Michi no Oku/The End of the Land:
Contemporary Art in Japan and the Catastrophic Condition

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Abstract

The nuclear meltdowns at the Fukushima Daiichi Nuclear Power Station that occurred after the Great East Japan Earthquake and tsunami on March 11, 2011, sparked a long-term international crisis that is at once environmental, social and political. In the face of such an ongoing planetary disaster, what is the role that contemporary art, artists, and cultural workers can play in diagnosing and contesting the disaster? This dissertation focuses on the work of artists including Chim↑Pom, Kota Takeuchi, and Bontaro Dokuyama to explore artistic and cultural responses to the disaster as both a short- and long-term catastrophe, and its effects on the environment and residents of the Fukushima coastal area and beyond. It unpacks the unique tools that artists have brought to this large-scale disaster both marked by its long duration due to the half-lives of the radionuclides and the invisibility of radiation to the human senses, which makes it difficult to see danger in the landscape. A close reading of this landscape and the history embedded in it reveals that the meltdowns at the Daiichi Power Station were just one disaster among many in the region. I read this history through a decolonial lens, to understand the roles that colonisation, extractive economies and a loss of collective agency have had in perpetuating a long-lasting precariousness to human and non-human existence in the area. This longer durational framework is what I call the catastrophic condition, a term I devise to explain the underlying causalities of the nuclear disaster. This dissertation shows how artists have directly responded to and resisted the effects of the nuclear disaster and its effects in Fukushima and Tokyo, and in the process posited new relationships between art production, labor, and anti-colonial practice in Japan.

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Introduction

On the morning of April 12th, 2013 the air was crisp as I sat in a car on the four-hour drive from Tokyo to the irradiated and forcibly evacuated town of Tomioka in Fukushima to see the blooming cherry blossom trees. In the vehicle were Ryuta Ushiro and Hiyashi Yasutaka of the Tokyo artist collective Chim↑Pom, and Fukushima-based-artists Kota Takeuchi and Yutaro Midorikawa. We were on a two-lane road with almost no cars. Towards the end of the drive, Yasutaka mentioned we should close the external vents and turn on the circulated air in the car. Ushiro handed me a simple polyurethane surgical mask that I immediately put over my mouth and nose. I tried to breathe as little as possible. What I didn't know at the time was that gamma radiation from the meltdowns at the Fukushima Daiichi Nuclear Plant Station was already passing through the metal of the car, through my skin and my body.

As we drove on, the surrounding landscape was dotted with vacant buildings with roofs askew and broken windows. The damage was from the Great East Japan Earthquake that occurred two years before, but the houses looked as though the earth had only just stopped shaking. However, the overgrowth of vegetation told a different story: unchecked, vines had begun to cover lamp poles and make their way up the walls of houses showing a prolonged absence of inhabitants.

The landscape was caught between these multiple times—that of the Great East Japan Earthquake which occurred at 2:46 pm on March 11, 2011, and the long durée of the subsequent nuclear meltdowns at the nearby Fukushima Daiichi Nuclear Power Station, which had dispersed radionuclides—most prominently caesium 137—the human-made radioactive element that had poured forth from multiple reactors, gone up into the atmosphere on the air currents, and settled all around the world as well as over a wide swath of northern Japan.[1] The greatest concentration of these radionuclides was in the area we were driving through, just a few kilometres from the reactors that were still in the process of leaking radiation.[2] We could see the past time of the earthquake, its effects still frozen in the landscapes and the buildings. However we couldn't see the omnipresent concentrations of radioactive nuclides in the air and land, or their location on the nuclear clock of decay as the caesium ticked forward through its 30-year half-life, which meant 60 years until its energy had dispersed—a process of which at the moment we were 2 years and 31 days into.

We turned onto a long and straight road, buttressed by cherry trees that formed a large pink and white shroud through which we couldn't see the overcast sky. There were new signs tied to many of the trees that read "In this area, the radiation level is high. When you view cherry blossoms, please stay inside the car." We drove on and after a few hundred meters we began approaching

[1] Michio Aoyama, "Long-Range Transport of Radiocaesium Derived from Global Fallout and the Fukushima Accident in the Pacific Ocean since 1953 through 2017—Part I: Source Term and Surface Transport," *Journal of Radioanalytical and Nuclear Chemistry* 318, no. 3 (December 2018): 1519–42, https://doi.org/10.1007/s10967-018-6244-z.; Kittisak Chaisan et al., "Worldwide Isotope Ratios of the Fukushima Release and Early-Phase External Dose Reconstruction," *Scientific Reports* 3, no. 1 (December 2013): 2520, https://doi.org/10.1038/srep02520.

[2] Greenpeace, "Fukushima Daiichi 2011-2021: The Decontamination Myth and a Decade of Human Rights Violations" (Greenpeace, March 2021), https://www.greenpeace.org/static/planet4-japan-stateless/2021/03/ff71ab0b-finalfukushima2011-2020_web.pdf.

what looked like a low metal rolling gate that appeared to be blocking the middle of the road. The road and the cherry blossoms carried onward on the other side of the gate, yet it blocked us from driving further. Midorikawa gestured toward the gate and noted that this is the border of the Fukushima exclusion zone—his house was somewhere beyond that barricade. This was the no-go zone, which the residents had been forcibly evacuated from and the public could not enter due to the high level of radiation, and yet it did not appear any different from the rest of the road. The gate itself was porous with wide gaps; at only two metres high, someone could easily climb over it. The gate blocked the road; extending its line one could see the border running through the middle of a deserted shopping mall. It seemed from where we were that one half of the mall would be considered "accessible" and the other half, part of the no-go zone. What did this border mean and what did it differentiate?

To my horror, Ushiro and Takeuchi opened their car doors and walked outside. Hadn't we just closed the vents a half hour ago? Now we were at the border of the zone and the entirety of the car was opened to the outside. Paralysed with fear it took me a minute before I hesitantly broke the seal on my own door and stepped out. Standing outside Ushiro showed us a video on his phone of a news report from the previous day announcing that for the first time since the start of the disaster the street with blooming cherry blossoms where we were standing was open for visitors. The footage showed different angles of the colourful trees, while people ambled around taking photos and setting up cameras. Multiple news vans could be seen, it was unclear who in the footage was a visitor and who was from the media. I looked up from the phone, the street was still desolate, we hadn't seen any cars or any person for kilometres, where was this crowd?

Looking around it was apparent that almost everyone filmed was part of the media or visiting government officials, filming each other like a Potemkin village that had since moved on. Standing there, the day after the report, it seemed no one but us had taken the recommendation to come to see the cherry blossoms. The dissonance between the news report and the reality we were witnessing was striking, the images in the report looked as though things were getting better and the area was healing a year on. Yet standing at the border of the Fukushima exclusion zone we couldn't find any signs of human life.

At 2:46 pm on March 11, 2011, the earth moved violently. The Pacific tectonic plate slid further under the North American and Eurasian tectonic plates below the submarine Japan Trench of the Pacific Ocean off the coast of northern Japan.[3] The reverberations rolled across this town of Tomioka in a massive earthquake measuring 9.0 on the Richter scale. Twelve kilometres further up the coastline, at the Fukushima Daiichi Nuclear Power Station, when the tremors hit four of the six nuclear reactors that were online shutdown as per emergency protocol.[4] Inside the reactors, the zirconium alloy control rods shot up to cover the thousands of rods of uranium oxide to slow the chain reaction of neutrons. The backup generators in the basements of reactor buildings all turned on their diesel engines providing the electricity to cool the water the rods were immersed in. Fifty minutes later the tsunami hit with waves that would rise to fifteen meters, far higher than the six-meter waves that the plant, situated on the shore of the Pacific

[3] The Geological Society, "Tohoku Earthquake, Japan," *Plate Tectonic Stories* (blog), accessed November 11, 2021, https://www.geolsoc.org.uk/Policy-and-Media/Outreach/Plate-Tectonic-Stories/Outer-Isles-Pseudotachylytes/Tohoku-Earthquake.

[4] The following account is based on the events as described in The Independent Investigation Commission on the Fukushima Nuclear Accident, *The Fukushima Daiichi Nuclear Power Station Disaster: Investigating the Myth and Reality* (Oxford: Routledge, 2014).

Ocean, was designed to protect against. The massive torrents of water easily cleared the seawall and rushed around the reactor buildings; the ocean salt water poured into the basements, drowning the backup generators and corroding the metal.

The nuclear reactors could not keep themselves cool without external electricity. The power station was powerless. As the temperatures started to rise in the water pools producing steam, the zirconium control rods began to react with the steam to produce large amounts of hydrogen. This volatile and flammable gas filled the containment buildings. On the afternoon of March 12 at 3:36 pm in reactor building 1, a spark touched the hydrogen and caused a massive explosion that ruptured the large concrete containment unit surrounding the reactor—radioactivity surged out of the building up into the atmosphere and travelled on air currents. Two days later at 11:01 am another explosion rocked reactor building three and the following day another explosion at reactor building four. This Level 7 radioactive disaster was the worst nuclear disaster since Chernobyl and the first time three reactors had melted down. Plutonium 239, with a half-life of 24,000 years, and other radioactive materials seeped into the ground around the plant and the adjacent Pacific Ocean. The disaster sent massive amounts of radioactive particulates, particularly iodine 131 (with a half-life of one week) and caesium 137 (with a half-life of 30 years) into the air and around the planet. The greatest concentrations of radioactive material on the northern half of Japan's largest island became the Fukushima exclusion zone, which traverses 7 towns with a total area of 337 square kilometres—roughly the size of the entire city of Philadelphia. 160,000 residents were forcibly displaced and, at the time of this writing, there are

still 25,000 who cannot return home 11 years later.[5] The disaster—commonly called 3.11 in Japan—and its impact on the planet and the surrounding residents can't yet be fully understood, but what is clear is that this is the largest ecological disaster at the start of the twenty-first century.

Why did this disaster happen? What are its ongoing effects? And what could art do in the face of such a large-scale disaster? Sitting in the car at the border of this zone just over two years after the start of the disaster, I was trying to comprehend the scope of this disaster; now 3,102 days later sitting at the computer writing I am still trying to answer these questions that form the basis of this thesis.

This dissertation looks at the artistic practices of some of those people sitting in the car that April day, including Chim↑Pom and Kota Takeuchi as well as others who have also responded to the disaster: Fukushima-born artist Bontaro Dokuyama and the Tokyo-based cultural collective Amateur Riot [Shiroto no Ran]. Through an in-depth reading of these artistic and cultural practices responding to the nuclear disaster, this dissertation provides an account of the ongoing disaster and its effects on the environment and residents of the Fukushima coastal area, as engaged by contemporary artists working in Japan. It unpacks the unique tools that artists have brought to this large-scale disaster both marked by its long duration due to the half-lives of the radionuclides; and the invisibility of radiation to the human senses which makes it difficult to see

[5] Aoyama, "Long-Range Transport of Radiocaesium Derived from Global Fallout and the Fukushima Accident in the Pacific Ocean since 1953 through 2017—Part I: Source Term and Surface Transport," 1519–42..; Kittisak Chaisan et al., "Worldwide Isotope Ratios of the Fukushima Release and Early-Phase External Dose Reconstruction," 2520.; Greenpeace, "Fukushima Daiichi 2011-2021: The Decontamination Myth and a Decade of Human Rights Violations."

unsafe levels in the landscape. A close reading of this landscape and the history embedded in it reveals that the meltdowns at the Daiichi Power Station were just one disaster among many in the region. I read this history through a decolonial lens, to understand the roles that colonisation, extractive economies and a loss of collective agency have had in perpetuating a long-lasting precariousness to human and non-human existence in the area. This process of creating and sustaining a durational framework of precarity is what I call the *catastrophic condition* and is one of the main focuses of this dissertation that explains the underlying causality of the nuclear disaster. This dissertation shows not only how artists have responded to and resisted the effects of the nuclear disaster and its effects, but the final chapter looks at how in particular one cultural collective has developed an urban autonomous zone to contest the larger forces of the catastrophic condition.

Little did I know that day in April 2013 that this would be the first of many trips to Fukushima and I would also traverse the gate many times to go into the Fukushima exclusion zone itself. That trip was also my first research for what would become the collective project and ongoing exhibition *Don't Follow the Wind* hosted by displaced residents inside the zone in their homes and places of work that they could no longer inhabit. This dissertation and research are deeply influenced by my experiences with the artists and displaced residents who co-constitute the project. It has also been informed by a bourgeoning field of politically-committed eco-criticism in global art history, for example in the writings of T.J. Demos and Grant Kester.[6] This

[6] T.J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Berlin: Sternberg, 2017).; T. J. Demos, *The Migrant Image: The Art and Politics of Documentary During Global Crisis* (Durham: Duke University Press, 2013).; Grant H. Kester, *The One and the Many: Contemporary Collaborative Art in a Global Context* (Durham: Duke University Press, 2011).

dissertation centres contemporary artists and cultural workers who have responded to the nuclear disaster in Fukushima, and therefore it might seem natural that this thesis is in dialogue with art historians who have focused on the nuclear project and art such as Gabrielle Decamous or Ele Carpenter.[7] However the artists discussed in the dissertation are not driven by a technological fascination with nuclear power and the nuclear industry. Rather the artists covered in the dissertation are responding to the social, environmental, and political conditions around them which, after 3.11, included radiation. As such this study is closer to the Marxist approach of Sven Lütticken that sees the nuclear project in the broader context of capitalism, and as such his writings on the nuclear are also based in their wider field of social and political relations.[8] Outside of the field of art history similar approaches in anthropology, such as Anna Tsing's, and political theory—by, for example, Sabu Kohso, Gabrielle Hecht, and Rob Nixon—that also have a wider breadth, or multi-scalar approach to nuclear and environmental crises as being situated within a large dynamic of systemic forces, have been influential to this dissertation.[9] Following the artist practices and artworks within this thesis has led me to undertake a wider decolonial reading of the disaster and Fukushima than can be found in other accounts.

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[7] Gabrielle Decamous, *Invisible Colors: The Arts of the Atomic Age* (Cambridge: The MIT Press, 2018).; Ele Carpenter, ed., *The Nuclear Culture Source Book* (London: Black Dog Publishing, 2016).

[8] Sven Lütticken, "Apocalypse (Not) Now," *The Nordic Journal of Aesthetics* 24, no. 49–50 (2016), https://doi.org/10.7146/nja.v24i49-50.23315.; Sven Lütticken, "Shattered Matter, Transformed Forms: Notes on Nuclear Aesthetics, Part 1," *E-Flux Journal*, no. 94 (October 2018), https://www.e-flux.com/journal/94/221035/shattered-matter-transformed-forms-notes-on-nuclear-aesthetics-part-1/.; Sven Lütticken, "Shattered Matter, Transformed Forms: Notes on Nuclear Aesthetics, Part 2," *E-Flux Journal*, no. 96 (January 2019), https://www.e-flux.com/journal/96/243057/shattered-matter-transformed-forms-notes-on-nuclear-aesthetics-part-2/.; these articles form part of the basis of his book: Sven Lütticken, *Objections, Volume 1: Forms of Abstraction* (Berlin: Sternberg Press, 2021).

[9] Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2017).; Sabu Kohso, *Radiation and Revolution* (Durham: Duke University Press, 2020).; Gabrielle Hecht, *Being Nuclear: Africans and the Global Uranium Trade* (Cambridge: The MIT Press, 2014).; Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011).

The account of the disaster as detailed by The Independent Investigation Commission on the Fukushima Nuclear Accident in their 2012 report and the Japanese government's study undertaken by the Investigation Committee on the Accident at Fukushima Nuclear and Power Stations of Tokyo Electric Power Company, both determine that the ongoing tragedy is a human-made disaster that was preventable.[10] The reports chronicle the recent history of the plant's owner and operator Tokyo Electric Power Company (TEPCO), poor safety standards, overconfidence in their knowledge and practices, and the underlying "safety myth" that the power companies and government had sold for generations since the introduction of nuclear power in Japan in 1965 via the United States' "Atoms for Peace" program.[11] The reports detail how a close relationship between TEPCO (capital) and their regulators (the state), both based in Tokyo, made a series of financially motivated decisions starting with the construction of the plant, and running through poor upkeep and oversight, ultimately led to the 3.11 meltdowns.[12] However, looking at the material histories that the artists uncover and highlight through their work provides a deeper understanding of the causes of the disaster, tracing back beyond the building of the plant. I expand on the independent and government report in order to situate the disaster in a longer history of colonisation and extractivism in Fukushima. It is through this more

[10] The Independent Investigation Commission on the Fukushima Nuclear Accident, *The Fukushima Daiichi Nuclear Power Station Disaster: Investigating the Myth and Reality*. And Investigation Committee on the Accident at Fukushima Nuclear and Power Stations of Tokyo Electric Power Company, "Final Report on the Accident at Fukushima Nuclear Power Stations of Tokyo Electric Power Company," July 23, 2012, https://www.cas.go.jp/jp/seisaku/icanps/eng/final-report.html.

[11] For more on the development of the Atoms for Peace program see Richard G. Hewlett et al., eds., *A History of the United States Atomic Energy Commission* (Berkeley: University of California Press, 1989).; Mara Drogan, "The Nuclear Imperative: Atoms for Peace and the Development of U.S. Policy on Exporting Nuclear Power, 1953-1955," *Diplomatic History* 40, no. 5 (November 2016): 948–74, https://doi.org/10.1093/dh/dhv049.

[12] The Independent Investigation Commission on the Fukushima Nuclear Accident, *The Fukushima Daiichi Nuclear Power Station Disaster.,* and Investigation Committee on the Accident at Fukushima Nuclear and Power Stations of Tokyo Electric Power Company, "Final Report on the Accident at Fukushima Nuclear Power Stations of Tokyo Electric Power Company."

in-depth reading that the loss of collective agency which produced an ongoing precarity can start to come into view. This longer historical reading shows that the nuclear disaster was not the first disaster in the area and traces a series of disasters that have been systemically caused by colonisation and extractivism in the area. What this reading shows is that the roots of the disaster go beyond cost-cutting measures of TEPCO but are part of an ongoing dynamic in the area. This dynamic I term the catastrophic condition where-in disasters can occur but be repaired without addressing the underlying systemic issues.

Chapter one offers an in-depth reading of Kota Takeuchi's work *Take Stone Monuments Twice* (2013-2016), for which the artist photographed 120 stone monuments throughout the area around the nuclear power plant, and that traces how the history of Fukushima is embedded throughout the landscape in the form of stone monuments. Takeuchi works through the images of the monuments to function as a sort of stepping stone to show how prescient and urgent the information present on these stones actually is. In the installation alongside the photographs, Takeuchi included small USB memory sticks, each with the images stored on them, that he had piled together in the shape of his body and, which visitors were invited to take with them. The offering of these images to the public via the USB sticks, I contend, can expand the reach of their knowledge and also help to protect them, a process that approaches what writer Jalal Toufic has termed the "the withdrawal of tradition past a surpassing disaster."[13] I argue that what theorists Astrida Neimanis and Rachel Loewen Walker call *transcorporeal stretching* over time—that aids in understanding the embodied nature of large-scale phenomena—is present in the action of

[13] Jalal Toufic, *The Withdrawal of Tradition Past a Surpassing Disaster* (Los Angeles: Redcat, 2009), https://ulib.aub.edu.lb/ebk/ebk000090_jalal-toufic.pdf.

Takeuchi transmogrifying his body in the installation into the images of stone monuments. Through this reading we can see how the important knowledge inscribed on these stones can also live within human bodies and be further circulated by these bodies.

In the second part of the first chapter I take a deep dive into certain of the stone monuments photographed by Takeuchi. This historical analysis reveals the underlying histories of the land, the initial colonisation of the indigenous Emishi people of Fukushima by imperial forces in the eighth century CE and the subsequent durational and extractive relationship between Tokyo and Fukushima. The reading of these monuments unveils previous ecological and human disasters that took place in the area and seeing these isolated moments together, it is possible to situate the extractive premise of the nuclear power plant as part of a longer lineage of an extractive economy in the area that has long damaged the region's landscape and residents. Setting up this relation helps us to understand the undergirding forces of the Fukushima disaster. Moreover it shows the relevance of these stone monuments, demonstrating how the artist focuses on the anti-archive through the bodily transfer of knowledge as a way to share and transmit this rich context across time.

The second chapter explores Fukushima-born artist Bontaro Dokuyama's endogenous perspective on the experience of the disaster and its ongoing effects. Looking at two works *Even After 1,000 Years* and *1/150* provides a deeper understanding of the residents' relationship to the landscape and the low-level radioactive contamination. *Even After 1,000 Years* traces the extractive route from Fukushima to Tokyo of early twentieth century artist Chieko Naganuma,

which Dokuyama subsequently followed. The performance in a rainstorm on a mountain-top near his family's home just outside of the Fukushima exclusion zone, works with his vulnerable body—what Sara Ahmed calls the "contingency of pain"—to visualise the plight and mental toll of what it means to live in a state of low-level radiation. The video *1/150* goes further to address the heavy toll of suicide in a region that has been one of the most pronounced effects of the nuclear disaster. Dokuyama utilises *fukeiron* or landscape theory in film to show the deep human and non-human relationship with the landscape and how radioactivity problematised the land and environment as a site of life.[14] These two artworks dwell in this landscape, not just to memorialise it or question its changes, but to engage in a potential reparative act. Through these works, Dokuyama attempts to repair his own relationship to the changed land and show how a sensitivity toward understanding the environment could potentially also deter future disasters.

The third chapter approaches the site of the Fukushima Daiichi Nuclear Power Station through two artworks undertaken immediately after the nuclear meltdowns. One of the works was undertaken next to the plant by the artists Chim↑Pom and the other performed inside the power station by the Finger Pointing Worker [*Yubi-sashi sagyō-in*] as represented by Kota Takeuchi. The artworks focused on the nuclear power plant as a way to figure the disaster, utilising their own bodies shrouded in white Tyvek suits—coveralls made of melt blown polyutherane developed by DuPont—in different ways to make visible both the epicentre of the disaster and index the presence of the radiation surrounding them. Both artists utilize the poor images of

[14] Takuma Nakahira, Masao Adachi, and Yusuke Nakahara, "On Landscape," in *From Postwar to Postmodern: Art in Japan, 1945-1989*, ed. Doryun Chong et al., Primary Documents (New York: Museum of Modern Art, 2013), 233-237.; Furuhata, Yuriko. "Returning to Actuality: Fukeiron and the Landscape Film." *Screen* 48, no. 3 (January 1, 2007): 345–62. https://doi.org/10.1093/screen/hjm034.

consumer grade cameras or surveillance cameras in order to embed the urgency of that moment in the transmission and reception of the image. The chapter looks at how the Tyvek suit carries its own misconceptions around the notions of safety and has also been a focal point of discrimination for those who wear it. The artistic tools that Chim↑Pom and the Finger Pointing Worker develop diagnose and contest the damaged landscape. Yet their use is not limited to the nuclear disaster but can help to illuminate the catastrophic condition at large.

Chapter four looks at a cultural response to the catastrophic condition and how one collective, Shiroto no Ran [Amateur Riot] based in Tokyo, constructed their own ecology in the city to sustain themselves and others. Amateur Riot established a form of collective agency that works against what theorist Wendy Brown has called a neoliberal rationality and its precaritising effects. The chapter unpacks how Amateur Riot utilised a prefigurative methodology—experimenting with different modes of living while still within the problematic contemporary condition of capitalism—described by the feminist economist theorist duo Graham-Gibson as instituting material and cultural practices to counter a shared condition. Drawing on the notion of *ikki*—a Japanese word meaning mutual aid practices—Amateur Riot formed an alternative economy in the Tokyo neighbourhood of Koenji which could support precarious workers such as musicians and artists, and allow spaces for cultural experiments. Building on James C. Scott's notion of self-governed areas, I argue that Amateur Riot formed what I term a *para-zomia*—an urban autonomous space where they were able to live and work. It was this para-zomia that was able to contest the precaritising effects of neoliberalism in Japan, by creating a collective infrastructure to support the livelihoods of a community of precariat and artists, while also

providing a space for cultural experimentation including public performances and interventions. Amateur Riot does not consider itself an art collective, yet I show how their prefigurative practices that blend cultural work and life have similarities to other art collectives in the region, primarily ruangrupa in Jakarta. The chapter details how Amateur Riot's experimentations in public space would lead them to organise the first large-scale political protest in the wake of the Fukushima disaster, which in turn would grow to become the largest social movement in Japan since the 1960s. Through Amateur Riot's work across different scales—from the local to the national— I argue for the potential of cultural collectives to develop practices of living and working that can fundamentally alter society at large.

Methodology and Positioning

My research lies at the intersection of contemporary art, the environmental humanities, and critical theory. I understand art and exhibitions not as a collection of representations, but rather as an experiment of human and non-human beings forming temporary communities to explore alternative theoretical and practical modes of living and working together. Rather than taking place inside a museum or gallery, these cultural experiments have often taken place amid the damaged landscape to see how culture can resist this transformation and simultaneously learn to co-exist within it. As such the research considers a new material and ethical matrix of aesthetic production of life, increasingly urgent due to the large-scale planetary shifts of climate change.

My research stems from my own curatorial work collaborating with artists to develop the long-

term project *Don't Follow the Wind* inside the radioactive Fukushima exclusion zone. Building the collective project with artists, curators, cultural workers, and displaced residents has created an unlikely transcultural social form to develop and host an exhibition of twelve new site-specific artworks by some of the most important living artists in the world, including Ai Weiwei, Aiko Miyanaga, Chim↑Pom, Grand Guignol Mirai, Nikolaus Hirsch and Jorge Otero-Pailos, Kota Takeuchi, Eva and Franco Mattes, Meiro Koizumi, Nobuaki Takekawa, Ahmet Ögüt, Trevor Paglen, and Taryn Simon. The exhibition opened on the fourth anniversary of the disaster, in 2015. However as the Fukushima exclusion zone remains inaccessible to the public, the exhibition is ongoing but largely invisible—a condition akin to radiation itself—only to be viewed in the future, if and when residents can safely return. Public access to the sites is uncertain, perhaps in 3 years, 10 years, or decades—a period of time that could stretch beyond our lifetime. Until then the exhibition acts as a powerful environmental mnemonic for the disaster and its effects. It has become a living testament to a form of collective action, where an exhibition of contemporary art in a disaster site necessitates a form of ongoing care, and in the midst of changing regulations and realities in the zone a sustained collective desire to keep the human and non-human participants together.

