Coping with Disaster through Technology: "Goodbye me!"

—— Itô Keikaku's Future Harmony ——

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Abstract

Post-war Japanese science fiction's fascination with the imagination of disaster relates to historical reality in a complex fashion. Focusing on a work of the acclaimed representative of *zero nendai* (2000's) Japanese science fiction, Itô Keikaku's *Harmony*, this paper explores another possible view on historical reality: a future world where human experience has been made self-evident through (nano-) technological means. *Harmony* offers a bleak vision of a transhumanist future triggered by a nuclear disaster that compelled world leaders to replace governments with medical administrations. These 'admedistrations' monitor and keep humans in perfect health within a frighteningly benevolent society to which they cannot fully adapt. *Harmony* questions the nature and functionality of consciousness itself, which is made superfluous by the advent of a postnanotech society. It provides therefore a valuable insight into the ethical issues raised by nanotechnology as well as a sarcastic critique of a sterilized and commodified global society.

概要

戦後日本 SF は災害のイマジネーションに魅惑されつつ,歴史の実態と複雑な関係を築いてき た。本研究では、ゼロ年代日本 SF の代表作家である伊藤計劃を取り上げ、『虐殺器官』(早川書 房、2007 年)と『ハーモニー』(早川書房、2008 年)を中心に、伊藤計劃が歴史の実態をどの ように捉えているかを考察した。それは、近未来に大災禍に見舞われた世界において人間がナ ノテクノロジーによって徹底的に管理され、最終的に自明な存在になってしまうというヴィジョ ンである。こうした殺風景な未来では、〈生府〉は政府にとって代わり恐ろしいほど博愛の社会 をつくり、人間の健康を完璧に管理している。しかし人間は、絶対的に優しい社会に苦しみ、 それに適応するよう、自己意識を捨てるしかない。伊藤計劃は、科学技術の発展に伴い必要と されなくなった自己意識とは何かを問うことで、人間性を問題としている。また、ナノテクノ ロジーを巡る倫理の問題や社会への影響のみならず、コモディティ化された無味乾燥のグロー バル社会を鋭い眼差しで洞察しているのである。

Keywords : Science fiction, Japan, nanotechnology, cultural studies, Itô Keikaku

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Many people developed cancer from the radiation. At the same time, the radiation caused mutations in China and the depths of Africa, spawning a flood of unknown viruses. With such a clear and present threat to its health, the world transformed overnight from a capitalist society monitored by governmental units to a medical welfare society organized by admedistrative bodies.

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- Itô Keikaku, Harmony (2008)

Japanese science fiction has been focusing on the imagination of disaster long before the tragedy of 3.11. Susan Napier has for example pointed out how it relates to historical reality in a complex way: attempts to "rewrite" it in the 1954 movie *Gojira*, to "enshrine" it in Komatsu Sakyô's 1973 novel *Nippon chinbotsu*, or to "erase" it in the 1988 animated film *Akira*.

Before introducing Itô Keikaku's award-wining novel *Harmonî* (*Harmony*) and how it relates to the imagination of disaster, I would like first to consider Komatsu's comments in his 1995 preface to the paperback edition of *Nippon chinbotsu* (*Japan Sinks*). They actually have a particular significance with regard to the imagination of disaster, since in the aftermath of the great Tohoku earthquake, many commentators made a parallel between the novel and what Japan was actually experiencing.

1. Various Ways of Coping with Disaster

1.1. Rewriting, consigning, contemplating, erasing History

Komatsu explains how the science fictional destruction of the highways linking Tokyo and Osaka, simulating the highly improbable outcome of an earthquake, took the shape of reality when portions of the Hanshin expressway collapsed in the Kobe earthquake of January, 1995¹⁾. It makes him recall the criticism from an expert who, upon reading the novel, asserted that "there was no way such a thing could happen," and that "one should not play at disturbing people's peace of mind" (3). "It's absolutely safe!" (Kubata & Tomokiyo, 53) was also the commonplace slogan to promote nuclear energy at that time; and the second Tokai nuclear power plant started construction the very year *Nippon Chinbotsu* was released ²⁾. However, Komatsu further writes that there is "no change to the fact that Japan is an earthquake archipelago, a situation against which political and social structures are still powerless," so that in his mind the sinking of Japan's narrative is not yet

over (7). It actually reached a climax on March 2011 with the great Tohoku disaster, leading then-80-year-old Komatsu to say: "I want to believe in human wisdom and in the passion of the Japanese people. I feel like living a little bit longer to see how Japan will deal with the situation" (Kasai & Tatsumi, 2). Much as an echo to his 1995 comments on his motivation to write *Nippon Chinbotsu*³⁾, Komatsu's declaration, shortly before his death, is a testament to the science fictional mind and its eagerness to envision possible futures.

The disaster of 3.11, proving reminiscent of Komatsu's sinking-Japan scenario, also calls attention to his 1964 novel *Fukkatsu no hi* in which Komatsu reflects on the possibility of a deadly man-made virus that is set free and wipes out most of the human population. Written during the Cold War era, the novel stresses the issue of nuclear warfare and Mutually Assured Destruction. A nuclear Automated Response System (ARS) between the United States and the Soviet Union is set off by a powerful earthquake and strikes most of the remaining humans. However, neutron bombs launched by the Soviet Union end up eradicating the virus and making the earth hospitable again to the last survivors. Whether intended or not, the Automated Response System acronym is thus a wry pun of the Acute Radiation Syndrome, officially abbreviated as ARS, whose dreadful effects have made a lasting imprint on Japanese collective history and imagination. However, in *Fukkatsu no hi*, mutation brought by nuclear radiation effectively stops the virus that threatens mankind of extinction and ironically contains the seed of future hope.

Turning back to Napier's discussion of the Japanese imagination of disaster, if it is true that Gojira works as a way for the Japanese "to rewrite or at least to reimagine their tragic wartime experiences" (332) and Nippon chinbotsu allows "the melancholy pleasure of mourning the passing of traditional Japanese society" (335), "finally encased in either written or collective memory" (336), Fukkatsu no hi extends beyond both conclusions. Even though it also stages scenes of grief over the loss of countless lives, it is not set in Japan, focusing instead on "mankind as an objective phenomenon" (Yamano, 146), and is thus a critique of civilization as a whole. This is why it could be placed between *Nippon chinbotsu* and *Akira* in the evolution of the Japanese imagination of disaster as discussed by Napier. In Fukkatsu no hi, danger is not coming from outside, it already prefigures the postmodern view that hazard lies within human realizations, within science and technology themselves. If Napier paralleled such a perspective with Tudor's definition of "paranoid horror" (340), it also beautifully fits Shibano Takumi's definition of science fiction as a genre "recognizing that the products of human reason separate themselves from reason and become self-sufficient" (192). Shibano's view actually anticipates the rise of what Ulrich Beck has termed "the risk society," where risks (and potential disasters) do not come from non-human forces anymore, but from within the process of modernization itself, from the products of science and technology.

