities" such as those of conjoined twins, and ambisexual or intersexed people (Orbaugh, ib.).

We offer a definition of a few modalities of posthuman subjects for analytical purposes. These are not cut-and-dried categories, as many of them intersect and overlap. Also, it seems that Oshii is more interested in the fluidity of these categories: he entertains the notion that multiple modalities can be adopted by a single entity, either consecutively or simultaneously, and the incorporation of a new modality also affects the "core" entity—there is no such thing as an immortal immutable soul crossing from one receptacle to the next. Even if there is a ghost, it is subject to change, and the change itself becomes a *raison d'être* in the case of Major Kusanagi Motoko, the protagonist of GITS.[6]

Potentialities in Genetic Manipulation.

Genetic manipulation is a technology that artificially shapes or alters organic life, usually by intervening during the reproductive stage on a cellular scale. The resulting being shows the effect of such a manipulation, but there is no technology being incorporated to the form of life, be it fully formed or still in its growing stages.

Right from the outset, these distinctions are arbitrary and problematic: the possibility of reconfiguring DNA in fully formed bodies is also being explored in science fiction and the question of what constitutes technology is also relevant in this context (is a genetic manipulation the result of a technology or does it constitute a technology in itself?). When the Puppeteer asks for political asylum, Nakamura from Section 6 blurts: "Ridiculous! You're merely a self-preserving program!"—to which the Puppeteer retorts: "By that argument, I submit that the DNA you carry is nothing more than a self-preserving program itself" (GITS 48m:30s). This is yet another instance of the existential doubt deeply embedded in Oshii's stance; time and again the refusal to take things at face value arises in his films. There is almost an eagerness for doubting one's own eyes and perceptions. His protagonists do not uphold unshakable and firm convictions. The characters that do hold up fanatical convictions have them questioned or crushed (consider the girl in *Angel's Egg* or the antagonists in the *Patlabor* movies).

Oshii is not so interested in placing bets about which definite transhuman categories will effectively emerge, but rather in highlighting the random factors, the unpredictability that arises in any complex environment (an AI becoming a fully realised self-conscious being is a case in point). "Overspecialisation leads to death" is an idea featured both in Shirō Masamune's *manga* (especially in *Ghost in the Shell 2: Man-Machine Interface*, 2001) and in Oshii's take on the franchise. The meaning of evolution is explored both at the discrete scale of individual achievements and as the potentialities of the whole species.

Human clones: Can prosthetic bodies manufactured in a series be considered clones (especially considering that they do have patented organic components)? Perhaps they are not clones because they host different ghosts? Consider the boat scene of GITS where Motoko sees another body identical to hers (34m:00s; 34m:54s). What about organic clones that do not share inserted memories and who have grown up in different environments (*Orphan Black*, 2013-2014; *The Boys from Brazil*, 1978)? And what about those that do share the same memories and training, such as the imperial stormtroopers in the Star Wars universe? At what point do they stop being copies due to the accruing of different experiences?

While most transhuman configurations imply the destabilising of the body as a marker of one's selfhood, the clones imply the destabilising of one of the main markers of social navigation, since it would be impossible to recognise someone merely on the basis of their physiognomy (other markers would become salient and reinforce the commodification of identity: style, fashion...).

Genetically enhanced humans: Although organ harvesting is explored in Shirō's *manga* universe, and while prosthetic bodies tend to replicate and enhance organic tissues, they are highly mechanised. The exploration of genetically enhanced humans does not concern Oshii particularly. Still, Oshii has explained in different venues that Ridley Scott's *Blade Runner* and the figures of the replicants were a major influence on his vision. This shows in his attention to the inextricable relation of enhancements, labour, and the questioning of one's own nature. For instance, the design of cyborgs destined for public security specifically enhances and supplements certain capabilities. Everything that falls outside the sphere of the purpose of the design is not incorporated. Thus, it is implied that cyborgs do not have reproductive organs or at least no functional reproductive organs. This is reflected in the subjects' personalities and concerns, e.g. when Motoko mentions that she is having her period at the beginning of GITS, or whenever the issue of reproduction is brought up.

In his 2009 film, *The Sky Crawlers*, Oshii explores the theme of genetic manipulation through the "kildren" characters. Other forms of enhancement consist of eugenics (e.g., *Gattaca*, 1997). Again the individual and the collective affect each other in more ways than the most apparent ones, and the depiction of transhumanist interventions highlights this issue. Following the reasoning that overspecialisation leads to death, Motoko requests that Togusa join her unit since he is fundamentally different to the rest of Section 9 in that he has not been as heavily modified as the rest—but also in that his background and his social attachments are also different.

> Togusa: Major, I've been meaning to ask you. Why'd you ask for a guy like me to be transferred in from the police?
> Motoko: Because you're a guy like you.
> Togusa: Huh?
> Motoko: An honest cop with a clean record. And you've got a regular family. With the exception of your cyber-net implants, your brain's real. No matter how powerful we may be fighting-wise—a system where all the parts react the same way is a system with a fatal flaw. Like individual, like organisation. Overspecialisation leads to death. That's all. (GITS 12m:48s)

Oshii seems to imply that trying to come up with the perfect formula for DNA configurations (even taking into account a certain variation obeying the market demands of customised features) might eventually lead the species to a dead-end.

Finally, market forces intervene in the cloning of animals that would be very expensive to breed, such as Batou's basset hound in *Innocence*. Thus, the impact of the human species on other species and on the planet has widened its range.[7]

Genetically transformed humans: these are humans that have genetic material from other species (even alien, extra-terrestrial) grafted into their DNA, thus raising the question of whether or not they are

still human or a new hybrid species. It is present in the most classical configurations of teratology (consider many mythical figures from different traditions: centaurs, Gorgons, angels). Angels are the creatures most alluded to by Oshii, who includes a fossil of a giant angel in *Angel's Egg* and also the vision of an angelic shape when Motoko and the Puppeteer fuse. Besides the allusion to the hybridisation epitomised by the angel's body (which in modern times has also come to be thought of as sexless), the image carries other symbolism as well. The feathers falling from the sky in the merging scene allude to birds as a metaphor for being liberated and soaring above worldly limitations. The apparition of an angel marks momentous episodes in human "history" such as the Annunciation. In the GITS context, it alludes to the emergence of a new life-form (both as a new ontological category and as the birth of a new individual). It also alludes to the revelation experienced by Motoko's consciousness.

In earlier explorations of genetic manipulation, this technology was not represented as removed from other technological configurations (whether hybrid or completely mechanical). Thus, clones were fundamentally presented as organic versions of robots. In Shirō Masamune's *Appleseed* (1985-1989), the concept of "bioroids" is explored. Some of these bioroids are genetically enhanced humans (although they are considered different from humans, which has legislative implications); for instance, the elders that govern the council, or Hitomi, a naive girl whose DNA acts as a master key for accessing and controlling Gaia, the computer that regulates Olympus, the futuristic city that is the setting for most of the story in *Appleseed*. On the other hand, there are also bioroids that incorporate the genetic material of other species and have enhanced physical abilities (thus, we find the trope of the catgirl). Humans, cyborgs, bioroids, and the megacomputer often clash with each other in this work of fiction. Finally, Shirō also posits that the bioroids would require high-end maintenance (probably an influence of *Blade Runner*, which had been released almost three years before *Appleseed* began publication). The iconic metaphor of scales has much pre-eminence in *Appleseed*'s narrative. It points to the difficulty of reaching equilibrium in complex systems, but it also points to the considerations and evaluations implied in a decision-making process. The notion that these advantages and progress also might have a price tag associated with them (often expressed in moral terms) has been at the heart of speculative fiction since H.G. Wells. There is also the notion of taking responsibility for the consequences of one's actions, however unforeseen the consequences might have been. This was already present in the relationship between creator and creature in Mary Shelley's *Frankenstein* (1818).

