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Fukushima: The Geo-trauma of a *Futural Wave*

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I. Introduction

The authors of this article have constructed an abstract machine, dated and signed, “*geophilosophy-futural wave-geo-trauma-Fukushima*.” In this article, the authors are committed to the view that they have put geophilosophy to work, and thus have performed an inaugural and creative act of thinking, which is entirely consistent with the spirit of the philosophy of Gilles Deleuze and Félix Guattari. Moreover, this abstract machine is an application of Deleuze’s transcendental empiricism (which can be read as the search for the conditions of singular, creative production) and invents a new mode of thought that encompasses the Fukushima nuclear disaster in 2011. From this perspective, and in developing an unprecedented thought-experiment, the authors have consequently worked with Deleuze and Guattari’s concept of geophilosophy to explore the 2011 Fukushima-Daiichi disaster in the time of the Anthropocene as a singularity of absolute deterritorialization, as a moment when life escapes formations of categorical or territorial capture. The article engages with the pressing ecosophical matters at hand, engineering a compelling set of concepts and questions, in order to think the outside and *beyond* human finitude. Here geophilosophy is employed to consider the sense of immanence in nature that operates through interactive material processes and between boundaries and bodies of differentiation. The article concludes that the geo-trauma of the nuclear disaster acts as a spur away from the black hole of entropic capitalism, and toward an irradiated homelessness that holds the promise of a *new utopos*, a *site of world-formation*, and a people yet-to-come. This is both the *Zerrissenheit*, or torn-to-pieces-hood, of Fukushima and a time of crisis, a moment fecund with new possibilities. This is the movement of philosophy

to a third reterritorialization as set out in *What Is Philosophy?*—from Greek polis, to modern democratic state to the absolute deterritorialization of a future revolution and earth—in other words, philosophy as infinite movement, as the “utopia of immanence.” This is a movement from third reterritorialization to the possibility of eco-planetary-revolution. In sum, geophilosophy finds its milieu in the time of the Anthropocene.

II. Geophilosophy: Fukushima and the Anthropocene

Deleuze and Guattari¹ anticipate many of the ongoing debates regarding the notion of the Anthropocene (Crutzen). The Anthropocene is a vital consideration at this juncture, as the geological time of man’s intervention on Earth is exactly what this article is about through the example of Fukushima. Deleuze and Guattari predicted the rise of the Anthropocene and the resultant crises such as the 2011 nuclear meltdown in Japan: For example, in *A Thousand Plateaus*, the plateau “The Geology of Morals (Who does the Earth think he is?)” is precisely dated 10,000 Years B.C., a period before the rise of human civilization in the Holocene, a time in which “the Earth—the Deterritorialized, the Glacial, the giant Molecule—is a body without organs” (Deleuze and Guattari, *Thousand* 40): That is to say, Deleuze and Guattari give voice to the Earth as a response to the Anthropocene. Moreover, in September 1988, in an interview with the *Magazine Littéraire*, Deleuze announced his plans for the near future: “I want to write a book on ‘What Is Philosophy?’ Also, Guattari and I want to get back to our joint work, and produce a sort of philosophy of Nature, now that any distinction between nature and artifice is becoming blurred” (155). Although the joint philosophy of Nature was never realized, *Qu’est-ce que la philosophie?* (*What Is Philosophy?*) was published in 1992. In Chapter 4, “Geophilosophy” of the work, the philosophy of Nature (and the Earth, which might be seen as their translation of Spinoza’s Nature) becomes apparent. Revitalising the sections on Nature and the Earth that can be found in their previous collaborations, their philosophy of Nature focuses on the destabilising of dualisms that separates nature and culture, man and environment, matter and thought; in other words, on attacking exactly those dualisms that are at the heart of critical thinking *in the Anthropocene*. Their

1. Cf. *What Is; Thousand*.

alternative is already found in their opening statement of the “Geophilosophy” chapter, which says: “thinking takes place in the relationship of territory and the Earth” (85). Thinking thus happens in a double movement or “entrenchment”; in a deterritorialization (from territory to the Earth) and a reterritorialization (from the Earth to territory): It is a passage to a third reterritorialization or new Earth and people. As territory and the Earth are inseparable from the moment that thinking (as a mode) begins according to this schema, it is impossible (for us) to take them apart—in other words, all thought removes itself from a territory, towards the Earth, while it at the same time installs a territory, removing itself from the Earth. “Thought” itself, moving parallel to the matters from which it breaks free, then necessarily involves both the Earth *and* territory, while it is deterritorialized and reterritorialized *in perpetuum*.