However, unlike *Akira*, *Fukkatsu no hi* does not attempt at "erasing" history altogether, but rather at "objectifying" it. That is why it is still, as are many works by Komatsu, "firmly within the horizons of progress" (Yamano, 147), bringing some sense of closure in the end: mankind has another chance at reconstructing civilization on earth. By contrast, *Akira* epitomizes the

postmodern fragmentation of the subject, the demise of authority and the collapse of grand narratives. As Napier's analysis shows, there is no closure in Akira: "the movie is a roller coaster ride of panic sites, which can be either exhilarating or disturbing" (350). There are no references to traditional Japanese society or to past history and while the movie ends with a beginning – Tetsuo's mutation into a new entity – his final bold declaration: "I am Tetsuo," may be some what threatening. As Napier explains, Tetsuo can be understood as a fictionalized member of the shinjinrui (the 'new human beings'), a term invented in the mid 1980's to design the young generation of Japanese born in mid 1960's wealthy Japan, who had no experience of the war and the hardships of the older generation. More individualist than their elders, they were "beginning to find their own identity and powers in contrast to the war-scarred generation" (342). However, even though Akira's powers are unstable or uncontrollable and end up destroying Neo Tokyo, I would argue that despite the lack of reassurance, Tetsuo's final statement "I am Tetsuo" could also be interpreted as a statement of self-confidence not entirely threatening. Furthermore, rays of light are piercing through the dark clouds in the end and Kaneda, still alive, is riding his bike along with Kei and another friend. Past history may be erased, but future history is about to unfold, waiting to be written by a multiplicity of individual voices.

1.2. Probing and naturalizing History – the Disaster of Death and Life

But what about more recent works by the zero nendai (2000's) science fiction writers? One of its most acclaimed representatives, late Itô Keikaku (Project Itoh) has left three full-length novels: Gyakusatsu kikan (translated into English as Genocidal Organ in 2012), Metal Gear Solid Guns of the Patriots (translated into English in 2012) and Harmony (translated into English in 2010); two short stories: The Indifference Engine (translated into English in 2012), From the Nothing With Love; as well as an unfinished novel, Shisha no teikoku (The Empire of Corpses) which was completed by Enjô Tô (Toh EnJoe) and published posthumously. The reason why I have listed all his works, save some essays and a couple of manga, is that almost all of them have immediately been translated into English, a rare feat for Japanese prose science fiction⁴). In the afterword to the Japanese paperback edition of Genocidal Organ Ômori Nozomi explains that the novel was about to win the 7th Komatsu Sakyô award – given to new talents – had Komatsu agreed to (407). The Indifference Engine did however win the 2007 Hayakawa SF Magajin Reader's Award and Harmony was awarded both the Grand Prize for Japanese Science Fiction ('Nihon SF Taishô,' equivalent to the Nebula Award) and the Japanese Nebula Award (Seiunshô, equivalent to the Hugo Award) in 2009, as well as a "special citation" for the 2010 Philip K. Dick Award. I will hereafter refer to Harmony with "H" and to Genocidal Organ with "GO" when I use quotes from the English translation of the books.

Genocidal Organ could be interpreted within the same postmodern scope as *Akira* since it stages a post-9/11 world where terrorism has spurred a radical war on terror. This war differs from former conventional 20th-century wars: it is not fought between nation states, not on behalf of a

single ideology – the right to eat Big Macs⁵! Instead, it is a proxy war, outsourced to private military companies, asymmetrical (a government - or factions of people within a government against a group of people), and largely concealed under the veil of secrecy. It has taken the (already prevalent) form of what Kasai Kiyoshi and Okawada Akira have termed the 'world civil war' ('sekai nai sen')⁶⁾. While the U.S. and Europe have turned into almost perfect surveillance states, tightly monitoring the population, the focus is primarily set on military operations in developing countries with vivid description of massacres. The main plot revolves around the existence of a human genocidal organ located in the brain, which, when activated, triggers slaughtering urges among a given population. The man behind the discovery, John Paul, has developed a grammar of genocide that stimulates the genocidal organ through the use of particular language patterns and specific vocabulary. Initially working for the US government, he has gone rogue and uses the genocidal grammar to wreak havoc in several developing countries to prevent the local population from turning against the United States, as they become aware that developed countries are actually thriving on them. He is chased by Clavis Shepherd, a military elite assassin struggling with his own demons – his decision to unplug the life support system sustaining his mother's life gradually becomes akin to an act of assassination and he cannot find a clear line between life and death (Okawada, 241). After catching John Paul, who is finally murdered, Shepherd decides to bring the grammar of genocide to the US. First, as an ironic attempt at stopping terrorism: if the country falls into chaos, it will cease to be the target of foreign attacks; but also as a way to overcome the global world order that was born out of a (US) dominant / dominated (developing countries) relationship. The massacres develop and so does the 'world civil war,' leading to a nuclear maelstrom.

Just like *Akira*, there is no absolute centre of authority in *Genocidal Organ*, no higher moral authority – only ultra-liberal capitalism as an all-pervading system – and danger is coming from within the collective since genocidal tendencies are embedded in human biology itself. The striking difference is that *Genocidal Organ* offers no exhilaration at all and only a "glimmer of hope," as Okawada (256-7) beautifully puts it, in the form of a fictional account about our time, a warning against such a world order that brings about a permanent state of world-scale civil war. It does not so much work at "erasing" history but at "probing" it: a sarcastic take on contemporary global history from a Japanese point of view. Itô himself, referring to William Gibson's remark that Japanese were living in the future, explained his science fictional approach in the 2009 January issue of *SF Magajin*: "If the here and now is probed with the most accurate sensor, any account of the present will inevitably assume the shape of the future" (25) ⁷.

A good illustration of this can be found when contemplating the issue of nuclear warfare. In *Genocidal Organ*, it is the nuclear bombing of Sarajevo that initially motivates John Paul to turn the grammar of genocide against possible enemies of North America (his wife and child died in the strike). However the bombing makes away with the fear of Mutual Assured Destruction that still resonated in Komatsu's *Fukkatsu no hi*:

The world changed the day the bomb exploded in Sarajevo. The era of Hiroshima was brought to a close once and for all. All around the world the military suddenly started waking up to the fact that their theoretical weapons of mutually assured destruction were maybe not so theoretical after all. Nuclear weapons were back on the table as an option. (205)

As Tatsumi explains in his introduction to the 2010 Paradoxa issue on Asian science fiction, the post 9/11 era "ironically ends up privileging the catachresis of 'ground zero' and erasing not only the memory of Hiroshima and Nagasaki as the hypocenters of Atomic Bombs but also the history of Japan as a literally invisible country (...) from the western perspective" (41). However visible Japan has become in the wake of late capitalism – Tatsumi here refers to Cool Japan's newly-found soft power – it is still functioning as a US base in the same dominant / dominated relationship Itô unveils in Genocidal Organ. In the novel, Japan does not appear often, but past memories are not erased: they can be pessimistic as the evocation of the end of Hiroshima's era, or ironic as the comment on the kamikaze pilots' patriotism - "I love therefore I kill" (GO 277-8). And when a contemporary fictional Japanese government is mentioned, it is only as a North American attendant⁸⁾. That is why *Genocidal Organ* stages a space of "absent solidarity" or "solidarity of absence" that reflects postmodern late capitalism's "sick worldview" (Okawada, 238): its refusal to rely on a higher moral power, its implacable disposal of the elements that are not useful to the system, its lack of mutual comprehension between individuals that are imprisoned within their own particular - biological - consciousness and forced to watch massacres as a distant spectacle. In Camus's words:

In a universe suddenly divested of illusions and light, man feels an alien, a stranger. His exile is without remedy since he is deprived of the memory of a lost home or the hope of a promised land. This divorce between man and his life, the actor and his setting, is properly the feeling of absurdity. (6)

That is why, even though he explains that Itô describes self-consciousness while denying a transcending freedom, Okawada finds a glimmer of hope in the novel. He does not refer to Camus, but *Genocidal Organ* could indeed be interpreted through the Absurd. The only way Shepherd can find meaning among massacres and a dehumanizing (nano) technology is by acknowledging the absurdity of it all. But it is "a necessary experience" according to Camus, one that will lead to revolt – the spreading of the grammar of genocide in the United States.