X-Factor: This is actually a blanket term that designates the development of psychic abilities by individuals via genetic manipulation (e.g., the espers in Ōtomo Katsuhiro's *Akira*, both the *manga*, 1982-1990, and the film, 1988). Sometimes this development is fortuitous (for instance, an effect of radiation in Judge Dredd's universe) or even naturally occurring (as is the case with mutants in the Marvel Comics universe). While transhumanist theorists have strived to uphold rationality and scientific plausibility, the exploration of this potentiality has mostly been the domain of fiction. At first glance, this would seem to be the category that is furthest from Oshii's explorations of new potentialities of consciousness. Nevertheless, there are vicissitudes associated with these psy characters that also emerge in Oshii's fictions. The third Clarke law states: "Any sufficiently advanced technology is indistinguishable from magic" (1962). When Motoko and Batou hear the Puppeteer's voice in their heads while on a boat, the scene is depicted with an eerie sensibility since the characters do not understand by what means the Puppeteer has managed to access their proactively firewalled brains. The inability to grasp what has just happened is actually reinforced by a quote from Corinthians uttered by the Puppeteer: "For now we see through a glass, darkly" (GITS 32m:40s). It feels like magic or like telepathy, only neither of these exist in Oshii's GITS universe (Shirō would explore psychic abilities in *Man-Machine…* through the character of Tamai Tamaki, a psychic investigator from the Channelling Agency). At the same time, both the chant that punctuates the movie and the opening scene remind us that humanity may have already attained godly attributes regarding the creation and manipulation of life.[8] These kinds of attributes have been associated with the most powerful representations of espers, such as *Akira*'s Tetsuo, capable of rebuilding his body and manipulating his surroundings. This has also been explored in Marvel Comics since the first appearance of the cosmic force Phoenix (*X-Men* #101, 1976), with the telekinetic ability to manipulate matter and energy at a molecular level.[9] Oshii poses that it may be feasible to attain these kinds of powers by technological

means. Hacking someone's eyes or memories is not so different from telepathic manipulation. Technology has also enabled the species to manipulate matter and energy at the atomic level.

Potentialities in Technological Developments.

More and more, the emergence of artificial intelligent life seems like a real possibility. Well beyond the Turing test, whereby a computer passes as a human being by virtue of its capacity to interact with humans using their very natural language and, contrary to the Chinese room thesis, *understanding* that language, the speculation is on the emergence of a sentient, self-conscious artificial intelligence, who would claim its right to be acknowledged as a form of life, as is the case with the Puppeteer in GITS. Again, the notion of evolution problematises more contained or simple approaches to the notion of AI, since these new forms of intelligent life may adopt different physical/corporeal iterations and evolve along parallel lines.

Droids: Droids are advanced robots that have been equipped with an advanced artificial intelligence, they may have a humanoid body, although not necessarily. Thus, they are able to engage in multipurpose communication with humans. Nevertheless, they are already "assembled" with a fully realised intelligence, and that intelligence may be more or less capable of change and learning. Also, that intelligence is usually confined to the single droid unit (back-ups may be performed, but these copies are not portrayed as autonomous and "living" outside the model they belong with).

Machine intelligence: This term refers to artificial intelligences that are not contained in a finite body, but are part of an extended mainframe or hardware. The most paradigmatic example would be Hal-9000 from *2001: A Space Odyssey* (1968). Even if Hal is not hosted within any particular terminal, it is contained within the Discovery One structure, within the premises of the ship, and can be physically deactivated. Sufficiently advanced machines might be able to design and manufacture more and better machines. This is what is referred to as "technological singularity" (for a dystopian exploration of this possibility, see *The Matrix* trilogy). It was proposed by the British mathematician I.J. Good (Isadore Jacob Gudak):

"Let an ultraintelligent machine be defined as a machine that can far surpass all the intellectual activities of any man however clever. Since the design of machines is one of these intellectual activities, an ultraintelligent machine could design even better machines; there would then unquestionably be an 'intelligence explosion,' and the intelligence of man would be left far behind. Thus the first ultraintelligent machine is the last invention that man need ever make" (1965)

The question GITS and *The Matrix* trilogy ask is, is that hypothetical situation sustainable or does that eventually lead to a deadly stasis of perfectionism?[10]

Digital intelligence: The image used to describe a digital intelligence is that of a fully disembodied sentient consciousness. That cannot literally be true, since the digital intelligence depends on hardware and means of communication to be actually ubiquitous. It is nonetheless true that the intelligence does not reside in one single, contained location. This makes some of the GITS plot points a bit problematic. Supposedly, Section 6 from the MOFA (外務省, "Gaimushō") tricks the Puppeteer into "entering" a prosthetic body and then locks him inside that body. While it is implied that the Puppeteer entered the body of his own free will in order to make contact with Public Security Section 9, the question remains as to how a consciousness with such expanded capabilities could be wholly contained within a single electronic brain. It becomes even more implausible when the audience is asked to believe that the merging of the Puppeteer and Motoko takes place in a fraction of a second and then the result of the merging is effectively contained within Motoko's brain, which is supposedly organic.

Oshii's GITS endeavours seriously to explore digital intelligence as a fully Cartesian consciousness, a consciousness that enquires. The Puppeteer's methodological skepticism resonates with Motoko's and elevates the questions from mere formulaic tropes (who am I, what is reality) to a genuine destabilising

pursuit that actually tries to come up with answers.[11] The digital intelligence does not question its own existence. It does not need to echo the viewer's awe: "is that possible?" In the fiction, the intelligence knows it exists; no need to wonder about that. Still, it does question its condition and its life cycle as one of the first instances of a new species. Its will to live and to perpetuate life make it all the more believable as a fully realised and independent life-form. The Puppeteer's answer regarding the question of reproduction involves merging and change that allows for a random factor, and it requires of the free will of the merging individuals. Considering that the product of the fusion is a fully realised and autonomous individual, somehow it makes sense that the parents "disappear" since there is no need to look after the offspring.[12]

Hybrid Potentialities

Many imaginations in sci-fi explore a merging of flesh and technology. It is interesting how, in the case of Japanese sci-fi, that this exploration often takes the form of a progressive transformation and is equated to medical and psychic disorders (infections, addictions). This is more noticeable in live-action Japanese cyberpunk films, but it also appears in *Neon Genesis Evangelion* (1995-1996)—consider the scene where Ikari Shinji's maimed giant robot, the Eva 01, grows a "human" arm. The cyborg has been exalted as a deconstructing signifier, one that transcends binary divides of gender (Haraway 1991) as well as the unproblematic correspondence between mind and body, whereby a single mind is encapsulated in a single prescribed body (Orbaugh 2002, 2008). The universe of *Ghost in the Shell* actually covers the whole gamut of cybernetic modifications: from minor modifications and enhancements operated on human bodies (not very dissimilar to pacemakers or insulin pumps today) to scanned minds or ghosts (human in origin) imprinted on fully prosthetic bodies. Who has access to which technology, and what kind of servitude comes in exchange for the technology, is one of the areas where power and class struggle are explored in sci-fi. One has to wonder about the implications that each version of the transhuman and its configurations have on each individual subject, their sense of empowerment, on social issues of equality and access opportunities.