As a white American-born curator I have mainly working between New York and Europe with ongoing research in East Asia, primarily Korea, China, and Southeast Asia. Prior to going to Fukushima I was aware of the regional cultural and political dynamics, had taken undergraduate courses in Japanese and Chinese art history, and studied Mandarin. However I had not been in Japan nor studied Japanese before 2013. I am aware of the difficulty of personally going to

Japan, from a country that was a former coloniser of Japan after World War 2, and whose military still occupies bases over a large portion of Okinawa as well as dotted throughout the main islands of Japan. Moreover, my research could be seen as another form of appropriation, as someone from a different culture potentially extracting knowledge or value from an area. That uncomfortable and problematic position is one that I cannot escape or overlook; instead I am forced to face it in each of the writings, curatorial projects, or including this dissertation.

My coming to Japan was at the invitation of Chim↑Pom, and together we would travel up north to work in Fukushima where we are considered outsiders. This adds another valance to the collaboration and ongoing research, as well as complicating the notion of who is considered "local." Just because someone is living in Japan does not mean that they are local to a specific region and its complicated and distinct histories. This has been another problematic that I and we face in undertaking a project and research in Fukushima that even the almost-ten years of engagement now does not overcome. At the end of the day, we won't be going to "home" to Fukushima or living in the low-level irradiated environment. I acknowledge the ongoing friendship and trust of certain local residents who I will keep anonymous given the sensitivity of the community they live in and the difficult choices they have had to make while they continue to feel the effects of displacement. The sharing of their knowledge and experience has greatly influenced this dissertation. This dissertation is meant as a retroactive gift, as it is what I wish I would have read before I came to Fukushima, and I hope that this account can be passed forward to share what artists and cultural workers have undertaken in the region to serve as a toolkit for facing other catastrophes. Both as a diagnostic to prevent future disasters, through a detailed

analysis of the events in Fukushima, or in the event of a disaster how artists and cultural workers have worked to contest the ongoing threat to human and non-human in the long durée of 3.11.

The Catastrophic Condition

A central argument in this dissertation is that Fukushima was not an isolated disaster. When the plant lost electricity for an extended period of time and the earthquake destroyed the surrounding area, making it difficult to marshal resources, the Japanese Prime Minister and his cabinet pulled out the emergency guide for what to do in a nuclear disaster, flipped through the entire book, and found no mention of prolonged power outages.[15] The guidelines had been developed in close relationship with the nuclear industry and government agencies, which had considered the danger only of "short term" power outages. They had always considered calamity in a vacuum. Power—in this case, the combination of capital and state—never took systemic risk into account. They conceived any nuclear event that might occur as doing so without large-scale disruption to society, and therefore believed any contingency plan could rely on immediate support from the surrounding area.[16] Theirs was a disaster mentality. Etymologically, "disaster," meaning "ill-starred," purports the notion of a chance disruption. While the use of the word disaster in this dissertation will refer specifically to the earthquake, tsunami, and nuclear meltdowns that began in 2011, what happened in Fukushima was not just an aberration in the system. It was not a chance disruption of an apparatus that could then be mended, simply folding the disruption back

[15] This account of the Prime Minister's action can be found in The Independent Investigation Commission on the Fukushima Nuclear Accident, *The Fukushima Daiichi Nuclear Power Station Disaster*.
[16] Ibid., 2–3.

into its workings. Rather, what happened in Fukushima obliterated the framework itself. While "disaster" is related to degrees of chance and outlying phenomena, the etymological root of "catastrophe" lies in a complete overturning, a reversal of what was expected—a paradigm shift. Fukushima superseded contingency to lay bare the fragility of the underlying order. Catastrophe in this thesis will refer to the effects of the paradigm shift of colonisation in the region and its long effects that I argue have produced a series of disasters—including the nuclear meltdowns.

Philosopher Jean-Luc Nancy, writing directly after the meltdowns, described these events as evidence of the interconnected nature of natural disasters and human-made disasters, terming this nexus the "equivalence of catastrophe."[17] Certainly the global distribution of radiation after 3.11 underscores the increasing risk and damage humans are causing to the planet, yet within this reading the specificities of local causalities are often overshadowed. The artistic and historical lens of this dissertation seeks to understand a social, political and environment history of a single place—coastal Fukushima—and how a deeper study of the internal and external forces on the region can produce a global crisis such as the nuclear meltdown. Part of a military-industrial complex that descended from the Manhattan Project, the Fukushima Daiichi Nuclear Power Station had a built-in destructive capacity. The site selected for the plant was on a bluff next to the Pacific Ocean, home to a former World War II airbase used to train Kamikaze pilots. This nationalist necropolitics extended through to a project of corporate extractivism when Tokyo Electric Power Company dramatically cut into and lowered the rocky plateau—which would

[17] Jean-Luc Nancy, *L'Équivalence des catastrophes (Après Fukushima)* (Paris: Éditions Galilée, 2012). In English, Jean-Luc Nancy, *After Fukushima: The Equivalence of Catastrophes*, trans. Charlotte Mandell (New York: Fordham University Press, 2015).

have been a natural barrier against tsunamis—in order to save money on the transportation of material and lower operating costs.[18] This made the site and surrounding communities more precarious. Despite shouldering this risk the local community received none of the electricity produced at the plant, but rather it was all sent south to Tokyo and beyond—part of an internal and, as we will see, longstanding colonial relationship between the metropolis and Fukushima.

The fragile notion of nuclear safety propagated by the industry and the central government was a framework of thinking formed around temporal myopia and an almost religious belief in acceptable risk, known in Japan as the "safety myth."[19] This ideology produced the limited contingencies for isolated disasters, the veneer of safety that allowed the industry to be profitable. Acknowledging the possibility of large-scale risk would expose the cracks and deep fissures in this belief and force a reckoning with the ontological instability of the safety myth. Moreover with the climate becoming more violent, actual preparation for contingency in these precarious times would dramatically reduce profits—or if "clean up" after nuclear contamination is taken into account, erase them entirely. In Fukushima, it was this abdication of contingency—imagining a future—that was a central component of the disaster.

Through an in-depth reading of the cultural response to the Fukushima disaster, this dissertation demonstrates that this was not an isolated event, but rather part of a longer history of disaster in

[18] Reiji Yoshida and Fukada Takahiro, "Fukushima Plant Site Originally Was a Hill Safe from Tsunami," *The Japan Times*, July 13, 2011.
[19] For more on the history of the safety myth see Kainuma, Hiroshi. *"Fukushima" Ron: Genshiryokumura Wa Naze Umareta No Ka*. Tokyo: Seidosha, 2011.; The Independent Investigation Commission on the Fukushima Nuclear Accident, *The Fukushima Daiichi Nuclear Power Station Disaster: Investigating the Myth and Reality*. ; Joonhong Ahn et al., eds., *Reflections on the Fukushima Daiichi Nuclear Accident* (New York: Springer, 2014).

the region caused by the colonisation of the area, the loss of the collective agency by the inhabitants, and the ensuing economy of extractivism. This left residents in a state of durational precarity that triggered multiple famines, allowed for energy extraction via hydro-electric, coal, and nuclear power, and the extraction of bodies from Fukushima to serve the growing metropolis of Tokyo. This dissertation contends that the nuclear disaster was caused by this underlying "catastrophic condition" one in which disasters can occur, be repaired, and yet the lack of collective agency and precarity continues. In the next sections, I will further define these four concepts that are central to the catastrophic condition: the loss of collective agency, extractivism, precarity, and pre-figuration.

Loss of Collective Agency

I argue that the catastrophic condition is based first and foremost on a loss of collective agency. The notion of collective agency is understood in this dissertation as both the process of making decisions amongst a group of people and the capacity to act together. At the same time, it is important to recognise how the classical framework of agency has profoundly misshapen the concept, with exclusionary consequences. The classical framework of agency, as inherited from the Enlightenment, and thinkers such as John Stuart Mill presupposes that collective agents are constituted when an overdetermined group of "rational individuals"—usually property-owning individuals who identify as male—come together of free accord to make decisions on how they want to live together.[20] This framework excludes those judged to be "less than human" or "non-

[20] See for example John Stuart Mill, *On Liberty*, Penguin Classics (Harmondsworth: Penguin, 1974).

human" on the basis of gender, class, race, species, or ecological discrimination. So these classical accounts already preclude the possibility of everyone having the capacity for agency. The second fault is in the presupposition of the individual as being separate from their surrounding humans and non-humans that presupposes the possibility of living autonomously. This radically denies the co-constitutive relations in which we live and the forms of mutual dependence that make life and our decisions around it possible. Thirdly, this framework presupposes an arena of sovereignty where the capacity to act is based on citizenship and those outside of the sovereign framework of citizenship or located elsewhere, do not have the same capacity. Thus making forms inter-regional movement, cooperation, or collaboration more challenging.

It is important to underscore that our thinking about agency has been based on the long tradition of the "individual." This is constructed around an Enlightenment framework of "man" that theorist Sylvia Wynter has correctly diagnosed as an overrepresented structure of "a white male-identified person" and all of the epistemological presumptions and baggage that comes with this figure.[21] Furthermore, this dominant ideology—which sees the unencumbered individual as primary and foundational to the constitution of collective agency—has overshadowed a much more robust non-western and indigenous understanding of collectivity in which subjectivity is co-formed and a multiplicity of ways in which social formations can be structured as a result. Judith Butler furthers this reading by positing agency "in the context of an enabling and limiting

[21] Sylvia Wynter, "Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation--An Argument," *CR: The New Centennial Review* 3, no. 3 (2003): 257–337, https://doi.org/10.1353/ncr.2004.0015, 313. See also Sylvia Wynter, "Black Metamorphosis: New Natives in a New World" (Unpublished Manuscript, Schomburg Center for Research in Black Culture, New York Public Library, N.D.).

field of constraint," a process of the negotiation what she calls the "struggle" in which agency is actualised.[22] This account intends to demonstrate the impossibility of the notion of a rational individual making decisions for itself, to contest the western Enlightenment notion of "man" as autonomous, and at the same time to open up space for other humans and non-humans beyond the traditional narrow scope of the subject, as theorist Jane Bennett has called for.[23] Within this framework, collective agency can be seen as a mesh of humans and non-humans negotiating their co-existence together in order to decide how they want to live together and undertake the collective work to struggle to bring that into reality. This is not a fixed or premeditated plan, but rather an ongoing negotiation of a shared life-world.

As such I rely on this Marxist feminist reading of collective agency as being both the capacity to make decisions together as well as undertake a common framework for social reproduction. This does not understand an individual as an autonomous person, but as someone already embedded in a series of overlapping relations and enmeshed in a number of interdependent ecologies. As such collective agency is seen as the capacity for a community to make its own decisions on the forms of collective social reproduction. This understands that reproduction is not an individual act, but always a collective set of interdependent human and non-human relations that maintain each others' lives. As such it is impossible to make individual decisions for one's own reproduction as it is contingent on these interdependent ecologies. Hence collective agency is the capacity for a group within the interdependent ecology to reproduce itself in a way that it chooses. This reading of collective agency thus is not an exercise in abstract decision making,

[22] Judith Butler, *Giving an Account of Oneself*, 1st ed (New York: Fordham University Press, 2005), 19.
[23] Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010).

but is always necessarily material tied to the conditions of collective life. It is here that Marxist feminism asserts that historical processes are those informed by a constituency of a group of human/non-humans and the way in which they struggle to collectively reproduce. Thus the loss of collective agency is the loss of being able to co-determine collective reproduction. This can happen for example via the processes of colonisation which foreclose the possibility of being able to have access to resources, be able to collectively manage those resources, and determine where and under what conditions communities live.

Extractivism

As explored by a number of artists in this dissertation, most notably Kota Takeuchi in Chapter 1, there is a long colonial entanglement between Tokyo and elsewhere in Japan, through which the modern capital was able to remove resources and bodies for its own benefit. Theorist Albert Acosta, who coined the term extractivism, describes it as "a mechanism of colonial and neocolonial plunder and appropriation" that is part of a capitalist relation between the "demands of the metropolitan centres" and regions with "primary commodities" stemming from natural resources.[24] While the notion was first utilised to describe international exploitation in Latin America, a careful study of *Take Stone Monuments Twice* reveals the dynamic of how Tokyo came to be the world's largest metropolitan centre on the back of the resources and bodies extracted from Fukushima and other territories. Built into this extractive relation is the loss of

[24] Alberto Acosta, "Extractivism and Neoextractism: Two Sides of the Same Curse," in *Beyond Development: Alternative Visions from Latin America*, ed. Miriam Lang, Dunia Mokrani, and Rosa-Luxemburg-Stiftung, (Amsterdam: Transnational Institute, 2013), 62-63.

collective agency in the local region as critical decisions around modes of living and resource uses are being made externally by companies or government entities. This distance between a resource and the location of where the decisions are made about that resource permit serious environmental damage to be caused in the region—usually with little or no effect on the urban centre. Through the artworks discussed in Chapter 1 and Chapter 2, the deep time of the extraction of natural resources and bodies from Fukushima to Tokyo that continues to the present day comes into clear view. My aim is for this text can be read as a stone monument of sorts that can provide an interpretation of the events whose knowledge is embedded in the landscape. Yet unlike a stone monument that is fixed in one place, this text is unmoored from those landscapes and instead is able to travel, a condition akin to the photographed stone monuments by Takeuchi.

Theorist Sabu Kohso has shown in his book *Radiation and Revolution* how the Tokyo Electric Power Company attempted to disown the radioactive fallout from the meltdowns by claiming that it is a "masterless object"—in TEPCO's logic once radiation leaves its containment, it is no longer a legal entity and thus must considered inseparable from other parts of the environment. As Kohso concisely diagnosed, "TEPCO claims once atomic energy misbehaves, the company is no longer obligated or even able to take care of it."[25] With the contamination that can't be perceived by any human senses, part of the work is to re-master its material as being constituent of the Tokyo Electric Power Company. The catastrophic environment is a process of rendering an area and its human and non-human inhabitants into a precarious state without collective agency. This shift toward precarity which can take years or generations, is then intensified and brought

[25] Kohso, *Radiation and Revolution*, 104.

into view through various forms of disasters. These disasters could only occur with the precaritisation of the environment.

Precarity

Precarity in this context refers to the instability of human and non-human life under the conditions of capitalism. Many recent readings of precarity come from a Marxist analysis of contemporary labour conditions in neoliberal economies—temporary contracts, low hourly or piece-meal wages, non-union jobs. But as the threat of capitalism to the planetary existence became apparent, the notion of precarity has been extended by such theorists as Donna Haraway, Lauren Berlant, and Anna Tsing beyond working conditions to encompass the landscape and non-human entities—such as bodies of water or animals—as sharing in the de-stabilised conditions of life under a capitalist mode of production.[26] Speaking of precarity can thus be seen as speaking of a shared condition across the diverse human and non-human beings and environs that make up a broader struggle for life.

How does this process of precaritisation take hold? The environment, as an integral mesh of the figure and the landscape, becomes undone into an atomised relationship between a subject/ human, and object/non-human (landscape, insect, air). This process of separation of the human and the environment is a critical schism in modernity that has been described by theorists such as

[26] Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, Durham: Duke University Press, 2016).; Lauren Berlant, *Cruel Optimism* (Durham: Duke University Press, 2011).; Tsing, *The Mushroom at the End of the World*.

environmental historian Jason W. Moore.[27] This schism allows the non-human to undergo exploitation and destruction at a large scale for the short-term propagation of the human. Instead of a long-term symbiosis and a mutual cycle of care, there comes into being the notion of an objective resource that can be transformed and extracted. This disregards a mutual negotiation of co-existence and, rather considers only life to be human, and the non-human as sub-genre of existence.

In this dissertation, I argue that the catastrophic condition based on this atomised relationship between human and non-human underscores their mutual precarity. Both the population and landscape are subject to a destructive external entity that causes the forcible withdrawal of existence from human and non-human life in order to support this external entity. For example, as in the case of Fukushima and the long history of an extractive relationship with Tokyo. Requisite to this withdrawal is the negation of self-determination, and imposition of sovereignty which sees decision-making withdrawn from the local environment and replaced by an imposition of external decisions. Implementing these decisions is the slow execution of self-determination and extraction of existence—in this void is precaritisation—a weakening of the fragile interdependent structures that sustain life. This precaritisation creeps into the non-human landscape, atmosphere, water, animal, and human life as a de-stabilising force through the extraction of existence. As we will see in Chapter 1 that this has happened previously with crop failure and famine in Fukushima and most recently a crash in the bird population after 3.11.[28]

[27] Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso, 2015).
[28] Anders Pape Møller, I. Nishiumi, and Timothy A. Mousseau, "Cumulative Effects of Radioactivity from Fukushima on the Abundance and Biodiversity of Birds," *Journal of Ornithology* 156, no. S1 (December 2015): 297–305, https://doi.org/10.1007/s10336-015-1197-2.

This fragmentation produces a precarious environment within which the catastrophic condition is simultaneously intensified and made visible by a disaster.

Yet what is the temporal relationship between the catastrophic environment and disaster? The horizon of the catastrophic environment extends in both directions. It reaches back to the withdrawal of collective agency and forward through the implantation of extraction economies, contamination, and the precaritisation of life. This gradual deprivation enacts what Rob Nixon terms "slow violence." Altering the notion of violence as an immediate and singular event, Nixon sees slow violence as happening gradually, "a delayed destruction that is dispersed across time and space."[29] These effects are not always visible and can occur inside the bodies and landscapes, altered by a chemical or radioactivity that can transform beings on a cellular level. Slow violence articulates the durational quality inherent to the catastrophic condition, one that pre-dates the disaster event, and is intensified by it. If the catastrophic condition is the long horizon traced by precaritisation and a slow violence, then the disaster is an inflexion point—causing a rupture and intensifying the pre-existing conditions. The disaster can be understood as an explosion, earthquake, tsunami, typhoon, hurricane, heatwave, an intense unleashing of energy that overwhelms the environment. Exceeding the capacity of the landscape, built environment, non-human, and human life, this influx of energy becomes destructive. The rupture causes a break and exacerbates the precarious conditions. The surge of the disaster becomes violent—maiming and tearing at the fragility of life. In the case of 3.11 TEPCO both initially altered the landscape to make the nuclear plant cheaper to operate and then cut costs on

[29] Nixon, *Slow Violence and the Environmentalism of the Poor*, 2.

maintenance and safety, so while the plant operated for almost forty years, it was actually always on the brink of disaster should a large earthquake and tsunami happen again in the region as it had periodically over time.

Prefigurative

In this dissertation, I am invested in both tracing the bounds of the catastrophic condition and those practices that contest it. In particular, practices that simultaneously make space for social formations that enact collective agency to put forward an alternative way of life to the endemic precarity of the catastrophic condition. As such this dissertation focuses this work on prefigurative practice, the anarchist praxis of forming and experimenting with new ways of living and working together inside the shell of contemporary society, as described by such thinkers as theorists J.K. Gibson-Graham and anthropologist David Graeber.[30] The understanding of prefiguration does not claim a full autonomy or separation from social or economic entanglement with capitalism especially in the urban setting. However, it does push against the overly deterministic reading that capitalism is an omnipresent mode of ordering all parts of life on Planet Earth. Articulating this tension helps to underscore how there can be non-capitalist ways of living and working. A good example is explored at length in chapter four in the practices of the cultural collective Amateur Riot. Foregrounded in this reading is their practice of making space inside the Tokyo neighbourhood of Koenji for artists, musicians, the precariat, and the unemployed to live, work, and produce culture. The different ways of life they supported

[30] See for example J. K. Gibson-Graham, *A Postcapitalist Politics* (Minneapolis: University of Minnesota Press, 2006). and David Graeber, *Possibilities: Essays on Hierarchy, Rebellion, and Desire* (Oakland: AK Press, 2007).

prefigure a new mode of co-existence that was generated from the opportunities offered through their cultural practice.

Michi no oku / End of the Land

A brief note as well on the title of this dissertation, which stems from the seventh century CE, when Fukushima was self-governed and inhabited by the indigenous Emishi people. The nascent imperial court based in the southeastern city of Nara on the island of Honshu controlled little of what is the present-day country of Japan. Fukushima and the area further north beyond imperial political control was termed by the court to be *michi no oku* or "the end of the land."[31] In the context of this dissertation the phrase recalls the pre-colonial existence of the Fukushima and the indigenous Emishi relationship to that land. This is not to romanticise that period, but rather to mark the existence of a different social, political, and environmental relationship between the human and non-human residents of that area. If a completely different social order previously existed in the area, could the present situation also radically change in the future? Through the artwork in Chapter 1 by Kota Takeuchi we will be able to see the many transformations Fukushima has undergone over the centuries since that colonisation—culminating in the nuclear disaster. Takeuchi presents this history not just to explicate the past but as an invitation to take a deep look at the history of the region and its impact on the present. Through this way of seeing, Takeuchi's work—and this dissertation—is hopefully also a provocation for what to do with that

[31] Karl F. Friday, "Pushing beyond the Pale: The Yamato Conquest of the Emishi and Northern Japan," *Journal of Japanese Studies* 23, no. 1 (1997): 1–24, https://doi.org/10.2307/133122.; Nathan Hopson, "Tohoku as Postwar Thought: Regionalism, Nationalism and Culturalism in Japan's Northeast" (PhD Dissertation, University of Pennsylvania, 2012).

information, now and across time, beyond the half-lives of radiation.

Chapter 1. The Catastrophic Condition in Fukushima: Kota Takeuchi's *Take Stone Monuments Twice*

What I argue in this thesis is that TEPCO's building of the nuclear power plant is just a rehearsal of a longer colonial history of the area, and we can't reference Fukushima without thinking of the longer history of extractivism—the memory of which can't just be wiped away in a tsunami. Consequently, this chapter deepens the historical perspective of the catastrophic condition in Fukushima. Accompanying this historical chapter is an in-depth reading of Kota Takeuchi's work *Take Stone Monuments Twice* (2013-2016), which traces how the history of the region is embedded throughout the landscape. Through this wider lens, I aim to show how the nuclear disaster is not an isolated incident in Fukushima but rather one disaster among many—with varying scales and intensities—that have occurred since the colonisation of Fukushima and the loss of collective agency, which has created a long durée of precarity that I am terming the catastrophic condition. What this embedded knowledge in the landscape will show is how disasters can occur and also be repaired, without impacting the durational precarity of the catastrophic condition. What becomes apparent in the reading of *Take Stone Monuments Twice* is

that the catastrophic condition is a destabilising force, yet it is not a totalising form, as evidenced by the alternative ways of life that have been able to struggle and exist within it. I aim to show that the temporality and affect in Takeuchi's work gesture towards developing a sensitivity that has a capacity to read that which is latent within the environment. I argue that this sensitivity aids in providing a diagnostic of the catastrophic condition and, in doing so, provides a vehicle to understand embedded knowledge in the landscape.

To demarcate the catastrophic condition in Fukushima, a close reading of *Take Stone Monuments Twice* will foreground colonising, as well as resistance to it, as ongoing processes. *Take Stone Monuments Twice* helps to unpack the long colonial entanglement through which extractivism was able to remove resources and bodies to Tokyo and elsewhere in Japan. Looking at the wider history of Fukushima reveals this long history of extractivism between the centres of power in Japan and the local area. What this careful study of *Take Stone Monuments Twice* will reveal is the dynamic of how Tokyo came to be the world's largest metropolitan centre on the back of the resources and bodies extracted from Fukushima and other territories. Through the imperial colonisation of Fukushima and the subsequent loss of collective agency in the local region, critical decision around modes of living and resource uses is being made externally—usually in Tokyo—by companies or government entities. This distance between the location of where the decisions are being made and the resources in Fukushima permitted serious environmental damage to be caused in the region—usually with little or no effect on the urban centre. Through the artworks discussed in this chapter, the deep time of the extraction of natural resources and bodies from Fukushima to Tokyo that continues to the present day comes into clear view. In

addition I hope this text can serve as a form akin to a stone monument. As we will see in this chapter the stones provide an interpretation of the events whose knowledge is embedded in the landscape. Unlike the often site-specific monuments, this text is unmoored from those landscapes and instead is able to travel—a condition akin to the photographed stone monuments by Takeuchi.

Knowledge Embedded in the Landscape

In order to approach an embedded knowledge, it is important to contextualise the relation of who is constructing the narrative. The following biographical information has been gathered from personal correspondence with the artist.[32] After the earthquake and tsunami in 2011, Kota Takeuchi moved to Fukushima from Tokyo where he had graduated a few years earlier from Tokyo University of the Arts and had been working odd jobs. Amid the ongoing nuclear disaster, Takeuchi decided to take a job with a subcontractor for TEPCO, working on the clean-up efforts to stem the fallout in and around the nuclear power plant. Taking this job can be seen as part of an effort of residents from Tokyo and elsewhere who came to volunteer in the areas affected by the tsunami, earthquake, or nuclear disaster.[33] Yet even after this particular job finished Takeuchi decided to continue to live in Fukushima, in or near the affected areas, working jobs related to the nuclear waste disposal operation and the accompanying businesses that support the workers.

[32] Kota Takeuchi, "Email Questions Around Stone Monument Twice to Author," November 15, 2019.
[33] After March 11, 2011, there was an outpouring of support by artists for those affect by the tsunami, earthquake, and nuclear disaster. Contributions came in the form of money and materials, as well as many who drove up from Tokyo and elsewhere to help residents after the disaster. While a number of art auctions to support victims and recovery efforts were held, Japan Art Donation, founded by curator Kenji Kubota, was unique in that raised money for the future culture in the area instead of immediate supplies. Other artists besides Takeuchi also transplanted to the affected areas such as Haruka Komori and Natsumi Seo.

Both his occupations and living in the local area have contributed to his unique understanding of the environment and its lived history.