A flickering 'I thus remains in *Genocidal Organ*, but it ushers the catastrophic ending of the novel and the ensuing nuclear Maelstrom that is actually not depicted. It is therefore an exploration of the present conditions, which, processed through the lens of science fiction, will lead to a disaster.

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Itô then went even further with *Harmony*, which is a completely different story that is however set in the same continuum: what happens to humanity after the Maelstrom? And again, no exhilaration! It begins with a digital declaration that is much less reassuring than *Akira*:

I have a story to tell.

<declaration:calculation> <pls: The Story of a Failure> <pls: The Story of a Defector> <eql: In other words, me.> </declaration>(H 9)

The message is written in Emotion-in-Text Markup Language (*etml*), a digital code that appears throughout the narrative, foreshadowing the ultimate extinction of the human 'T in the conclusion. Not so much hope there as well, instead of the affirmative "I am Tetsuo," we have a resigned: "Goodbye, me" followed in the next page by the end of the consciousness programme: "<null> me </null>" (*H* 243-4). So what happened?

As the epigraph indicates, the disintegration of the post-modern subject, epitomized in *Akira* or *Genocidal Organ* by a nuclear disaster, is forcefully reinstated into a socio-technological harmony so suffocating that the only way to cope with it is to adjust the individual to society as a whole – to discard self-consciousness. The story starts with three young girls: Tuan, Miach and Cian who are feeling alienated from a society that holds life to be the most important resource. Adults have a nanobiotechnological health monitoring device – 'WatchMe', implanted in their body. 'WatchMe' is linked to a global network, enabling immediate medical assistance when needed, and to a household medcare unit that can synthesize any required substance through the use of "medicules" (medical particules). But health enforcement is not reduced to physical monitoring alone, it extends to all aspects of everyday life – kindness as the sole dogma:

Vices, things which had gone more or less ignored in the past, had been carved into a list of sins by the all-powerful hand of medicine, and one by one, they had been purged from society. (H 12)

To maintain such a social harmony, individual are tagged with Social Assessment scores appearing as metadata publicly available through augmented reality contacts. In doing so, admedistrations (a portmanteau of 'medical' and 'administration' that translates the Japanese neologism of 'seifu' 生府 composed of the kanjis for 'life' and 'government') do not need to enforce a constraining law. Every citizen is part of the evaluation process, constantly assessing and being assessed. The three girls, free of 'WatchMe' since they are children, decide to commit suicide by

starvation but only Miach succeeds - or so the reader thinks. Tuan, sickened by the lifeist society, becomes a Helix agent and travels to the few remaining battlefields on earth, places with no admedistrations where she can enjoy forbidden pleasures - alcohol, tobacco, etc. She then gets involved in a conspiracy lead by Miach – who had actually been rescued by Nuada, Tuan's father, the inventor of 'WatchMe' and leader of a shadow group that has been looking over humanity since the maelstrom. Miach has created a separate faction and aims at activating "harmony," a secret nano-virus that was designed to annihilate self-consciousness, should humanity go back to its old violent ways. She sees it as the only solution for humans to withstand the asphyxiating environment of a lifeist society. In order to achieve her goal, she forces a few thousand people to commit suicide by tempering with their brain functions through the networked 'WatchMe'. Cian is targeted and takes her life in front of Tuan. Miach then offers a choice to all citizens: kill someone "to prove that other people don't matter" (144) or 'be suicided,' in the hope that a surge of violence would force Nuada's group to activate harmony. Tuan eventually comes at her first and kills her in a sad and poetic scene. She does however not do so to prevent chaos from happening, but to avenge Cian and her father's deaths. Harmony is finally activated and it is her "Goodbye, me" that closes the main narrative.

In the epilogue, a record from an ensuing post-humanity states that:

I am a part of the system, as you are part of the system.

No one felt any pain about that any longer.

There was no "me" to feel pain.

I had been replaced by a single whole, by "society." (H 251)

The experience of reality is thus made self-evident. Nothing is left to investigate in a world where everyone is acting as he or she should: history is "naturalized" in the very Japanese sense of the word nature. '*Shizen*' is composed of two characters: '*onozukara*' (自ずから) and '*shikari*' (然)). '*Shikari*' itself is built from the adverb '*shika*' ('so'; 'in its way') and the verb '*ari*' (to be') and means 'to be so;' while '*onozukara*' is formed by '*ono*' ('itself'), the genitive particle '*tsu*', and '*kara*' ('by birth', 'originating from') and means 'originating from itself,' 'autogenesis'. '*Shizen*' (*onozukara*') is therefore what follows its own genesis, what is 'from/by the way of itself. There is therefore no self-reflective process, no T and no other, everything just is, and is as it should be.

The novel thus presents two disasters. The first one, the maelstrom, is reminiscent of *Akira*'s postmodern fragmentation of grand narratives and stages chaos. The second one is nothing but death as the intolerable waste of society's assets, and it is marked by the reinstatement of a grand narrative: lifeism (life to be protected as the most important resource). It is therefore, in a reverse way, the disaster of life that is implicitly woven in the thread of the narrative: faced with the terrible realization that the human 'T can be self-destructive, it is life itself that needs to be managed.

2. Post-Nanotech World and the Technologization of Myth-the Future Eve

Harmony's conclusion bears therefore striking similarities to Sartre's philosophy in Being and *Nothingness*, especially to the famous description of the waiter who "is playing at being a waiter in a café." (1984, 102). Not that the waiter is an actor – he is actually a waiter; but he is playing a role, trying to fit into what a waiter should be. But Sartre explains that he is not exclusively defined by the fact that he is waiter, he is free to stop doing it if he wishes so. Being a waiter does not offer him ultimate security; he has to make free decisions about what to do with his life. Freedom is therefore scary: it is a cause of anguish because of the responsibility that goes along with it. That is why the waiter is trying to refuse his freedom by overplaying his role. It is interesting to note here that, according to Sartre, the attempt at escaping the freedom of conscience is called 'bad faith' or 'selfdeception' (since it is actually impossible to escape consciousness and freedom). Ironically, in Harmony, the act of self-deception appears through the use of "DummyMe," a software installed within 'WatchMe' that sends phony data about the body, so that its user can hurt himself without the network knowing it (H 57). It becomes an act of revolt against becoming a perfect element of the social system. Becoming a perfect element, or in Sartre's example the perfect waiter, would give man a definitive definition, an essence. In other words, the waiter and the citizens of admedistrations in *Harmony* (who end up being what they have to be) are trying to turn themselves into what Sartre calls a "being-in-itself" (a mode of existence that simply is; that is not conscious, neither active nor passive). But at the same time, it is quite hard - if not impossible - to imagine a society where individuals would have completely lost their will and their consciousness:

People cried as though they were sad and raged as though they were angry. But these actions carried the same value as the mimicked emotional responses a robot would have had in the previous era. All people had lost their inward minds. (H 251)

Therefore, as the waiter in Sartre's discussion, the post-humans of *Harmony* seem to remain at least simulacra of a "being-for-itself" (consciousness; the human reality). Sartre explains that such a combination of "being-in-itself" and "being-for-itself" is nothing but the traditional notion of God – man's attempt at getting the security of a fixed essence while maintaining a free will. To Sartre, it amounts to "an irrational synthesis of spontaneity and passivity" (2000, 84), which humans are however longing for. That is why the epilogue in *Harmony* is directly referring to myth and religion:

At that moment, the angels took up the hymn of Harmony and spread their wings before every person with 'WatchMe' installed, all over the world.

When the angels' wings touched the peoples' heads, their consciousness and wills were gone.

In this new world, everything was self-evident, with nothing left to be chosen.

We are alive.