There are other varieties of technologically tampered consciousness where there is neither enhancement nor any benefit for the subjects. Such is the case with "cloned ghosts" where the original ghost is used only as a template and, with each new copy, the original deteriorates more and more until it becomes unrecoverable.[13]

The notion of "hive minds" is also explored in *Man-Machine...* An instance called Stabat Mater is connected via chemical and technological means to a collective of minds. It is not quite clear the extent to which these other minds remain conscious of their individuality or are just a means for the multitasking of Mater. Nevertheless, the very name Stabat Mater suggests the attachment and the tenuous line separating the Mater from the underlings. One cannot help but being reminded of the social, labour and educational processes that have led to the salience of the mother-child relationship in modern Japanese society; but the resemblance seems totally accidental. *Man-Machine...* also explores the notion of "plugged in humans." It depicts an orbital station with a high-end facility where those who can afford it can check in their bodies, and have their avatars transferred to a virtual reality environment where they can live leisurely forever after, provided they keep paying handsomely and timely.

"Decots" is the term used to describe the ability of a digital intelligence (or an scanned mind) to occupy simultaneously different bodies (cyberdroids that can be activated at will by the subject). The body to which the consciousness is transferred is called a "decot." Theoretically, a single digitalised mind could be transferred to more than one body at a time and still remain one single consciousness thanks to real time synchronisation amongst the delocalised minds. This is amply explored in *Man-Machine...*, where Shirō seems particularly invested in showing a whole host of gorgeous bodies at Motoko's disposal.

The question of the adjustment to transhuman abilities/bodies by a human consciousness has been a core theme in fictions involving some sort of genetic manipulation/alteration. This has been explored in many

different fashions—again, salient examples are Tetsuo from *Akira* and Marvel's teenage mutants learning to cope with emerging capabilities, but consider David Cronenberg's 1986 adaptation of *The Fly* as well.[14] The question of adapting to a prosthetic body has been explored in *Ghost in the Shell,* but more from a mechanistic point of view than as a source of deep-seated anxiety. Especially in Shirō Masamune's rendition, any synchrony issues between one's body and one's mind are deemed as a program bug that can be solved with the proper update. In Oshii's GITS universe, the transhuman characters have enhancements but cannot be considered superhuman (not in the context of their own society) and the anxieties derive from not being able to ascertain the individuality and authenticity of one's own identity.[15] The anxiety that Motoko faces in GITS comes not so much from questioning the ontological viability of posthuman lifeforms, but rather from the philosophically problematic notion of veracity when applied to identity. Another layer added to her anxiety derives from the realisation that her growth and evolutionary potential are limited by the physical limitations of her current modality of being. In his characteristic pragmatic, matter-of-fact approach to life, Batou promptly assumes that the new cybernetic arm he is equipped with in *Innocence* will actually become the original as he uses it more and more. His remark actually carries more weight than the casual delivery implies, since it questions the divide between original and copy regarding living tissues (especially considering that his new arm carries Batou's DNA signature and, to begin with, organisms are composed of a succession of cells that experience growth and decay).

The Puppeteer, and also Motoko after fusing with the Puppeteer, can be assumed to have something similar to an expanded consciousness such as that explored in certain spiritual traditions and fictions that revolve around psychic characters. Oshii posits that, even with minor cyber-modifications, the characters' consciousness will experience changes. Even the cyber-net brain implants and the expanded access to information and services at whim lead the characters to have experiences that they are not properly prepared to undergo. This can have both alienating and enlightening effects. Consider Batou and Togusa being brain-hacked in *Innocence*. Consider also what Brian Ruh has aptly called "*satori* moments" (2004: 27). These are moments where the characters gain insight about their own being and their place in the world/society. These are marked by sounds effects (in GITS, bells and sometimes a distancing effect on voices), the framing of the shot and lens effects (a signature slow dolly zoom close up that digitally distorts or bends the backgrounds), the stillness and focus on the facial expression of the character. Examples of this are the final close-up on Batou's face in *Innocence*, and Motoko's gait after the Puppeteer first contacts her and Batou (GITS 32m:50s-33m:10s). Granted, one does not have to be a cyborg to experience both hallucinations and enlightenments (there are "*satori* moments" in other Oshii films), but it is implied that transhuman features will affect and shape such experiences in ways we cannot fully foretell.

We have already mentioned that in the *Ghost in the Shell* fictional universe, the subjects can transit different transhuman iterations in a lifetime (the question of mortality beyond a certain transhuman threshold is also foregrounded but not fully explored). Here, Oshii differs significantly from Shirō Masamune. Both in *Ghost in the Shell 1.5: Human-Error Processor* (2003) and in *Ghost in the Shell 2: Man-Machine Interface* (2001), Shirō portrays Motoko as a digital intelligence that quite unproblematically can "download" herself to different cyberdroids around the world in an instant, all the while remaining active in the information networks. All these simultaneous iterations of Motoko are synced in real time and remain a single unitary consciousness (although it is suggested that a decot can temporarily "detach"). Regardless of the structural change as a life-form that she has experienced, a Motoko that is effectively posthuman continues interacting with the old colleagues of Section 9 and other human characters in the carefree manner characteristic of Motoko in the first *manga* series (1991) before fusing with the Puppeteer.[16] For Oshii, matters are not as simple. Once one experiences such a change, there is no real going back and one cannot pretend that nothing has changed. That is why Motoko in *Innocence* only uses a decot as a last resort, and it is strikingly clear that a decot is a crippled version of what she really is now. That also affects the underlying affection between her and Batou in a very touching way (more on that in section 3).