Takeuchi moved to the area after the disaster, never having been to Fukushima before; this lack of a pre-disaster engagement with the landscape has been a backdrop to his continual search to understand that time before. While his experience of living in the local area prior to the nuclear meltdowns is lacking, he has for the past ten years continued to live adjacent to this extraordinary environment of contamination and the long-running government "clean up" operation (technically called "remediation" it is commonly referred to as "clean up," although actually "cleaning" or removing all of the radiation is impossible, the goal is to reduce the radioactive material in the area to a level the government deems safe).[34] This has given him a unique perspective—compared with other artists—of the ongoing transformations in the area and the physical and affective experience of living day to day in Fukushima after the disaster. This commitment to being in the area has been integral in forming an approach to the lived environment through its relationship to the body in his practice.

Takeuchi's durational project *Take Stone Monuments Twice* (2013-2016) is an example of how this closeness with the landscape and its embedded history has developed a longer perspective on temporality. The project takes as a point of departure the ecological and social histories that are inscribed on stone monuments found in the landscape. These human-made monuments are

[34] Limeng Cui et al., "Environmental Remediation of the Difficult-to-Return Zone in Tomioka Town, Fukushima Prefecture," *Scientific Reports* 10, no. 1 (December 2020): 10165, https://doi.org/10.1038/s41598-020-66726-y.; Greenpeace, "Fukushima Daiichi 2011-2021: The Decontamination Myth and a Decade of Human Rights Violations."

carved onto generally free-standing large stones, either found or made from locally quarried rocks, and are common throughout Japan to highlight cultural, ecological, political events or individuals specific to the area where the stone is located. *Take Stone Monuments Twice* was inspired by a report of one such stone monument, which was unearthed by the tsunami that accompanied 3.11 surged over a road construction site in Iwate prefecture.[35] The imposing twenty-tonne rock was revealed to be a "tsunami stone," a type of stone monument usually placed in the landscape to mark the resulting water level of a tsunami with the intention to act as a warning, embedded in the environment for future generations, about the heights the tsunami water can reach. This particular stone was originally carved at the mouth of the Yoshihama River in Ofunato to record the 1933 Sanriku Earthquake and Tsunami; yet approximately forty years later, due to a modernisation project on a nearby road, the stone was buried. This tension in the way the landscape is historically transformed undergirds Takeuchi's project, as stone monuments exist both as a way of reading a fuller history of the environment and as markers of the landscape's transformation by humans.

Reading a fuller history of the environment in the stone monuments is particularly important in coastal areas of Fukushima as there has been a long history of major tsunamis, including three originating in close proximity to the local area since 1896 and others which originated elsewhere in the Pacific Ocean that also caused flooding. These geologically induced events, caused by shifts in existing fault-lines, usually occur in long cycles, as is evident in the map of the east coast of northern Japan marked with nine major tsunamis from 869-2011 that originated in

[35] Kota Takeuchi, "Stone Monuments and People" (Gallery Handout, Snow Contemporary, Tokyo, February 3, 2017).

similar areas [Figure 1]. The periods of time between these large-scale events can be decades or centuries, during which the memory of these periodic destructive events can be lost. This was the case in Ofunato, where the tsunami stone was covered by development, the transgenerational memory of its location thus severed. During the 2011 tsunami, the ocean deluged the same areas of land that had previously been affected by tsunamis and destroyed bodies and buildings that were once again in its way. In some communities, this intergenerational knowledge persisted. In Aneyoshi, for instance, a stone monument explicitly states, "Do not build your homes below this point," the stone's intergenerational address was heeded and the village was untouched by the 2011 tsunami.[36] In Ofunato, when in the aftermath of damage the buried stone monument was revealed by the same tsunami against which it was prognosticating, the community recognised the latent knowledge and re-established the stone as a critical warning marker for the area. Comparing the different areas' relation to their stone monuments and the resulting effects centres the legibility of the stones as durational conduits of information. Takeuchi sees this initial tragic oversight of the knowledge embedded in the environment as resulting from the development of and inundation with different media to relay information.

[36] Martin Fackler, "Tsunami Warnings, Written in Stone," *New York Times*, April 21, 2011: A6.

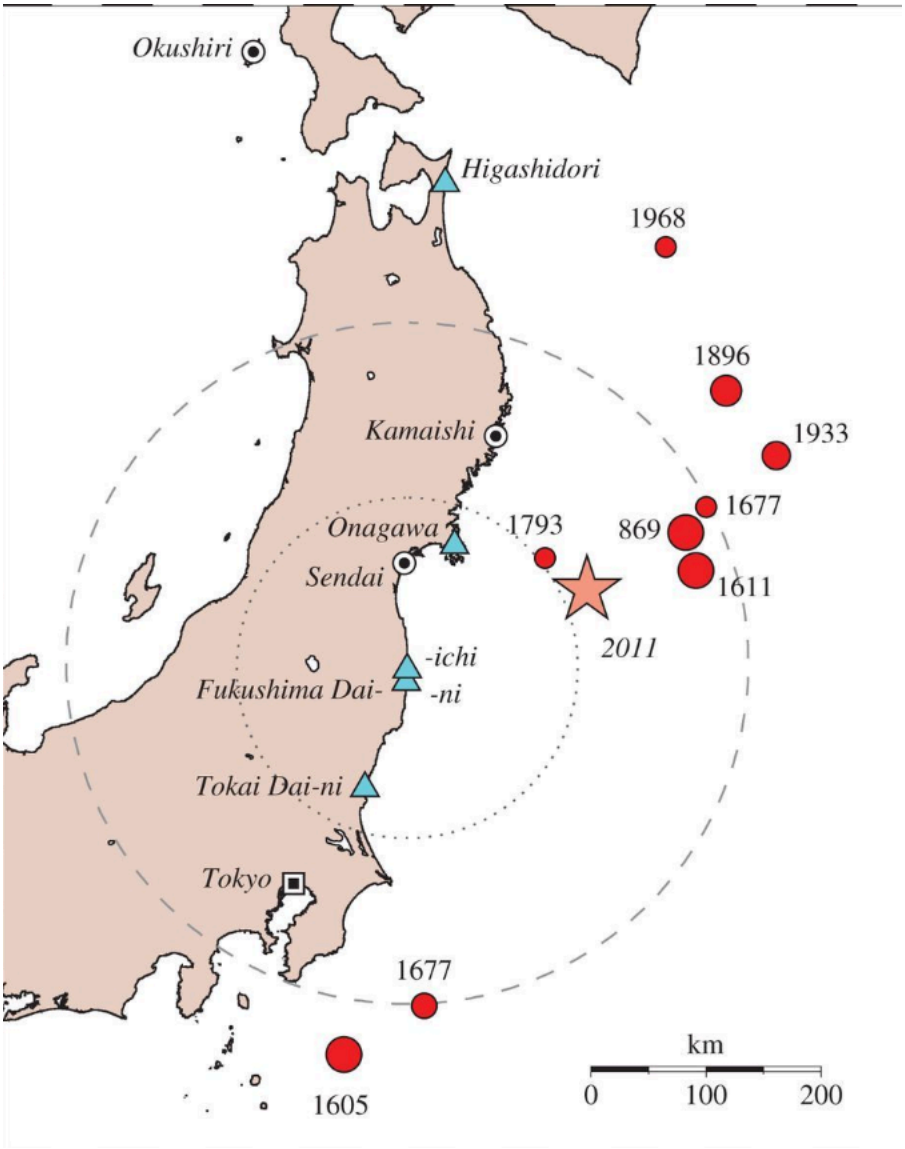


Figure 1. Locations of Nuclear Power Plants (triangles) affected by the 11 March 2011 earthquake (star) and tsunami, and relevant historical earthquakes in North East Japan listed in the 1974 catalogue of Soloviev & Go. Events are shown with red dots, whose radius is adjusted to the Soloviev tsunami intensity scale; 150 and 300 km radius circles from Fukushima Daiichi are shown with dotted and dashed lines, respectively, depicting the region over which international standards require consideration of hazard sources.[37]

[37] Source of figure, Costas Synolakis and Utku Kânoğlu, "The Fukushima Accident Was Preventable," *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 373, no. 2053 (October 28, 2015): 20140379. Reference to catalogue of tsunamis Soloviev, S. L., and Ch N. Go. "A catalogue of

The inability to read the knowledge embedded in the landscape was also an important contributing factor to the meltdowns at the Fukushima Daiichi Nuclear Power Station. In the 1960s, Tokyo Electric Power Company started constructing the Fukushima Daiichi Nuclear Power Station with American General Electric (GE) designed reactors. The site chosen for the Fukushima Daiichi Nuclear Power Station was a thirty-five-meter high bluff adjacent to the Pacific Ocean. Due to a cost-benefit analysis of running the seawater pumps for the reactors, TEPCO razed the bluff almost entirely and then dug basements another fourteen meters below sea level where the emergency diesel generators were installed, which ultimately flooded along with the reactors and were instrumental in causing the meltdowns.[38] In 1966, when TEPCO submitted its planning application to the government it set the tsunami prevention measure height at 3.122 meters. This figure was based on the wave height of the recent 1960 Great Chilean tsunami. While it is unclear what records TEPCO's study relied upon to set this low initial level for tsunami protection, scientists have noted that listing the number 3.122 meters to the millimetre on the application was unusually precise and that the extra decimal places might have served to convey the appearance of precision.[39] As shown in Figure 2, there is a long history of local tsunamis—most of which had waves well above 3 meters and some with the similarly sized 13-meter waves that struck the Fukushima Daiichi Nuclear Power Station on March 11, 2011.[40] This knowledge of the wave heights was embedded in traces in the landscape

tsunamis on the western shore of the Pacific Ocean (173-1968)." *Nauka Publishing House, Moscow, USSR, Can. Transi. Fish. Aquat. Sci* 5077, no. 1984 (1974): 310.

[38] Reiji Yoshida and Fukada Takahiro, "Fukushima Plant Site Originally Was a Hill Safe from Tsunami," *The Japan Times*, July 13, 2011.

[39] Costas Synolakis and Utku Kânoğlu, "The Fukushima Accident Was Preventable," *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 373, no. 2053 (October 28, 2015): 16.

[40] Ibid., 5-6.

as well as tsunami stones and oral history, yet seemingly did not enter into TEPCO's process for building the plant as evidenced by the low height listed on the planning application. This could have been due at least in part to the attitudes of TEPCO and bringing new technology to the supposed hinterlands. The difference is evidenced in the process of the local power company in Tohoku. Before building the Onagawa nuclear power plant the Tohoku power company interviewed local residents about the terrain's historical relationship with tsunamis and also took into account the deep time of the environment. The local power company built their plant much higher than TEPCO's Daiichi. And on March 11, 2011, despite the Onagawa plant's location further north along the coast as closer to the epicentre of the quake and even higher waves from tsunami than hit Tokyo Electric's Fukushima Daiichi plant, there was little damage to the Onagawa plant.[41] The ignorance of the area's long history of large-scale tsunami activity demonstrates the Tokyo-based power company colonial chronomyopia—understanding time only in a limited window set around the empirical experience of the extractivist entity—a temporal consideration shortened further by the demands of capital.[42]

This account shows the potentially disastrous results of an inability to recognise the human and non-human knowledge already embedded in the landscape. While Takeuchi also comes from outside of Fukushima—living in the area since 2011—his artistic practice has incorporated not only an effort to learn from these situated knowledges, but also one to repair their modes of transmission, including a sensitivity toward reading the environment itself. In the artist's writing, he suggests it was not only the road work that covered the stone monument in Ofunato but also

[41] Synolakis and Kânoğlu, "The Fukushima Accident Was Preventable," 6.

[42] The notion of chronomypoia will be discussed in greater detail in Chapter 2.

the "massive new appearance" of other forms of media that "buried" the importance of the rock as an urgent mode of transmitting knowledge.[43] Takeuchi takes into account the impressive stature of these rocks that would have signalled their value and as a form through which the intergenerational passing of knowledge could have occurred in a period before the widespread availability of other documents and their repositories such as "libraries, photography, films, television programs, and the internet."[44] While this deluge of media forms has increased the availability of information, it has simultaneously weaned populations off of an awareness of information situated in the immediate landscape. In reading the story of Ofunato, the loss of the ability to recognise this landscape is evident as well as a latent resilience that might be hiding in plain sight. Confronting this lost capacity to see the effects of time in the landscape, Takeuchi intervened with the time-based medium of photography. Following existing images from a book, he displays two sets of images of a single stone monument to repair a way of seeing the knowledge in the landscape through the imposing forms of terrestrial media.

While there are a variety of types of stone monuments in Japan some marking business names, or others celebrating local politicians, Takeuchi's *Take Stone Monuments Twice* works with a set of images found in *Economic History in the Modern Age of Iwaki* (1976) by Ichiro Saito. This book —published in the same period when the Ofunato tsunami stone was being covered by construction—contained a study of stone monuments related to the area where Takeuchi lived in Fukushima, which also encompassed the Fukushima Daiichi Nuclear Power Station. The book includes different types of entries for each stone: some entries had transcriptions of the words on

[43] Takeuchi, Gallery handout, Snow Contemporary.
[44] Ibid.

the stone; in other cases, the entries contained a summary of the event the stone refers to; certain entries were solely excerpts from other authors' writing on the event; while sometimes the entries include the author's experience of visiting the stone. These later accounts often include anecdotes from residents who live around the stone and serve as an oral history of the event or why the stone was created. For Saito the stone monuments were both a form of environmental mnemonic of the history of Iwaki, but also as an entry point for to talk with the local community about their knowledge of the stones, or the events, or what it is like to live near the monument. Thus the stones serve not only as markers of the past but also for Saito an entry point into the web of experience of the community. Thus both the stones, his research, and his encounters with the inhabitants are woven together into the book to both recognise the landscape as having an intrinsic importance as well as providing the means through which to decode it. Through a selection of stone monuments he photographed and analysed, Saito constructed a social history of the development of the local area with this embedded knowledge.



Figure 2. Uchigo Stone Monument, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

The photos of Saito's stones sometimes document the surface of the stone, but they do not always capture all of the text on the stone, whether due to the low-resolution reproduction, the glare on the stone's surface, or the small characters on the stone. Instead, the photographs of the stones usually show the entire stone including the base, while at other times just an excerpt of the stone is visible. Many of the images are straight on, but others are at an angle or at a distance framed by the landscape. Sometimes it appears that figures are staged looking at the stones, other times it seems that figures are passing by and asked to pose in front, or children continue to play around the stone as the photograph is taken. While some of the writing may be visible in many of the images, usually the immediate landscape behind the image creeps through the sides of the

image, or occasionally dominates the monument. Thus the images serve as an index in time (in this case the 1970s) of both the stone monument and its surrounding landscape. If the stone monument is a snapshot of an event that occurred in and around that site, then the photograph can serve as a reference for that event via the stone monument but also provide additional context of the present state of the landscape—providing visual evidence of how the space might have altered over time.



Figure 3. Kota Takeuchi, *Metamorphosis*, 2017, 240 photographs, USB-upd chips, clothes, shoes, installation at Snow Contemporary, Tokyo, 3 February - 3 March 2017. Courtesy of the artist.

Takeuchi followed the images in Saito's book as a guide, spending three years traveling to all

170 of the stone monuments detailed in the book, and then selecting 120 of the monuments to re-photograph at the same angles and composition as they appeared in the book.[45] *Take Stone Monuments Twice* displays the original 120 photographs by Saito from the 1970s side by side with Takeuchi's 120 new photographs of the stone monuments as they presently appear. In the installation of the photos at his solo exhibition at SNOW Contemporary in Tokyo in 2017, images of each stone are presented side by side and arrayed in grid patterns of roughly the same dimensions. [Figure 3.] This is in contrast to Saito's book where the images both differed in size and arrangement on the page, often inserted in the midst of text. Takeuchi's approach in the installation lays bare the photographs, enlarging the images from Saito's book and, rather than accompanying the images with text, presenting them adjacent to Takeuchi's own images from the present day. It is the indexical nature of the photograph that Takeuchi's work picks up and dwells in, in contrast to Saito's narrative web in the form of a book. Takeuchi's installation positions the two sets of photographs to serve as an index of the history of the site, but also the changes over time. The comparative images thus become a photographic index of the state of the stone and landscape at the end of the twentieth century, and the state of the stone and landscape at the beginning of the twenty-first century. Takeuchi's re-staging of the photograph kept the same framing of the photograph, less concerned with sharing the contents of the particular stone monument than reproducing a photograph similar to Saito's. This means that overgrowth or new buildings can partially or entirely obscure the stone, or sometimes where the stone has fallen or been removed the photograph is of an empty base and the surrounding landscape. And yet, the images show the stones largely in the same space and in the same state as Saito's image almost

[45] Kota Takeuchi, "Email Questions around Stone Monument Twice to Author," November 15, 2019.

half a century before and perhaps not too distant from the time of their creation. It is this durability of the stone monument to transmit site-specific information into the future that the artwork highlights. I will look at one example of a stone monument depicted through the comparative series of photographs to unpack how the work shifts the viewer toward a greater sensitivity about the kinds of knowledge embedded in the landscape.

Reading the Environment

Let us compare the images of the Uchigo stone monument that sits on the grounds of the Zuihoji Temple in Iwaki, one photograph taken by Saito in the 1970s and the other by Takeuchi around 2015. [Figure 2.] The stone monument appears similar in both photographs, framed in the centre and shot from the same angle. Due to being made of resilient stone, the monuments appear almost entirely unchanged across the almost half-century. The consistency in the photograph's composition and the stone monument's appearance allows for the changes in the surrounding landscape to emerge. Saito's image shows the stone monument flanked by two gravestones and a small structure to the rear of the monument, with the spacious background depicts a hillside in the distance and a few trees in the graveyard. In Takeuchi's denser photograph a new retaining wall buttresses the monument, while additional graves and statues have been installed around it. The vegetation on the hillside has multiplied and grown, while the trees in the graveyard have vanished, perhaps making way for over four decades of deceased inhabitants from the

community. These changes in the human landscape and non-human environment become more pronounced as the artist situates the images side by side in the installation. The comparison allows us to see what the transformation of time in the landscape looks like over approximately half a human lifetime—a movement toward an understanding of extended forms of temporality. Yet the comparison also makes this extended temporality seem surprisingly close and urgent: this comparison between the present and the recent past in the images confers on the latter a sensation that this period of time is almost tangible. The similarities in the composition make the recent past appear graspable but just out of reach, a haptic sense of presence that originates with the artist's experience in front of the stone monument.

Takeuchi describes the feeling of coming upon a stone monument, writing, "I can feel my tiredness in my legs and breathing. Then I feel an aliveness and connection between me and the stone."[46] Through the immense care taken in replicating the composition of the photograph, this strong connection—perhaps even reverence—the artist feels toward the stone monuments comes through in his artwork. Through this generous effort Takeuchi allows the gallery visitor to have their own unique experience of the stone monuments from the possibility to compare the photographs of Takeuchi with those of Saito taken decades prior. Within the common framework of the composition the viewer can see the stone monument as a shared reference point across the two images. With that anchor, the changes in the background then come into stark relief between the two images. The passage of time, the effects of development on the landscape, the vital force of trees growing over decades, all contribute to an intimacy with the place that the viewer is

[46] Ele Carpenter, "Getting Closer to Deep Time with Kota Takeuchi," *Research Z33* (blog), September 20, 2017, https://z33research.be/2017/09/ele-carpenter-getting-closer-to-deep-time-with-kota-takeuchi/.

invited to share. Seeing these changes provides small steps toward accessing the sensation of the long durée of time that the stone monument represents.

In both images, a single figure is standing reading the inscription on the monument. The figure in Saito's photograph is dressed casually with a shaggy hairstyle, the informality of the figure in the photograph is unmistakably modern.[47] The image by Takeuchi is a self-portrait. He strikes the same pose as Saito's figure and Takeuchi mirrors the nondescript modern dress by wearing a workman's dark blue jacket and slacks, which project a similar casualness to Saito's image. In addition, both figures appear to be around the same age. These similarities in the bodies' age and appearance, both striking the same pose, in a photograph taken from the same angle that also shows the growth in the surrounding nature, all allude to a commonality in the lived experience of the site and, equally important, a sense of continuity despite the dislocating effects of the nearby disaster. The meltdown—planetary in scale—locally produced a 337-square kilometre exclusion zone forcibly displacing over 100,000 people; yet, nonetheless, the image comparison demonstrates that one can still be where another has been before. The image is that of presence—of body and stone. While the stone monument is around fifty kilometres off outside of the zone—a place that was never formally evacuated—the continuity in human presence both makes the time period appear closer and works to undo the preconception that the area outside of the zone is similarly uninhabited. The consistency in the image framing and the figures shows continuity in corporal presence and aid in seeing a cohesion across time. It is this continuity that can act as a form of repair, one in which life and inhabitation can continue despite the disaster, but also a way

[47] The figure in the photograph is likely Saito or a son-in-law of Saito based the artist's conversation with Saito's daughter. Kota Takeuchi, "Email Questions around Stone Monument Twice to Author," December 24, 2019.

of repairing a relation with the landscape.

This comparison of images reveals a continuity of lived history. In periods of long displacement from the area, the artwork acts as a way of repairing the possibility of reading the landscape and its embedded knowledge. In particular, via the temporal sensitivity that is engendered by seeing the multiple time periods in the artworks. Takeuchi, instead of confronting the stone monuments in a dichotomous temporality—for example, the original event represented and transferred onto the stone monument as one description of time, and the second time, a single photograph in the present day of the artist looking at the ancient carvings—includes the third recent past of Saito. Thus the artist unpacks a reading of the knowledge embedded in the landscape through these multiple temporalities: one perspective from Saito forty years ago; one perspective of the artist from the present day; and the perspective of deeper time inscribed on the monument. This arrangement allows for the process of receiving such knowledge to come more clearly into view. These multiple perspectives provide a framework through which we can see the continuity of knowledge being received across generations (Saito's and Takeuchi's, but also more broadly, between the survivors of one tsunami and those to come to whom the monument is a warning). Or in the case of some of the photographs where the stone monuments are missing or broken, we can also see the fragility of that continuity of knowledge and its potential rupture. That rupture helps to break down the temporal junction of the perception of the eternal unchanging durée of the environment and the immediacy of a shocking event like a tsunami. What becomes clear is that the import is not just in the stone monuments' existence across time, but in our ability to read that history and have its lessons from previous experience act through us by informing the

way we live with the environment in the present day.

The images by Saito in Takeuchi's installation also function as a sort of stepping stone to show the approximate past. This aid of Saito's image showing the site in the 1970s opens up the viewer to approach a way of understanding the extended temporality of the stone monument, as well as connecting us to the impression of its reception over time. This reading of the temporal comparison in Saito's and Takeuchi's image of the Uchigo stone monument can be extended to the entire series of photographs in the installation, which has the effect of increasing the sensitivity to reading the visual environment over time. Rather than just presenting the artist looking at a historical record, the double gaze at history shows a presence and a reading of the monument across the spectrum of time. Simultaneously, this allows the viewer to see the closeness of that earlier period, while also preparing us to recognise the deeper time of the third temporality of the site inscribed on the monument. The comparative exercise institutes a temporal alertness that brings the viewer toward a perspective of reading the past as more legible as well as allowing the viewer to develop a way of looking at deep time as proximate. As we will see, the heightened temporal alertness the role of the body also is highlighted with a parafictional turn in the installation.

Transcorporeal Stretching through a Surpassing Disaster



Figure 4. Kota Takeuchi, Detail of the installation *Metamorphosis*, 2017, 240 photographs, USB-upd chips, clothes, shoes, installation at Snow Contemporary, Tokyo, 3 February - 3 March 2017. Courtesy of the artist.

Lying in the centre of the gallery is the remnants of a transmogrified body. It is surrounded by the grid of the photographs of *Take Stone Monuments Twice* at the exhibition of the work at SNOW Contemporary gallery in Tokyo. [Figure 4] A jacket, jeans, and shoes similar to what Takeuchi is wearing in the stone monument photographs are sprawled on the floor, arrayed in the shape of a body. Spilling out of the empty appendages of the clothes are thousands of small USB chips. The gallery handout, written by Takeuchi, tells of how during the process of installing the photographs when the last image was placed on the wall he suddenly passed out and his body was transformed into the scattered USB chips—each of which contained a single image of a stone monument.[48] This parafiction—a performative intervention that skirts the boundaries of the documentary and fiction—articulates a process of how the images of the monuments on the walls were transformation into a fragmented stone corpus of silica USB chips.[49] Takeuchi sees these images in these geologic chips as potential "rescue boats," carrying forward the knowledge of the stone monuments beyond their fixed location and re-inscribing this knowledge onto smaller portable stones.[50]

The images residing in these stone silica chips, the artist hopes, will provide a durational media to survive to contest the fragile form of the digital image. Instead of just the artist retaining the image on his hard drive or in the cloud, the images are shifted onto USB chips, offering them to the public in the hopes that some might survive. The transformation of images of the stones through different forms to preserve their memory resonates with what writer Jalal Toufic has

[48] Gallery handout, Snow Contemporary.
[49] Carrie Lambert-Beatty, "Make-Believe: Parafiction and Plausibility," *October*, 129, Summer 2009: 51-84.
[50] Ibid.

termed the "the withdrawal of tradition past a surpassing disaster."[51] For Toufic, the "surpassing disaster" destroys objects, people, artworks, buildings, all of which constitute a "tradition." In order for culture to be able to survive this cataclysmic period, Toufic argues for a "withdrawal" that could consist of works being removed or a community of artists, writers, and cultural workers going into exile. After that surpassing disaster they can respond to this traumatic rupture, by "resurrecting" the works and concepts in new forms that both carry forward the original works or their fragments and respond to the unique conditions of the aftermath of the disaster.[52] Through the lens of Toufic's concept, the transmogrification of Takeuchi can be seen as constituting a withdrawal via the re-inscribing of the images onto small "stones" and distributing the images to the public for safekeeping. This process can be understood as the retreat of the image from the wall and petrifying its precarious digital form onto the stone chips. The transmogrification—stone monument to image to digital pebble—not only "backs up" the knowledge on the stone monument through the image residing on the stone chip, but also allows the image to circulate in a physical and durational form to be shared beyond the site of the stone monument itself. While this process has the potential to disseminate the knowledge of these stones, with the use of any technology there is also the recognition of its own fragility and the ultimate entropy of memory in relation to deep time.