In a world where everything is as it should be. No wondering, no choices, no decisions. Something very close to heaven. <music:name=Messiah:id=2yr6r58jnjhu7451110e99>

<Hallelujah!> <Hallelujah!> <Hallelujah!> <Hallelujah!> <Hallelujah!> </music> (H 250)

It is not so surprising if *Harmony* really works as a naturalization of history, since naturalization of history, as Barthes has pointed out, is the very principle of myth (194), but how does a science fiction work about a post-nanotech world relate to myth?

As in almost all of Itô's works, the main science fictional novum ⁹⁾ appears in the trait of nanotechnology. This is very interesting and has to be linked with what both Ômori and Okawada (Okawada, 235) acknowledge about Itô's novels: they are governed by sheer reason and logic, excluding any future of mythical resonance, and yet, they finally reach a mythical tone in their conclusion, as we have just seen in *Harmony*. Okawada rightfully explains it through Itô's fight against cancer. He quotes an excerpt of his blog where Itô explains that incurable diseases force humans to face death not only on a biological level but on a mythical level as well. I would argue that it is also the very reason why nanotechnology is so pervading in his works, but not as "a means to accomplish anything within the realm of imagination," as criticized by Graham Collins (90).

Accounts, both scientific and popularized, of nanotechnology are closely intertwined with science fiction. From Feynman's 1959 speech "There's Plenty of Room at the Bottom," to Eric Drexler's 1986 *Engines of Creation* and the official 2001 American NSF report *Converging Technologies for Improving Human Performance*, to name just a few, the dream of reshaping the world and humanity at will is so pervading that it is hard to make a distinction between the real and the fictional. So much that Colin Milburn, building on Baudrillard's hyper reality concept, can write that nanotechnology is a "science fiction" (2004, 112), defined by both terms at the same time. The "science fictionalization" of nanotechnology has been largely discussed, notably the use of science fiction rhetoric in scientific accounts of the field, so I will just emphasize here the fact that nanotechnology has conjured up powerful mythical imagery¹⁰. The envisioned manipulation of matter at its atomic level – its complete mastery – has triggered hopes for a bright future where scarcity, pollution, diseases and aging have been overcome. The mythical imagery is best illustrated in the transhumanist view that death is not an intrinsic condition of man and can be overcome by technological means to achieve a new humanity. Interestingly enough though, the very word 'transhumanism' comes from Dante's Italian neologism 'trasumanar,' meaning 'to jump'

from the human to the divine, from earth to heaven' (Maestrutti, 184). However, as Laurent and Petit have shown, it has also stirred up deep fears linked to the loss of control, the abuse or misuse of scientific knowledge and the idea of transgression. As they explain, those fears have deep resonance with mythical archetypes: the Apocalypse, the sorcerer's apprentice, the Tree of Knowledge and the fall of Adam or Prometheus (267-72).

However, in *Harmony*, Itô does not simply re-enact myth in its original form, nor does he use nanotechnology simply as a magical means of making away with rationality to reach out to myth. He is himself fighting against cancer, a disease that makes him face his remaining time in the background of the rising transhumanist view that death itself is only a disease to be overcome by technological means¹¹⁾. The idea of death as the inevitable end no one can escape is fading away because we are gradually entering a post-death society characterized by a model of politics and social life that is obsessed with health and security (Lafontaine). That is why his use of nanotechnology is focusing on medicine and his thoughts revolve around the coming era of a lifeist society and its implications. What first strikes the reader, which Okawada has not failed to explain, is the use of non-Japanese names for most (but not all) characters, and the fact those names are actually the Japanese phonetic transcription of Celtic divinities. Most importantly, they refer to divinities linked to medicine, healing, immortality (235) or leech craft. I will hereafter refer to James Mackillop's *Dictionary of Celtic Mythology* to briefly present them.

Tuan, the narrator in the novel, refers to Tuan mac Cairill, a member of the Partholonians, one of the first mythical invaders of Ireland, as recorded in the pseudo-history *Lebor Gabála* (Book of Invasions). They were actually "the first invaders after the Flood" (363) but eventually all die of the plague after a period of thriving. Tuan however survives the plague to tell the story of the *Lebor Gabála* many generations after. He actually undergoes a series of metamorphoses and is "finally changed into a salmon who is caught and eaten by the wife of Cairill, who gives birth to him again in human form so he may recite the early history of Ireland" (414). Tuan's role in the novel is thus identical: it is through her viewpoint, written in *etml* language, that we learn about the early history of post-humanity, the events leading to social harmony in the aftermath of the maelstrom.

The other characters are named after divinities from the Tuatha Dé Danann ('People of the Goddess Danu'), "the principal family of euhemerized pre-Christian deities in Old Irish tradition," also called "the Ever-Living Ones" (414). They arrive in Ireland long after the Partholonians and fight the Fomorians – previous ill-formed and predatory invaders of Ireland¹²⁾, to establish a golden age. The parallel with the post-maelstrom society of Harmony is blatant: Tuan's father, Nuada, leader of the Next-Gen Human Behaviour Monitoring Group (*H* 139), eventually – albeit unwillingly, ushers humanity into a perfect state of socialization. Corpses of the unfortunate victims of the maelstrom, plagued by mutant viruses (echoing the deviant Fomorians) have to undergo "protein reduction" (*H* 110) to avoid any infectious outbreak. The Next-Gen is nothing but the science fictional deformation of the scientific community as a whole who is trying to create a new tribe of gods. Interestingly, Squire explains that the goddess Danu "probably represented the earth

and its fruitfulness, and one might compare her with the Greek Demeter" (34) or Gaia, the Great Mother Earth. It is as if nanotechnology provides the means to trigger an apocalypse – the revelation that to truly realize a lifeist society, which is trying to restrain human (Fomorian) violent nature, humanity must get rid of conscience. Only then will it achieve "the closest thing to heaven" (H 252), an age where violence, suffering and death are no more. But I am getting ahead of myself; the overview of the characters is not over yet.

Cian refers to the father of Lug, the future champion of the Tuatha Dé Danann. He is "a mysterious character," maybe the son Dian Cécht – the main healing god – and could transform into a pig. His name means 'distant,' 'enduring' (Mackillop, 86) and he is indirectly linked to healing powers as well. He was killed while being a pig; and Lug, to punish his slayers, forces them to accomplish impossible quests during the last of which they die because he denies them the use of a magic pigskin that heals all wounds (Squire, 92-106). In *Harmony*, Cian appears also enigmatic as well, as if she lacked personality first, nodding and agreeing to whatever Miach has to say. But Tuan finally understands the feelings of Cian right before she 'commits' suicide. As the eponym divinity, she has accepted the enduring task of balancing Miach's passion and determination: "She had been stronger than any of us, and more noble, and more alone. All Alone," (*H* 108) Tuan bitterly realizes. In the same way the mythical slayers of Cian are punished by not being able to heal their wounds, Tuan eventually avenges Cian by allowing the realization of Miach's envisioned harmony but denying her access to it.

The name of Tuan's father corresponds to that of the king of the Tuatha Dé Danann, Nuada Airgetlám ('of the silver hand/arm'). Nuada, who had led his people in Ireland, has his arm severed in battle and must renounce kingship because "he no longer meets the criterion of physical perfection" (Mackillop, 348). The uniformization of human traits in *Harmony* is a direct echo to Nuada's fate: "lifeist society meant everyone, man or woman, had to conform to certain standards. Nonconfromity made itself physically obvious" (H 58) and immediately reflected in SA scores. However, in the myth, Dian Cécht restores King Nuada's blemish through the graft of a silver arm (Mackillop, 348). This would indeed translate into a cyberpunk narrative characteristic of late 20th century science fiction whose main novum relies on information theory and the possible connection of organic and synthetic components.