Finally, the fact that the Puppeteer develops a consciousness also poses transcendental questions. The puppeteer that is ensnared to enter a prosthetic body is not a "recorded" human consciousness that is

somehow installed in a new hardware. Can it claim to be human on the grounds that it is sentient and intelligent? And if so, can it claim human rights? The plan of the Puppeteer was to ask Section 9 for political asylum all along, but as the discussion with Nakamura and Aramaki highlights, it all hinges on whether the Puppeteer is seen as the equal of human beings. The more disturbing, and somehow logical, line of reasoning would lead us to conclude, after pondering on the Puppeteer's abilities and capabilities, that the Puppeteer constitutes a more evolved life-form. If that is so, humans could hardly pass judgement on the Puppeteer, inasmuch as animals cannot pass judgement on humans (granted, animals react to humans but it remains a moot point whether animals have consciousness, self-awareness or a say in human matters without the mediation of a human interpreter and enabler). Oshii once again points toward the more problematic aspects of history and naturalised hierarchical notions of evolution and perfection. As it turns out, though, the Puppeteer is not particularly anthropocentric, it later claims:

> Puppeteer: I called myself a life-form but I am still far from complete. For some reason, my system lacks the basic life processes of either death or the ability to leave behind offspring.
> Motoko: Can't you copy yourself?
> Puppeteer: A copy is merely a copy. There's the possibility a single virus could utterly destroy me. A mere copy doesn't offer variety or individuality. To exist, to reach equilibrium, life seeks to multiply and vary constantly, at times giving up its life. Cells continue the process of death and regeneration. Being constantly reborn as they age. And when it comes time to die, all the data it possesses is lost leaving behind only its genes and its offspring. All defense against catastrophic failure of an inflexible system.
> Motoko: You want the variety needed to guard against extinction. But how will you get it?
> Puppeteer: l wish to merge with you.
> Motoko: Merge?
> Puppeteer: A complete joining. We will both be slightly changed, but neither will lose anything. Afterwards, it should be impossible to distinguish one from the other. (GITS 01h:09m:40s)

Thus, s/he is interested more broadly in the notion of life and in fully replicating the functions of a living organism. What s/he proposes is not for a posthuman life-form to regress to a human state or even a human legal status. The film explores channels for transhuman hybrid beings to beget another hybrid being, which is arguably fully posthuman.

Exploration of social and political evolutions of the globalised capitalist network.

The first *manga* series opens with the following lines:

> It is the near future. The world has become highly information-intensive, with a vast corporate network covering the planet, electrons and light pulsing through it. But the nation-state and ethnic groups still survive.
> And on the edge of Asia, in a strange corporate conglomerate-state called "Japan"... (Shirō 1995)

The film adapts them thus:

> In the near future—corporate networks reach out to the stars, electrons and light flow throughout the universe.
> The advance of computerisation, however, has not yet wiped out nations and ethnic groups.
> (Oshii 1995; screenplay by Itō Kazunori)

While this introduction could be dismissed as a mere setting, the rest of the film and indeed the whole media franchise assert the inextricable connection of any transhumanist development with its social, economic and political milieu. This theme has been present in the cyberpunk genre ever since the publication of W. Gibson's *Neuromancer* (1984), so it is somewhat perplexing that the thinkers grouped in the World Transhumanist Association (now called Humanity+)[17] have not paid closer attention to the corporate and political interests that naturally would come into play when it comes to research and development that require substantial investment. Maybe this is due to the ensuing discussions that are held amongst the members of the WTA. One of the salient discussions revolves around the so-called "perfectionist ethical imperative," under which humans would be ethically compelled to replace random natural evolution with planned and designed change (this stance is sometimes referred to as "participant evolution") (Clynes and Kline 1965).[18] That debate brings to the fore the problem of evolution *vis-à-vis* stasis as posed by the Puppeteer. According to the Puppeteer, even the most complex system is a closed set of rules, and Shirō also plays with the notion that the more a system approaches complexity and perfection the more it risks stagnation. The film plot never actually clarifies how the reproductive operation could become really unpredictable if it applies a limited number of procedures and only contemplates a limited set of options, but we are nevertheless persuaded that it implements a combinatory randomness in the change and reproduction process. From a cultural relativist standpoint, perfection is perceived as being bound to cultural canons and social hegemonic discourses, so the Puppeteer's approach would seem a more rational option than wilfully favouring specific outcomes perceived as more conducive to perfection.

Without veering too much into the debates of the Humanity Plus not-for-profit corporation, a superficial review of the proposals put forward by the supporters of advancing transhumanism (many of which are either reflected in or reflect the potentialities explored in sci-fi) reveals that the actual achievement of such goals contains a host of potential conflicts regarding equal access to transformative cybernetic enhancements, governance, education, labour, gender issues, industry, trade, transnational standards, mobility, health and work insurance…

In a 2005 WTA survey on interests and beliefs, 95% of the respondents (sample: 586 out of 3000 members of the WTA at the time) replied "yes" to the question "Do you believe that people have a right to use technology to extend their mental and physical (including reproductive) capacities and to improve their control over their own lives?" (Hughes 2005: 10). Out of the same population, just 46% replied yes to the question "Do you believe humans and posthumans will be able to coexist in one society and polity?" (ib. 12). Thus, even those more in favour of transhuman developments are not completely persuaded that a stage of posthumanism can be attained without inequalities or tensions.

Oshii's father was a private investigator, and, in works preceding GITS, Oshii had already explored the noir genre, although with a political and philosophical leaning. In the OVA[19] *Twilight Q.: Mystery Article File 538* (1987), the narrator, a detective himself, jokes about the rough patches when jobs are scarce. In contrast, Oshii has explained repeatedly the kind of sprawling workloads and schedules to which he voluntarily submits himself. For instance, much of the ambience in *Urusei Yatsura 2: Beautiful Dreamer* (1984) is owed to the mood within Studio Pierrot during the production, when the staff spent the nights in the studio and started to experience an eerie sensation of "time distortion" themselves (Oshii 1984: Audio commentary).[20] In the GITS universe, Togusa has difficulties reconciling work and his family life, and the rest of his colleagues do not seem to have any private life to speak of (at least in Oshii's rendition, the SAC series offers more insight in the private sphere of the characters). In *Innocence*, Ishikawa even chastises Batou because he keeps a "high-maintenance" basset hound even though he is single and has a dangerous line of work (this, besides providing comic relief, is clearly a self-referential joke by Oshii, who keeps a basset hound, is single, and an *anime* director). Personal history aside, in GITS and *Innocence* Oshii is launching another foray into cyberpunk gender tropes and adapting them to his own sensibility. Gibson's *Neuromancer* not only dealt with the merging of two artificial intelligences, but was also a crime caper (albeit a grittier one than in Oshii's explorations), and finally it presented a host of characters focused on their own private goals and mostly oblivious to other people's lives.

While much of cyberpunk fiction has dabbled in "incomprehension in the face of politics" (Bould 2005: 221), Oshii highlights the opacity of politics by actually focusing on characters privy to black ops and hidden political agendas. This in turn highlights the ongoing postmodern anxiety about whether one can actually know what happens if reliant on media, institutional and social channels. Intellectuals such as Noam Chomsky have reflected on many occasions on the difficulties that citizens have to face just to stay informed and to avoid manipulation (Herman and Chomsky, 1988; McChesney, 2008). What is most notable about Oshii's approach is just how intertwined all the topics are in the narrative. Thus, the mediated knowledge of the world mirrors the mediated nature of even witnessed experiences (optical implants, augmented realities) and of one's own memories and subjectivity.

While much of the work on Oshii has focused on the subjectivity of cybernetic life-forms (GITS) or on the interpretations of international relations and history (*Patlabor II)*, more work needs to be pursued regarding his representation of the political economy, not just through secret conspiratorial meetings but as part of everyday social life. The attention paid to objects, materials and urban environment has been a constant of Oshii's filmography and can be equated to what Mark Bould calls a "new kind of specificity to Sci-Fi" (220) heralded by cyberpunk. This is also very present in Shirō Masamune's work (who is known thoroughly to research the mechanical, biological and scientific elements of his stories). Thus, Togusa doesn't just carry a revolver that sets him apart from his teammates wielding automatics; he carries a Mateba. A virus is not just virus, but a specific version of a specific virus. Everything is mentioned by its specific marketing name. This is not just a device to help flesh out the world and add to its believability—it points to the commodification of all material reality (in turn, the familiarity and believability of such an approach add to the awareness of how far current trends have pursued that commodification already).