In confrontation with the long durée, Takeuchi has an ambivalent relationship with the concept of durability. While indeed stone monuments have served to hold their information for hundreds of

[51] Jalal Toufic, *The Withdrawal of Tradition Past a Surpassing Disaster* (Los Angeles: Redcat, 2009), https://ulib.aub.edu.lb/ebk/ebk000090_jalal-toufic.pdf.
[52] Ibid., 12-16.

years, others have had their inscriptions eroded back to a tabula rasa. The USB chips can diffuse and extend the memory of stones, yet the silica memory of the stick only lasts about ten years before it becomes corrupted and inaccessible. Reflecting on the installation Takeuchi felt that he should have renamed the work *Flash Memory* to reference "volatile, quickly lost memory. Stone, USB, everything is flash memory infront [sic] of deep time."[53] Takeuchi sees the stone monuments as a commentary on the fragility of contemporary mediums, both digital and material. These forms lack the durability of the stone monuments—which themselves are being eroded, broken, or destroyed—so even with the petrification of knowledge, it is still no guarantee for its longevity or persistence. This disillusion with both the old media of stone monuments and the current digital images highlights the fallibility of material archiving processes. Rather the critical point becomes how memory is actively transferred and utilised across generations. While the stone monuments might not survive, and as an alternative to rubbings, the laborious process of photography undertaken by Takeuchi to re-stage the memory and the surrounding site have re-inscribed these latent histories in the memories of the viewers.

Holding on to the petrified fragment of the image in the USB chip might continue a record of the stones, but this doesn't ensure that the meaning of the stone and its relationship to the land and community would continue to exist. I think it is instead through another vehicle in the work—the body—that the knowledge needs to reside and be lived, in order to survive. In the installation, the parafictional gesture of the artist decomposing his own body into fragments, and by implication into documentation of the stones motions toward the fact that visiting those stones

[53] Kota Takeuchi, "Email Metamorphosis to Author," February 9, 2020.

and their knowledge had become part of the fabric of his being. Thus, through the journey of his body to visit and photograph those stone monuments, and our bodies being able see them in the exhibition the knowledge embedded in them are transferred into our own bodies. It is not just the body as a vehicle for transmitting knowledge, but also as an interpretive device that is critical. It is through the experience of the body and what it has brought forward that the temporal dimension of the knowledge can come into sharper focus, as well as the broader history of Fukushima. Here the writing of theorists Astrida Neimanis and Rachel Loewen Walker, who are focused on the relation of the body to the vast scales of time and environmental entanglement in human-made climate change, help us locate the capacity of the body as a receptor and agent of environmental knowledge. Neimanis and Loewen Walker speak of transcorporeality, which they define as "an ontological orientation that expresses the imbrication of human and nonhuman natures. It denies the myth that human bodies are discrete in time and space, somehow outside of the natural milieu that sustains them and indeed transits through them."[54] While for Neimanis and Loewen Walker, transcorporeality is useful to contest the body's supposed autonomy from the world; rather it recognises the human body as always being enmeshed in and with the non-human, to foster a better understanding of the immediate interconnectivity and ongoing vibrant dynamics with this mesh. In Takeuchi's own account of visiting the stone monuments he remarked on the physical connection he felt to the stones and their vitality mirrored in his own body. That sensitivity to the monuments, as well as the reading of their text, I argue can be understood as a transcorporeal relationship with the stone, the surrounding site, and the knowledge embedded on the monument. In *Take Stone Monuments Twice* Takeuchi literally

[54] Astrida Neimanis and Rachel Loewen Walker, "*Weathering*: Climate Change and the 'Thick Time' of Transcorporeality," *Hypatia* 29, no. 3 (June 2014): p.563.

manifests the representation of this transcorporeal relation through the parafictional transformation of his body into a composite of images on silica. In our journey through the exhibition space, seeing the photographs and reading their inscription we undertake our own physical relationship to that knowledge on the stones in Fukushima—picking up one of the USB chips and taking it with us has the potential to extend this knowledge even farther.

How can we understand the temporality of the events on stones and the future lessons they might hold in relationship to Saito's photographs, to Takeuchi's photographs, our viewing them, and the circulation of the USB chips? Neimanis and Loewen Walker help to read these entanglements in the world and the multiple times already occurring in this space through the lens of what they call "thick time."[55] They see the temporality of thick time not as an abstract framework but rather as the co-existence of multiple human and non-human times that act on one another. To better understand these relations they articulate how our bodies can see an always in the process of a "transcorporeal stretching between present, future and past."[56] For Neimanis and Loewen Walker the temporal relation of transcorporeality constitutes multiple timelines at once, which they describe as follows:

> Our very bodies, thoughts, actions, and behaviours make the present, past, and future. And just as significantly, we are made by the time makers all around us: the earth's soil that heats our bare feet in summer and freezes hard in the winter, telling us to wear boots to protect our skin; the old concrete building that decays as it collaborates with the wind

[55] Ibid., 561.
[56] Ibid.

and rain, retaining a/our memory of past splendour in its peeling paint.[57]

This passage articulates how a sensitivity to understanding our bodies as partaking in transcorporeal stretching can read the time and environment of quotidian gestures. This sensitivity can help us to read the knowledge in the landscape, and to begin to think toward its direct correlation to the present and the future. I see in Takeuchi's installation this thick time of the overlapping time around of the stone monuments: the deep history of the site inscribed on the monument; the surroundings landscape and its changes over time; the photographers ephemeral visit to the sites; the documents of the images that brought the moment of that visit and the knowledge embedded in it to travel to the exhibition; and how this knowledge can extend beyond the confines of the gallery. This thick time is not just a series of moments. If we understand through the example of the tsunami stones that the stones are a temporal marker, which might contain critical knowledge to potentially avert future disasters, then the urgency and relevancy of this thick time comes to the foreground. We as visitors we might or might not partake in those transformations to stop the next disaster in Fukushima or elsewhere, this might exist in someone else's timeline. Or we might be able to effectuate small gestures that help a shift toward a different future reality but it wouldn't be our timeline alone that makes this future possible. Nonetheless the photographs of stone monuments have the potential to help us—not only in sharing the content of the stones—but moreover in articulating their temporal relationships to many times past, present, and future and how we can situate our own collective agency within these times.

[57] Ibid., 569.

To further understand the implications of these temporal relationships on us it is useful to follow Neimanis and Loewen Walker who describe the entanglement of co-existing entities in thick time as a "nonchronological durationality."[58] This is not a linear progression of a single time but rather a host of different overlapping times with different potentialities. Looking at the stone monuments it is never certain when such knowledge will once again regain its urgency, for example in the case of the Tsunami stones. While it is clear, given the history of the region, that a tsunami would happen again and will return in the future, developing a sensitivity to the landscape in order to be able to read its embedded knowledge and subtle changes would allow for these stone monuments to actively live in the human geographic understanding of the environment. Just as in Aneyoshi, where the persistent awareness of the tsunami stone across generations who lived in the town and acted on its warning to not build below the marker—allowed the community to safely thrive and co-exist with the landscape. The deep time of the landscape and the explicit signposts in these stone monuments can be understood to exist in a nonchronological durationality, having a relevance to multiple times but it is not always clear precisely when they will come into co-temporal urgency. What is clear is that the residents—as well as ourselves—are always already embedded in the environment and the markers for the future are also already around us. The sensitivity to our body as a receptor to this knowledge and as an interlocutor acting on these environs as well as their embedded timelines brings us closer to how the stone monuments in Fukushima can function and what equivalents we might be overlooking in our own environs.

[58] Ibid.

In the wake of 3.11, it is clear that knowledge in the landscape was missed and consequently TEPCO initiated a process of land transformation that lowered the height of the ground the power plant was built on, this lack of sensitivty became an important contributing factor to the nuclear disaster. If we can employ this sensitivity in reading the embedded knowledge in the environment, what we can find in the images taken by Takeuchi, is that the disaster at the Fukushima Daiichi Nuclear Power Station was not an isolated incident. Rather taking a deeper look at the landscape reveals that it was only the latest disaster in a long trajectory stemming from the colonisation of Fukushima. The following sections take the time and care to go through a number of these images and their histories to illustrate the catastrophic condition but also attempts to resist it.

While perhaps the meltdowns at the nuclear power plant received the most attention and the spread of radiation via the atmosphere and oceans are planetary in scope, the stone monuments reveal previous disasters that extended beyond the bounds of the coastal area of Fukushima and also had wide-ranging effects. Bridging the temporal and geographic gap, *Take Stone Monuments Twice* invites the viewer to look at this embedded knowledge and how it reveals the colonising of Fukushima as well as the area's entanglement in larger planetary forces. While Takeuchi might be more interested in the mode of transmission of knowledge, if we read the collection of moments that the artist has compiled we can gain a deep understanding of history that lies under the area. I would like to focus on an alternative invitation, one that is perhaps unintentional being offered through the images, and unpack the contents of the stones' messages in order to see the history that they contain and its consequential bearing as a narrative of the colonial reality of

Fukushima as a critical cause of the nuclear disaster. This close reading of a number of stones and the events and previous disasters that they marked piece together the precarity of the region prior to the nuclear disaster and show how these disasters can be seen as linked through a history of colonisation and extractivism, that undergirds what I am calling the catastrophic condition of the area.

Extractivism and Fukushima



Figure 5. Bato-san Stone Monument, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

What can be overlooked when speaking about the artwork is what the stone monuments themselves are actually saying. In this section I will undertake a sensitive reading of the embedded knowledge in the landscape as shown in *Take Stone Monuments Twice* in order to learn more about the land and the region, and what they reveal about the historical trajectory that created the catastrophic condition in this area.

Starting with the Horse stone above [Figure 5.], the inscription 馬頭尊 [*Bato-san*] refers to the *Batou Kannon* or Horse-headed bodhisattva, seen as a figure of protection for horses. Saito recalls that this particular stone was placed at the site of a well-known horse market in the area. This type of stone monument to the spirits of horses was common throughout Japan on roads, racetracks, or at horse markets as horses were long a mode of transport in Japan and even part of a theory of the founding of imperialism in Japan as originating from horse riders in Central Asia.[59] The *Bato-san* stone was likely put in its location to acknowledge the spirts of horses who would have been in the market on that site and act as a talisman for their protection. But if we dig deeper, we can see the long relationship between horses in Fukushima and its earliest indigenous inhabitants. I will undertake a closer reading of this stone monument through the history of horses in the area which marks the locality's indigenous past, how the relationship with horses and the indigenous people developed technology that was used to resist colonisation, and how this technology was appropriated by the colonising forces and stills comes down to us

[59] Sherry D. Fowler, *Accounts and Images of Six Kannon in Japan*, 1st ed. (University of Hawai'i Press, 2016), 21.; Egami Namio, *The Formation of the People and the Origin of the State in Japan*, 23 (Memoirs of the Tokyo Bunko, 1964).

today through the colonial archetype of the samurai.

Up until the ninth century CE, Fukushima and Tohoku were separate from the nascent imperial south and inhabited by the indigenous Emishi people.[60] The Emishi were distinct from the Ainu —the indigenous people of Hokkaido, Sakhalin, and Kurils—whose culture, while under threat, still exists today. The name Emishi is likely a transliterated homonym of what the Emishi called themselves; however, it has been translated to mean "hairy people" in Japanese, underscoring how the imperial south viewed the Emishi as "barbarians." As such the name could be seen to have negative connotations, but I utilise the name because it was also a name that was used by the Emishi in describing themselves to individuals outside their group.[61] They maintained their autonomy in Tohoku and Fukushima, undertaking a lifestyle that revolved around hunting as well as agriculture. The Emishi developed various technologies including horse husbandry and a form of equestrian combat unique in Japan which included archery and the development of curved swords.[62] This technology and their use of it in combat kept the area autonomous for centuries, as evidenced by later travellers referring to the area as the "Scotland of Japan" due to its landscape and fierce independence.[63]

In the seventh century CE, the Yamato empire in the south of Honshu Island was looking to

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[60] Kazuro Hanihara, "Emishi, Ezo and Ainu: An Anthropological Perspective," *Japan Review*, no. 1 (1990): 35–48.; Hirofumi Matsumura and Yukio Dodo, "Dental Characteristics of Tohoku Residents in Japan: Implications for Biological Affinity with Ancient Emishi," *Anthropological Science* 117, no. 2 (2009): 95–105.

[61] Mark Hudson, *Ruins of Identity: Ethnogenesis in the Japanese Islands* (Honolulu: University of Hawai'i Press, 1999), 224.

[62] William Wayne Farris, *Heavenly Warriors: The Evolution of Japan's Military, 500-1300* (Cambridge: Harvard University Press, 1992), 81-92.

[63] Nathan Hopson, "'Christopher Noss' Tohoku and "Survey of Rural Fukushima": Portraits of Tōhoku a Century Before March 11, 2011.,'" *Asian Cultural Studies*, no. 42 (March 2016).

expand its territory northward to conquer Tohoku. The imperial army had imported and adapted Tang dynasty Chinese military methods, which included large formations of soldiers moving together in heavy armour.[64] This was successful in the plains of the south, but the hilly geography of Tokoku, combined with the mobility and flexibility of the Emishi combat technology, allowed the Emishi's smaller numbers to resist southern colonisation for 150 years. Thus it was the technology developed through the close relation between the Emishi and horses which both secured their autonomy and through its appropriation ultimately lost their independence.

There were a number of different factors in the territorial conquering of the Emishi including bribing some groups of Emishi, settling other groups of Emishi elsewhere in Japan for assimilation and then sending these assimilated groups back to fight.[65] However, it was not until Imperial forces adopted indigenous Emishi technologies that they were able to fully subjugate Fukushima and Tohoku. It is this appropriation of Emishi technology, in particular, the curved sword, lighter more mobile armour, and the practice of horse-mounted archery, that was crucial for the colonisation of the north.[66] These technologies were not only integrated into the north armies but also come down to us today wholly intact as constitutive components of the iconic figure of the samurai.[67] While the samurai are often considered the archetype of Japanese culture, complete with their curved "samurai sword," a number of these core components are actually the

[64] Ibid.

[65] Karl F. Friday, "Pushing beyond the Pale: The Yamato Conquest of the Emishi and Northern Japan," *Journal of Japanese Studies* 23, no. 1 (1997): 1–24, https://doi.org/10.2307/133122.; and Hudson, *Ruins of Identity*.
[66] Farris, *Heavenly Warriors*, 81-92.
[67] Ibid.

embodiment of certain Emishi technology. The appropriation of Emishi tools into symbols of the imperial Japanese state is indicative of what would become an extractive internal colonial relationship between Tokyo and Fukushima. A relationship wherein resources, bodies, energy, and technology are transferred to the south, often losing this connection to Fukushima, in order to become metabolised into Tokyo.

Thus the *Bato-san* stone monument can be seen as an opening to reading a deeper history of the relationship between the land and its non-human and human residents. Tracing the history of the horses in the region not only reveals its indigenous past but how this relationship developed technology that enabled the indigenous residents to maintain their autonomy and collective agency. Yet to overcome this autonomy made by the bond between the non-human and human residents, the imperial system itself would have to change—a transformation that would have profound effects on the entirety of Japan. It was not just these essential resources and technologies from Fukushima and Tohoku that contributed to the growth of Tokyo and Japan, but also the creation of the position of the shogun who would go on to create the *bakufu*—the military warlord system of governance which would dominate Japan for seven centuries. As historian Hidemichi Kawanishi highlights, due to the resistance of the Emishi in the 7th-10th centuries CE, the Imperial court created the position of a shogun, a central military leader, to wage this lengthy campaign.[68] Ultimately, the power of the shogun would boomerang back south, usurping the emperor and the court, with the shogun becoming de-facto ruler and the centre of power in Japan. Kawanishi underscores that it was the imperial desire to subjugate

[68] Hidemichi Kawanishi, *Tohoku: Japan's Constructed Outland*, Regional Spaces, Cultures and Identities of East Asia, (Leiden: Brill, 2016), xix.

Tohoku and Fukushima which ultimately led to the undoing of the power of the emperor and the court, and it in its place came a feudal system with the shogun at the top.[69] While the initial colonisation campaign of Tohoku and Fukushima finished around 950 CE, there would be continuous rebellion in the region continuing through the nineteenth century. It would be this feudal system and its implementation of an internal colony of Tohoku which would eliminate collective agency and institute a durational precarity that would produce disastrous results.

While the specificity of how collective agency functioned in Emishi society is not known, what is clear is how the feudal system imbued certain individuals with extreme authority, allowing them to rule through an interlocking system of authority. The colonisation of Fukushima would implement a series of local warlords who would have total dominion over the area. While some readings of the feudal system saw it as a top-down system with the shogun exercising supreme authority, and others saw warlords or daimyo as running autonomous regions, the philosopher Masao Maruyama articulates a dynamic wherein authority was centralised in individual figures who ruled individual spheres, which were interconnected into what Maruyama termed the "hierarchical structure of immanent values."[70] Within this structure broad authority was situated in individual, often patriarchal, figures that could both interpret and enforce laws at their discretion:

> The article in the bakufu's legal provisions that permitted every samurai, "even if he is only a foot-soldier [*ashigaru*], if townspeople and peasants insult him" to punish them

[69] Ibid.
[70] John Haley, "Rivers and Rice," *The Journal of Japanese Studies* 36, no. 2 (Summer 2010): 313–49.; Masao Maruyama, *Studies in Intellectual History of Tokugawa Japan.* (Princeton: Princeton University Pres, 1974), 244.

> with impunity *(kirisute gomen)* meant that each individual samurai on his own responsibility was given the authority to enforce the law. The same thing holds for the master's right of private punishment over his servants and the father's over his children.[71]

This authority also scaled upward with the warlord having authority over their own domain and the shogun having authority over the warlords. Within his reading, Maruyama demonstrates how this chain of authority can in the singular situation have one person operating with total authority, and yet through the hierarchal structure of immanent values, they are subordinate in other levels, a dynamic which Maruyama asserts works toward the preservation of the total structure.[72] An important element to maintaining this feudal system was a system of registration that ordered the populace into villages, and then within smaller groups of households. This enforced an isolation on the residents, and dismantled collective agency. Instead it kept people bound to that specific small area of land through taxation and the corvée system of forced labor. There were surveys of all lands and their capacity to produce to enable the enforcing of a rigid system of taxation. While taxes could go from 40% to 70% of the harvest, they varied depending on the warlord's region. The society was overwhelmingly agrarian and also relied heavily on these taxes most often and importantly in the form of rice to support the ruling class of samurai, warlords, and shogun. This often meant that a significant amount of the crop was sent to the warlord in his regional town or on to Tokyo. Rice functioned both as a food source and an important mode of payment as the ruling class of samurai, warlords, and shogun would be obligated to pay tributes and salaries in rice. Besides the obligation of taxes, there was the corvée duty for labor, which

[71] Maruyama, *Studies in Intellectual History of Tokugawa Japan*, 244.
[72] Ibid.

could take the form of military service or tilling lands that the individual warlord or samurai claimed to increase their yield of rice and extract more from the area. This meant that there was a large amount of food—serving as both use-value and as a currency—being shifted out of the villages. I posit that the emphasis on rice production, shifted production toward a mono-culture of crop cultivation, which is implicitly precarious as a population is thus heavily reliant on a single crop. In the case of Fukushima, this risk is endemic to rice as its cultivation originated in a warmer southern climate. As we will see the forced adoption of this warm weather crop in the cooler north of Fukushima and Tohoku came with a greater exposure to crop failure from climatic shifts and famine.



Figure 6. Stone Monument to the Tenmei Famine, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

The feudal system, via forcing a transition to a solely agricultural existence in the area, instituted a catastrophic condition of systemic precarity causing disaster can be found in a number of stone monuments in the collection photographed by Kota Takeuchi. The *Bato-san* monument marked the non-human and human indigenous past of Fukushima as well as the mobility and autonomy if those living in the area. The oldest stone monument in the collection photographed by Takeuchi, Stone Monument to the Tenmei Famine [Figure 6.], details the disastrous effects of this colonisation and the systemic precarity of the inhabitants. Erected in 1786 and eroded by the elements, this monument marks one of the worst famines in Japanese history.[73] In 1783, toward the end of the little ice age—a period of pronounced cooling on Earth—the eruptions of Mt. Asama in Japan and Laki in Iceland sent volcanic dust and sulphur up into the atmosphere and around the globe, refracting sunlight and reducing the planet's temperature further.[74] This produced crop failures all over the world, yet the effects were acute in Fukushima and Tohoku even compared to other places in Japan. In Fukushima and Tohoku the effects were horrific with starvation and infanticide.[75] One chronicler spoke of three successive years of bad crops and millions dead;—other historians believe the death toll might be closer to hundreds of thousands.

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[73] There isn't an exact historical record of the deaths from the cenus at least 400,000 people died, however anecdotical accounts are much higher. Mikiso Hane, *Modern Japan: A Historical Survey* (Boulder: Westview Press, 1986), 53.

[74] H. Arakawa, "Meteorological Conditions of the Great Famines in the Last Half of the Tokugawa Period, Japan," *Papers in Meteorology and Geophysics* 6, no. 2 (1955): 101–15, https://doi.org/10.2467/mripapers1950.6.2_101.; G. A. Zielinski et al., "Climatic Impact of the A.D. 1783 Asama (Japan) Eruption Was Minimal: Evidence from the GISP2 Ice Core," *Geophysical Research Letters* 21, no. 22 (November 1, 1994): 2365–68, https://doi.org/10.1029/94GL02481.; Akitune Imamura, "Effects of Volcanic Dust on Solar and Terrestrial Radiations, with Special Reference to the Causes of the Tenpo and Tenmei Famines," *Proceedings of the Japan Academy* 21, no. 3–10 (1945): 382–84, https://doi.org/10.2183/pjab1945.21.382.

[75] Maruyama, *Studies in Intellectual History of Tokugawa Japan*, 252.; Hane, *Modern Japan*, 53.

Nonetheless, the trauma of the disaster is clear.[76] While the volcanos produced a hardship planetary in scale, the disaster could have been exacerbated in Tohoku not only by its northern geography, also by the loss of collective agency through the feudal system. The problematics of rice and feudalism are also highlighted in Saito's reading of the stone monument.[77] He details how the provinces were closed off from one another and within these strict spheres of control they could not rely on rice from others territories, thus furthering the food insecurity that was causing starvation.[78] Even before the Temmei famine, the precarity can be seen in a series of successive famines in 1749, 1755, and 1757, and would be repeated late in the devastating Tempo famine 1833-1836.[79] The stone monument stated the cause of the famine and documented the misery of the disaster, but also listed the alternatives to rice that were used to survive: cakes from straw and bran, bamboo notes, pine bark, and wild plants.[80] Thus the stone monument can be seen as a diagnostic tool but also as a means of carrying forward the mode through which survival was possible.

[76] Hane, *Modern Japan*, 53.; H. Arakawa, "Meteorological Conditions of the Great Famines in the Last Half of the Tokugawa Period, Japan," 101–15.
[77] Takeuchi believes that the stone monument was almost completely illegible and Saito might have read a sign describing it nearby or a rubbing of the stone kept at a nearby temple. Kota Takeuchi, Line Message with the Author, 25 July 2021.
[78] Ichiro Saito, 近代いわき経済史考 *[The Economic History of Modern Iwaki]* (Iwaki: Tahisa Takaoki, 1976), 38-40.
[79] Ibid., 252.
[80] Ibid.