Dian Cécht, the healing divinity, or physician does not appear as a human character in the novel. Instead, it is the name of the "medical industrial collective building" in a fictional Baghdad that has turned into a new "medical industry mecca" where cutting-edge researches – including Nuada's – are being conducted (*H* 160). It is a probable echo to mythical Dian Cécht's healing spring that is said to restore any mortal wound – save the decapitated (Mackillop, 138). The modern enacting of Dian Cécht in *Harmony* draws attention on the evolution of the bio-medical industry in late-capitalist societies: most notably the innovation race and the frenzied patenting of substances down to atoms and particles. Medicine in the novel stands for technosciences in general, and Dian Cécht's etymology is quite revealing: it means 'rolling quickly forward'; 'swift

power' in Old Irish (Mackillop, 138). Itô is thus taunting the transhumanist certitude – and the general feeling about the inevitable marching forward of technosciences – that the ever-increasing pace of technological change will necessarily lead to a radical "merger of our biological thinking and existence with our technology" (Kurzweil, 7).

The last name linked with Celtic myth is of course Miach. Although a central character of the novel, it has no entry in Mackillop's dictionary. The divinity, son of Dian Cécht, is only mentioned in the story of Nuada's severed arm. It is however further developed in another mythical account of Ireland's early history: *The Second Battle of Moytura*¹³⁾. It is recorded there that Miach, unsatisfied with the silver hand his father designed for Nuada, sets on to restore it *de novo*, by reconnecting sinews and joints and growing skin on it. With Miach, we leave the cybernetic era of Dian Cécht to enter the nanotechnological age: a time when subtle control of matter at its most intimate level allows not only the interconnection between the organic and the synthetic but their complete fusion and indistinction. The account goes on with Dian Cécht's jealousy toward Miach whom he kills with his sword. He needs however four blows since Miach heals himself until the final strike hits his brain and he finally dies¹⁴⁾. He then buries him and from his body grow all sorts of healing herbs. Dian Cécht does not allow knowledge of their properties, "so that no one knows their proper cures unless the Holy Sprit should teach them afterwards" (69). MacCulloch explains that Dian Cécht's slaying of his son is "a myth of divine jealousy at man's obtaining knowledge" (28).

We are thus back to what links *Harmony*'s mythical undertone and nanotechnology imagery: the archetype of the Tree of Knowledge. It refers first to the divine prohibition against knowledge – and thus against the bringing forth and manipulation of hidden natural powers (the atom being an illustrative thread in both *Genocidal Organ* and *Harmony*). It is then intertwined with the myth of transgression – Prometheus/Adam and to death. Durand explains that the quest for knowledge is a metaphor for man's aspiration toward immortality. According to him, the rivalry between the serpent and man is nothing but the rivalry between an immortal element that is able to regenerate – to shed its skin while growing a new one – and Man stripped of immortality (125). And apart from Nuada, all the characters of *Harmony* who were named after Celtic male divinities are actually women. This feminization of the original myth and Miach's central role in the narrative both point out to Eve rather than Adam or Prometheus.

Miach actually represents an 'inverted' Eve, performing the role of a new messiah. She comes from a secluded minority ethnic group from Chechnya where people were born without consciousness due to the expression of a recessive trait – the gene responsible for consciousness. But she was forced to develop one, or at least to emulate consciousness, when she was captured by Russian soldiers and sent to a camp as a sex slave. As Nuada explains: "her brain needed a consciousness with a hyperbolic value system¹⁵⁾ in order to withstand the daily, immediate terror of repeated rape" (*H* 189). It is Adam who forces knowledge of herself onto Eve/Miach, whose consciousness awoke in a cave "filled with juices —semen, vaginal secretions, blood, tears, snot, and sweat" (*H* 235). But it is however as an inverted Eve that Miach attempts at erasing sins, at curing "the world of its infection, its 'me's and 'Ts" (H 236). It is a way for her to get back to the bliss of life without consciousness – where people would not be torn between their 'self-ish' and vicious nature and the social imperative, made absolute in admedistrative societies, to restrain it.

However, if this longing for a blissful Eden motivates Miach, it is not a mythical Eden but a technological one. In other words, as Bauman has commented: "Eschatology is dissolved into technology" (18). Man's creation of a perfect person entails the discarding of the soul and what it means to be human. It strongly echoes Wiener's famous declaration that "we have modified our environment so radically that we must now modify ourselves in order to exist in this new environment" (48). In a lifeist society where man is conceived only of vital processes, what is necessary is not to enhance or improve individuals, but to protect and prolong life itself. Nanotechnology in *Harmony* is not aimed at humans but at life as a process to be maintained indefinitely.

Going back to Japanese definition of Nature as what follows its own genesis, such a technological harmony looks a lot like Maturana and Valera's definition of living systems as "autopoietic" ('self-created' in Greek)¹⁶⁾. According to them, autopoietic systems, through "their interactions and transformations (...) continuously regenerate and realize the network of processes (relations) that produced them" (79). However, it is not the individual subject that is the centre of the system, it is society as a whole – the admedistrative system. Hyles has convincingly demonstrated that: "autopoietic theory preserves the autonomy and individuality characteristic of liberal humanism, but it sees thinking as a secondary effect that arises when an autopoietic entity interacts with its own representations." She is concluding, as an illustration of Itô's future social harmony, that "the liberal subject, although more than ever an autonomous individual, is literally losing its mind as the seat of identity" (149).

This is basically because the liberal subject, the individual 'I' is playing the same role as a cell in an organism that *Harmony*'s conclusion leaves a bleak impression. That is why, as opposed to Miach's vision of a future bliss, Tuan can make an – almost imperceptible – parallel between death and the technological harmony she is about to let happen: "her body, her brain, lost their warmth, and her consciousness—that which made her Miach—faded, thanks to that simple, ancient mechanism known as death" (*H* 242). And succeeding to the 'ancient mechanism', the new one kicks in to terminate Tuan: "I felt a cold creep across my cheeks. I wondered where my body ended and the cold air began. The boundary was already vague in my mind. (...) Good bye, m—" (*H* 243).

Although there is a record from the posthuman future in the epilogue, the main narrative ends abruptly and draws attention to the meta-fictional structure of the book and to its very signs. The fact that Itô uses *etml* language to introduce and conclude the five parts of the novel, as well as to provide factual explanations throughout the narrative – in the form of meta data or lists reminiscent of pop-up icons or windows in video role playing games¹⁷⁾ – is a direct hint at computer programming.

3. From the Grammar of Genocide to the Grammar of Life – the Semiotics of Nanotechnology

The Research Society on Marginal Novels (Genkaishôsetsu kenkyûkai) has indeed remarked that *Genocidal Organ*, with its depiction of universal themes like violence and aggression, makes the world appear as a game. As if the "grammar of genocide" was akin to some sort of computing system operating humans' minds (394). In the novel, Shepherd's comrade Williams actually makes a parallel between the grammar of genocide and famous video-game characters: "So, basically, this thing makes people act like lemmings" (*GO* 211).

However, both the grammar of genocide and the *etml* language relate to each other in a deep way. Beyond the analogy between *Genocidal Organ*'s central protagonist, John Paul, and Sartre's name, it is interesting to recall that it is composed of two famous apostles names: John and Paul. Here again, the novel draws its readers back to myth, or at least to early Christian writings: the Gospel of John and the Pauline epistles. An in-depth discussion of these writings in relation to Itô's novels is beyond the scope of this article, so I will merely point out some connections.