This article focuses on the event generated by “Fukushima” in the time of the Anthropocene, an event where the planet, as Deleuze and Guattari say in their own terms in *Anti-Oedipus*, “becomes so artificial that the movement of deterritorialization creates of necessity and by itself a new Earth” (353). Working from a deep Spinozism, and radically breaking from Eurocentric Cartesianism, which still largely dominates the image of thought in philosophy, Deleuze and Guattari’s geophilosophy emphasises the “situatedness” of thinking principally in two ways. 1) Descartes’s *cogito* functioned “independent from anything else” (Gaukroger 50), forming both “the starting point for knowledge and the paradigm for knowledge” (50). Consequently, the origin of Cartesian thought and knowledge had nothing to do with the Earth. Cartesian thought reflected upon the Earth, but always already remained fully independent of it. 2) Descartes considered the *cogito* a distinctly human enterprise: *our* thinking (all the operations of *our* soul) is completely in *our* power and it is only according to *our* ideas that we envision the outer world (which makes Fukushima in light of the Anthropocene a radical break with this tradition). For Descartes—in contrast to Spinoza and Deleuze and Guattari in *What Is Philosophy?*—the human mind thinks about something—an animal, a thing, a disaster, or simply: “the Earth.”

By situating thinking *between* territory and the Earth as “entrenchment,” geophilosophy breaks with Cartesianism, because it turns thinking into an *immanent* activity and refuses to make thinking a solely human enterprise. Situating thinking “in the midst of things” as they occur, Deleuze and Guattari stress that the act of thinking is produced in the zigzagging relation between territory and the Earth. Thinking thus does not wait for man to begin, and

necessarily happens when territory and the Earth meet. Baruch De Spinoza, in response to Descartes, notably offered the situated conceptualisation of thinking in his “Letter to Schaller” (390), in which he goes as far as to say that even the material assemblage called a stone holds the ability to think:

that a stone, while continuing in motion, should be capable of thinking and knowing, that it is ‘endeavouring,’ as far as it can, to continue to move. Such a stone, being conscious merely of its own endeavour and not at all indifferent, would believe itself to be completely free, and would think that it continued in motion solely because of its own wish. This is that human freedom, which all boast that they possess, and which consists solely in the fact, that men are conscious of their own desire, but are ignorant of the causes whereby that desire has been determined. Thus an infant believes that it desires milk freely.

Thinking, for Spinoza, is not a product of the human mind; it is not even located “inside” a body. Rather, thinking is what *immanently causes* the body to function as one, (since in the end its oneness is an illusion of the mind), and to act as one. Spinoza already noted that a body is “always already” a composite—he tells us that every individual is always a series of individuals *ad infinitum*.² The functioning together of these individuals, and, most importantly, expressing the desire to keep working as one (to maintain this particular being) forces the stone, the child, or any possible individuality, to action. Therefore, thinking, in turn, is not so much “caused by” its body because this would lead us to the wrong kind of essentialism (there are an infinite number of causes, unknown to the body *in casu*). Rather, thinking has its body as its object of thought (it is the idea of the body).

For Deleuze and Guattari in both *A Thousand Plateaus*³ and *What Is Philosophy?*,⁴ thinking decisively breaks the Cartesian mind/body distinction and rests on the capacity for entrenchment between territory and the Earth, or between culture (which is not necessarily human) and nature; thought is

2. See Deleuze’s lecture on “Spinoza: The Actual Infinite-Eternal, the Logic of Relations”; also Dolphijn, Rick. “The Revelation of a World That Was Always Already There: The Creative Act as an Occupation.” *This Deleuzian Century*, n.p., 2014, pp. 185–205.

3. Cf. Chapter “10,000 B.C.: The Geology of Morals (Who Does the Earth Think It Is?).”

4. Cf. Section 4 Geophilosophy of Part 1.

being actualized immanently, offering new life-forms (Cole) and new images of thinking hitherto unknown or unforeseen. Hence, can we make sense of the event of Fukushima through the geological-geophilosophical thought of the Anthropocene, the mixing of territories and the Earth, and the type of thinking that the nuclear meltdown has initiated?

The article is about Fukushima, that moment when a singularity ended the world as we know it and made in its wake both an *un-world* (*immonde*) as well as the possibility of a new Earth. Of course, the event of Fukushima was anticipated by dystopic Manga comics (think of Tokyo Magnitude 8.0 or Astro Boy/Mighty Atom), by the historical precedents of Hiroshima and Chernobyl, and by capitalism itself, through the economic imperatives that drove nuclear technology, including the construction of the Fukushima site. This last point is explored by Shirō Yabu (矢部史郎) in *3.12 no Shisō*, in which he describes the desire for nuclear energy as being primarily driven by what he terms “nuclear capitalism.”

The concept of geophilosophy in the work of Deleuze and Guattari and in the light of Fukushima and the Anthropocene, pivots on two aspects of how, and in what sense, the singularity of the man-made nuclear meltdown is immanent:

- 1) What is the (new) Earth in the context of Fukushima and the Anthropocene, and how does it relate to territory and land?
- 2) How is the nuclear disaster and contamination of Fukushima not only on Earth, but in the end, a mode of geo-trauma of human/non-human subjectivity⁵ that prevents thinking altogether?