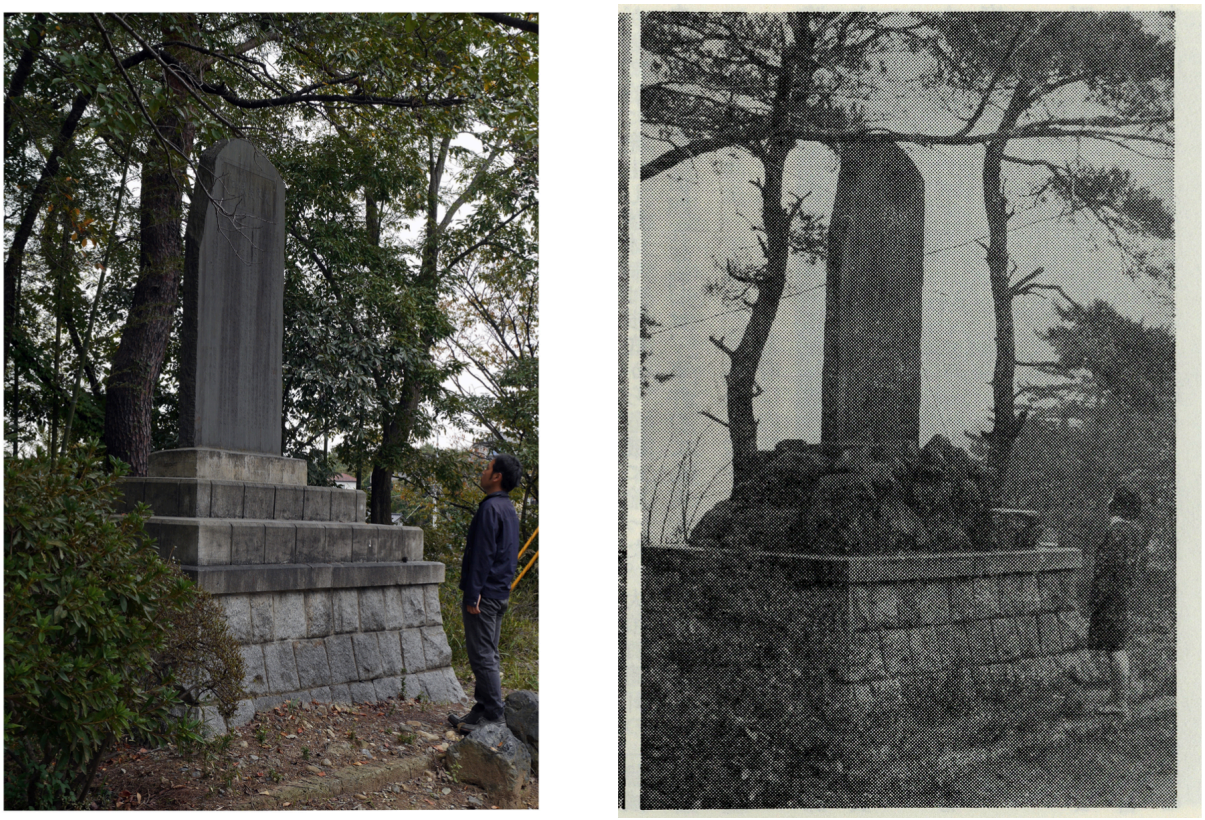


Figure 7. Peasant Revolt Stone Monument, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

While the Stone Monument to the Tenmei Famine showed the disastrous effects of the catastrophic condition are not just limited to the aftermath of 3.11, the Peasant Revolt Stone Monument [Figure 7.], highlights the resistance to the dominate order of the catastrophic condition. Despite the feudal system's control through isolation and the distribution of authority into the individual strict hierarchical structure of immanent values, there were still moments of collective revolt, usually taking the form of *ikki* [uprisings] of peasants. These had different forms, from violent uprisings to mass protest or the settling up of mutual aid, but became intensified in the 18th and 19th centuries due to both the increase in extraction as well as the

increasing of precarity.[81] This resistance to the catastrophic condition appears on the stone monument for a large-scale uprising in Iwaki that occurred in 1738. The ruler of the coastal region of Fukushima had been increasing taxes for certain crops up 95% and a well-organised mass movement involving 84,000 peasants, demanded a cessation of eighteen different taxes.[82] The social movement asked for one representative from each house to join, and forming squads of one hundred people with arms and provisions that all convened on the ruler's castle in Iwaki, staying for twenty-seven days.[83] The stone monument commemorates the nine peasant representatives who were invited into the castle to negotiate with the ruler and were promptly arrested and later killed. Ultimately the shogun had to step in to replace the ruler and some concessions on taxes were given. While there were similarly large uprisings elsewhere, it was common to succeed in getting some redress from the authorities. However, the movements were unable to coalesce into something larger that would challenge the underlying political order. Maruyama claims that the inability to form a broader coalition was due to the isolation that the villagers and regions were kept in. This creates a clear picture of how an underlying catastrophic condition, wrought by an imposed feudal regime in Fukushima and Tohoku, created an underlying precarity that could be exacerbated by ecological shifts, thereby producing individual disasters (such as famine) which could last for several years. Yet despite this precarity the underlying feudal system was able to remain in place for hundreds of years, so these disasters

[81] Koji's table of amount of protests shows a doubling of the amount of protests from 211 in 1651-1700, 422 in 1701-1750, 670 in 1751-1800, 814 in 1801-1850 Aoki Koji, *Hyaskusho Ikki No Nenjiteki Kenkyu* (Tokyo, 1966), 36-37.; Stephen Vlastos, *Peasant Protests and Uprisings in Tokugawa Japan* (Berkeley London: University of California Press, 1990).; Mikiso Hane, *Modern Japan: A Historical Survey*, 53-56.;Maren Ehlers, "Benevolence, Charity, and Duty: Urban Relief and Domain Society during the Tenmei Famine," *Monumenta Nipponica* 69, no. 1 (2014): 55–101, https://doi.org/10.1353/mni.2014.0013.

[82] W. Donald Burton, "Peasant Struggle in Japan, 1590–1760," *The Journal of Peasant Studies* 5, no. 2 (January 1978): 135–71, https://doi.org/10.1080/03066157808438044.; Maruyama, *Studies in Intellectual History of Tokugawa Japan,* 459.; Valstos, *Peasant Protests and Uprisings in Tokugawa Japan*, 70.

[83] Ibid.

could be seen as being able to be repaired without affecting the underlying order.

At the same time that the loss of collective agency via the hierarchical structure of immanent values that produced isolation, the catastrophic condition was also causing displacement. As capital and debt were beginning to expand in the second half of the eighteenth century, it caused increasing instability in the villages. While it was the isolation of the feudal system that kept residents tied to their land which led to starvation. Famines and despair also forced people to abandon their land, draining villages in particular after the Tenmei famine. This coupled with the new growth of debt forced people from their lands to become vagrants. In this period, the population of Tokyo grew to over one million people, despite discriminatory legislation such as the "Order for the Return of Unregistered and Wild Beggars to Their Former Native Places" to attempt to repatriate these refugees.[84] The end of the feudal system and the transition to democracy led to the development of infrastructure at the end of the nineteenth century and into the twentieth century, which would intensify the displacement from Fukushima to the metropolitan area. This extractive infrastructure would have profound effects not only on the residents but also on the environment. The next chapter will focus further on this displacement through the artist Bontaro Dokuyama who was one of these economic migrants from Fukushima to Tokyo. Takeuchi, in contrast, was one of the few who undertook the reverse migration moving from Tokyo to Fukushima in order to work.

The importance of this deep historical content lays the groundwork to understand how the

[84] Katsuya Hirano, "Politics and Poetics of the Body in Early Modern Japan," *Modern Intellectual History* 8, no. 3 (November 2011): 512.

catastrophic condition came about and the many disasters it has caused over time. Yet it also shows the context that Takeuchi entered into when he began to work in Fukushima. In a way, his act of following Saito can also be understood as learning from a previous photographer about the history of the area and how it has shaped the present. This rich legacy that comes through in the stones necessitates such a lengthy discussion as it is following this sensitivity toward the landscape and its history that Takeuchi previously undertook in his travels to the stones. Importantly the attention to the depth of the history that is contained in the stone monuments shows the potential of the form as vehicle for future knowledge. The previous sections have focused on two important components of the catastrophic condition the process of colonisation and the loss of collective agency. What becomes clear in reading these selection of images from Saito and Takeuchi, is that this process already had devastating effects on the residents. In order to connect this history with the meltdowns at the nuclear power plant it is important connect how these political changes affected the environment of Fukushima through the development of extractive infrastructure.

Extractive Infrastructure



Figure 8. Stone Monument to the Cow Spirits, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

Through the stone monuments, it is possible to track not only the misery inflicted by colonisation but also the development of the infrastructure through which extraction of rice and other resources would be intensified. This infrastructure would then form the ground upon which the extraction of energy to power Tokyo and its surroundings would begin. I characterise this framework of extractive movement, the north-south flow, shifting resources and bodies from

Fukushima to Tokyo in a way that is indicative of the period of colonisation that continues until now. The counter east-west movement I define as an intra-Fukushima movement occurring access the large province and in particular between the three distinct areas of Fukushima that are separated by geological seams of hills and mountains. The traditional means of traversing this mountainous terrain of the east-west movement is captured in a small squat polished black stone monument carved with the large characters, 牛霊塔 [cow spirits]. [Figure 8.] To unpack its significance, Saito includes in his book an excerpt from Yukio Kogure's text, "Gods of the Roadside":

> Among the many memorial stones for the gods of horses, there is an unusual memorial stone with the inscription "Cow Spirit" on a stone reminiscent of the back of a black cow, on which a saddle is placed. In order to transport goods between the Hamadori region [the ocean side of Fukushima Prefecture] and the Nakadori region [the central part of Fukushima Prefecture], it was necessary to follow the steep mountain roads of Abukuma. For this reason, cows were often used rather than horses in the past.[85]

The previous reading of the *Bato-san* stone monument demonstrated the development of Emishi equestrian relationship as critical to their protection and as a resistance to imperial colonisation. This cow spirit monument speaks of a gentler type of local movement that sustained an intra-Fukushima sense of community. The excerpt from Kogure highlights the mountainous terrain that divides the three sections of the Fukushima Prefecture that has made it difficult to travel across, even today. Yet we can see how this different form of human and non-human relationship

[85] Saito, 近代いわき経済史考 *[The Economic History of Modern Iwaki]*, 83. Translation by Kota Takeuchi. Originally published in Yukio Kogure, 道ばたの神々 [*Gods of the Roadside]*, Tokyo: Sanshudo, 1981.

in the Cow Spirits monuments allowed for greater intra-Fukushima connection. While cows were used as draught animals elsewhere in Japan, the indigenous cattle to Tohoku were accustomed to dwelling in the mountainous terrain, hence their adaption for east-west travel.[86] Kogure also details the flow of salt moving from the ocean inland and, in a counter journey, the timber to the coastal areas. This shows the historical mutual intra-Fukushima trade which supported the residents and their sense of community across the mountain divides. In Saito's image of the stone, there is a wooden saddle that would have been used on cows; it is unclear, whether it was there on the monument or Saito placed on it monument before taking the photograph, but in either case, it shows the saddle was still nearby and showed the continuity and/or nostalgia of this technology still existing well into the widespread adoption of the automobile. Thus the stone monument to the cow spirits can be read as both a recognition of an older mode of infrastructure that focused on an intra-Fukushima relation and a continuity of the knowledge.

[86] Hsiu-Luan Chang, Yu-chia Huang, and Asia-Pacific Economic Cooperation Agricultureal Technical Cooperation Experts Group, *The Relationship between Indigenous Animals and Humans in APEC Region* (Taipei: Chinese Society of Animal Science, 2004), 71-89.



Figure 9. Hirakata Tunnel Stone Monument, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

In contrast to the east-west movement indicated by the Cow Spirits stone monument, there are a number of stone monuments that mark the development of roads and tunnels which would facilitate the north-south extraction. While the small-scale east-west movement of goods by cow showed how Fukushima was able to support itself through its different areas. The north-south movement of goods was at a much larger scale and also mainly uni-directional—with natural resources and people funnelling down to the growing metropolis of Tokyo. One example is the monument marking the creation of the Hirakata tunnel that finished construction in 1775. [Figure 9.] This stone is situated at the entrance to the north-south tunnel, which provided a major artery for the movement of goods from Fukushima down to Tokyo and the southern region more

broadly.[87] The stone monument to the Hirakata tunnel represents this early form of overland movement of goods flowing southward. The tunnel already shows the large investment in this extractive infrastructure, even in the feudal period, and was a prelude to the mechanisation of this extractive infrastructure in the form of the railroads that would be developed in the Meiji era —the period after the Boshin Civil War and the fall of the shogunate that saw the opening of Japan to the world, the restoration of the emperor to Tokyo, the founding of the modern democratic state of Japan, and an intense drive to modernising the country.



Figure 10. Joban Line Stone Monument, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

[87] Saito, 近代いわき経済史考 *[The Economic History of Modern Iwaki]*, 122.

Deepening the groove of this north-south movement in Fukushima was critical to the growing metropolis of Tokyo, especially with the advent of the Meiji-era and the government's demand for industrialisation which required resources, energy, and labor. Fukushima had opposed the restoration of the Emperor in the Boshin Civil War, and after the victory of the neo-Imperial forces, Fukushima was intentionally excluded from much of the state's drive to modernise. However, Fukushima's proximity to Tokyo did mean that its natural resources and labor were marshalled to fuel the city's growth. The north-south extractive infrastructure was intensified when Tokyo-based Nippon Railways, the first corporate railway company in Japan, built two northern train lines the Tohoku Line in 1891 and the Joban Line in 1897.[88] [Figure 10.] These rail lines formed part of the modernisation campaign of the new Meiji Government that would aim to connect all of Japan by rail. The Tohoku line was the first line going north from Tokyo with its utmost northern section built inland for military purposes. This shows the dual facets of the infrastructure as a means to service both the needs of capital and the needs of the state.[89] The Joban line that started at the Shiminbashi station—the first major railway hub in Tokyo—snaked up along the eastern coast to Mito and then to Iwaki and the surrounding Joban area of Fukushima. This new line allowed for a further migration southward of labor. However, its main goal was to boost the movement of natural resources, primarily coal from Fukushima. Its building would provide a catalyst for the intensification of extraction in the Iwaki area and would inaugurate the eastern coastal area of Fukushima as a space of energy extraction to service Tokyo —a trajectory that would continue through to the building of the Fukushima Daiichi Nuclear

[88] Dan Free, *Early Japanese Railways 1853-1914* (Tokyo: Tuttle Publishing, 2012), 161.
[89] Hidemichi Kawanishi, *Tohoku: Japan's Constructed Outland*, Regional Spaces, Cultures and Identities of East Asia, volume 2 (Leiden ; Boston: Brill, 2016), 99.

Power Station. The modern energy extraction in the form of nuclear power connects Saito who was undertaking his photographs during the building of the power station and its ongoing meltdown that has occupied the practice of Takeuchi. While both Saito and Takeuchi documented the stones that commemorated the infrastructure which would make this energy extraction possible. It was actually the existence of another stone in the region—coal—which would be the stepping stone to the nuclear power which connected the photographers.

Coal had an outsized importance on the development of Fukushima, and yet it is geological makeup of the land of Fukushima that would in turn have a big impact on extractivism elsewhere in the world. This came about through the altering of the technological development of trains that were used in Fukushima. The predominant type of coal in the Joban area of Fukushima was anthracite or hard coal, which was difficult to ignite and slower burning than bituminous coal or soft coal that was commonly used in locomotives at the time.[90] With the building of the Joban line, Nippon Railways commissioned the Philadelphia-based Baldwin company to develop a freight-hauling locomotive that could run on hard coal. The resulting "Mikado" design, named after the Japanese Emperor, had a larger firebox which allowed for a more powerful engine along with the rearrangement of the wheels which could traverse mountains more effectively and produce less wear on tracks.[91] The Mikado design would go to become the most common type of locomotive produced in the twentieth century and due to its power and versatility would be used in other extractivist colonial projects such as the Japanese occupation of Manchuria, the

[90] Free, *Early Japanese Railways 1853-1914,* 266.; Paul T. Warner, "The Development of the Anthracite-Burning Locomotive," *The Railway and Locomotive Historical Society Bulletin*, no. 52 (May 1940): 11–28.
[91] Colin Garratt and Max Wade-Matthews, *Illustrated Book of Steam and Rail* (Leicester: Anness Publishing, 2014), 72.

colonisation of Western North America, and the European colonisation of Africa.[92] I do not intend to equate these for forms or extractivism or colonisation. Rather I intend to demonstrate how the extractivism in Fukushima had worldwide repercussions already in the early twentieth century. If the conquering of Fukushima led to the feudal governance system in Japan, and the appropriation of the indigenous Emishi culture led to the development of the Japanese military archetype of the samurai, then it would be the natural resources of Fukushima that would have an impact on extractive infrastructure worldwide—and the use of those materials to build the global north. Thus it is clear how the extractivism in Fukushima contributed to the altering of land elsewhere in the world. The possibility to extract large amounts of earth from Fukushima to Tokyo via the railway, a possibility engendered by the development of the Mikado engine, catalysed the largest human-led geological transformations in the landscape of the coastal region of Fukushima in the form of coal mining. This extractivism of energy production from the coal in Fukushima would find a direct continuation with nuclear energy sourced along Fukushima's coastline. This phase of extractivism would also subject the body to greater hardship and greater risks to serve capital.

Across Takeuchi's photographs of stone monuments around Iwaki, one of the most common topics marked by the stones is coal mining. While the burning of coal was sometimes used in Iwaki in the fifteenth century to prevent vermin, the mining of coal was banned so as not to hinder agricultural production.[93] Modern mining in Japan began with the vast deposits of coal in

[92] J. B. Hollingsworth, *The Illustrated Encyclopedia of North American Locomotives: A Historical Directory of America's Greatest Locomotives from 1830 to the Present Day* (New York: Crescent Books, 1984), 58. Many thanks to William Waite for his contribution to the research on this topic.
[93] Iwaki Coal and Fossil Museum, "Joban Coalfield Development Chronology." Museum display, Accessed 15 November 2015.

Kyushu. There, mining had long been undertaken for the production of salt, but it would be in the Meiji period with the development of industrialisation that the intensification of coal mining would expand.[94] During the 1877 Satsuma Rebellion, coal stopped flowing to Tokyo so the hard coal of the Joban area around Iwaki started to be mined as an alternative source of energy production to fuel industry in and around Tokyo.[95] The mining companies in Fukushima were largely owned by Tokyo businessmen such as the Iwaki Colliery Company, founded by Shibusawa Eiichi, known as the "father of Japanese capitalism." For Eiichi's business—as well as other large family-run companies such as Mitsubishi and Mitsui known collectively as *zaibatsu*—mines were highly profitable due to the exploitation of labor, which provided these firms with the bulk share of their profits, allowing them to expand into different fields to become mega-corporations.[96] Due to the geology of the Joban area the mines had to be constructed quite deep, over 6,600 meters underground and the tunnels would often flood with the hot thermal water that the area was known for.[97] This flooding of steaming hot water prevented large-scale mechanisation and meant that the Joban mines were forced to use antiquated labor-intensive mining techniques.[98] While mining was always a physically taxing and dangerous undertaking, it was even more so in the Joban coal fields as the thermal springs entering the mines shafts made it brutally hot, forcing miners to work practically naked in order to bear the heat. As the coal in Joban was of lower quality than the other large mining areas such as Kyushu and Hokkaido, the

[94] Sachiko Sone, "The Reversible World of Japanese Coalmining Women," *The Australian Journal of Anthropology* 18, no. 2 (2007): 211.
[95] Iwaki Coal and Fossil Museum, "Joban Coalfield Development Chronology."
[96] Laura Elizabeth Hein, "Energy and Economic Policy in Postwar Japan, 1945-1960" (Dissertation, Madison, The University of Wisconsin, 1986).
[97] Toshitaka Nagahiro, "Japan's Coal Cartels in the Interwar Period" (A World Business History Congress, Frankfurt, 2014).
[98] Ibid.

companies in Iwaki attempted to compete on volume, which meant increasing production and further intensifying the exploitation of labor.[99] It is the resulting precarity of these conditions that is documented across a number of stone monuments photographed by Takeuchi.

While there are a number of stone monuments in *Take Stone Monuments Twice* to the building of the extractive infrastructure of mining, there are also a number of monuments to commemorate the disasters they caused. Exemplary of these monuments is the memorial to the killing of thirteen miners in an underground fire in the Uchigo mine that took place on September 28, 1907. [Figure 3.] Reading the stone monument provides a critical marker of the danger in the early history of energy extraction in the area. In recording the fatal large-scale mine accident, the stone monument—and its representation through Takeuchi's photograph—flag the danger and show the vulnerability of bodies to this extractivist economy. Through the lens of extractivism, the stone monument to the mining tragedy can be seen as a similar type of warning marker akin to a tsunami stone. Looking at Takeuchi's installation, the vulnerability of the body to extractivism can be seen in the photographs as the two figures are dwarfed by the imposing stone monument. Looming over them the enormous rock slab ominously balances on its base. Yet it is not only the immediate blunt trauma in mining that was a threat but also the slow violence of the coal dust embedded in the lungs that produce long-term pulmonary health problems such as coal workers' pneumoconiosis or "black lung disease."[100] The hazard of the coal rock's dust resonates with the contemporary geological threat of colourless radiation stemming from radioactive

[99] Ibid.

[100] "Slow violence" is addressed in length in the introduction but for purposes of confirmation I am including this footnote. It is a term developed by Rob Nixon to address the long term health effects of contamination and pollution on the body. See Nixon, *Slow Violence and the Environmentalism of the Poor,* 2.

geological elements that during the meltdown were scattered into the air and across the present landscape. A reading of deep time into the longer-term effect of extractivism brings into view the lengthy effects of the materiality on the body which configures a different reading of the future.



Figure 11. Stone Monument to Korean Workers, Detail of Kota Takeuchi, *Take Stone Monuments Twice*, 2013-2016, installation, Courtesy of the artist.

Energy extraction would affect the most vulnerable in society. Due to the difficult conditions, dangers, and low wages it was difficult to find the labor for the mines, such that, sometimes local farmers were kidnapped and forced to work in the mines.[101] In other cases people lost their land

[101] Hein, "Energy and Economic Policy in Postwar Japan, 1945-1960," 55.

due to the Meiji government's land tax reform in the 1870s that allowed for land to become a more fluid market commodity. They also enclosed common lands and their free resources that would support the farmers while instituting a flat tax regardless of the amount of harvest—all of which created dispossession and displacement at a large scale.[102] Due to failure to pay taxes almost 400,000 people lost their land in the 1880s, and mining would become one of the outlets for workers becoming the second-largest industrial employer in this period.[103] Both men and women worked in the mine, under a subcontracting system where the crew boss would control wages, housing, and run the local store, which encouraged continued work through the meagre wages, cycles of debt, or just sheer coercion.[104]

It was not just the bodies of local people that were at risk; Japan's colonisation of Korea created the conditions where many Koreans had to migrate to Japan to look for work, oftentimes undertaking the dangerous and hard work for even less pay than their Japanese counterparts. This included mining where their numbers grew, peaking during the war where one in three miners including in Fukushima were Korean.[105] Their presence is memorialised in a stone monument to 193 Korean workers who died in the mines in Fukushima. [Figure 11.] This loss speaks to the brutal conditions of the mine, and was also reflected in the fact that over one-third of all Korean miners fled their contracts due to the oppressive conditions.

[102] Kazuhiro Abe, "Japanese Capitalism and the Korean Minority in Japan: Class, Race, and Racism" (Dissertation, Los Angeles, University of California, 1989), 49-53.
[103] Ibid.
[104] Ibid.; Sone, "The Reversible World of Japanese Coalmining Women," 211.
[105] Hein, "Energy and Economic Policy in Postwar Japan, 1945-1960," 57.

While mines are both a precarious and risky place, theorist Kathryn Yusoff poetically articulates how they are also a place for political organisation and other unexpected alliances to take place:

> The mine names a colonial geography of extraction and its burdens. But it was also an underground that people could organise from and feel a different relation to and with other subjects. If mining unearths the exoskeleton of geologic life to produce the nowness (or the now, now, temporality) of contemporary life (its energy and communication networks, its highways and pathways), it also creates an opening and the passageways of unintended fractures—fissures—that lead into other undergrounds. In the mine the overseer remains at surface, changing the forms of mutuality and network of relations that the underground as a politically autonomous zone historically gave rise to into a site of property. While accumulation is concerned with getting the stuff up and out, undergrounding is a condition of, often unnoticed, traversal: underground railways, caves, hideaways, shafts, a racialised spatiality that negotiates the governance of the surface and its forces of deformation.[106]

Yusoff articulates the political dynamics at play in the mining relationship and in particular the tensions between the social order of the surface and the underground space that allows for different networks of mutuality and relations unfold. This undergrounding, in the words of Yusoff, took place in the mines in Japan and Fukushima. As the anthropologist Sachiko Sone details in her study on women in coal mining, the space of the mines could be used to form

[106] Kathryn Yusoff, "Mine as Paradigm," *E-Flux Architecture*, Survivance, June 7, 2021, https://www.e-flux.com/architecture/survivance/381867/mine-as-paradigm/.

different amorous connections that wouldn't be permitted on the surface. This was no doubt exacerbated during the war when it was Japanese women and migrant labourers from the colonies (in particular Koreans and Chinese) that would make up the bulk of the mining labor. These networks of interdependence exploded out of the underground after the war, when Korean and Chinese miners joined together in large scale strikes in Fukushima for better conditions.[107] Thus it was the energy extractivism which not only exploited the land and a diversity of colonised labor but also in its fissures provided the space for resistance and rebellion against these forms of exploitation. The through-line of the transversal activism will come to the foreground in the next chapter as we look at the movement against nuclear power. However it is clear that extractivism already had a strong resistance in Fukushima before the instituting of nuclear power and one which would continue afterward.

With the shift to an oil based economy and cheaper imports of fossil fuels in the 1950s coal mining in the area became economically unfeasible and declined rapidly, with the last mine closing in 1972. To attempt to support the area with a new economy, the coal mining company sought to develop tourism by building a resort and water park called the Joban Hawaiian Center, to make use of the thermal waters that once drained into the mines. However it would be the legacy of the infrastructure of power production that would allow energy extractivism to continue to develop. This infrastructure included the Joban rail line and the power lines built for a coal plant developed in the 1950s to make use of the local earth, which were both important considerations when nuclear power became a possibility. Just as critical was Fukushima's

[107] Hein, "Energy and Economic Policy in Postwar Japan, 1945-1960," 132.

proximity to Tokyo in order to be able transmit energy but far enough to potentially buffer the city from any dangers caused by the new technology. With this in mind, Tokyo Electric selected to build their first nuclear reactor in Fukushima. However all of the power it produced would be shipped south to Tokyo and beyond as Fukushima was serviced by a different regional power company, so the tradition of energy extractivism in the area would continue.[108] This close reading of the individual stone monuments in Kota Takeuchi's work, has shown that TEPCO building of the Fukushima Daiichi Nuclear Power Station was just part of a longer history of colonisation and extractivism in the area. Yet the installation itself not only carries forward the representations of these stone monuments, but also the act of looking at them across time.

How do the stone monuments function in relation to their photographs and the installation of Takeuchi? In particular, how in the image does Takeuchi's body striking the same viewing posture as the figures in Saito's photographs, also entangle with our own postures of looking at the images. And does this positioning of the body carry its own affect that can be transmitted.

Body-to-body transmission

While the photographs of Takeuchi faithfully follow the structure of Saito's images, the curious shift in the image comes with the inclusion of the artist in the frame. I have noted above how this inclusion of the figure marks the contemporary moment and the continuity of bodies being present—especially in light of the displacement of bodies from the Fukushima exclusion zone

[108] Kenta Ofuji, "Fukushima's Non-Nuclear Power Plants: Their History, Damage by Disasters, and Prospects for the Future," *Energy & Environment* 24, no. 5 (October 1, 2013): 712–14.

that is not so far away. Yet I would like to expand here on the figure's act of looking at the stone, and in particular how Takeuchi's re-performance of Saito's viewing of the stones highlights this practice. In the photographs, Takeuchi utilises his body to mimic the pose of the figure in the photo which sometimes appears to be an adult male like himself, yet other times Takeuchi stands in for a diversity of figures such as in the image of the *Peasant Revolt Stone Monument* [Figure 6.] where he stands in the place of what appears by the clothing to be an adolescent female student. In the image, Takeuchi doesn't alter his day labourer clothing or alter his appearance to look more like figure in Saito's images, rather it is the re-performance of the pose and the act of looking that Takeuchi highlights across all of the figures. The difference in the appearance of age and sex between himself and the student highlights their shared commonality through the pose that they both inhabit. It is in this shared perspective of reading the monument that they inhabit one another's viewpoint as well as their posture, the arrangement of their limbs, and the position of the body in space. In the course of viewing this re-performance in the installation of the *Take Stone Monuments Twice* it is striking that the visitors often strike similar poses as both Takeuchi and the figure in Saito's photographs. Through this perhaps initially unwitting re-performance by the visitor's own body, it becomes clear that the reading of this embedded knowledge needs to be activated again and again in order to become a tool for a generational transmission of knowledge.