3.1. John

The first one is the central role given to the *logos* in the first chapter of the Gospel of John¹⁸⁾. The meaning of 'logos' goes actually beyond its translation as 'word' referring also to 'language'¹⁹⁾. *The Book of Signs* (the Greek 'sēmeia' meaning 'marks by which things are known' and 'signs from the gods', hence: 'miracles'²⁰⁾) immediately follows the famous *Hymn to the Word*, drawing on the importance of the 'sign', the word made flesh, enabling a connection between the divine and the material. Letters ('gramma') are thus tangible traces of the logos, articulated through the 'art of letters'('grammatikē technē'). Grammar, broadly understood as the set of structural rules that govern a language, is thus the tool by which the original power of words can be mastered.

The idea that language is powerful is of course very old and the latin 'grammatica'²¹⁾ was also (although not regularly) understood as '(magic) incantation' in English²²⁾. Itô directly referred to the connection between 'grammar' and 'glamour' through the use of the same furigana ('guramâ') for both 'bunpô' ('grammar') and 'nikukan' ('glamour') in the original Japanese text (*Hâmonî*, 85). Unfortunately, the pun was not rendered in the English translation, which misses on the relation between language and physical power. Uttering the proper words in the right order gives "man a power over and above his own limited field of personal action" (Malinowsky, 235). Such a fascination for the power of language is often found in Japanese science fiction. It is for instance the main theme of Yamada Masaki's *Kami-gari* (*God Hunting*) where a linguist, after the discovery of ancient characters, struggles to decipher a language whose grammar is completely different from human languages, leading him to glimpse into the nature of god. It plays a central part in Kawamata Chiaki's *Genshi-gari* (*Death Sentences*) where a surrealist poem, "The Gold of Time," literally kills its readers. The search for the original language, spoken before the fall of the Tower of

Babel, which would enable communication between all living forms (down to microorganisms) and the complete resurrection of the dead is at the heart of Itô and Enjô's *Shisha no teikoku (The Empire of Corpses)*.

Shisha no teikoku actually echoes Shepherd's reoccurring nightmares about the world of the dead. The first account of the nightmare immediately follows the first chapter, where Shepherd poetically describes the atrocious extermination of a village in a distant war-zone. Itô thus playfully confuses the reader: the actual slaughtering of villagers looks like a fictional account, "almost like a scene from *Alice in Wonderland*" (*GO* 9); whereas Shepherd is relieved to hear his mother explain that the nightmarish underworld he is experiencing "is just the regular world. The world you and I have always lived in" (*GO* 10). Language blurs the distinction between reality and nightmare, between life and death. Shepherd is a professional military assassin, as he explains right away in chapter two, but his first assertion is: "I killed my mother with my own words" (*GO* 11)²³⁾. Language's power is also humorously described through the "killer joke" and the way British soldiers shouted a German translation of the joke so that the enemy would drop dead from laughter upon hearing it (*GO* 211). The interesting science fictional explanation of such power is that it is actually situated in "a built-in organ inside our brain" (*GO* 168) and therefore dependent on the genetic code, which becomes the source of both matter – the human body – and spirit – the human consciousness and language.

It must be then recalled that another of Shepherd's comrade, Alex, committed suicide after repeatedly maintaining that one "can't escape from hell. Because hell's right here, inside your mind, and you carry it around with you" (GO 51). It would thus point out to the famous platonic explanation that the body ('soma') is just a prison ('sēma') for the soul, while indicating at the same time signs ('sēmeia') of its workings. It does so, however, by blurring the distinction between body and soul: both are intrinsically intertwined since language evolved from the brain, which is itself nothing more than the product of a genetic formula²⁴. Even though humans may transcend their genetics through culture, they cannot make away with biology altogether – but biology understood as a narrative organized with a precise grammar. And in *Genocidal Organ*, technology is starting to enable what John Paul is achieving through the "primordial power of language" (GO 235).

Cybernetics, by understanding the body ('soma') as signs ('sēmeia'), initiated the technological examination of its grammar so that it could be modified or perfected. Nevertheless, it did not question the traditional divide between mind and matter: only mind can transcend the material constraints. Just like transhumanists who view the body as mere meat (hardware) and mind as the informational pattern equating the self (software). But if man *is* not a body but only *has* a body that he can thus modify or substitute, the same goes for the mind that also emerges from the architecture of the brain: it can be tampered with. Neurosciences, with the help of nanotechnology, provide such means in *Genocidal Organ*: Special Forces soldiers undergo BEAR (Battle Emotion Adaptive Regulation) neurotreatment or "sensory masking" before going to battle. It enables the masking of particular combinations of brain modules so that the soldiers can keep on killing light-

heartedly without any "ethical noise" (GO 195) for the former, and can acknowledge pain without feeling it for the latter.

Such modifications of the mind lead to dreadful scenes in the novel: the whimsical, albeit poetical, description of the slaughter of children; or the grotesque battle between enhanced soldiers that do not feel pain and continue to fight with missing limbs in "an eternal shootout without pain or feeling" (*GO* 243). Itô does refer, in his vivid description, to zombie movies, but "fast zombies of the early twenty-first century" (*GO* 242). Like Shepherd, caught between the land of dead and the land of the living, the half-living and half-dead zombie soldiers of *Genocidal Organ* prefigure the post-humans of *Harmony*. In this sense, the grammar of genocide is only but a fragment of a deeper grammar, that of life itself, whose mastery has grown in *Harmony* by means of nanotechnology.

In such a perspective, Ted Sargent makes the following parallel between nature's logos and nanotechnology:

Nature authors her infinitely variegated masterpieces using an alphabet of atoms linked via an exceptionless grammar. (...) Nanometer grammar may seem exotic, but today we understand it well. Nanotechnologists piece together letters, words, sentences, and paragraphs that have meaning. Our ultimate triumph will be to construct narratives as intricate as life, erected from an atomic alphabet." (2-4)

Cognitive sciences in general (linguistics, psychology, information technologies, cybernetics, neurosciences, etc.) have enabled insight into the workings of the mind and its higher functions – such as language – but nanotechnology is thought to provide the tools to act on them. The construction of a narrative de novo constitutes indeed the demiurgic dream of creating life anew, but as both *Genocidal Organ* and *Harmony* show, it is first the technological means by which man can re-write himself down to its most intimate core. It is also blatantly illustrated in *Shisha no teikoku* where the living human mind can be overwritten by a "necro-ware" that is originally designed to function as an operating system for the dead.

But then, how do nanotechnology, language and *Harmony*'s Emotion-in-Text Markup Language (*etml*) relate to each other and what kind of post-humanity arises from their connection? I will turn here to Agamben's discussion on the philosophical meaning of language.

In *Language and Death: The Place of Negativity*, elaborating on modern linguistics – pronouns like 'T or 'you' are empty signs in language (a code) that acquire an objective referent only in the instantiation of discourse (a message) – Agamben emphasizes the importance of the voice (23-44). In doing so, he does not point out to the mere sound of the animal voice, but to a capitalized Voice "as a pure intention to signify, as pure meaning" (33). This Voice is not to be taken as the instantiation of a particular proposition but as the will that grounds the possibility of any articulation. In this sense, and with reference to the Hegelian *Geist*, Agamben finds the location of

Being in the Voice, which unveils the intentionality of consciousness: "human language is the 'voice of consciousness' and it is granted reality because language is articulated *voice*" (44). However, it is with Heidegger that he further examines how the Voice of consciousness is closely intertwined with death. Man, as 'Being-There' (*Dasein*), has been thrown into the world, but not of his own accord, and it is then that he first realizes the possibility of not being-there; that is, the possibility of death (55-6). The Voice of consciousness becomes:

the originary ethical dimension in which man pronounces his "yes" to language and consents that it may take place. To consent to (or refuse) language does not here signify simply to speak (or be silent). To consent to language signifies to act in such a way that, in the abysmal experience of the taking place of language, in the removal of the voice, another Voice is disclosed to man, and along with this are also disclosed the dimension of being and the mortal risk of nothingness. To consent to the taking place of language, to listen to the Voice, signifies, thus, to consent also to death, to be capable of dying (*sterben*) rather than simply deceasing (*ableben*). (86-7)

The Voice of consciousness is therefore a token of man's freedom, of his relation to the world in which he has been thrown; and at the same time, the acceptation of the possibility of death. The word 'harmony' in this sense, refers to the openness of the possible relations, the agreement or concord between different sounds (voices).