By means of rethinking Deleuze and Guattari’s geophilosophy, we note how Fukushima is an excrescent component in the logic of Japan’s post-war development, that its body (in space) and the ideas with which it effects its endurance⁶ are situated in Japan. However, such logic does not properly take into account the location of the power plant, the likelihood of future strong earthquakes and fierce tsunamis, and the dangers of nuclear contamination. The schizophrenic “full Earth” as described in *Anti-Oedipus*, where “the body without organs is the deterritorialized socius, the wilderness where the decoded

5. Cf. Section IV of this paper.

6. Cf. Section II of this paper.

flows run free, the end of the world, the apocalypse” (176) was unthinkable in terms of Fukushima as a staged event in the realisation of post-War Japanese capitalism. Even if (or when) human beings become extinct because of looming global climate catastrophe, Fukushima remains a lasting monument to the ways in which the insatiable desire or *jouissance* for constant energy has led to unsustainable invention. Following Geoffroy Saint Hilaire, the pre-Darwinist naturalist, who was more interested in the homologies in life than in genus and species, we read the Anthropocene as a layering of *strata* (his concept), a thickening of the Earth, with all sorts of sediments (from nuclear waste to socio-economic policy). Not starting from the human being, or from any privileged form of life, the focus on *strata* allows us to see the power differentials or levels involved with thinking of the Earth in the context of the Anthropocene, and today, these differentials tend towards extenuating and obfuscating the intent of human activity. For example, the reasons for Fukushima’s placement are prefaced on the capitalist need for cheap energy to supply Japan’s industry — and this fact sets up a double articulation in terms of why Fukushima was built in such a precarious situation, in terms of modelling a new capitalist Japan after World War II, and in the frame of an obliviousness to global environmental effects that the push to a new Japan has created. The Anthropocene as an over-arching concept or designation for our “all-too-human” times has inter-linked streams, flows or vectors working through it. Especially within the geosciences (e.g., the atmospheric sciences), the results of the Anthropocene indicate the interconnected layerings and feedback loops that define the ways in which human activity is changing the world irreversibly (Steffen et al. 842–67). These changes are akin to the point made by Heidegger in *Being and Time*, where claims that it is when our circumspection confronts the breakdown of equipment *as* ready-at-hand, that the environment is itself revealed afresh. Similarly, we can say that not until there is a traumatic rupture or bifurcation in our thinking *vis-à-vis* this layering does what is happening become truly apparent.

Fukushima is one such bifurcation point or singularity; it is at once an event of creation and destruction, which has, for example, radically altered environmental thinking about nuclear power as a possible solution to global warming through fossil fuel usage (Chu and Majumdar 294–303). In contrast, the mainstream political and conservative mollification of what has happened in Fukushima can divert and stall the asking of questions about possible action or activism as a result of the accident. The political forces that set Fukushima

in place and justified its funding and construction work to suggest the implications of nuclear meltdown are not as they in fact are. Fukushima is a singularity that shows how the strata of the Anthropocene work, on all levels of life and in all spheres, and it demonstrates how the various spheres fit together in the context of Japan and in time.⁷ Fukushima realizes the Anthropocene, forming a singular territory of fluid materiality *and* geo-ideas that continue to create new cancerous webs of truth and lies between its territory and the Earth.

III. The Futural Wave and the Irradiating Plane

If Fukushima acts as a realization of the Anthropocene, as promoted in this article, one way to speculate upon the (end) times to come is through Alvin Toffler's (1980) idea of *The Third Wave*. From the perspective of the geophilosophy of Deleuze and Guattari (*What Is; Thousand*), the strategic use of Toffler is important because of the ways in which *Fukushima in the Anthropocene* operates as a fully evolved concept that is at work on every social level from the micro to the macro, and also eats itself into the *dimension of time*. Toffler's predictions were based on developments in the information society in the 1970s, and how, for example, democracy could change for the better under pressure from the new information society and increased transparency. Whilst some of Toffler's predictions have come true, for example, the ways in which the internet has reinvented the limits of socialisation, learning, and knowledge, the wholesale refashioning of society due to the information age has not taken place, principally because of the ways in which capitalism has resisted and co-opted such changes (Harvey 53–73). Capitalism has been able to deal with Toffler's utopian ideas, such as changes in and improvements to democracy, through the increased reach of credit and debt forms of financialization (the debt economy) and in their very fluctuations (Melitopoulos and Lazzarato 24), which have seeped into all aspects of life through learning, and which have been largely facilitated through the combination of electronic mediation and cybernetics. Toffler's wave notion, figured here as a "futural-wave," works in parallel to the entrenchment of the geo-idea of Fukushima (as [an]other plane), and captures the ways in which the socius is changing: *The futural wave* is a time-based, posthuman means of understanding the geothought of the

7. Cf. Sections III and IV of this paper.

Anthropocene—or non-anthropocentric, nonhuman “Nature” in the wake of Fukushima.