Performance theorist Rebecca Schneider articulates how bodily affects of knowledge can be shifted to one another both through performance, for example, through the act of positioning of a body within an art installation. She describes how the position of the viewing body in a state of stillness in front of Jan van Eyck's Ghent Altarpiece is in itself following a script of the painting

in the chapel.[109] And yet at the time of the painting she argues it was unclear whether this act was one that the painting was foretelling or responding to. This dynamic between the painting and the viewer she claims can "interanimate" one another in the act and its undertaking by the visitor. This blurring the depiction and action into a form of body-to-body transmission allows the experience of the bodily position to carry forth the knowledge of the affect of that act in that specific place and time.[110]

If we see the incorporation of Saito's figures highlighted by Takeuchi's re-enacting of these poses, then in turn our similar posture in front of the photographs add another temporal dimension to this chain. It is in this rehearsal of the pose that the gallery viewer becomes complicit in with their own gestures. In this re-re-enacting by the exhibition viewer— the pose of Saito's figures, then Takeuchi's re-performance, and finally the visitor—we can become aware of our own presence in front of the works, and how we too are part of this continuity of reading embedded knowledge. As such, the focus of Takeuchi's installation moves away from the contents of the stone monuments and toward the importance of viewing embedded knowledge and how this can be re-performed across generations as a means of body-to-body transmission. Bringing the configuration of the body in reading the landscape into the gallery itself, we the visitors become engaged in this process of looking that can begin to instill a sensitivity toward the act itself and its utility in everyday life. This could be seen as corporal form of artist Robert Smithson's site/non-site distinction of bring actual earth, maps, and images from a particular

[109] Rebecca Schneider, *Performing Remains: Art and War in Times of Theatrical Reenactment* (Abingdon, Oxon ; New York: Routledge, 2011), 145-148. Many thanks to Prof. Anthony Gardner for this reference.
[110] Ibid., 147.

place into the gallery as a means of transmitting a form of knowledge from that place.[111] In Takeuchi's work seeing the exhibition of the stone monuments doesn't take us to that place, nonetheless it shares not only an image, knowledge, and history of that place, but also asks us at times to incorporate our selves with that place via our body's position in the work. Through highlighting of the act of looking itself, I contend that the viewer becomes more sensitive to the knowledge embedded in the environment. As we will see this form transmission of the knowledge forms an important counterpoint to the logic of the archive.

Anti-archive

In Jacques Derrida's book *Archive Fever*, he describes the archive through the logic of enclosure, one that serves as a "shelter" for knowledge. This capture of the document in the archive that Derrida calls the "*domiciliation*" of the archive, he describes as "house arrest."[112] Thus the logic of the archive relies on the removal from the public in order to maintain the document's security and durability as well as its taming. The enclosure of the document within the walls of the institution permits their access to potentially become a commodity and creates the conditions that necessitate the role of gatekeeper to regulate access. Derrida writes that those who keep the archive do more than just preserve the documents but undertake the "functions of unification, of

[111] Jack Flam, ed., *Robert Smithson, the Collected Writings* (Berkeley: University of California Press, 1996).
[112] Jacques Derrida, "Archive Fever: A Freudian Impression," *Diacritics* 25, no. 2 (Summer 1995): 9–10.

identification, of classification."[113] In other words, access to the documents as well as their ordering is always mediated by these institutional gatekeepers that allow for an ontological structuring of the document. For example, the document is stripped of its environment and enters into an archive where it is given a categorisation and ordered in relation to other material. The construction of this context within the institution can prejudice the document's reading and reception.

In contrast, *Take Stone Monuments Twice* focuses on the terrestrial documents of stone monuments largely found in public space or viewable from adjacent roads. These terrestrial documents are largely unsheltered, open to the public, to non-human life, as well as planetary elements such as wind and rain. It is their intrinsic petrified and durable materiality that maintains the knowledge inscribed upon them; as such they don't necessitate enclosure or need to be mediated by an institution, gatekeepers, or the logic of enclosure. These stone monuments exist rather as anti-archives—open historical documents embedded in the landscape itself. As an anti-archive they stand *in situ* and share their contents with a diversity of human and non-human publics. Often standing on the site where what they are documenting allows for the content to enter the understanding of the inscription. These stone monuments can be read as such against the backdrop of the terrain itself, a siting that allows for the context of the environment to contest, clarify, or verify a reading of the stone monument.

While the anti-archives resist the need for enclosure, their exposure can slowly be degrading as

[113] Ibid., 10.

we can see in a few of the monuments that have toppled due to earthquakes. Yet what is evidenced in Takeuchi's photographs is that networks of care have sprung up around them. Many of the stone monuments in Takeuchi's photographs are largely free of moss and lichen that would otherwise obscure the engravings; some have had new bases constructed for them. In other images small offerings such as incense, small cans of soda or flowers, have been given to the stone and the memories and spirits they reference. This underscores the interdependent nature of the stones caring for the locals through maintaining their collective history, and the locals conserving these stones and their spirits through offerings. These gestures of care show how the stones are situated within their communities where they are closer to the notions of a commons as articulated by theorists Silvia Federici and George Caffentzis—an environmental interdependence of human and non-human that foregrounds use-value.[114] Seen through this lens, the relationship between stone monuments and community can be one of mutual aid. The stones carry forth the collective memory of the community on a given site, and in turn are continually cared for by the community, which facilitate both the duration of the stone and the transmission of its knowledge across generations.

If we understand the stone monuments as a form of anti-archive that have a direct relationship with their environment and their community, what impact does the trans-positioning of the stone monuments into an art installation have? In order to approach this question, we first have to look at the role of photography and its relationship to both archival and counter-archival practices. The catalogue essay to Okwui Enwezor's landmark exhibition *Archive Fever* looked at the turn

[114] Camille Barbagallo, Nicholas Beuret, and David Harvie, eds., *Commoning: With George Caffentzis and Silvia Federici* (London: Pluto Press, 2019).

in contemporary art toward the uses of documents, largely through the use of photography and video. Enwezor articulates how the photograph itself has an archiving impulse toward the fixing of site and temporality in its image. While this both captures a temporal register of a document it also could be used to liberate that knowledge from an enclosure via the circulation of the image. As such the use of photography with a document has the potential to produce a counter-archive, freeing the document from the logic of the archive and providing a different context for its reading or contestation. Liberating these materials and/or their stories from the archive and through the recontextualisation in an artwork could produce "critical transactions predicated on opening up new pictorial and historiographic experiences against the exactitude of the photographic trace."[115] This transposition of the document and its re-representation or even fabulation within an artwork moves toward de-centring the archive as an arbitrator of both the documents and history writ large, instead producing a "mnemonic ambivalence."[116] Thus we can see how photography allows for a multiplicity of practices to be brought to bear on the document. Yet in the case of Saito's and Takeuchi's photographs it is not only the document of the stone monuments that appear in the photos but also glimpses of their surrounding environment and occasionally figures seen in the frame looking at them. It is in this excess in the image, beyond the anti-archive of the stone monument, that Takeuchi's images and the installation allow us to better understand the process of seeing intergenerational memory in the landscape.

Looking again at the installation of *Take Stone Monuments Twice* through Enwezor's approach to

[115] Okuwi Enwezor, *Archive Fever* (Gottingen: Steidl, 2008), 9.
[116] Ibid., 30.

the photograph and the document we do see how certain of these stone monuments—and their context—are carried forward through the image. The environment of the site of the stone monuments come through the edges of the images both in the shots from the 1970s as well as 2010s, as does the photographic technology (a kind of media archeology). These images fix not only the stone monument, but their surroundings, and through the comparison between Saito and Takeuchi's photographs certain changes might only be visible through these documents, especially where the landscape today has been drastically altered. Thus the image, perhaps unintentionally, becomes a record of the changes on the site, a record made through the comparison we are able to see through our own reading of the side by side images taken at the same site, from the same angle, forty years apart. As such it is all of the information surrounding the document that the photographic image brings into view, allows the viewer to create their own understanding of the site beyond what is engraved on the stone. The importance of this excess in the image becomes clearer when one attempts to read the stone monuments themselves. Looking across the collection of images in the installation, at times the knowledge inscribed on a stone monument is fully visible, yet just as often an image contains only a partial view of the engraved surface, or the writing is illegible; at other times the engraving is obscured entirely in the photographs by new constructions or overgrowth. The images rarely completely capture the documentation of the image, their messages, or their surroundings. Thus instead of capturing all of the information on the stone monuments, the images instead function in part as an index of their presence. This index serves as a recognition of the stones themselves and points toward the knowledge they contain as well as their relationship with the landscape. Rather than enclosing the stone monument in the image, the indexical form alludes to its continual presence on the site.

This is highlighted in the list of works in the gallery that contains the GPS coordinates of each stone. The lack of legibility of all of the stones and their accompanying coordinates could be seen as an invitation to visit them to verify or understand more fully the document and its surroundings. Yet I think the importance of the installation is not just this invitation to look more deeply at the environmental histories of Fukushima, but also how the sensitivity of reading the landscape can be utilised in our own environments. The experience of going through the intensive installation, with its large archival record, and the process comparing the images of Takeuchi with those of Saito, creates a space through this sensitivity is nurtured and practiced. I argue that the sensitivity doesn't just stop when leaving the gallery but implores us to look more carefully at our surroundings and why and how they came to be that way.

The nuclear disaster at the Fukushima Daiichi Nuclear Power Station underscores the importance of the ability to read the embedded knowledge in the landscape. Through the tsunami stones and their relationship with some local residents, we saw in this chapter how during times of disaster, how this generational knowledge can become extraordinary in its importance during such crises and have a real impact on whether the continuity of generations is continued. Through an in-depth reading of Kota Takeuchi's *Take Stone Monument Twice* this chapter has shown the history of Fukushima's colonisation and the loss of collective agency in the area. This loss of agency produced a long running precarity in which disasters such as famines and disasters related to extractivism could occur, and while the loss of life could not be restituted there could systems of repair to society and ruling order which could fold the disasters into the precarious conditions of life and not threaten the underlying catastrophic condition. It was this loss of agency and self-

determination for Fukushima which had never been remedied and as such its status as an internal colony of Japan and a site of extraction of materials and bodies for Tokyo continues to this day. Thus this chapter has demonstrated the state of catastrophic condition that Fukushima is in, and has shown how the meltdowns at the Tokyo Electric's nuclear power plant were not the first calamity in the area, and were not an isolated incident. It is the knowledge embedded in the landscape that Takeuchi visualises in *Take Stone Monuments Twice* that allows for an opening to understand the history of colonisation in the area and its ongoing effects. This reading has functioned as a diagnostic of the catastrophic condition through the embedded knowledge on the stones themselves.

Chapter 2. Even After 1,000 Years: Bontaro Dokuyama

3.11 set forth a new time of "Fukushima," one circumscribed by the disaster and its attributes of radiation and displacement. Like "Chernobyl" and "Bhopal" the name of the locality became imbricated with a disastrous event. The time of the arrival of Fukushima into global consciousness thus begins with the nuclear meltdowns, and becomes an immutable layer through which the external world sees the present and future of the place.

Yet the perception of that new era is not uniform, as described by sociologist Hiroshi Kainuma

(who was born in Iwaki, Fukushima): "there is always a perception gap between those who look out from and those who look into any given place."[117] While the previous chapter looked at a work by Kota Takeuchi who moved to Fukushima after the disaster, this chapter looks at a response to the disaster through the practice of a Fukushima-born artist, Bontaro Dokuyama. Two of his artworks help to shed light on the temporality as experienced by the artist whose knowledge of the land traverses the period before the disaster and the contaminated fallout afterwards. This chapter will explore how that affinity to the land shifted the understanding of the multiple temporalities at work in the low-level irradiated landscape around the melted-down Fukushima Daiichi Nuclear Power Station. The space-time matrix of contamination is one defined by the invisible presence of the radiation on the land, and due to the radioactive half-life of the elements has a durational presence. Through analysis of Dokuyama's artworks made in the wake of the disaster, this chapter will explore the temporal schism of the disaster through the lives of the residents. Many residents surrounding the plant have been forcibly evacuated for over ten years now, or, as in the case with Dokuyama's family, initially evacuated for a short period but because they lived outside the mandatory evacuation zone, they returned to live in the low-level irradiated landscape. Writing in 2021, there are a host of different viewpoints of local residents who have lived in the surroundings of the Power Station, continue to be displaced by the fallout, or have returned to irradiated areas, and some perspectives have shifted toward what it means to have lived for ten years in the area since the disaster.[118] This chapter will explore two

[117] Reiji Yoshida, "Fukushima Researcher Says Region Still 'stigmatized' by 2011 Disaster," *The Japan Times*, March 11, 2016, https://features.japantimes.co.jp/march-11-radiation/#part2.

[118] Kyoka Ohba, "Report on the Basic Survey on Disaster Recovery on Eight Towns and Villages in Futaba-Gun," Disaster Recovery Research Institute Edition (Fukushima University, February 4, 2012), https://www.oecd-nea.org/rp/meetings/ISTC-STCU/docs/5-feb-fukushima/13%20K_Oba(Japan)_English.pdf.; Japan Times, "65% of Fukushima Evacuees Have No Intention of Returning Home: Survey," *Japan Times*, November 28, 2020, https://www.japantimes.co.jp/news/2020/11/28/national/fukushima-evacuees-survey/.

works, *Even After 1,000 Years* and *1/150*, both undertaken in 2015, to show how they help to convey the residents' sentiment of the period before and immediately after the disaster. The artworks also addressed one of the most important "invisible" effects of the nuclear disaster on the inhabitants: the mental health damage and the suicides among the local population. This is one of the most enduring legacies of the nuclear disaster as well as the longer catastrophic condition in Fukushima.

Of the artists surveyed in this dissertation, Bontaro Dokuyama has the unique perspective of a deeper relationship with the land—one that embodies a continuity with the place before and after the rupture. The effects of the disaster are not abstract to him, as his family lives constantly with the potential threat of radiation in the surrounding landscape. I argue that this has produced an increased sensitivity to the landscape through the recognition of its capacity to cause damage; as such, there is a specific attention to the relationship of the body to the landscape. Through these ties to the local area, Dokuyama's artwork about Fukushima has a distinctive characteristic that meshes a longer temporality with the landscape and the body to repair ways of seeing the lived environment. Moreover, he and his family have lived through the mental effects of the disaster, one of the most pervasive and tangible effects of the radiation on the residents. As we will see Dokuyama addresses these effects via the landscape as well as its non-human inhabitants. It would also be the disaster that would be formative to Dokuyama's own decision to become an artist.

Dokuyama grew up not far from the nuclear power plant and has an intimate knowledge of the

local landscape. At the time of the disaster Dokuyama was living in Tokyo, yet the events starting on March 11, 2011, are personal for the artist as they upended the lives of his immediate family and the low-level radiation continues to threaten them daily. Dokuyama's family was forced to evacuate after the disaster but returned only two weeks later as his father was a veterinarian in this predominately agricultural area, and many farm animals needed care after the disaster. Thus it was this commitment to the non-human inhabitants of Fukushima that brought the family back to their home town which was largely deserted due to the low-level radiation. Dokuyama, who was in Tokyo at the time, was deeply concerned for his family's well being and was in constant contact with his family and visited when he could. It was this dual separation, first the family's evacuation from their home and then the artist's own separation from them as well as from Fukushima, which has been critical to his practice reflecting on the disaster.

In 2011, Dokuyama was working as an interior designer in Tokyo and felt the inhabitants of Fukushima were not being heard from in the media nor were their experiences being represented in culture. Reflecting on the communicative capacity of his occupation at that time Dokuyama said, a "building interior cannot convey the voices of the Fukushima people to the outside," so he decided to quit his job to become an artist.[119] In this statement, it is clear that even though he was based in Tokyo, he strongly identified with his hometown and the residents. Moreover, his turn to becoming an artist was predicated on his belief in the capacity of art to convey the experience of what it means to be from Fukushima. Given the durational nature of the nuclear disaster, where the crisis and its aftermath would last for years or decades, for Dokuyama art could not be

[119] Bontaro Dokuyama, "Line Message with the Author," October 30, 2019.

undertaken as a hobby or a few months of sabbatical from work. After 3.11, Dokuyama committed to becoming an artist full-time and started studying Buddhist and still life painting. In 2013, he joined the alternative art school Bigakkō in Tokyo where he studied with Ryuta Ushiro of Chim↑Pom and part of the group of his students called Tensai High School [Genius High School] that also included the artist unit Kyun-Chome. This period was the first time that he experimented with expanded forms of art-making such as performance, video, and installation that have come to be central to his practice. Dokuyama's continuing commitment to art also speaks to the utility of maintaining the position of being an artist to be able to communicate the changing effects of the long durée of radioactive fallout over time. His desire to share the voices and experiences of those from Fukushima has taken shape in both his collaborations with fellow residents but also through performance and the deployment of his own body and voice, as in the case of *Even After 1,000 Years* (2015). [Figure 12.]

Is This Sky the Real Sky?



Figure 12. Bontaro Dokuyama, *Even After 1,000 Years*, 2015, video, [video still], Courtesy of the artist.

The documented performance, *Even After 1,000 Years* took place not far from Dokuyama's family home in Fukushima atop the dormant volcano of Mount Adatara, which is named on Dokuyama's t-shirt. It is a site made famous by the early 20th-century avant-garde artist Chieko Naganuma who was also born nearby. On the mountain apex there is a carved wooden post with a quote from her, "This sky is the real sky," that comes from a poem by her husband and poet Kontaro Takamura. In the performance, Dokuyama reads the inscription aloud in the pouring rain and then declares that this is indeed the real sky and proclaims that all other skies are fake; he then vacillates, asking Naganuma whether this is indeed the true sky that she loved. The title of the work *Even After 1,000 Years* comes from a line in another poem by Takamura, about a posthumous sculpture of Chieko Naganuma that Takamura made in honour of her memory, which is situated in Tohoku at the edge of Lake Towada. The poem speaks about the difficulty

that the sculpture contends with being exposed out in the open, subject to the harsh northern elements.

On Mt. Adatara where Dokuyama stands there is low-level radiation from the fallout of TEPCO's Daiichi Power Station. As the previous chapter highlighted, Fukushima has long had a history of extractivism and disaster pre-dating the plants meltdown and Mt. Adatara is no exception. The volcano was the site of large-scale sulphur mining and its eruption in 1900 killed over eighty mine workers.[120] In the setting of *Even After 1,000 Years* the mountaintop is littered with broken rocks among which Dokuyama stands, it is unclear whether this is mining debris but given the history of setting and region it is not difficult to read these rocks as evoking the long durée of extractivism in Fukushima. Thus we can interpret the setting of the mountain as having both mining debris and low-level radiation two byproducts of the legacy of the catastrophic condition in Fukushima. In order for a more in-depth reading of this setting and how to read its relationship to Dokuyama's performance, it is important unpack the concept of landscape further.

Much has been written about the notion of landscape. For the purposes of this reading I will focus on art historian W.J.T. Mitchell's understanding of landscape as it focuses not just what the landscape reveals but also what it obscures. He understands landscape not as a noun but instead a verb akin to a "cultural practice."[121] For Mitchell a landscape is more than just a signifier of the

[120] Akihiko Fujinawa et al., "Reconsideration of the 1900 Explosive Eruption at Adatara Volcano, Northeastern Japan," *Bulletin of the Volcanological Society of Japan* 51, no. 5 (2006): 311–25, https://doi.org/10.18940/kazan.51.5_311.

[121] W. J. T. Mitchell, ed., *Landscape and Power* (Chicago: University of Chicago Press, 2002), 2. Similarly relevant sources to this discussion are Terry Smith, *Transformations in Australian Art* (Sydney: Craftsman House, 2002) and Kōjin Karatani, *Origins of Modern Japanese Literature* (Durham: Duke University Press, 1993).

power relations; rather he sees it as a "cultural media" with the dual role of naturalising "cultural and social construction" that consequently produces an "artificial world" that is received as "given."[122] Secondly the landscape for Mitchell always exists in relation to the human figure: whether that figure is present in it or viewing it, the landscape is an anthropogenic formation. Yet while the landscape is an anthropogenic formation it also often obscures this reality through appearing as it has always existed in such a state. Through this understanding of the landscape what can we see on Mt. Adatara in Dokuyama's work? The site has clear evidence of human intervention in the form of a wooden marker. Yet, the trees, grass, and shrubs that surround the clearing are dwarfed by the artist and the marker; it is unclear whether this constitutes a higher altitude wilderness of low-level growth or whether they are indeed smaller as a result of recent growth in wake of human-caused destruction. This ambiguity could be thought to substantiate Mitchell's understanding of landscape as a cloaking mechanism for the history and present of a place.

Dokuyama's performance directly questions whether what we are seeing surrounding the landscape is what it appears to be. Dokuyama yells to the sky asking "Chieko" whether, as is written on the post whether this is indeed the "real sky." What does this question imply about the location of the mountain in Fukushima as well as the centre of extractivism—Tokyo? In the poem from which the phrase comes, Chieko Naganuma claims "there's no sky in Tokyo": instead she longs for the "blue sky high above Mount Adatara—That's what I call the real

[122] Ibid.

sky."[123] Takamura entitled the poem "Talking Like a Child," which seems to allude to the poet being bemused and slightly befuddled by Naganuma's statement which she gives while looking up at the sky in Tokyo. Yet the poem was written at the start of the twentieth century, when the burgeoning metropolis of Tokyo had one of the most polluted atmospheres on earth, ensconcing the city in grey skies, the result of the plentiful smokestacks of local heavy industry.[124] The sharp contract of this dichotomy between the industrially choked city sky and the imagined idyllic rural atmosphere might not have been so evident to the Tokyo-born Takamura. These factories were burning coal, much of which would have been brought from Fukushima to the city on the new railways which accelerated not only the extraction of resources but also bodies, as was the case with Naganuma who took the train in 1920 as part of this early migration, and Dokuyama almost a hundred years later as part of the continual draining of the prefectures' youth to the metropolis. The framework in the poem of a dichotomy between the grey atmosphere of the heavily developed landscape of Tokyo and what Naganuma imagines nostalgically as the "real" blue sky of the environment of Fukushima is contested in Dokuyama's performance in part due to the stormy conditions. Instead of undertaking his performance on a clear day with a view of the surrounding area, Dokuyama places himself in the midst of a rainstorm under grey skies. This setting complicates any nostalgic view of a pristine environment, as he struggles to undertake the performance in the rain. It is this figure of the storm that not only disrupts the site, but, I contest, also plays an important role in gesturing toward the new conditions of the irradiated yet invisible landscape. By highlighting Naganuma's connection to the place, Dokuyama's performance sets

[123] Kotaro Takamura, "Talking Like A Child," translated by Paul Archer. http://www.paularcher.net/translations/kotaro_takamura/the_chieko_poems/talking_like_a_child.html.
[124] John Robert McNeill, *Something New under the Sun: An Environmental History of the World in the 20th Century* (London: Penguin, 2001), 236.

up a parallel between the grey polluted skies of Tokyo, with the present day rainy sky over Mount Adatara that is contaminated with the invisible presence of low-level radiation. Thus I assert that the artist's questioning of the sky as well as its parallel with an industrially polluted Tokyo helps to bring to the foreground the existence of the nuclear fallout. In doing so Dokuyama helps to undo the obscuring effects that Mitchell sees as intrinsic to landscape by literally calling into question the realness of the site and through highlighting Takamura's history that culturally binds the mountaintop to Tokyo. As such the landscape in Dokuyama's work isn't just seen through the single time of his present but also through another's past relation to that site —principally Naganuma. This helps to break down the presumption that the landscape in the words of Mitchell is "given."[125] This dual temporality in Dokuyama's work at least opens the possibility of the site as having been different in the past. Dokuyama's work not only refracts time but also space. By evoking early industrial Tokyo he overlays multiple places on the site which helps to show the deep historical relation between the mountain and Tokyo and how they have affected one another: first from the mining, and second the nuclear fallout from TEPCO's plant, both part of extractivist industries to service Tokyo's development. This relationship between the city of Tokyo and the landscape of Fukushima is also part of Dokuyama's life and artistic identity.

Low-level Radiation

While studying art at Bigakkō, Dokuyama met the artist Sachiko Kazama. Kazama decided that

[125] Mitchell, *Landscape and Power,* 2.

Dokuyama's birth name was too ordinary and boring—not fit for an artist—so she gave him his present nom d'artiste: Bontaro Dokuyama.[126] This more threatening surname means "poison mountain," as it was the nuclear meltdown in Fukushima that propelled Dokuyama to commit to becoming an artist and then assume this new identity through altering his name. I suggest that the performance atop Mount Adatara can be seen as him embodying and enacting this identity. Looking at the meaning of his name, we can see a representation of the contaminated landscape in the performance. The radioactivity in the area—caused by fellow humans—is a burden he carries through this moniker. Yet at the same time, this name also carries with it the geological figure of the mountain. It is this paradox in the name "Dokuyama," which signifies both the contamination and the land, but doesn't figure the artist's relation to them. Rather the "poison mountain" can be read as the ground on which he and his practices struggle. This was not just a symbolic enactment of his artistic identity; his presence is literally embodying the "poison" of low-level radiation on the mountain. His performance on Mount Adatara interweaves the material radiation of the site with his artistic name and potentially leaves traces in the alteration of the DNA in his cells. This stochastic effect has the potential to happen with any radiation exposure, and while there have been studies that show the increase in certain types of cancer caused by low-level radiation, a recent literature review on the effects of the Fukushima disaster by the United National Scientific Committee on the Effects of Atomic Radiation found that it would be difficult to discern a population-wide impact on low-level radiation experienced in the area.[127] So while the stochastic effect is omnipresent, it is doubtful that there would be health

[126] The artist prefers that his legal name not be published. Bontaro Dokuyama, "Line Message with the Author," October 30, 2019.