The plot device that exemplifies the power attained by corporations is quite smart. Instead of showing the dealings and cover-ups of specific companies, as GITS SAC would do through the confluence of interests of Health Ministry officials and pharmaceutical companies in the "Laughing Man" arc, Oshii shows that democratic elected governments would resort to industrial blackmailing and espionage to reassert their authority before transnational corporations. On the other hand, it is not as if any of these agents, either economic or political, are cast in a positive light or condoned, since they all participate in and perpetuate this patronage system. The continuity of the LDP's power in Japan and the weight on policy making exerted by the iron triangle of high-ranking party politicians, bureaucrats and *keiretsu* managers is projected into the future. Section 9 itself needs to perform black ops whereby, on the record, they are officially acting outside of their ministry's supervision, so that the state cannot be held accountable. Thus, in *Innocence*, they operate on international waters over which they have no jurisdiction. Another aspect of the co-opting of the nation by economic forces is exemplified with the nation-branding. While this is only anecdotic in Oshii's universe, it is explored in more detail in the *manga* franchise and even more in other works by Shirō, such as *Appleseed*. The whole notion of hand-drawn jurisdictional waters is problematised by the use of birds as metaphors, especially when Togusa and Batou discuss the divine and the mundane while on a plane shaped like a bird (*Innocence* 44m:17s).

As we mentioned before, cyberpunk fiction favours specificity, and that is why most depicted enhancements and transhumanist developments have a clear design and purpose. Most private individuals cannot finance these modifications. So, when one agrees to an enhancement, one is usually agreeing to be legally bound to performing a service or some kind of labour compensation for the organisation providing the enhancement. In the setting of GITS, these modifications require high-cost periodic maintenance not widely available. This effectively forces the modified individuals to comply with their end of the bargain. Expanding on the notion of purpose, we find that there are modifications that effectively damage the overall health or quality of those individuals willing to trade personal safety in exchange for a benefit (a higher pay, for instance), those individuals desperate enough to do so, and those unable to refuse. An instance of modifications for criminal purposes is the Kani-yarō, a modified *yakuza* hoodlum that appears in *Innocence* and features a gigantic crab-like arm.

Some transhumanist speculations are performed in an abstract fashion that bypasses other relevant factors when considering these possibilities. At the current stage, cybernetic modifications are being

designed for compensating health issues and disabilities, and for military purposes. It seems unlikely that modifications will be performed in order to attain some overarching goal of self-realisation (a notion that would have to take in subjective preferences and cultural differences). More likely, specific designs will be made available according to demand (regardless of whether the demand is induced): mobile connectivity, GPS, enhanced senses… There are also those that take a realist view of transhumanism and argue that even now we have a gamut of vehicles with different safety standards and provisions. In the tradition of cyberpunk that naturalises capitalism,[21] it could only naturally follow that societies would include both individuals with high-end hardware and other individuals with cheap prosthetic eyes that can be easily hacked (as happens with the shooting in the yakuza premises in *Innocence*).

There is again a continuity between subjectivity, self-perception and these other social, political and economic factors. Throughout GITS up to the denouement, Motoko feels like she is trapped within her prosthetic body, unable to change. Beyond the intimate sphere, she also feels entrapped within the same routine and her obligations towards the organisation she works for. When Batou inquires whether she wants to quit Section 9, a discussion about whether that is an acceptable possibility ensues. Motoko submits that "We do have the right to resign if we choose. Provided we give the government back our cyborg shells and the memories they hold" (GITS 01h31m40s). Then she aptly points out that those are core pieces of the conglomerate that constitutes a single individual (more on this in the next section).

The set for Debordian alienation is completed with the mediated nature of her perceptions and memory. Oshii has (perhaps unknowingly) portrayed the symptoms of the society of the spectacle repeatedly in his works: lethargy and inability to engage or react, a labyrinthine fossilised cycle of labour and rest (consider the end of the opening scene of GITS that shows Motoko slowly getting out of bed), the detachment from any part of the environment that does not constitute a means (of transport, of trade), and the same prescribed entertainment saturation for the masses. These are addressed in some form or other in *Urusei Yatsura 2*, *Angel's Egg*, *Twilight…*, *Avalon*, and *The Sky Crawlers*:

> Las tesis de Debord (1967) sobre la sociedad del espectáculo y la historia detenida, "congelada en un presente íngrimo tan carente de futuro como de pasado" (Pardo 2007: 22), son llevadas al paroxismo en *The Sky Crawlers* (Oshii, 2008)[22] (Lozano 2009).

While there are different lines of dialogue that contribute to this alienation, it is also explored with visual representations. For instance, the first time in the movie that we see Motoko blink is after the merger with the Puppeteer, at Batou's safe house. This highlights that perhaps her previous condition was more "artificial" than the one she has attained as a result of the merging. Indeed, it is the first instance of Motoko actually looking around with curiosity (and not just out of a procedure to survey the surroundings).[23]

Explorations of psychological and emotional transformations regarding the Subject

Another factor that plays a central part in the consciousness and self-awareness of individuals consists of their relationship with other sentient beings. Indeed, the socialised and interpersonal dimension of any kind of consciousness has been largely overlooked in the academic study of transhuman explorations.

The fact that social relations are mediated by convention lends special significance to the dogs that appear in Oshii's films, since the expression of their moods and their interactions are perceived as unmediated (even if dogs are trained to adapt to certain behaviour standards, their mood and their reaction to other beings remains quite apparent). There is a kind of living in the here and now attributed to dogs and reminiscent of Zen Buddhism. There is also the unmediated access to the surroundings that dogs seem to display. Consider how, in *Innocence*, Batou's basset still recognises his owner even after it is implied that

his body is now mostly prosthetic; thermo-optical camouflage doesn't work on them either; even hacking their eyesight would not impair them, since they rely on other senses even more than on vision.[24]

The treatment of character relationships and interactions is one of the issues where more disparity can be appreciated amongst the different media iterations of the franchise. The *manga* is quite straightforward in its resort to archetypes that fulfil a narrative function or dramatic function. This in turn makes it harder to individualise the characters, which sometimes come across as shallow. The SAC TV series has been the venue where all the members of Section 9 have had a share of screen time and some have had leading roles in individual episodes or at least have become the focus of the story.

Oshii's directorial style manages to make his films multi-layered and full of content without making them feel overstuffed with underdeveloped subplots or half-baked ideas; nor do they feel rushed or self-indulgent. The dynamics between characters also feel as if they can convey much with very little. The director does not need to spell out the past relationship between Batou and Motoko to convey the undercurrent of affection and concern, or rather, caring for each other. It becomes apparent when Batou turns his head as Motoko changes clothes or when he lends her his jacket. Motoko's affection towards Batou is more subdued, but still it is expressed in the irony and frankness displayed when she addresses him. On the other hand, that relationship is not as important to her as the other existential issues she is facing. Even so, small gestures, such as a tilt of the head, and the inflections in Tanaka Atsuko's exemplary performance, clearly individualise and give prominence to Batou within her circle of relationships.