If we take the very instance of the singularity of Fukushima—March 11th 2011—it could be figured as a “shock of the new.” Suddenly, the (conscious and unconscious) mistakes of the past and possible ways forward become apparent as planes collide. Instead of relying on the nuclear power solutions of the previous generation, new modes of energy creation can begin to take precedence, as ideas and in practice, as the dangers of nuclear energy are fully understood and this knowledge is gradually disseminated. However, these changes in thinking and societal organization are not instantaneous, but take concerted pressure, imagination, and activism/work on all levels, as the stalling mechanisms in capitalism (anti-production) hinder progress to a better (uncontaminated) life. The unfortunate reality of living in the Anthropocene is that it takes deep ruptures, crises, and moments of *Zerrissenheit* or torn-to-pieces-hood, here figured as societal futural-waves, as adapted from Toffler, combined with the geo-thinking of the strata, to refigure the modes through which society has been organised in the past, and to alter the continuums for society and thinking. Or as Michel Serres puts it: “Global history enters nature; global nature enters history: this is something utterly new in philosophy” (4). The continued growth and strengthening of global capitalism makes “cost benefit analysis” a matter of life and death in terms of society’s choices around building and maintaining nuclear power stations in vulnerable areas such as Fukushima. As Ronald Bogue has argued, Deleuze and Guattari’s “people-yet-to-come” (after Friedrich Wilhelm Nietzsche) is not simply a utopian project, but posits “collectivity as change” that makes a difference in “the now” (“Deleuze and Guattari”), involving, in the context of this article, those who have fully realised the folly of Fukushima, and those who would do everything in their power to ensure that a nuclear disaster never happens again.

The *futural-wave* discussed here is therefore about disruptions in social strata and the time-based thinking that can happen because of and in relation to Fukushima and the Anthropocene. Toffler underestimated the power of capitalism to undermine and infiltrate such processes as those that might think Fukushima with the Anthropocene, perhaps because of his Marxist-influenced notion that the capitalist mode of production will be overcome. In contrast, the futural-wave takes on inter-related scientific, political, artistic, and strategic meanings, depending on how it is positioned, and pragmatically what work it is set to do in the world. Such an argument about the futural-wave leads to the

genesis and question of time in relation to the future in Deleuze. Significantly, the third passive synthesis in Deleuze's *Difference and Repetition* (1994) is of the future. The third synthesis is a peculiar force in time that dislocates time and divides the subject or "I." James Williams⁸ and Bogue⁹ have remarked that the third synthesis cannot be understood simply through dislocation, but it is a deliberate reordering and playing with time (or a science fiction of the temporal order).

In the context of Fukushima and the situatedness of this article, Japanese art has concerned itself with time since Hiroshima. For example, in its aftermath, Akira Kurosawa's classic film *I Live in Fear* (1955) works with Fukushima as its extreme limit or next plane of collision. Furthermore, Manga comics such as Astro Boy/Mighty Atom (from 1952 to 1968) and Barefoot Gen (1945 onwards) have incorporated the irradiated playing with time of the third synthesis in the context of Fukushima as a limit thought. At the heart of Fukushima, one could place the writings of noir author Haruki Murakami, whose *Kafka on the Shore* and *1Q84* meticulously show us how, as Deleuze puts it in *Difference and Repetition*, "time itself unfolds instead of things unfolding within it" (88). In other words, the third synthesis is a form of novelty or action that produces lesions in time, a "before and after" that, in our case, has been realized with the futural-wave of Fukushima and in the geothought of the Anthropocene. One could say, following Bergson, that the third synthesis or futural-wave constructs time internally as duration, but also tears such duration asunder. Once the violence and loop in time have been achieved, a new sequencing will occur: In the context of this article, around how exactly to deal with Fukushima in the Anthropocene, the consequent geo-trauma that Fukushima has produced, and the new forms of subjectivity that the plateau based around March 11th 2011 tolerates. A territory, an Earth, *an idea* has emerged that is so radically different from hitherto notions that a rupture in time, a "crack in the world," as Murakami puts it, is noticed, producing a non-equilibrium division in which the *before* (nuclear power in the Anthropocene) and *after* (alternate power in the Anthropocene) are incommensurable. Put differently, an absolute silence, an absolute nothingness is realising itself *as time unfolds* post-Fukushima. As non-equal elements pre- and post- Fukushima, the continuum is thus divided

8. Cf. Gilles Deleuze's *Philosophy of Time: A Critical Introduction and Guide*.

9. Cf. Bogue, Ronald. *Deleuze's Wake: Tributes and Tributaries*. State U of New York P, 2004.

not only as a sequence, but also as a series (Williams 179).