So what about Itô's Harmony?

The logical virus's name does not refer to a concord of voices. On the contrary, it is the code that shuts down the very possibility of relations by overwriting them with one single command. Its foundation is not on 'harmonia' ('joining two different things') but on 'harmos' ('fastening of a door')²⁵⁾, a 'settled order' that leaves no space for the Voice of consciousness, or, in Itô's words, the "inward mind" (H 251). No more Voice or even voices, humanity has turned into a huge organism, which is the expression of a written code that no longer seeks any relation with the world. Individuals are reified, turned into the letters that compose the overall system's grammar, and as such cannot think death anymore. In other words, they are no longer capable of dying, but only of deceasing. That is why, even though Itô writes that "the several billion people in the world with 'WatchMe' installed had ceased being animals" (H 250), it is actually quite the contrary: they have turned into mere 'living beings,' like plants or animals, devoid of articulated language. By loosing the Voice of consciousness, man looses also language since he becomes himself a code without meaningful relations.

Going back to the *Gospel of John*, in *Harmony*, it is not the word that is made flesh, but the flesh that is made word. Relations are no longer *instantiated*, they are *codified* through the nanotechnological grammar of life that is to be understood as biological barelife only.

Let us now briefly turn to Paul to try to see whether an escape from the code is possible.

3.2. Paul

In doing so, it is not to the Apostle or the saint that we will turn, but to Badiou's take on Paul as a subjective figure close to the political militant. In his *Saint Paul: Foundation of Universalism*, Badiou displaces Paul's "interventions" (31) from the politics of domination (the Roman Empire), the coercive law (Judaism) or the power of knowledge (Greek philosophy and wisdom) to relocate them in the truth-founding event of the resurrection of Christ. It is precisely Paul's subjective experience of a singular event that grounds the possibility of universalism. By de-theologizing Paul, who himself did not give much importance to the historical figure of Jesus or the miracles he accomplished, Badiou is able to secularize Paul's Christian universalism and project it against the cynic dissolution of identity, truth and culture operated by late 20th-Century capitalism and ultraliberalism. Paul's experience of the resurrection-event is the founding moment that shapes his political subjectivity, shattering the existing referents (Roman, Greek or Judaic) to open up a space for change and action. In this sense, for Badiou, it is not the content of Paul's message that is important, but the fact that he was able to overcome specific modes of domination to universalize it.

Looking now at *Genocidal Organ* or *Harmony*, how does the figure of Paul relate to the protagonists of the novel?

Shepherd's comrade Williams is also a militant, but completely in capital's payroll, a counterpart of the Pauline figure. In a very ironical but hopeless way, he is too deeply embedded in the global politics of domination to think it possible to break away from it. That is why, as Okawada remarked, he refuses that John Paul be properly arrested and the grammar of genocide's secret be unveiled (253).

Although the discussion on Saint John and Saint Paul started with his name, John Paul falls also short from the universal militant figure. As Paul, his motivation to spread the grammar of genocide stems from his subjective experience of losing his family in the nuclear bombing of Sarajevo. However, far from trying to open new possibilities and universalize *his* truth – protect the people *he* loves – he chooses to maintain the status quo and the domination of late capitalist societies over developing countries.

Only Shepherd could be considered as a close match. Through his encounter with Lucia and John Paul, he comes to realize that the grammar of genocide is nothing but the grammar of domination and that it needs to be overcome. Nevertheless, unable to achieve a Pauline positive universalism, perhaps because late capitalism makes it almost impossible, he is bound instead to proceed negatively by destroying the source of global order: his own country. Ironically, the ensuing world order that arises is the admedistrative society.

Harmony does not provide a perfect illustration of the Pauline figure either. Miach is rather close to John Paul in the sense that she is not able to transcend her own experience of the event of consciousness, which she is forcefully awoken to in the slave camp, and then buried into in the Japanese admedistrative system. Faced with the realization that consciousness is intrinsically

'self-ish' and potentially destructive, and that at the same time its regulation by the admedistration is condemning it to suffocate, she chooses to relinquish the former and surrenders to the latter.

Cian, reminiscent of Alex in *Genocidal Organ*, is trapped in her own guilt and cannot but maintain the status quo. Knowing it, though, the only escape is death (suicide), but an individual death that is not conveying a broader message.

As far as Tuan is concerned, not unlike Shepherd, her conscious choice not to stop the virus from being activated is ambiguous: neither a relinquishment nor a militant act. Besides, what could be considered as the truth-founding event for Tuan, her encounter with Miach and their decision to starve to death, which could be interpreted as a meaningful rebellious act against the system in the form of a silent cry, does not eventually lead to further action. Instead, the failed attempt puts Tuan in a position similar to Shepherd's: inside and outside the system, understanding, as Okawada puts it, that the society in which she was born and raised is but a fiction she has been expelled from (254).

Conclusion

Where, then, can possible means of coping with the disaster of life be found, when the individual is faced with the realization that the self-ish "I" may be (self-) destructive and that its techno-political regulation may not be liberating either?

Even though Badiou tries to reinvent a universal political militant figure based on the figure of Paul, he cannot find a contemporary secular illustration. Action always seems linked to violence, and at the same time management of such actions makes grounds for an authoritarian violence: "The foundation of violence is the violence of the foundation" (Agamben, 106). Agamben's proposition is therefore to move beyond the recursive loop of violence. To do so, man must acknowledge that individual violence and authoritarian violence are not opposed; there is a possible mediation in the form of "social praxis itself, human speech itself" (106).

In this perspective, *Genocidal Organ* and *Harmony* unveil this never-ending loop of arbitrary and authoritarian violence. Late-capitalist order brings about a revolution initiated by the grammar of genocide, which in turn is embodied as an apocalyptic chaos. From this chaos arises a supreme techno-order that tolerates no arbitrary violence and control individuals down to their very biological core. It is not a surveillance order, but a systematic subveillance network where authoritarian violence and arbitrary violence are confounded. Social praxis becomes therefore impractical and it is with a radical and frightful technological solution that the novel ends.

Interestingly, despite their rather bleak perspectives on humanity's future, *Genocidal Organ* and *Harmony* also contain a contradictory voice in a form of a silent call. It is found in the metafictionality of the text itself: *Harmony* is a record written by a codified post-humanity where 'T and 'you' no longer make sense, yet the narrator still makes use of these pronouns, addressing both the human and the post-human readers: "let me tell you about what happened" (*H* 249). In the

original version this line is represented as "hanashi wo shiyô" (350). Despite the lack of pronouns, which is a common characteristic of the Japanese language, the use of the volitive form of the verb indicates a meaningful, residual intention to relate to someone. There is thus a profound intention to trigger a reaction within the reader who is confronted with this call from our future.