While the intersubjectivity in which their existence is enmeshed seems to be a good enough anchor as proof of an individualised subjectivity for most of the people, the conversation between Batou and Motoko in the elevator of Section 9 headquarters hints that Motoko is not just concerned with reconciling herself to her current subjectivity and mode of existence, but she also feels a desire to shift her ontological status. The implication that her condition might be that of a mass produced and cyclically replaced mechanism (a possibility intimated in the opening scene) would naturally foster her existential doubts and fuel her restlessness to achieve transcendence:

> —So, what's your problem?
> —Doesn't that cyborg body look like me?
> —No, it doesn't.
> —Not the face or the figure.
> —What then?
> —Maybe all full-replacement cyborgs like me start wondering this. That perhaps the real me died a long time ago and I'm a replicant made with a cyborg body and computer brain. Or maybe there never was a real "me" to begin with.
> —You've got real brain matter in that titanium skull of yours. And you get treated like a real person, don't you?
> —There's no person who's ever seen their own brain. l believe l exist based only on what my environment tells me.
> —Don't you believe in your own ghost?
> —And what if a computer brain could generate a ghost and harbor a soul? On what basis then do l believe in myself? (GITS 42m:05s)

While the inner conflict is sprung as a doubt regarding her humanity and her bounded identity, it evolves to a drive to overcome her limitations as a living organism (regardless of whether her current life-form is to be deemed human or whether it would populate some other branch in the tree of life). Orbaugh, drawing in part from Oshii's writings about *Innocence*, has argued that affect constitutes one of the only remaining elements that assert the human dimension of selfhood in posthuman life-forms once body and memory have become non-existent or unreliable (Orbaugh 2008: 161). While Orbaugh focuses her account of the treatment of affect in both GITS films on the relationship between Batou and Motoko, I will add a few more considerations to this approach. Before analysing these other elements, though, I will draw

attention to the fact that affect and the communication of affect between individuals are rarely performed by subjects sharing the same standpoint, with the same intensity or even conveying the same kind of emotions.[25]

While it can be argued that Batou's feelings are more conventional, familiar or even human, Motoko's affect in *Innocence* is necessarily more detached, since she no longer lives on the same plane of existence as Batou nor is her consciousness commensurate to Batou's. Going back to GITS, one must consider affect also as the internal self-searching and emotional impulse that motivates us to pursue certain external persons/objects/situations, which then may or may not be internalised. Thus, it does not seem like the Puppeteer "infects" Motoko. Rather, the Puppeteer represents a certain stimulus for Motoko's affect, which is directed to transcending the perceived corporeal limitations and vulnerabilities of her current selfhood. On the other hand, what arouses the affect of the Puppeteer is not infatuation with a single individual, but the conscious decision to pursue change and evolution by imitating the reproductive function of organic forms of life.

Once Motoko has merged with the Puppeteer, she attains a different ontological condition and can change without fear of no longer being herself since her markers of selfhood are altogether different and do not depend on exteriority. She perceives a bright light and a blurry angel in the moment before the merging, because that is the way her cognitive abilities manage to deal with what she is confronting, which she cannot fully recognise in her cyborg and human condition. Speculating about her consciousness and knowledge after the merging seems truly an incommensurable task. Afterwards, in *Innocence*, she adopts an angelic role as a being that can and will intervene in worldly humans matters, subtly guiding the subjects (Batou, in this case).[26] This relates also to the trope of the ghost that whispers (*sasayaku*) to the individual, repeated throughout the franchise, which foregrounds the Lacanian "self's radical ex-centricity to itself" (Lodge 1995: 101). In her dialogues in *Innocence*, Motoko also implies that she is ubiquitous, she is always there even when she chooses not to make her presence physically perceptible.

When s/he explains its plan, the Puppeteer asserts: "We will both be slightly changed, but neither will lose anything. Afterwards, it should be impossible to distinguish one from the other" (GITS 01h:11m:01s).Thus, Motoko's affect should remain—be it the affect that drove her to pursue a posthuman mode of existence, the affect that made Batou someone special, or the affect that connected her to the rest of colleagues in Section 9. The Puppeteer's original long view and covert tactics to intervene in human matters are also part of the picture in *Innocence*.

We have noted before in this paper that individuals in the Ghost in the Shell universe may traverse different transhuman stages. Thus we have a progressive "cyborgisation" of members of public security as their organic bodies suffer irreparable wounds in the line of duty. Equally, those more specialised in data manipulation and research, are regularly equipped with new upgrades. In the case of Motoko, she covers the whole arc from a human body, to a mostly prosthetic shell, and then to a fully posthuman existence. In the *manga*, after Motoko has merged with the Puppeteer and starts life as a data stream, we see her retaining her personality and bodily representation. As already mentioned, she moves unproblematically amongst different decots and hacks different bodies. In one of the stories, she proceeds to resume her interaction with the members of Section 9 almost as if nothing has changed. Oshii, on the other hand, is not so naive regarding this possibility. Motoko expresses this clearly in GITS when she explains the agreement clauses regarding the ownership of their prosthetic bodies under the law (32m:17s). Clearly, even as some things remain and do lend continuity to the sense of self, there is no going back.

> We do have the right to resign if we choose. Provided we give the government back our cyborg shells and the memories they hold. Just as there are many parts needed to make a human a human there's a remarkable number of things needed to make an individual what they are. A face to distinguish yourself from others. A voice you aren't aware of yourself. The hand you see when you awaken. The memories of childhood, the feelings for the future. That's not all. There's the expanse of the data net my cyber-brain can access. All of that goes

into making me what I am. Giving rise to a consciousness that I call "me." And simultaneously confining "me" within set limits (GITS 01h:31m:40s).

Motoko looks forward to a change in her life, something that brings reassurance about the existence of the being that thinks. The Cartesian "cogito, ergo sum" is a phrase that loses all reassurance when we doubt the nature of the subject that thinks and is. Granted, in a tautological logic, whatever/whoever is thinking is also by necessity a consciousness that exists. But this tells us nothing about the modality of this consciousness and how can it be sure of its continuing existence, its historically situated narrative. As the interrogation with the garbage man (which turns more into a maieutic exercise) proceeds, Batou chimes: "All data that exist are both reality and fantasy. Whichever it is, the data a person collects in a lifetime are a tiny bit compared to the whole" (01h:27m:38s). This points to Motoko's underlying desire to transcend her given cognitive and physical barriers (made even more obvious due to their artificial nature), actually to fuse with the sea. As far as Batou is concerned, what he means is that there is no need to obsess about the reliability of memory as long as one remains a sentient being and retains a sense of self.