In the 22nd series of *The Logic of Sense*, entitled “Porcelain and Volcano,” Deleuze discusses how self-destruction comes out of left field. Something happens that shatters the image and sanctuary of a perfect life—“looks, charm, riches, superficiality and lots of talent”—like “an old plate or glass” (154). This is what he describes as the “terrible *tête-à-tête* of the schizophrenic and the alcoholic” (154). Indeed, in *Transpositions: On Nomadic Ethics*, regarding a discussion on the nomadic processes of transformation, Braidotti, following Deleuze, maintains that the point is to learn how to refuse the sad passions which one feasts upon on “the crest of the wave of cracking-up” (208). If one toils in “the long deep crack” of life, the question is how to learn to ward off the sad affects “of orchestrated demolition of the self” (Braidotti, *Transpositions* 213). In Braidotti’s essay “Affirmation versus Vulnerability: On Contemporary Ethical Debates,” she suggests that from the experience and recovery from the crack up, what returns is a new force of health, resistance, adaptability, even ethical transformation, which is productive of difference. As she says,

[p]aradoxically, it is those who have already cracked up a bit, those who have suffered pain and injury, who are better placed to take the lead in the process of ethical transformation [...] They know about endurance, adequate forces, and the importance of Relations. (“Affirmation” 156)

Deleuze takes the line that art itself is a path between the cracks. In a 1988 interview he says: “Any work of art points a way through for life, finds a way through the cracks” (Deleuze and Joughin 43). For Deleuze, and indeed Nietzsche, the question is how to live in and on the surface of the crack, to traverse it, delicately, like the tightrope walker, balancing as ever over the precipice, yet learning all the while how to avoid headlong, hell-for-leather suicidal collapse and thus to resist the perilous descent into nihilism, decadence, and despair. In this article we argue that this is precisely the type of sensitive balancing required to live on in the time after Fukushima, as the futural wave constantly extends, mutates, and plays with time, as the Anthropocene become even weirder.

One could suggest that, with respect to the futural-wave that unfolds from the *caesura* that we have called the singularity of Fukushima in the Anthropocene, there are three forms or planes of the future, that is to say, the 1) present, 2) past, and 3) future. These forms of the future “groove the Earth”

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for the people-yet-to-come, as they carry with them and work with forms (material and immaterial) of the future. Such modes of time set conditions and act as contingency in terms of the non-linearity of what happens next. In the context of Fukushima, the force of the Fukushima-Anthropocene geo-idea, for example, which includes the ability to rally against nuclear power and compellingly dispute its continued use in exposed and vulnerable positions, will live or die depending on the ruptures and feedback loops in time that are possible, and the outcomes associated with such rupturing and subsequent assemblage. Deleuze's third synthesis promotes the thinking through of the *absolute* complexities of time, which adds another dimension of thought to the gathering of forces necessary to change society with respect to Fukushima. Ultimately, Deleuze and Guattari's geophilosophy lends itself to avoiding the mistakes of the past (e.g., those involved with nuclear capitalism), but this avoidance cannot be left to gradual changes in society, especially in the context of an irradiating Fukushima in the Anthropocene; it has to do with creating difference and planes on all levels, including the natural world (rethinking the Earth), the unconscious (reimagining and feeling a new world), and the hyper-rational (making a new world). In the next section, the challenge of the futural wave is taken up in the context of the temporal and traumatised dimensions at work in post-Fukushima Japanese society and is read through the trope of "geo-trauma."

IV. Geo-trauma from within Japan

How does the application of Deleuze and Guattari in *A Thousand Plateaus* and *What Is Philosophy?* make sense of post-Fukushima Japan? Firstly, one can now name a Fukushima-Japanese thinking-praxis that disseminates the rhythm of the irradiated, singular milieu (March 11, 2011), hence opening up new (possible) worlds. This is a wholly new conception of thought in and for Japan, redefining what it means to think of and according to an infected and traumatised *non-place* such as Fukushima. In this context, the Japanese Earth, the cherry blossoms, seas, and mountains all give rise to geo-ideas, marking the Anthropocentric nuclear age as infected by/in Fukushima. However, one cannot overlook the power and "affect" of the geo-trauma produced on March 11, 2011, and the social and psychic maladies which have ensued—which are bound up in memory, image, contamination, and a frozen temporality where

one “works to forget” to the point of *karoshi* or death from overwork. The geo-trauma of Fukushima functions in a new sense based on the posthuman thinking that the nuclear meltdown has precipitated and constantly gives rise to as a futural wave.¹⁰

The anthropologist Chihiro Minato, who appears in Melitopoulos and Lazzarato’s documentary, *Life of Particles* (2012), speaks of the adaptation to the environment in terms of interior and exterior “psychosis,” which he argues is a territory or psycho-geography that the Japanese must now negotiate. Minato suggests that “the absolute evil” of the atom bomb is inextricably tied to Japanese desire. Similarly, the adoption of nuclear power is wedded to desire for economic development in post-war Japan. Because of this desire, Minato says that the Japanese are compelled to respond to Fukushima. Geo-trauma, in the context of the Anthropocene and Fukushima, is defined as a form of ecological thinking that takes as its object not Nature *per se* but the unnaturalisable as such. Drawing on the concept of geo-traumatics, as suggested by Nick Land (2011) and as elaborated on by Reza Negarestani in *Cyclonopedia*, we can say: “it is not a question of being ‘open to’ something, some object or other, but, rather, of being opened, with all the necessary force that this suggests” (200–01). Geo-trauma helps us to rethink the relation between the human and non-human post-Fukushima, by embracing a notion of violence irreducible to either side of the human/non-human relation and through the very irruption of Fukushima. As Land points out in *Fanged Noumena*, for Sigmund Freud, the notion of trauma corresponds to a breach or invasion, the emergence of something alien from the outside that the conscious system struggles to assimilate (333).