[127] Sofiya Choudhary, "Deterministic and Stochastic Effects of Radiation," *Cancer Therapy & Oncology International Journal* 12, no. 2 (October 5, 2018), https://doi.org/10.19080/CTOIJ.2018.12.555834.; K. Suzuki and S. Yamashita, "Low-Dose Radiation Exposure and Carcinogenesis," *Japanese Journal of Clinical Oncology* 42, no.

effects, especially for such a short exposure. Yet, by situating his own body in the prefecture's historical location, the performance highlights the potential risks for himself and his family.

Being in low-level radiation in every moment of every day produces the possibility—albeit remote—of one photon of energy from the radionuclide potentially altering a cell in the body that later on could cause a cancerous growth afflicting the body or even a genetic alteration whose effects could transcend generations. This threat occurs every second of every moment inside an irradiated landscape and in my experience can change the perception of time. On my first trip through the irradiated landscape in coastal Fukushima in April 2013, I felt the fear and anxiety of being in the place but not being able to see any physical danger or know how to best protect myself. This made me hypersensitive to every moment and every gesture. The awareness of the threat in that one second, and the second that comes afterwards, induced a hypersensitivity to time wherein a short period feels much longer. In addition, as that one second might have repercussions that only emerge years or decades later, there was not a clear understanding of the causality at work in that period. This evoked a feeling of an elastic time, unstuck from linear time, as that moment had the potential to re-emerge in the form of a cancerous cell a decade later.

However after I had made a number of trips into and around the irradiated landscape over a

7 (July 1, 2012): 563–68, https://doi.org/10.1093/jjco/hys078.; Klervi Leuraud et al., "Ionising Radiation and Risk of Death from Leukaemia and Lymphoma in Radiation-Monitored Workers (INWORKS): An International Cohort Study," *The Lancet Haematology* 2, no. 7 (July 2015): e276–81, https://doi.org/10.1016/S2352-3026(15)00094-0.; United Nations Scientific Committee on the Effects of Atomic Radiation, "Levels and Effects of Radiation Exposure Due to the Accident at the Fukushima Daiichi Nuclear Power Station: Implications of Information Published since the UNSCEAR 2013 Report," Scientific Annex B (United Nations Scientific Committee on the Effects of Atomic Radiation, 2020), https://www.unscear.org/unscear/en/fukushima.html.; Greenpeace, "Fukushima Daiichi 2011-2021."

period of years, a sense of habit and the routine experience became commonplace as one returns to the same places, gets to know them, enters and exits them, with no obvious effects. The impossibility of knowing the exact causal reaction to being in the low-level irradiated area as well as later rough calculations about the levels of exposures during the visits strangely normalised the experience of these conditions. There were only sporadic ruptures when I was knowingly in the proximity of a radioactive hotspot—a place many times higher than the ambient radioactive levels—which would shock me back into the invisible reality lurking in the landscape. I don't intend this to represent Dokuyama's or his family's experience as I have not lived in this area, nor experienced the events of 3.11. I share my own experience as a means to convey the temporal dissonance that can be experienced in the place, and how an awareness of being in low-level radiation can create an elastic sense of time.

This first-hand account details the parallax nature of the threat—of the immediacy of exposure (yet not necessarily becoming apparent at the moment as it can take years for cancer or genetic alteration to become apparent) and the long half-lives of the radionuclides which ensure the landscape will be irradiated for decades or even millennia. It is this temporal dilemma that the artist or his family inhabit. How to cope with the need to shuttle between these vastly different scales of time and the anxiety that can be caused by this invisible presence of radiation?

I argue that Dokuyama in the performance utilises the relationship between his own body and the weather as a metaphorical device to stand in for the invisible radiation enveloping the landscape. Through this, he not only underscores the present contaminated state of the mountain and the

surrounding region but also helps to bring us closer to understanding the experience of living there. His body situated on the mountain drenched in the rain acts as an evocative metaphor for the radionuclides that drench the area and its inhabitants in low-level radiation which cannot be perceived. Through this framework, it can be understood that the question Dokuyama is asking to the sky is whether this contemporary atmosphere complete with the radionuclides is indeed the "real sky." Has the irradiated atmosphere of Fukushima thus transitioned the idyllic mountain in the poem from Naganuma's time into an unreal landscape of nuclear aftermath? If this is the case, then how does the artist, by situating his body amid the storm, convey the experience of inhabiting this new landscape?

It is helpful here to turn to the long history of landscape painting in Japan and East Asia. One type of landscape developed in Japan called the *shinkeizu,* or true-view pictures, is particularly useful in understanding Dokuyama's configuring of the landscape. While commonly used today to refer to paintings that depict a well-known locality, starting in the eighteenth century, *shinkeizu* paintings merged an empirical study of the land with imaginary landscapes. As such *shinkeizu* were not straightforward single point perspective landscapes common in European painting. Instead, they had to incorporate the *shinkei* or true-view, understood as the spiritual resonance of the human relationship with the non-human site.[128] As the paintings often depicted famous sites, the artist had to express the importance of the site through their unique emotional relation to the place. Thus it was critical to utilise one's body and emotional sensitivity to channel and understand the site in order to accurately depict the feeling and importance of the

[128] Melinda Takeuchi, "'True' Views: Taiga's Shinkeizu and the Evolution of Literati Painting Theory in Japan," *The Journal of Asian Studies* 48, no. 1 (February 1989):3-26. Many thanks to Sohin Hwang for this suggestion.

site.

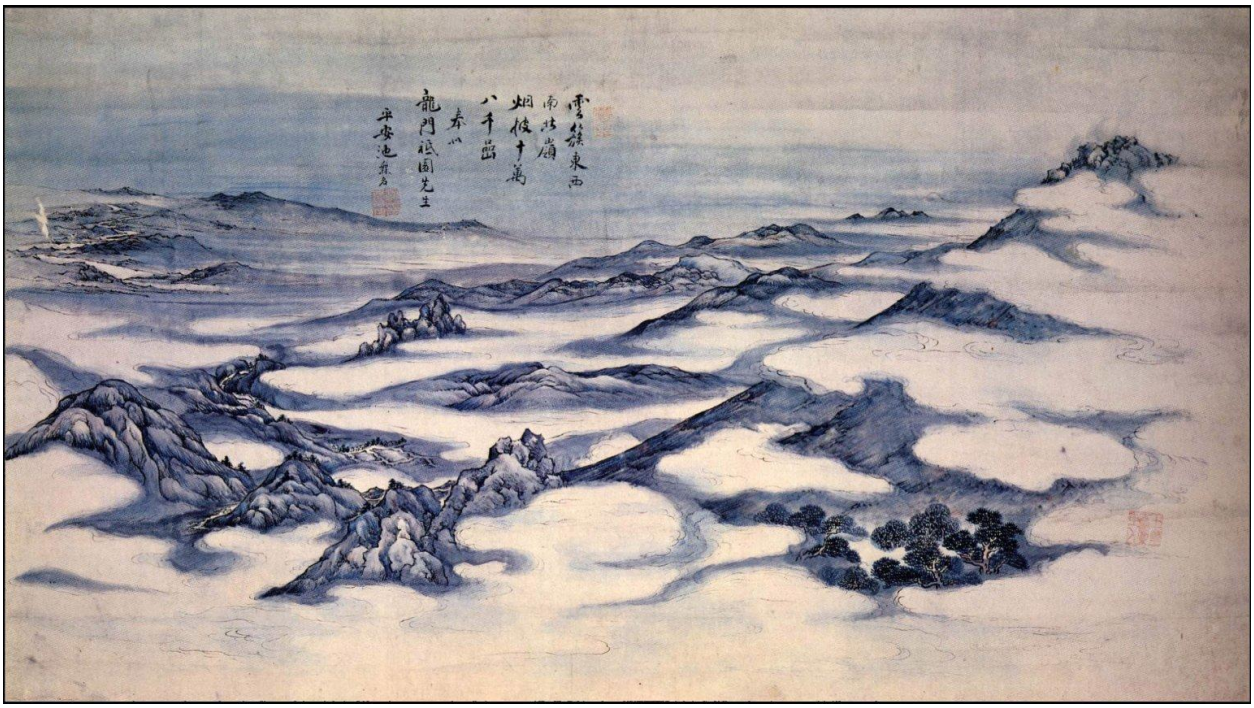


Figure 13. Ikeno Taiga, *Asamagadake shinkeizu* [*True View of Mt. Asama*], Hanging scroll, ink and colour on paper, ca. 1760.

In order to represent the artist's true perspective of the place, works of *shinkeizu* would often be atmospheric pieces and at times the artist even re-arranged the site's actual components within the painted depiction to suit their emotional expression of the place. This balance between an accurate portrayal and a true feeling of place is seen in the 18th century Edo period painter Ikeno Taiga's *Asamagadake shinkeizu* [*True View of Mt. Asama*]. [Figure 13.] This ethereal landscape of Mount Asama (to the right) in Gunma prefecture as seen from the southern side of the adjacent Oiwake mountain is a largely consistent depiction of the topography of the mountain slope. The small silhouette of Mt. Fuji, Japan's most important mountain, can be seen to the left

of the painting in the background, providing a distant echo of Mt. Asama. The painting is regarded as an important development in empirical painting in Japan, however despite the accurate depiction of the contours in the landscape, Mt. Fuji wouldn't have been visible in such as view as it was actually located on the opposite side of Mt. Oiwake.[129] Thus Taiga channeled his ideal vision of the place by incorporating what he saw from his body facing the south side of the mountain, and then his body facing the north side of the mountain: overlaying these two counter-perspectives in order to fulfil his ideal feeling of the site.

By comparison, what might be the *shinkeizu* of Mount Adatara and Fukushima in the wake of the nuclear disaster? The true feeling of a place might need to incorporate the experience of being in a landscape that is at once potentially threatening but the effects—if any—might only be known years later. Thus one is caught between two drastically different time periods—the body time of immediate exposure or durational exposure if living there and the time of the half-lives of the radioactive elements. In *Even After 1,000 Years*, Dokuyama maintains the camera at a single view point perspective, instead of cutting together different perspectives which might be closer to Taiga's collage perspective of Mt. Asama. If the viewing position is fixed and Dokuyama hasn't digitally altered the landscape, then perhaps we have to look at the composite elements inside the frame, particularly the strong presence of the atmosphere in contrast to his body to find out what the "true view" is that the artist is proposing. I maintain that Dokuyama embodies this struggle between the two time periods and the anxiety they can produce through situating his own body in the midst of a rainstorm. Through his struggle in the storm, I hold that Dokuyama's

[129] Ibid., 16-19.

use of his own body in *Even After 1,000 Years* can be seen in this tradition of depicting the inner feeling of being at Mount Adatara at this moment in time when it was shrouded with invisible low-level radiation. To situate how the landscape and body operate in greater detail in this "true view" it is important to unpack further the temporalities of radiation at work on the land and people.



Figure 14. Bontaro Dokuyama, *Even After 1,000 Years*, 2015, video, [video still], Courtesy of the artist.

Weathering Deep Time

The radioactive elements present in the landscape from the nuclear disaster range from Iodine-131 with a half-life of eight days to Plutonium-239 with a half-life of 24,100 years. The most prevalent radioactive isotope in the region is Caesium-137 with a half-life of 30 years. So

while the low-level radiation of Caesium-137 in the area may only exist for 30-60 years, I think the title of the work, *Even After 1,000 Years*, alludes to the longer temporalities of deep time that the nuclear disaster evokes. The perspective of deep time incorporates vastly larger scales of time that extend beyond humanity and also includes the social, political, and technological entanglement of humans as a presence that has exerted a planetary force. The evoking of this longer time might signify the emotional experience of time that Dokuyama and his family felt as the disaster was moving into its fourth year with no end in the near future—especially given the anxiety of living in a low-level irradiated environment. This sense of exhaustion from enduring the massive upheaval of 3.11 and the subsequent years of navigating the uncertainty of living amongst nuclear fallout would certainly be a strain and make one feel that this is going on forever. And yet the temporalities of some of the radionuclides do indeed persist for an epic duration that would span generations.

As mentioned above the *Even After 1,000 Years* title comes from a line in a poem by Kotaro Takamura, about the posthumous sculpture of Naganuma that is situated outdoors. The poem speaks about the difficulty that the sculpture contends with being exposed out in the open, subject to the harsh northern elements. The title furthers the overlap between the life of Naganuma and her sculptural effigy that is carrying forth her memory for generations to come. Thus the title can be seen as not only a reference to a longer temporality, but also what it might mean to endure long-term hardship. *Even After 1,000 Years g*estures to an epic span of time and also alludes to the resilience of the site and the surrounding community over the past millennia, while also flagging the collective concern that radiation might be coexisting with them for

millennia to come. While referencing this long period of survival, the title is also imbued with mortality and vulnerability

In the performance, the vulnerability of Dokuyama's body is emphasised by being dressed in casual country attire, sporting a T-shirt emblazoned with an image of Mount Adatara, shorts, and sandals, so he remains largely exposed to the elements. [Figure 14.] Staging the action during an intense downpour, the artist struggles with the rain, coughing, squinting, and rubbing his face, as he attempts to talk through the onslaught. Highlighting the difficulty and its emotional toll, the physical struggle with the elements through the vulnerability of the artist's body can extend the affective sensation to the viewer. This partakes in what theorist Sara Ahmed has called the "contingency of pain," wherein seeing a struggling and vulnerable body we connect to it and, through that body, the site where it occurs as well.[130] She describes the affective response in the viewer that seeing the pain can create as a "moving toward" and "aligning" between both the observer and the struggling body along with the site of the action. Thus beyond just depicting the site, it is the very real enactment of the struggle taking place that Dokuyama can bring the place closer to the viewer.

In *Even After 1,000 Years*, Dokuyama's insistence on enduring the storm and his struggle with the weather that has the ability to traverse geographies of experience—of those living in the low-level area of radiation, and others' experiences in different places as well. So while one may not know how it feels to be in a radioactively contaminated area, the experience of getting drenched

[130] Sara Ahmed, *The Cultural Politics of Emotion*, (Edinburgh: Edinburgh University Press, 2014), 28.

by the rain can provoke a deeper connection with the viewer. Dokuyama thus breaks down the remoteness and alienation of the durational struggle of coexisting in low-level contamination by utilising one set of environmental conditions—a rainstorm—to stand in for another—low-level radioactivity. In doing so the artist can physically demonstrate a struggle with the elements acted out in real time. The deluge of the rain is overwhelming covering his body and inundating his mouth to the point where he can't speak, and has to halt to spit out the water. This halting endurance of the rain shower, while lasting only minutes in the video, can perhaps give us just a glimpse into the "true view" of the feelings of the artist and his family in the long durée of nuclear disaster.

Schizophrenic Temporality and the Chronomyopia of Capital

This difficult experience of the temporality of radiation has also contributed to mental illness in the area. Even before the events of March 11, studies have shown that Fukushima grappled with mental illness, but after the disaster this was further exacerbated.[131] In addition to a high rate of suicide, there has been depression, PTSD, chronic anxiety, and socio-psychological issues among others that have been prevalent amongst those displaced and the residents who have also chosen to remain in the surrounding area.[132] Particularly challenging for mental wellbeing has been the urgency of the contamination coupled with the long duration of its existence, along with

[131] Masaharu Maeda et al., "Fukushima, Mental Health and Suicide," *Journal of Epidemiology and Community Health* 70, no. 9 (September 2016): 843–44, https://doi.org/10.1136/jech-2015-207086 and Masatsugu Orui et al., "Suicide Rates in Evacuation Areas After the Fukushima Daiichi Nuclear Disaster: A 5-Year Follow-Up Study in Fukushima Prefecture," *Crisis* 39, no. 5 (September 2018): 353–63, https://doi.org/10.1027/0227-5910/a000509.
[132] Masaharu Maeda and Misari Oe, "Mental Health Consequences and Social Issues After the Fukushima Disaster," *Asia Pacific Journal of Public Health* 29, no. 2_suppl (March 2017): 36S-46S, https://doi.org/10.1177/1010539516689695.

the prolonged forced separation of residents from their homes. These invisible mental effects have also accounted for a number of deaths attributed directly to the nuclear disaster.[133] This demonstrates the disaster's multidimensional impact.

It is not only the mental harm to the self that can occur in a nuclear disaster, but as was demonstrated in relation to the Chernobyl disaster, the distortion of the self and its understanding of time can happen through schizophrenia, which can also develop from the disaster.[134] Dokuyama highlights this effect of the disaster through the peformance's symbolic location. While Mount Adatara is a site bound together with Chieko Naganuma—who brought the site into the nation's consciousness through her words—in the public's mind Naganuma herself is inextricable from her mental illness. Kotaro Takamura's collection of her sayings in the book *Chieko's Sky* charts their marriage as well as her descent into schizophrenia and her early death at the age of 52. Yet, I assert it is not only the health effects of schizophrenia that Dokuyama evokes but the distorted sense of temporality that the disorder engenders. Critical theorist Fredric Jameson—through a reading of Lacan—has written on the temporality of schizophrenia as the breakdown between signifier and the signified which undoes the temporal unity of understanding[135]:

> If we are unable to unify the past, present, and future of the sentence, then we are

[133] Ibid.
[134] K. N. Loganovsky and T. K. Loganovskaja, "Schizophrenia Spectrum Disorders in Persons Exposed to Ionizing Radiation as a Result of the Chernobyl Accident," *Schizophrenia Bulletin* 26, no. 4 (January 1, 2000): 751–73, https://doi.org/10.1093/oxfordjournals.schbul.a033492 and K.N. Loganovsky and T.K. Loganovskaja, "1319 – Psychiatric Legacy of Chernobyl: Fukushima Projections," *European Psychiatry* 28 (January 2013): 1, https://doi.org/10.1016/S0924-9338(13)76373-9.
[135] Fredric Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism*, (London: Verso, 2008), 25-26.

> similarly unable to unify the past, present, and future of our own biographical experience or psychic life. With the breakdown of the signifying chain, therefore, the schizophrenic is reduced to an experience of pure material signifiers, or, in other words, a series of pure and unrelated presents in time.[136]

Jameson argues that the breakdown in an accounting of time shows that the temporal experience of schizophrenia to be one of eternal and fragmented presents. Because there is no past, and no expectation of a future, the perception of the present world comes with a "heightened intensity, bearing a mysterious charge of affect."[137] This could be an apt description of Dokuyama's performance: a mad man standing in the rain questioning whether this is the "true sky." Perhaps it is a schizophrenic intensity that Dokuyama manifests through the immanence of his performance of the struggle with the rain. Or perhaps this performance gestures beyond the effects on the residents, and toward a deeper affliction of the Tokyo Electric company that built, owned, and ran the plant, and whose distorted sense of time—constantly living in the present of their quarterly financial returns—as we will see was an important factor in the nuclear disaster.

This schizophrenic temporality of only being able to live in and conceive of the present seems indicative of the chronomyopia of extractivism instituted by TEPCO that caused the disaster. Chronomyopia—sight constricted to a limited horizon of time—was critical to TEPCO's initial

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[136] Ibid., 26.

[137] Ibid.; This temporality of schizophrenia is distinct from Delueze and Guattari's account of a "schizophrenic cogito" that they describe as breaking down "a semiotic machine" constructed through fixed word order meaning. While Jameson via Lacan also describes a breakdown in the signifier, it is highlighting the undoing of a temporal order that this rupture produces which is more salient to the dissertation's argument. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1987), 83-84.

planning when constructing the Fukushima Daiichi Nuclear Power Station. One instance, detailed in the last chapter, focused on how TEPCO's initial assessments of tsunami danger seemingly only took into account one of the most recent tsunamis (the 1960 Great Chilean tsunami), which was quite low (around three meters) instead of the longer history of tsunamis in the area which had been much higher.[138] This chronomyopia caused a limited understanding of the history of the site, which in combination with the profit motive to locate the plant closer to the water because it was cheaper to construct and operate there, led TEPCO to raze the land where the Daiichi Power Station was to be built, thereby producing a landscape that was particularly vulnerable to the adjacent ocean.

Another important contributing factor to the disaster, as detailed in the Independent Investigation Commission report on the disaster, was the lack of maintenance and increasing cost-cutting that stemmed from a chronomyopia intensified with the rise of neoliberalism in the 1990s.[139] The report details how TEPCO focused on reducing costs and increasing profits more than other companies in the energy sector, with its CEO proclaiming, "Let's point our desks toward *Kabutocho* [Japan's Wall Street] when we work."[140] This move by TEPCO in the 1990s, to align this powerful politically connected utility company closer to the short term profit-oriented financial markets, increased the risk of accidents at all of their nuclear power plants including Fukushima Daiichi Nuclear Power Station. Repairs and upgrades at the plants were reduced or

[138] Costas Synolakis and Utku Kânoğlu, "The Fukushima Accident Was Preventable."; Reiji Yoshida and Fukada Takahiro, "Fukushima Plant Site Originally Was a Hill Safe from Tsunami."
[139] The Independent Investigation Commission on the Fukushima Nuclear Accident, *The Fukushima Daiichi Nuclear Power Station Disaster*, 77-78, 95-122.
[140] Ibid., 77.

postponed as the short-term maximisation of profit became the working ethos at TEPCO.[141] This form of neoliberal chronomyopia also had a bifurcated temporal quality. The reckless financial cuts in the short-term would increase the quarterly profit-margin of a company. However these cuts could create a long-term precarity in the company with potentially deleterious effects in the future. Thus the residents of Fukushima could be seen as living in a future that came to fruition from past decisions of TEPCO. And yet the real material effects and mental toll of living in a low-level irradiated environment means that the residents' own everyday choices could have drastic consequences on their own futures. It is this critical struggle with time that I argue Dokuyama affectively conveys in his body's own struggle with the rain shower in the video. As the rain heightens the sense of the effects of every moment—we can see, hear, and understand what each drop of rain and collectively is doing to his body at that moment, unlike what the radiation also present in the scene might be doing—his performance provides an affective glimpse to what it means to live every day in a low-level irradiated landscape. Thus Dokuyama is able to mobilize the body as a means to centre the long durée of Fukushima's contamination. While the title of the work *Even After 1,000 Years*, opens up the horizon of deep time, it also suggests a durational temporality that alludes to the long existence of the landscape, the many generations that the residents have co-inhabited with the environment and the extended timeline for some of the radionuclides which can have half-lives of thousands of years. Yet even as he alludes to this expansive and intertwined timeline, Dokuyama firmly places the work in the present and utilizes the intensive rainfall to highlight the urgency of now. While indeed the radioactive contamination can continue for decades it is an ongoing struggle at this moment

[141] Ibid., 76-78.

which is critical to consider. Dokuyama effectively cuts through the large temporal expanse at stake in the landscape to focus on his immediate experience at the top of the Mount Adatara. By working with this methodology of deep time, Bontaro Dokuyama is contesting the limited temporal perspective of TEPCO that was fundamental in causing the disaster.

If we begin to utilise a longer reading of time, as gestured in the work's title, then we can see how the disaster starts to reveal the effects of the longer catastrophic condition in Fukushima, which has been there for centuries. Fredric Jameson in his essay *Dialectics of Disaster* writes about 9/11: "it is important to remember that historical events are never really punctual—despite the appearance of this one and the abruptness of its violence—but extend into a before and an after of historical time that only gradually unfold, to disclose the full dimensions of the historicity of the event."[142] Jameson argues that 9/11 is part of a longer dialectic without synthesis of the colonial project of the United States and the resulting reactions against it. The Fukushima meltdowns similarly can be seen as a symptom of a longer catastrophic condition in the region: caused by the colonisation of the central government and neocolonial extractivism—perpetrated in this case by TEPCO—whose chronomyopia led to the disastrous meltdown. As this thesis is contesting, the slow unfolding of precaritisation made by these external forces is characteristic of the catastrophic condition. As such, a disaster is always latent. The causal link develops years, decades, or even centuries before, that festers and ultimately produces disaster. This temporal delay shows that the disaster can never be punctual, rather it is a result of an ideology and set of practices put in place well before the disastrous event. In *Even after 1,000*

[142] Frederic Jameson, "The Dialectics of Disaster," *South Atlantic Quarterly* 101, no. 2 (April 1, 2002): 297–304, https://doi.org/10.1215/00382876-101-2-297.

years Dokuyama synthesises this temporal delay in the catastrophic condition and the anxiety produced by it, in his own grappling with the elements on the top of Mount Adatara. Yet in order to confront his own personal feelings of suicide evoked by the disaster he had to look beyond his body and into the non-human world in order to express these sensations.



Figure 15. Bontaro Dokuyama, *1/150*, 2015, installation, dimensions variable, [video still], Courtesy of the artist.

The Politics of Suicide

In the video *1/150* (2015), a solitary lifeless dolphin is shown limp at the water's edge at the mercy of the waves. [Figure 15.] This animal was part of a pod of 150 melon-headed whales—a

type of dolphin—that stranded themselves on a beach near Fukushima on April 10, 2015.[143] This was seen as an eerie omen near the fifth anniversary of the Great East Japanese Earthquake, as fifty of the same type of dolphin had similarly beached themselves on the shore nearby and died shortly before the earthquake in 2011.[144] Dokuyama drove to the beach the same day to capture the scene and filmed this single creature. Dokuyama heard that it was brought by local volunteers back into the water that morning, but it returned to the shore and had just died when Dokuyama arrived at the beach. Upon hearing the story of the dolphin intentionally coming back to the beach to die and seeing its lifeless body, Dokuyama felt a deep affective affinity with its final decision. His studies as an undergraduate in microbiology, coupled with the exposure to his father's job as a veterinarian, would have increased his sensitivity to and awareness of the livelihoods of non-humans. It seemed that the dolphin and its pod must have gone through something traumatic to drive them to the shore in what amounts to suicide. Dokuyama, after experiencing 3.11 and the ongoing trauma of the Fukushima nuclear disaster, saw in this non-human body his own urge and desire to give up and die.[145] It is through this worry of his own suicidal thoughts brought on by the lifeless dolphin that I suggest the video can be seen as a form of self-portrait. Instead of acting on these destructive impulses, the artist was able to shift them into the image of the non-human body which had just itself committed suicide. This is not to imply that the artist is anthropomorphising the dolphin; to the contrary, in the image the

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[143] AFP, "More than 130 Dolphins Beach in Japan," *The Guardian*, April 10, 2015, https://www.theguardian.com/environment/2015/apr/10/more-than-130-dolphins-beach-in-japan.