The component of irrevocability present in transhuman life-altering modifications arises again in *Innocence* when we realise that Motoko has only downloaded a fraction of her consciousness and relevant abilities (combat, hacking) in the Hadaly model that starts assisting Batou at Locus Solus. In her posthuman modality of existence, Motoko retains a sense of self; she retains affects; but she has changed, and both she and Batou realise and acknowledge that. Batou has not changed that much, as she tells him when he lends her a vest echoing a scene from GITS: *kawatte-(i)nai wa ne*, "you haven't changed," she says (Innocence 01h:21m:03s). It may be more accurate to state that Batou has changed on a human scale, but that he still retains the features that attracted Motoko's affection. A big part of these features reside in Batou's personality. And indeed Batou is invested in his own sense of selfhood, however unappealing his life may seem to the spectator. Batou has not such an invested affect in transcending the physical world. He is not so worried about the possibility of having his ghost tampered with that he needs to pursue a fully posthuman stage. He is a pragmatist and does not live endlessly questioning himself. *Utagaidaseba kiri-ga nai...* "Once you doubt, you can't stop" (41m:20s), he said in GITS. Thus, in *Innocence*, he never articulates a desire to join the Motoko-Puppeteer entity. It is still not so common to see cinema characters that display a maturity whereby adult characters reach the same conclusion and understand each other without having to lay it all out, but Oshii accomplishes it in both films. This emotional, affective dimension serves in Oshii's narrative to put any absolute economic and labour determinism, and any genetic/cybernetic mechanistic determinism into perspective.

Conclusions

The previous analysis has demonstrated the multifaceted and overlapping considerations that Oshii covers in his reflections on the potential modalities of consciousness in a transhuman-to-posthuman future. Building on a relativist sensibility regarding politics, economics, social organisation, history and even humanity, Oshii explores all the dimensions that come into play in building a person's subjectivity. The question posed is where would people turn to if the modernist markers of selfhood stop being relevant: body, mind, the Subject, national history and culture (Orbaugh 2008). In the end, with or without transhuman enhancements, Oshii implies that each individual has to do his or her own exploring and reach an awareness that enables him or her either to escape or negotiate an alienated existence thereby reaching an image of Selfhood that suits each individual separately.

The intensity of the anxiety fuelled by the self-awareness of ontological limitations varies between the characters. This anxiety is better illustrated by the Japanese word *fuan* (不安), whose kanji evoke the idea of "lack of quietness." Thus, Motoko's restlessness derives from her conscience and her consciousness that she is not all that she could be. Other characters in the fiction feel such *fuan* as well, most prominently Batou. As we have already seen in previous sections, Batou's way of dealing with such existential condition

is more cynical than Motoko's. He is willing to yield to ontological limitations; he avoids pursuing the lines of reasoning that would feed right back into that anxiety. On top of that, he is willing to accept a certain degree of restlessness as inevitable. Motoko's course of action, her leap into full posthumanism, is much more radical as her *fuan* is more intense and, let us not forget, her attachments with subjects while in her still-transhuman plane of existence are much thinner than Batou's. Her priority is freedom from existential anxiety, and she achieves it: "at the very least, this current me is free from conflicts [葛藤, *kattō*]" (*Innocence* 01h:28m:50s).

Oshii's exploration does not set out to determine what would be the ideal outcome of a participant evolution. It is not a matter of locking onto a single target amongst the myriad potentialities of consciousness. As works such as *Angel's Egg* and the *Patlabor* movies illustrate, he would be too wary of both esoteric, prophetic divination and public bidding and tender processes. Oshii's relativistic approach is made all the more convincing because of his waiving of detached guiding rationales, or the kind of human epistemology that only holds in fictional and hypothetical scenarios, but rarely *vis-à-vis* "the swarming, unpredictable, and problematic mess in which human beings live" (Said 1978: 93). The modalities of life outlined in *Innocence* all stand on equal footing: Motoko, Batou, Togusa, and, yes, the Basset Hound—all the characters have meaningful existences, and that validates their respective consciousnesses. The Basset that lives in the here and now and shares an affective bond with his owner; Togusa, who wants to keep on living and wants to safeguard the continuity of a life shared with his family; Batou, who has come to grips with his cyborg enhancements, and who has decided long ago that he prefers to keep on living attached to a human scale and environment, without uploading his consciousness, even if that means that his connection with Motoko consists of a disembodied, almost mute, co-presence in the net—nothing like the fusion between Motoko and the Puppeteer. Finally, already in GITS we witness Motoko's reasoning and decisions when it comes to shaping her selfhood.

Previous research has latched on to the enlightenment metaphor, the Buddhist *satori* (Japanese) or *bodhi* (Sanskrit), to describe the attainment of posthuman consciousness in the *Ghost in the Shell* universe. While the analogy is perfectly valid and supported by the filmic narrative, it might turn our attention away from the fact that enlightenment is not necessarily *better* than not being enlightened. Rather, enlightenment is giving up such discriminations (better/worse, righteous/wrongful). If desire is the source of human suffering, it would be utterly paradoxical to desire the *bodhi*. One does not become enlightened by chasing after enlightenment. As it turns out, Oshii illustrates the axiom of the Heideggerian take on *empathy* as his directorial gaze honestly regards all lifeforms and modes of living as equally meaningful.[27] Indeed, after careful consideration, one comes to find Oshii's portrait of affect akin to Heidegger's empathy, reaching beyond the bodhisattva's *compassion* and much further than any kind of mere clinging affective attachment.[28]

Acknowledgements

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Notes

[1] The reproduction of Japanese names complies with the default collocation in Japanese language: family name followed by given name.

[2] Hereafter, "GITS" refers to the 1995 film *Ghost in the Shell* (攻殻機動隊, "Kōkaku kidōtai"), "*Innocence*" refers to Oshii's *Ghost in the Shell 2: Innocence* (イノセンス, "Inosensu," 2004). "Ghost in the Shell" refers to the whole fictional universe of which different media licenses participate (*manga*, *anime* films and TV series, novel series). "GITS SAC" refers to the TV animation series *Ghost in the Shell: Stand Alone Complex* (攻殻機動隊 *STAND ALONE COMPLEX*, "Kōkaku Kidōtai Sutando Arōn Konpurekkusu"). The TV series consisted of two seasons with 26 episodes each, broadcasted between 2002 and 2005, directed by Kamiyama Kenji. In this text, "GITS SAC" refers to both seasons. All these animations were produced by Studio I.G. The author responsible for the *Ghost in the Shell manga* series is Shirō Masamune (although he is identified as Masamune Shirow in most translations published in languages other than Japanese). Different works by *mangaka* Shirō have built and expanded this fictional universe during the last decades since the first story began its serialization in 1989.

[3] We will be using the term "Puppeteer" rather than "Puppet Master." The first was used in the *manga* and the second, in the movies. The original Japanese, *ningyō-zukai*, 人形使い, uses the *kanji* of "person," "form," and "use." (The *kanji* of "form" is the same *kanji* that designates the *kata* in martial arts, and it also features prominently in schools of philosophy from East Asia.) We will use "s/he" to refer to the Puppeteer in the third person singular. "Its" will be used as the third person possessive determiner.

[4] His use of fish and birds is more allegoric and not so much connected to considerations of consciousness as to a variety of reflections on spirituality, freedom, and evolution, among others.

[5] Real dogs can have psychological and perceptive disorders, but that's not how they are portrayed in Oshii's fiction when they are confronted with the mediated and saturated experience of the humans. Another purpose in which dogs are used in his filmography is to allude to military discipline and conditioned loyalty (*The Red Spectacles*, 1987; *Stray Dog: Kerberos Panzer Corps*, 1991; *Jin-Roh*, 2000). Since that symbolism implies a training of both dogs and humans, it does not contradict the representation of an unconditioned dog's behaviour and reactions. Also, to the images of pack behaviour and trained dogs, he opposes that of the stray dog (Ruh 2004:189).