Notes

- 1) Dioramas of the toppled highway at the Kobe Great Hanshin-Awaji Earthquake Memorial Museum are a symbolic testament to the catastrophe. See http://www.dri.ne.jp/english/index.html (last access: 11/2012).
- 2) See http://www.japc.co.jp/english/corp_data/history.html (last access: 11/2012)
- 3) "I wanted us to think a little bit about the significance of our country, whether things went as they should with prewar and with postwar Japan" (5).
- 4) See Tatsumi Takayuki's essays on Japanese science fiction where he explains that English translations started to appear only in the mid 1980's. Takayuki Tatsumi. "Japanese and Asian Science Fiction." A Companion to Science Fiction. Ed. Seed, David. Blackwell Publishing, 2005. Takayuki Tatsumi. "A Very Soft Time Machine, From Translation to Transfiguration." Bolton, Christopher, Istvan Csicsery-Ronay Jr. and Takayuki Tatsumi, eds. Robot Ghosts and Wired Dreams, Japanese Science Fiction from Origins to Anime. Minneapolis: University of Minnesota Press, 2007.
- 5) See Shepherd's comrade William's declaration: "Got that, Clavis? I'm prepared to protect my world. I'm going to defend the world where you can order a jalapeño pizza and pay for it by thumbprint. I'll fight to the death for my family's right to eat as many Big Macs as they like and then throw away whatever they can't eat" (283).
- 6) On the concept of "world civil war," see Kasai Kiyoshi: "9.11 blatantly revealed North America's state of exception a result of its post Cold War one-sided domination; and ushered a worldwide state of civil war. 21st-century wars are world-scale civil wars, putting the former conventional 'legal' wars between sovereign states on the back burner." (Genkaishôsetsu kenkyûkai, 10). For a detailed discussion on the relation between Genocidal Organ and the concept of world civil war, see the Japanese SF Critique Award-wining essay by Okawada Akira. "Sekai naisen' to wazuka na kibô: Itô Keikaku *Giakusatsu Kikan* e mukiau tame ni" (A faint Hope in the Midst of World Civil War: A Reading of Itô Keikaku's *Genocidal Organ*). SF Magajin 51.5 (May 2010): 230-59.
- 7)「いま,ここを最高に精度の高いセンサーで捉えれば,現在を描いても自ずと未来になる」。
- 8) "We were the ones who requested the mission from the Japanese government. We asked that it take this form,' the colonel said without preamble" (191).
- 9) In Darko Suvin's sense of a "cognitive innovation" which deviates from (or speculates on) "the author's and implied reader's norm of reality" (64) and is "so central and significant that it determines the whole narrative logic" (70).
- 10) For a detailed account on the relations between nanotechnology and science fiction, see: Hessenbruch, Arne. "Beyond Truth: Pleasure of Nanofutures." Nanotechnology Challenges: Implications for Philosophy, Ethics and Society. Ed. Baird D. and J. Schummer. Singapore: World Scientific Publishing, 2006. 357-382. Lopez, José. "Bridging the Gaps: Science Fiction in Nanotechnology." Nanotechnology Challenges: Implications for Philosophy, Ethics and Society. Ed. Baird D. and J. Schummer. Singapore: World Scientific Publishing, 2006. 327-36. Marshall, K. "Atomizing Risk Technology." NanoCulture: Implications of the New Technoscience. Ed Hayles, Katherine N.Bristol: Intellect Books, 2004. 79-102. Milburn, Colin, Nanovision:

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On the powerful mythical imagery stirred up by nanotechnology, see: Laurent, Louis. and J.C. Petit. "Nanosciences and their Convergence with other Technologies: New Golden Age or Apocalypse?" *Nanotechnology Challenges: Implications for Philosophy, Ethics and Society.* Ed. Baird D. and J. Schummer. Singapore: World Scientific Publishing, 2006. 249-286. Joy, Bill. "Why the Future doesn't need Us." *Wired* Vol.8-04 (2000). McKibben, Bill. *Enough: Staying Human in an Engineered Age.* New York: Owl Books, 2003. Rees, Martin. *Our Final Hour – A Scientist's Warning: How terror, error, and environmental disaster threaten humankind's future in this century-on earth and beyond.* New York: Basic Books, 2003.

- See for exemple Drexler Eric. Engines of Creation : the Coming Era of Nanotechnology. Oxford University Press, 1986.or Kurzweil, Ray. The Singularity is Near – When Humans Transcend Biology. New York: Penguin Books, 2006.
- 12) "the Fomorians appear hideously misshapen, with only one eye, one arm, and one leg" (363).
- 13) A translation can be found on the University College, Cork website. See: http://www.ucc.ie/celt/online/ T300011.html (last access: 11/2012). It is based on Stokes, Whitley. "The Second Battle of Moytura." Revue Celtique 12 (1891): 52-130.
- 14) Itô echoes this emphasis on the brain in *Harmony* by letting the reader believe for some time that medicules could not reach the brain, which was therefore "protected" from nanotechnology. It is definitely a hint at the long-lasting belief that the siege of humanness resides in the brain. It crumbles down however when Nuada ironically explains that "No one is comfortable with the idea of people messing with their brains. The idea that the brain is protected from medicules is a misunderstanding we spread quite deliberately" (*H* 178).
- 15) What Itô means by hyperbolic value system is that humans (vertebrates in general) have a tendency to attribute more value to immediate reward, because "If we don't eat the thing sitting right in front of us, some other individual will come along and take it away. Individuals who sit around waiting for a future reward would die in such a world" (*H* 163). Had Miach not developed a conscience in the Russian camp, she would not have been able to withstand her condition. As far as the reasons goes, Itô does not provide much of an explanation: could she thus feel some hate against her ravishers, fuelling her will to survive, or would have she chosen suicide instead of a life of endless pain? Nuada explains that "her newfound simulated consciousness despaired and chose death." (*H* 190). She was rescued, but the deep death drive she experienced manifested again within the lifeist society of Japan, an artificial harmony she could not bear: "I knew how barbaric people could be. And I knew how broken they could become when they tried to repress that nature. I thought that this society, admedistrative society, this lifeist system was all wrong. A society that wanted me to regulate myself internally, even while people were killing themselves all around me, was just bizarre" (236).
- 16) "An autopoietic machine is a machine organized (defined as a unity) as a network of processes of production (transformation and destruction) of components which: (i) through their interactions and transformations continuously regenerate and realize the network of processes (relations) that produced them; and (ii) constitute it (the machine) as a concrete unity in space in which they (the components) exist by specifying the topological domain of its realization as such a network" (78).
- 17) Itô himself was fond of video games, especially the *Metal Gear Solid* series, which he novelized in *Metal Gear Solid Guns of the Patriots*.
- 18) "In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made. In

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him was life, and that life was the light of men. The light shines in the darkness, but the darkness has not understood it" (John 1:1-5).

- 19) Liddell, Henry George& Robert Scott. An Intermediate Greek-English Lexicon. Perseus Digital Library. Tufts University. 1 Feb. 2013. http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999. 04.0058%3Aentry%3Dlo%2Fgos>
- 20) Liddell, Henry George & Robert Scott. An Intermediate Greek-English Lexicon. Perseus Digital Library. Tufts University. 1 Feb. 2013. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.04.0057:e ntry=shmei=on&highlight=sign>
- 21) 'Grammatica' itself derives from the Greek 'grammatikós'.
- 22) Harper, Douglas. *Online Etymology Dictionary*. 1 Feb. 2013. <http://www.etymonline.com/index.php?term=grammar>
- 23) Shepherd's mother, who had suffered brain injuries from a car accident, was maintained alive through nanotechnological means in a hospital. Shepherd decided to "unplug" her life support.
- 24) As John Paul explains: "we are no more than bundles of flesh assembled according to a genetic code. Our livers and bowels and kidneys were made according to a predetermined genetic formula, so why should there be a special exemption for our minds or hearts, or anywhere else we choose to believe our mysterious sprit might reside?" (GO 167).
- 25) Harper, Douglas. Online Etymology Dictionary. 1 Feb. 2013. http://www.etymonline.com/index. php?term=harmony>

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