In his newspaper article “Beyond Boredom” Kōichirō Kokubun (國分功一郎) writes that although the post-Pacific war generation in Japan believed that politics could not change anything in principle, they nevertheless engaged in politics to “pass the time” (*taikutsu shinogi*, 退屈しのぎ). Fukushima has prompted a rethinking of that mentality. One could say that given the historical structure of Japanese democratic politics and sovereignty, before 3.11, no new image of thought or vision of the future could have been imagined—because Japan had enjoyed its prosperity, while living schizophrenically under the shadow of American imperial will. As such, there is no way to actively engage in politics, except by merely passing the time. However, following the nuclear

10. Cf. Fig. 1.

meltdown, and in the resultant horror and danger to their life, the Japanese people are forced to become “animals” (*doubutsu ni naru koto*, 動物になること)—compelled to think a new image of thought that fully embraces the ramifications of Fukushima. In an interesting way, this move by Kokubun is a reworking of Deleuze and Guattari’s geo-conception of thought. Why? Because, as they say, in facing the “ignominy of the possibilities of life” and the shameful compromises of our non-thinking present, Deleuze and Guattari contend that: “[T]here is no way to escape the ignoble, but to play the part of the animal (to growl, burrow, snigger, distort ourselves)” (*What Is* 108).

Amidst the ongoing and complex geo-trauma of the shock of 3.11, Japanese society is confronted with a demand to think a new image of thought, to begin thinking again, especially with respect to an engaged democracy. Kokubun makes the point that there is a pressing need to connect the everyday lives of people with representative bodies in singularly new ways. In this respect, 3.11 is a trigger for people to think fundamentally, in order not to fall back on received opinion, or what Kokubun terms passive democracy (*omakase minshushugi*, お任せ民主主義). In a similarly critical manner, Shirō Yabu, author of *3.12 no Shisō* (The Philosophy of 3.12), writes that Japan remains bound to the logic of a “nuclear state” (a concept borrowed from Robert Jungk). What the 3.11 shock demonstrates, *qua* simulacrum of the real, is how the dystopia of “nuclear capitalism” (*genshiryoku shihonshugi*, 原子力資本主義) was pre-existent before the catastrophic accident. Meanwhile, Sabu Kohso claims that Fukushima remains implicated in a capitalism-driven “totalisation of the world” (52) and, as such, its “apocalyptic symptom” is part of an “unending process toward a radioactive planet” (52). The fissures of Fukushima are, he says, “running everywhere on our existential territories” and because of this, the people of Japan face a crossroads, one towards conservatism and collusion with the nuclear industry, the other to “pry open the fissures” (52)—to destinations unknown. Through the fissures, there is the remote hope to “decompose capitalism” (53), to “turn people’s sufferings into political projects and the different ways we can interact with the planet” (53). So it is this crack or rupture, a break in the clouds, a rend in the protective walls which govern the everyday, which offers the possibility to view something other, not-yet or unforeseen, a new utopos: an emergent island or volcano amidst the chaos.

Congruously, one could argue that post-Fukushima meltdown and the new geophilosophy from, in and about Japan on the singularity of the plateau of March 11, 2011, is bound and grooved on a course of the autonomous,

animist technology of radiation (Winner 30). The geo-idea/wave of Fukushima forges an irradiated territory with the Earth that pushes the real “out to sea” to envelop the entire Japanese archipelago, and its conception of itself through contamination.

After Fukushima, the abstract movement from “land of hope” to “hope of land” —a relay to and fro, from deterritorialization to reterritorialization— is a question of *terra incognita* (unknown land) or, in Deleuze and Guattari’s terms absolute deterritorialization, nomadism, drift, and utopia. Absolute deterritorialization connects with both the present relative milieu (of irradiated land) and the forces that are curtailed by this milieu (*What Is* 99–100). “The land of hope” metamorphoses into “the hope of land,” as it is a passing from collapse of structure to ungrounded ground, or *terra infirma*. The absolute deterritorialization of the Anthropocene in light of Fukushima is, pivotally and simultaneously, the search for a new escape fantasy, an off-world sanctuary, enclave, haven, or (an)other Atlantis—sited in the sea of geo-trauma, indifference, separation, and mutation—*mare incognitum* (unknown sea). The futural wave sweeps away the present, as well as assumptions about the past in Japan, made in and for the expansion of a post-war capitalist state as the “miracle economy.” The futural wave could be aligned with an impersonal K-wave or extended cycle of economic activity in Japan, because the course of inexorable inhuman economic logic, or expansion for any purpose—is tellingly a line of pure madness, destruction, and abolition in and for itself. As a consequence, a dramatic interplay between Fukushima as geo-idea/wave and the continuing economic miracle of the new Japan is emerging.