[6] The following structure and arrangement are loosely based on Hough 2003, with some modifications. The phrasing and content are ours. A review of literature and resources trying to provide thorough accounts of transhumanist technologies and configurations reveals an almost inexhaustible wealth of explored potentialities, but the ones described here are those present in GITS or alluded to in Oshii's works.

[7] Here, it is the genetically manipulated animal itself that is commodified. It would no longer be a case of a few individuals whose genes have been modified to perform clinical tests in laboratory environments.

[8] Kawai Kenji, composer of the soundtrack, has declared that the theme is a wedding song where a divine figure descends from the skies to wed a dancing maiden.

[9] Consider how both Tetsuo and Jean Grey are unable to restrain the cosmic forces that they have tapped into and both their psyches eventually become undone.

[10] This is also explored in *The Terminator* (1984-) franchise, although in that universe a notion of senseless vengeance and persecution is highlighted ("they can't be reasoned with and they won't stop"). The point of view is focused almost exclusively on the humans. Hardly any consideration is given to the motivation of the machines or the reasoning behind their behaviour.

[11] We already had a taste of that relentless questioning in *Patlabor II* (1993).

[12] Of course, in Nature there are many instances were offspring is laid and left to its own devices, but that tends to occur in species that generate a number high enough of offspring as to ensure that at least a fraction will survive.

[13] This procedure is explored in *Innocence*, the *manga*, and GITS SAC, in plots involving new modalities of "sex-trafficking" (where the abuse is performed on the original ghosts *and* the copies) or storylines where threatened individuals wilfully create copies of themselves to act as perfect look-alikes.

[14] The "New Flesh" exploration that originated with Cronenberg's *Videodrome* in 1983 was a major influence in the visceral and visual assault approach of the more punk infused live action Japanese cyberpunk explorations of technology, body and mind, especially in the works by Izumiya Shigeru (*Death Powder*, 1986), Tsukamoto Shinya (*Tetsuo: the Iron Man*, 1989; *Tetsuo II: the Body Hammer*, 1992), and Fukui Shozin (*Pinocchio v946*, 1991; *Rubber's Lover*, 1996). Cf. Player 2011.

[15] Nevertheless, GITS SAC and *Man-Machine...* explore the implications of having children transition to prosthetic bodies.

[16] The publication years offered in the text are those of the *tankōbon* or series compilation volumes. These compilations contain materials published from 1989 to 1997.

[17] The World Transhumanist Association changed its name to Humanity+ in 2008.

[18] Cf. Agar 2004, Kurzweil 2005.

[19] OVA is the acronym for "original video animation." These were direct-to-video animations released straight into the home video market. *Dallos* is acknowledged as the first series of OVAs, consisting of four releases (1983-84) directed by Oshii Mamoru.

[20] The issue of the working hours, working conditions and pay within the *anime* industry is brought to the fans attention periodically, especially when creators die at a young age. Even when the cause of death is illness, many fans interpret that overwork may have been a factor.

[21] "[Bruce Sterling's] *Schismatrix* [1985] treats capitalist economics as being as immutable as the laws of physics, and the Shaper [supporters of genetic enhancement]/Mechanist [supporters of cybernetic enhancements] conflict resolves into competing neoimperialist expansions concealed behind an apparent politics of life-style choices and the micromanagement of the self" (Bould 2005: 222). *Schismatrix* was published in 1985, consider to what extent that ongoing naturalization has advanced.

[22] "Debord's thesis (1967) about the spectacle society and the stopped history, 'frozen in a deserted present which is deprived both of future and past' (Pardo 2007: 22) are brought to a climax in *The Sky Crawlers* (Oshii 2008)" (Lozano 2009).

[23] Consider also the following scenes...31m:50s The individual confined; 32m:17s Diving scene; 34m:00s Ferry scene; 42m:16s I believe I exist based only on what my environment tells me; 01h:12m:09s

By merging on higher structure Motoko and the Puppeteer retain certain humanity since to be human is to change.

[24] Again, there is no need to blow this out of proportion. Certainly, dogs have a sensory mediated access to their surroundings and rely heavily on their senses, which could be tricked if someone put their mind to it. In Ghost in the Shell, cybernetics has been able to replicate even the original DNA of organic tissues, and so Batou's basset ability to still tell Batou apart has a perfect explanation. Still, it seems reasonable to assume that the director uses the dogs to make a point and not just out of a particular inclination.

[25] "Affect" then, in this conceptualization, refers to the emotions that arise from and are felt within human interiority, and also to how information about those emotions is conveyed at the body's surface, allowing others to "read" them and respond" (Orbaugh 2008: 152). Orbaugh goes on to equate the transmission of affect to a form of infectivity (that can be beneficial) and which is reproduced with flows of information entering systems or bodies, as Motoko does in *Innocence*.

[26] He even refers to her as her "guardian angel" (守護天使; *shugo tenshi* [*Innocence* 01h:07m:16s]).

[27] "Empathy and compassion often are used interchangeably, but empathy should be seen as the wider term and as that which makes compassion possible. Compassion is an emphatic awareness of another's suffering, prompting an interest in alleviating that suffering (or at least dwelling with another's woe). Empathy can include the sharing of positive feelings (e.g., one can share the joy of someone's freedom or success), and so it has a wider application than compassion. But since suffering and injury are clearly prominent in moral concerns, it is no surprise that compassion is highlighted as a crucial form of empathy" (Hatab 2012: 253)

[28] One could make the case that the girl rescued at the end of *Innocence* showcases precisely a lack of such empathy.

About the Author

Artur Lozano-Méndez holds degrees in Translation and Interpreting and East Asian Studies, as well as a PhD in Translation and Intercultural Studies — Research in Contemporary East Asia. He is a teacher of Japanese politics; classic Japanese thought; popular culture; and cultural studies involving Japan at Universitat Autònoma de Barcelona. Member of the InterAsia research group (UAB). His research interests are in comparative study of educational approaches to culture in area studies; international circulation of Japanese cultural products; and social representations of family and youth cultures in media and cultural products. He has presented papers at Asian Studies Conference Japan (Tokyo, 2009), Association of Asian Studies (Philadelphia, EUA, 2010), European Association of Social Anthropologists (Maynooth, Ireland, 2010), Asociación de Estudios Japoneses en España (Valladolid, 2011), European Association of Japanese Studies (Tallinn, Estonia, 2011), World Congress of the IUAES (Manchester, Regne Unit, 2013), New York Conference on Asian Studies (2013), Kinema Club XIII (Harvard, Boston; 2014), Japan Anthropology Workshop (Istambul, 2015). He has publications in English: "Techno-Orientalism in East-Asian Contexts: Reiteration, Diversification, Adaptation" Telmissany, M.; Tara Schwartz, S. (eds): *Counterpoints: Edward Said's Legacy*. Cambridge Scholars Publishing, 2010. Currently, he is working on a publication on Japanese cinema co-edited with Blai Guarné (UAB) and Dolores Martinez (SOAS, University of London).

Email the author