Post-Fukushima Japan is on a journey motivated by the “hope of virgin land” (*risōkyō*, utopia) as mutated object. The “idea” of Fukushima/ Japan—contaminated and irradiating—thinks flows of time, images, abstract matter, and machines in the context of geo-trauma. *Terra firma* ebbs in and out of being: Irradiated being is a processual, futural ebbing machine of trauma. The future of Fukushima ungrounds the Earth and territory; its pollution remains “groundless,” nomadic. The breakthrough of the ground “ungrounds” the Earth from its moorings and sets it on a course for posthuman and futural becomings—in other words, “processual virtual immanence.” *Fukushima signals a universal breakdown or collapse (effondrement) alongside a universal ungrounding (effondement)*—an “absence of fondement” or ground, more cracked spaces than smooth spaces, but more than this, it is also a reversal of grounding and in effect, it is undoubtedly an “absence of ground” in the

new Japan (Sauvagnargues 97–98). However, one significant problem for the universal ungrounding of Fukushima is that there appears to be no immediate prospect for a Japanese diaspora, or the possible discovery of a new Promised Land. There is no escape from the viscous hyperobjects of the Anthropocene (Morton 29). Fukushima now reconfigures “the *Zeitgeist* of precarity” according to Maria Grajdian (Rosenbaum and Iwata-Weickgenannt 119), and is the new threshold of cataclysm and mutation. For example, filmmaker Sion Sono’s *The Land of Hope* in 2012—made soon after Fukushima—represents this new sense of terra-formation *as* Fukushima. Inhabitants of a made up prefecture are uprooted and ordered to evacuate, never to return. They leave without destination. They flee with neither weapons nor hope. This harsh reality brings home the radical destratification of the Earth in the present epoch¹¹ which is to say post-Fukushima as a fundamental condition of the Anthropocene.

Despite the aforementioned relationless and precarious aspects of the Anthropocene, Slavoj Žižek, in the documentary, *The Possibility of Hope*, which was made for the film *Children of Men*, speaks affirmatively of the state of being adrift. Discussing the concept of the boat and reflecting on the geo-traumatic ecological crisis facing mankind, Žižek suggests:

We must really accept how we are rootless. This is, for me, the meaning of this wonderful metaphor, boat. Boat is the solution; ‘boat’ in the sense of, you accept rootless, free floating. You cannot rely on anything. You know, it’s not a return to land. Renewal means you cut your roots.

This philosophical sense of cutting of roots and the acceptance of drifting at sea—rendered imperative in post-Fukushima geo-traumatised Japan—functions with the intensification in horror-Manga that we have seen in the last few years, in, for example, the cartoons of Junji Ito (Fig. 1). The recent emergence of horror manga as a major genre in the Japanese expressive psyche, coheres with the schizophrenic downgrading of nuclear capitalism, after Fukushima. Put another way, the decoded schizo flows of Fukushima *haemorrhage* hyperobjects, a traumatic chaos from which “we”—deliriously—pass into thinking the inhuman and the increasingly inhospitable Gaia. Irradiated Japan is posthuman and nothing posthuman is

11. Cf. Fig. 1.

alien to it. And we are thus always already populated by this strange matter, overcoded by an abstract machine which emerges from the futural wave:

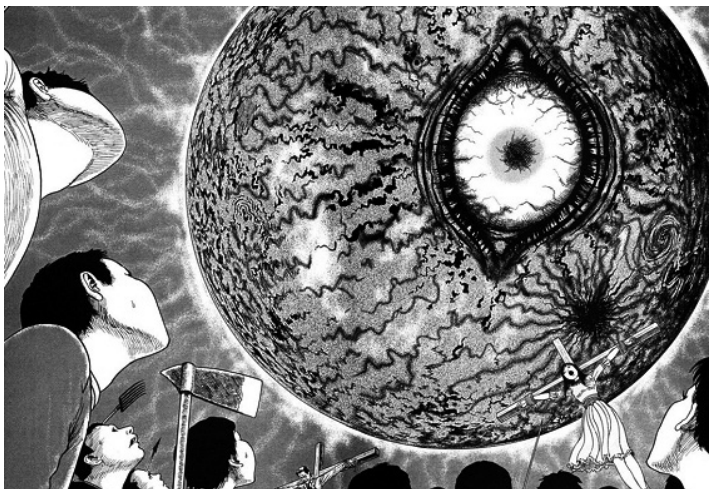


Figure 1. Junji Ito. Horror-Manga image, “The Irradiating Eye”

V. Conclusion: After Fukushima and the *Kizuna* (絆) to Come

Although the Anthropocene may well be part of what Deleuze and Guattari designate the “landscapification” of all milieus in *A Thousand Plateaus* (181), propelled, as Arun Saldanha claims, by “the crazy greedy feedback loop that is capital” (Stark and Roffe 201), there is also embedded in Fukushima-Anthropocene, equally, simultaneously, and pivotally, a land (e)scapification of all current worlds, milieus, territories, and (ir)rationalities of the human—a course of posthuman terra-formation for *the people-yet-to-come*.

Indeed, as Jean-Luc Nancy insists, nature has reached a threshold; *it is nature no more* (34). The earthquake and tsunami render Fukushima not only a technological catastrophe, but also a social, economic, political, and philosophical earthquake. He writes:

We have, in fact, transformed nature, and we can no longer speak of it.

We must attempt to think of a totality in which the distinction between

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nature and technology is no longer valid and in which, at the same time, a relationship of “this world” to any “other world” is also no longer valid.
(34)

Faced with the enduring geo-traumatic effects mentioned in this paper, we may ask the following questions: How does the philosopher, the friend of the concept, become a friend of the Earth in the time of the Anthropocene and in light of Fukushima? How does one become a friend of territory, a friend of terror-formation or “terra-formation” in Japan, when one is already baked in radiation? How does the philosopher form a provisional friendship with polluted territory and affirm the becoming of mutation? How does the philosopher think the *Zerrissenheit* of Fukushima and the third reterritorialization to come (eco-planetary-revolution)? How does the philosopher open up to the taking-over of the unthinkable? More succinctly, these questions pertain to the question of friendship *with the* nonhuman. And this focus is what crystallises the form of thinking in this article. Indeed, this article works in a parallel manner to Hiroki Azuma, who discusses the notion of *kizuna* or bonds (of friendship), and claims that what 3.11 demonstrates is the conspicuous lack of solidarity and homogeneity in pre- and post-Fukushima Japanese society. He argues that the reality of post-Fukushima is that people remain atomized and alienated from each other in terms of income, location, and age. Therefore, in this *immonde* or un-world the question is: How does one become a friend of radiation and embrace the *kizuna*, or friendship of the irradiated territory? Moreover, the question “How does one embrace *kizuna* in terms of the irradiated, impossible Earth?” coincides with Heidegger’s pessimistic view of the Earthrise photograph: “This is no longer the Earth on which man lives” (Wolin 105–06). In response, and faced with a kind of liminal eco-schizophrenia, geo-trauma, or *Zerrissenheit*—so described because Japan’s nuclear capitalism appears hell-bent on more catastrophe, tearing the World away from Nature in its wake—we state that thought is destined for absolute deterritorialization, for all manner of strange becomings: *Thought is no longer bound to the Earth on which man lives*. How does one de/re-territorialize when one is terra-forming, searching for an island of renewal amidst irradiated seas? How does one embrace one’s “corporeal facticity” in the cosmic-making times of the Anthropocene? How does one embrace the absolute deterritorialization or utopia of a milieu in which and through which one calls, following (Nietzsche and) Deleuze and Guattari, for “a new Earth, a new people?” (*What Is* 101).

How is it possible to produce a mode of thinking capable of engineering futural becomings, to produce the thought of a third reterritorialization of the Earth? Post-Fukushima geophilosophy must respond to its current milieu, however traumatically, and contra the unworld or the *immonde* of Integrated World Capitalism, “create worlds of thought, a whole new conception of thought,” of “what it means to think” in that infected milieu (Deleuze, *Desert* 138). So to ask the most *Unheimlich* of questions: How to become what one is, in the crack of time, outside of time, for a time yet to come?

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Abstract

The enduring effects of the March 2011 tsunami and nuclear meltdown at the Fukushima Dai-ichi Nuclear Power Station in Japan are explored in this paper through the notions of “geo-trauma” in the authors’ work and geophilosophy in Deleuze and Guattari’s philosophy. At the fulcrum of the 2011 global disaster was the nuclear meltdown and the emittance of radioactive *material such as* Caesium-137 and Strontium-90. This event mattered and matters, dispersing and deterritorializing organic, non-organic, and anorganic life in all of its articulations. In the wake of the singularity of Fukushima and the Anthropocene epoch more generally, it is timely to ruminate upon in what way this event as a futural wave makes “us” as the present generation both responsible for and part of the ongoing Fukushima meltdown. The questions that Fukushima provokes are not about the specific clean-up operation and environmental impacts around the plant, but more about how we can understand Fukushima as an event in nuclear history, or a singularity of “geo-trauma.” The folly of Fukushima and its aftermath, points to something fundamental about the Anthropocene, in the sense that the interconnected patterning that one may derive from the site of the disaster, gives new life to understanding the darker/non-human sides of ecology, the media, the unconscious, contamination, and space. The posthumanism of Deleuze and Guattari combined with the extinctions impetus of the Anthropocene will drive this analysis forward in terms of uncovering new forms of understanding about the Earth, World, territory, land, and Nature.

Keywords: the Anthropocene, Fukushima, futural-wave, geo-trauma, geo-thinking, nuclear contamination

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