[144] Sara Nelson, "Mystery Of Mass Japanese Dolphin Deaths Trigger Earthquake Speculation," *Huffington Post UK*, April 13, 2015, https://www.huffingtonpost.co.uk/2015/04/13/dolphins-mystery-mass-japanese-dolphin-deaths-trigger-earthquake_n_7054800.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAACe_DA0t-ARE8QS3ocigPOZgIVD8vEW-p7y2ojJ5ysK0wvk-Lcz8fXzDOJjQMg80CNwsPJElOW5JisgMot3k601Zwu9QGl6bFS8DQYufSdvvB74uz76STtyNPBZe1eByRblWeyAFyXFd4urRswItrVL5mSKQ3njbd20RcI8TeZUY.

[145] Bontaro Dokuyama, "Line Message with the Author," February 17, 2020.

dolphin's body just rests in the waves, and the title *1/150* doesn't attempt to ascribe any human characteristics to the body. While it is unclear why the dolphin intentionally initially beached itself, and when pushed into the water by volunteers returned to the beach and died, the artist felt a kinship in the dolphin's decision: the single long camera shot of the non-human body conveys the artist's respect. This long take does not disturb the non-human body and in the simplicity of the fixed frame with the sea and sky confers a certain dignity on the body.

This quiet image is in contrast to its initial installation in April 2015 at Chim↑Pom's alternative space in Koenji called *Garter*. Dokuyama's work was part of a group show of Tensai High School artists entitled *Genbutsu Over Dose*. The *1/150* video was projected on a wall and hanging on a string in the middle of the room was a bone from the dolphin with flesh still hanging on it.[146] This bloody bone, that the artist cut from the dolphin, is in stark contrast with the quiet image of the dolphin in the waves, and serves a as visceral memento mori of not only the dolphin's death but of the horrific events of 3.11 and the ongoing nuclear disaster continuing in Fukushima.[147] If in *Even After 1,000 Years* Dokuyama showed an ongoing struggle with the elements as a stand-in for the continuing and everyday struggle that residents face in the coastal region of Fukushima, than the bloody bone of in *1/150* speaks to a deeper ongoing violence.

Even before the events of March 11, Fukushima grappled with a higher rate of suicide than the rest of Japan due to the social and economic difficulties of what I have argued in this dissertation

[146] *Genbutsu* means to "go and see for yourself."
[147] Dokyama, February 17, 2020.

is the catastrophic condition in the region, which the disaster further exacerbated.[148] The discrepancy between the suicide rates in Fukushima, which continue to be higher than the surrounding prefectures, and the rest of Japan also attests to the unique difficulty of the durational crisis for local residents.[149] Unlike elsewhere in Japan, where the tragic earthquake and tsunami struck causing a rupture that was severe but immediate in loss of life and damage to property, the radioactive contamination and its displacement has continued for years with severe mental effects on the residents. Radioactive contamination has not only affected the environment and bodies, but the invisible particles have deeply affected the mental horizon of what is possible in one's life. The long durée of the nuclear fallout, in particular, has made it difficult for those to clean up and re/construct their lives like elsewhere in tsunami- or earthquake-affected areas. Instead, it is the temporal chasm that opens up between the life, land, and place that was, and the separation from that space and community around it. Many displaced residents had to adjust to new surroundings or small temporary housing in disparate areas while their homes were left to continue in a parallel but inaccessible existence. The tsunami- and earthquake-affected areas also were heavily damaged or washed away, yet there was an important finitude in that destruction, the residents were able to move back, re-build, and continue life there. This differs from the forcibly displaced residents around the nuclear power plant who are still in the process of waiting to return home for over a decade now. In this period much has happened: the loss of relatives, separation from home, economic destitution, isolation due to displacement, the uncertainty of the

[148] Masaharu Maeda et al., "Fukushima, Mental Health and Suicide," *Journal of Epidemiology and Community Health* 70, no. 9 (September 2016): 843–44, https://doi.org/10.1136/jech-2015-207086 and Masatsugu Orui et al., "Suicide Rates in Evacuation Areas After the Fukushima Daiichi Nuclear Disaster: A 5-Year Follow-Up Study in Fukushima Prefecture," *Crisis* 39, no. 5 (September 2018): 353–63, https://doi.org/10.1027/0227-5910/a000509.
[149] Maeda et al., "Fukushima, Mental Health and Suicide," 843–44.

future, all of these account the continuing high rates of suicide in the area.[150]

1/150 figures the toll of this death through the image of the non-human body and visceral evidence of its remains. The flesh and bone in the gallery give a powerful reminder of the lives at stake in this ongoing nuclear disaster and more broadly the long-term catastrophic condition in the region. While the health effects of radiation are still being evaluated due to the potentially long period it takes for cancer to develop and there is only little expectation that many cases will emerge, suicide has been a widespread but under-reported phenomenon in the areas affected by radiation and in those displaced by the disaster.[151] In the case of the Fukushima exclusion zone, residents were separated from their homes, neighbours, and lives, yet the zone itself still carried on with the same spatial arrangement just without the human occupants. For some forcibly displaced residents I've spoken to over the years, it is the unclear limbo of a future for these parallel pasts that causes both mental illness and a continued schism in their conception of how and where to think about living in the future. For others, this prolonged separation has led to suicide. As with the case of Hamako Watanabe who returned to her home for the limited hours of visit allowed and poured gasoline over herself, self-immolating under a cherry tree on her property where she could no longer live. Her family charged TEPCO directly with causing her death through the nuclear disaster and took them to court. After a long and harrowing fight by the family, this was the first death that TEPCO was juridically held directly responsible for from the disaster, but can also be seen as a placeholder for the thousands of other suicides that haven't

[150] Ibid.
[151] United Nations Scientific Committee on the Effects of Atomic Radiation, "Levels and Effects of Radiation Exposure Due to the Accident at the Fukushima Daiichi Nuclear Power Station."

gone through the court system.[152] While Hanako Watanabe became the first death juridically deemed as a direct result of the nuclear disaster, the case also shows the culpability of mental health as critical essential to the continuation of life.

To bear witness to this tragedy and countless others, as well as a way of dealing with his own sense of precarity on the edge of suicide, Dokuyama turned toward the non-human experience of mass death as a way to grapple with the scope of this tragedy. This turn away from the human can be seen in the lineage of the critical cinematic practice of *fukeiron*, meaning landscape theory, developed by a group that included filmmaker Masao Adachi and critic Masao Matsuda who collaborated with others on the 1969 film *A.K.A. Serial Killer* [*Ryakusho renzoku shasatsuma]*. The film, wherein the concept was first materialised, centred on the case of a nineteen-year-old serial killer in Japan, yet instead of filming the perpetrator the filmmakers traced the landscape from the events and filmed around where he lived, in order to see what the environment had to say. In commenting on this practice Adachi found it shocking that he felt the environment was looking back at them.[153] For them *fukeiron* meant a turning away from the human figure and instead finding meaning in the surrounding landscape. While in the film, the landscape certainly had been inhabited by the serial killer, the landscape was not determined by him. It was in these images that the group took of the surroundings where they saw that the environment had its own sui genesis form and language, independent from its human inhabitants. They termed the practice of turning the lens toward the landscape that happened in *A.K.A. Serial*

[152] BBC, "Tepco to Pay Damages in Fukushima Suicide Case," *BBC News*, August 26, 2014, https://www.bbc.co.uk/news/world-asia-28933726.
[153] Takuma Nakahira, Masao Adachi, and Yusuke Nakahara, "On Landscape," in *From Postwar to Postmodern: Art in Japan, 1945-1989*, ed. Doryun Chong et al., Primary Documents (New York: Museum of Modern Art, 2013), 235.

Killer as *fukeiron* or landscape theory. In *1/150*, Dokuyama also turns toward the environment to try to grapple with the magnitude of a disaster. Its deep ongoing effects and the magnitude of the experience was perhaps so large that its emotional and physical scale could not be expressed in the literal signifiers of the nuclear disaster, such as cooling towers and black bags as other artists commonly depicted after 3.11. Rather Dokuyama channelled his trauma through the loss of a non-human single being, but in turning toward the landscape, there also lies a great depth of knowledge.

One of the reasons Dokuyama was so struck by the news of the stranded dolphins was its correlation to a previous mass stranding before the 2011 earthquake. Was this stranding in 2015 supposed to be another foretelling of events? While the melon-headed whales as animals have been shown to have reactions well in advance of earthquakes, this could be due to their sense of a shift in the magnetic field, yet studies have been inconclusive.[154] However, the experience of the trauma of 3.11 certainly made Dokuyama more sensitive to the environment and potential non-human warning signs of future disasters. If the previous collective suicide of dolphins in 2011 could have been read as a warning sign, could the disaster have been averted or mitigated? In the video, the fixed camera and long take of the dolphin, the sea, and the sky, also allows us time to contemplate the surroundings and the particular landscape of coastal Fukushima more deeply. I contend that through this looking at the environment Dokuyama seeks to make us more attentive to our surroundings and through this attentiveness produce the basis for a different

[154] Sara Nelson, "Mystery Of Mass Japanese Dolphin Deaths Trigger Earthquake Speculation."; Rachel Grant, Anna Savirina, and Will Hoppitt, "Offshore Earthquakes Do Not Influence Marine Mammal Stranding Risk on the Washington and Oregon Coasts," *Animals* 8, no. 2 (January 26, 2018): 18, https://doi.org/10.3390/ani8020018.

relationship with that land. In the case of Dokuyama this sensitivity to land transformed by low-level radiation produces a different ontological relation with the environment. One that does not simply see the landscape as an external site for short term extractivism but rather an entity which we are in constant relation to and with. If there has been a longer relationship of non-humans with planetary forces than our human existence, within this sensitivity to the land is also a greater sense of time.

Eco-Melancholy

Dokuyama's video *1/150* highlights the potential prognostication that comes with the repair of ways of seeing deep time through the non-human experience. The dead mammal in the landscape evokes the non-human nature of deep time. As deep time pre-dates humanity and potentially extends beyond human's existence, *1/150* alludes to existence of life and death beyond the context of the human body. Moving toward a space without human existence helps to repair an understanding of the environment as not necessarily being constituent with the human. Not in the sense of an Arcadia—an inverted teleological paradise of life without humanity—but rather the complicated mesh of life that exists apart from and distinct from humanity. The anthropocene, the new geologic period of the present, insists on inscribing human influence throughout the epoch, which to some degree it does on a macro level with climate change. And yet this anthropogenic focus has the potential to cast the human as the prime mover, not just one entity among many in a vast planet which we as humans don't fully understand.[155] In the video, the

[155] See for example Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016).

dead non-human body being tossed on the surf is a somewhat surreal sight. It is certainly not the common images of swimming pods of dolphins that we might be accustomed to. Instead this strange collective death of the pod as captured through this single being arguably gestures toward a conception of a different time beyond our own, or beyond even human time. Looking at the non-human time of the video of the dolphin and the ocean tides expands our understanding of the horizon of temporality. Seeing past the time of our lives helps to ground an ethos in a wider field of relations, so that by seeing a temporality without humanity, we can become more sensitive to the actions humans do undertake concerning the environment. To concretise this larger heterogeneous sense of deep time, death can also be an important anchor. If deep time is fundamentally a non-human space—as humanoids have only existed for 100,000 years while the geology of the planet has endured 100,000,000 million years—then the very fact of our own individual potential non-existence opens up a means through which a larger expanse of time without humans, in general, is possible. Theorist Ray Brassier embraces this type of eschatology, dramatically describing when:

> both life and mind will have to reckon with the disintegration of the ultimate horizon, when, roughly one trillion, trillion, trillion (10^{1728}) years from now, the accelerating expansion of the universe will have disintegrated the fabric of matter itself, terminating the possibility of embodiment. Every star in the universe will have burnt out, plunging the cosmos into a state of absolute darkness and leaving behind nothing but spent husks of collapsed matter. All free matter, whether on planetary surfaces or in interstellar space, will have decayed, eradicating any remnants of life based in protons and chemistry, and

> erasing every vestige of sentience—irrespective of its physical basis. Finally, in a state cosmologists call 'asymptopia', the stellar corpses littering the empty universe will evaporate into a brief hailstorm of elementary particles. Atoms themselves will cease to exist.[156]

Brassier's bleak reading is definitively situated at the far end of deep time, in a post-life and even post-matter state—a temporal imaginary beyond the scope of deep time in Fukushima. Yet it helps to elucidate a nihilistic current in the discourse of deep time. This eschatology, common in speculative realism, brings forth what Emily Apter calls a "planetary dysphoria," a type of "recessionary drive" that is suffused with an eco-melancholy.[157] Rather in Dokuyama's work we see an approach of interspecies empathy and the concern for a specific non-human life. The struggle of a specific life and the collective care that surrounds it has more urgent and concrete relation than the abstract nihilism of speculative realism. If indeed the lifeless dolphin serves as a self-portrait of the artist, then it is one that he is simultaneously recording, living through (as an empathic stand-in for himself) and yet past (as the creature has already died). In choosing not to act on suicidal thoughts, the artist took care of his own life and those who care about him. In the face of such overwhelming nuclear disaster with indeterminate temporality, Dokuyama undertakes this act of memorialising the non-human. While honouring this life with a single, unedited take, he is also bringing its body into the gallery for the visitors to bear witness. This visceral reminder of death, the shared flesh and bone that lies underneath our skin, is far from a detached eschatology. Instead it can be seen as helping to ground our experience in a wider field

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[156] Ray Brassier, *Nihil Unbound: Enlightenment and Extinction* (New York: Palgrave Macmillan, 2009), 228.
[157] Emily Apter, "Planetary Dysphoria," *Third Text* 27, no. 1 (January 2013): 131–40, https://doi.org/10.1080/09528822.2013.752197.

of relations and in so doing we can become more sensitive to the actions humans do undertake with the environment.

Conclusion

The disorienting temporality that low-level radiation can cause is central to Dokuyama's work in this chapter that interrogates the landscape transformed by nuclear fallout and what it means for residents to be separated from that land. The multiple temporalities of radiation—its long half-lives contrasted with the potential threat to the body in every moment; and any changes in the human DNA from radiation that, if it were to occur, would take years to reveal itself— are conveyed in the performance *Even After 1,000 Years*. Dokuyama's work addresses the eco-melancholy of the disaster—and his own despair—seen in *1/150* as a proxy for all of those struggling with mental health issues in the wake of the disaster as well as those who have committed suicide. His work is situated in this entanglement between the past landscape and present contaminated environment, between the deep time of the half-lives of radioactivity and a single moment that could affect human and non-human life. Instead of staying away from the area after the disaster, Dokuyama returns, again and again, perhaps looking to the landscape to find a bridge from the past of Fukushima with a future that is not yet knowable. These two artworks also dwell in this landscape, not just to memorialise it or question its changes, but perhaps as a reparative act: repairing his own relationship to the changed land as well as for those of us outside of Fukushima, the realisation that the place is more than just a terrain of disaster.

This repair is very real and tangible for Dokuyama and his family who continue to live in the area. In their case, low-level radiation is not a dislocating force but rather a condition that needs to be accommodated—an uninvited guest that ultimately ends up staying to live with you. This is not meant to reduce its potential threat, but rather it is a heuristic to approach living in a low-level radiation environment, which continues to be a daily reality for those living in the area. What does this new assemblage of landscape and environment mean for our future entanglement of life on this planet? In many ways, Dokuyama and his family are not exceptional in the sense of coexisting with contamination. Even before the nuclear meltdowns at Daiichi, around the world, people were asked to consider the risk of eating fish during pregnancy due to the large amount of mercury already present in the oceans from decades of burning coal and other industrial pollution.[158] What Dokuyama's work helps to do is to provide a different means through which we can see how this assemblage of landscape and environment is already present, and in beginning to see our world through this lens, how joyful co-existence with the non-human can emerge—whether that be animal life, environmental ecosystems, or even a nuclear threat.

[158] Food and Agriculture Organization of the United Nations and World Health Organization, eds., *Report of the Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption: Rome, 25-29 January 2010*, FAO Fisheries and Aquaculture Report, no. 978 (Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption, Rome: Food and Agriculture Organization of the United Nations: World Health Organization, 2011).

Chapter 3. Distance and Risk: Chim↑Pom & Finger Pointing Worker

In the first chapter, artist Kota Takeuchi showed how to read the catastrophic condition across time. In the second chapter, artist Bontaro Dokuyama gave an endemic perspective on the invisible effects of mental illness on the local residents. This chapter looks at how artists made visible the invisible presence of human-made radioactive contamination through their presence in the landscape and the role of the Tyvek suit as an index of this invisible contamination. Unlike the tsunami or earthquake that predicated the meltdowns, or other environmental disasters such as forest fires or oil spills, humans have no direct ability to sense the presence of radioactive contamination. Unseen by human eyes, the invisible radioactivity complicates the understanding of where the radionuclides are in the landscape, their quantity, and who is potentially affected by them. The use of the term "contamination" in this chapter is not intended to further the social stigma associated with Fukushima residents and workers, but rather is meant to evoke the many effects of the slow violence of radiation that include mental health and social discrimination.

I have argued in the dissertation that the catastrophic condition is a durational form, yet this chapter presents work that was immediately responding to the nuclear disaster. This focus on the immediate response has the potential to overshadow the longer forces in the region that were pre-existing and continue to exert influence on the residents and the environment. Seen through this longer catastrophic condition, radiation is just one of numerous instantiations of slow violence at work in Fukushima. The artists in this chapter attempt to make visible the emergent radiation in

the landscape, not just as a form of representation or media coverage—even though the images produced garnered national and international attention—but as a way of embedding the images with critique. The artists utilise the forms of the nation state such as flags or the act of working for the nuclear power company remediation operation to gesture towards the radiation as an urgent problematic but also as part of a larger set of forces at work in Fukushima.

In this chapter, I address two artworks by two different artists: the collective Chim↑Pom and the anonymous labourer known as the Finger Pointing Worker [指差し作業員, *Yubi-sashi sagyō-in*] who is represented by the artist Kota Takeuchi. Both focused on the nuclear power plant as a way to figure the disaster, utilising their own bodies shrouded in white Tyvek suits in different ways to make visible both the epicentre of the disaster and index the presence of the radiation surrounding them. Both physically went to the site, Chim↑Pom travelling from Tokyo immediately after the disaster and the Finger Pointing Worker in the plant during a work shift. Both grapple with how to visualise the implications of the disaster—only a few weeks and a few months into the disaster. In the TEPCO plant, the artists found the capacity to address both the non-human environmental impact as well as the effects on humans. Chim↑Pom marks the large-scale and durational transforming of the land, while Finger Pointing Worker gestures towards those responsible both for the disaster and its fallout. However, both of them utilised their own bodies to both make visible the presence of the disaster as well as humanise the landscape which was otherwise forced to be voided of human presence.

Real Times



Figure 16. Chim↑Pom, *Real Times*, video, 2011, [Video still], Courtesy of the artist.

Awaking in the dark on April 11, 2011, members of the Tokyo-based art collective Chim↑Pom arose before dawn. They started the four and half hour drive from Tokyo north to the Fukushima Daiichi Nuclear Power Station that was in the process of a meltdown and haemorrhaging radiation. Unsure exactly how to protect themselves, Chim↑Pom had purchased white coveralls, which is what they had seen power plant workers were wearing in media depictions. They could only afford two coveralls which the members Toshinori Mizuno and Motomu Inaoka were wearing over their clothes in the car that they had borrowed from another artist, Aida Makoto.[159] Chim↑Pom's other members on the trip, Ryuta Ushiro and Masataka Okada, each wore an improvised solution of two layers of raincoats. Driving in silence on the relatively empty

[159] Makoto Aida. "Makoto Aida on Chim↑Pom," *ArtAsiaPacific*, September/October 2011.

highway with the windows and the air vents closed to prevent a greater exposure of radioactive particulars, the group sat bundled and sweating in the hot stale air.[160]

They captured the moment they arrived at the entrance to the Fukushima Daiichi Nuclear Power Station in the opening scene of the *Real Times* video. Driving on the way to the power plant in Fukushima, the footage shows the destruction from the earthquake in the form of cracked pavement and wide gashes the road. The video cuts to the artists approaching the power plant—a proximity in which few reporters had dared to venture—yet in front of the power plant there are no signs of destruction. Rather, a pristine corporate landscape of well-manicured grass, hedges, and trees flanks the empty road, belying the present contamination and the ongoing meltdown beyond the gates of the plant. In the video, this desolate landscape was punctuated by three figures in white coverall and gas masks who come into view, standing and talking in front of the plant's gate as the car pulls in front of the plant. The casual milling about of the figures in the landscape caused Ryuta Ushiro of Chim↑Pom to laugh, breaking the silence. This laughter in view of the crisis also added a non-normative response to the expectations of one being in such a zone, a sign of relief but also an expression of difference in its transmission in the video as there was no such laughter existing in media coverage.

After attempting to drive into the nuclear power plant and being turned away by the three Tyvek shrouded employees, the artists drive on around the plant and in the video's next scene we see two members of Chim↑Pom dressed in white coveralls walking down the empty road, one

[160] Ryuta Ushiro, Line Message with the Author, March 14, 2018.

carrying a flagpole and the other a can of spray paint, making their way up to an observation point overlooking the Pacific Ocean adjacent to the nuclear power plant. The camera zooms in on the plant and the mangled wreckage of the containment building of Reactor 4 with steam wafting out. These are perhaps the closest independent images since the disaster. The few images from inside the power plant were taken by the Tokyo Electric Power Company (TEPCO) who built and operated the Daiichi Nuclear Power Station and released a few of the images daily. In *Real Times* the camera zooms out and fades, opening again on one of the figures unwrapping a white flag from the pole, waving this flag of surrender in the wind and then let it settle flat on the ground. The second figure uses spray paint to make a red circle in the centre, the symbol of the rising sun and the Japanese national flag. Then the figures continue spray painting adding trapezoids, forming the radioactive trefoil symbol around the centre circle. As the other figure begins to cut metal wire with the intention of attaching the flag to one of the railings, the initial figure then lifts the flag into the ocean wind, positioning himself in front of the plant as the other figure stands alongside. Holding this new flag in radioactive winds highlights the new invisible and indivisible relation between the disaster and a new paradigm of radioactive sovereignty over land. If it was mutual interest of the nation state and capital that brought nuclear power to Japan the escape of the radionuclides from the plant showed a failure of the present paradigm of power relations. It was thus the radionuclides that were now the determinate force behind where was safe to live, what was safe to drink, and what was safe to eat. The chasm of this rupture in the previous status quo was captured when in the video the image switches to another camera which slowly zooms in on the fluttering symbol on the flag, then panning down to the steaming wreckage of the reactor behind it before fading out. Going into the twenty-kilometre evacuation

area, where local residents were asked to leave, certainly had its dangers. However, when Chim↑Pom entered the area it was not yet illegal to do so; at the time, the government proclaimed that one could enter at one's own risk. It was actually the government's announcement, made after Chim↑Pom had entered the area a number of times to help residents and undertake research, that a zone would be created and entry would be prohibited that sparked the artists to undertake *Real Times*. While technically not breaking the law by going into the area before the prohibition, the elements of physical danger were clear. The text accompanying the video explains that the radiation level in the area averaged 199 microsiverts, meaning that each member would have received roughly their average annual dose in radiation for the few hours they spent there.[161] Yet this threat of radioactivity remained invisible to the naked eye, along with the underlying cause of the meltdown, so how did the artists bring these conditions into view?

Flagging Radiation, Colonialism, Time

As art historian Noi Sawaragi noted in his review of *Real Times*, the radiation was coming from American-designed reactors, thereby referencing the origins of this disaster to the Atoms for Peace program in which the United States shared nuclear technology with allies as a means to justify further uses of nuclear technology to aid its weapons' research.[162] Sawaragi also ties in another reference to the military-industrial complex—the space program—in the context of Chim↑Pom planting the flag in an empty landscape similar to that of the moon. The space of

[161] US Environmental Protection Agency, "Radiation Sources and Doses," Radiation Protection (website), Accessed March 21, 2018, https://www.epa.gov/radiation/radiation-sources-and-doses.
[162] Noi Sawaragi, "Real Times," *Bijutsu Techo*, July 2011. Translation assistance by Eiko Soga.

Fukushima for Sawaragi, however, is not "a frontier of hope" but a "land already settled with death."[163] While the planting of the flag acts as a claim on a territory, with all of the implicit violence embedded in the gesture, in Fukushima it also signalled a different kind of colonialism: the presence of the radioactive particles that have taken over and made the land uninhabitable, but which could not be seen in the landscape. Standing in for this contamination Chim↑Pom holds the symbolic flag that references the invisible atomic shroud all around them—marking of this new condition on the territory. It is useful to highlight that the language utilised by Sawaragi, such as "frontiers" and "settlers", stem from terrestrial forms of colonisation. I argue that applying such contested terms in Fukushima helps evoke the long colonial relationship between the area and the imperial metropolis of Tokyo. The flag Chim↑Pom painted the red circle of the Japanese national flag with the trefoil nuclear symbol surrounding it, can be read as the national project of nuclear power that underscores this disaster, but the flag is also reminiscent of the Rising Sun Flag [Figure 17.] used by the Imperial Japanese Army during the period of colonisation of East Asia in the early 20th century and a flag that remains controversial to this day in former colonies such as South Korea.[164]

[163] Ibid.

[164] Justin McCurry, "South Korea Compares Japan's 'rising Sun' Flag to Swastika as Olympic Row Deepens," *The Guardian*, October 29, 2019, https://www.theguardian.com/world/2019/oct/29/south-korea-compares-japans-rising-sun-flag-to-swastika-as-olympic-row-deepens.



Figure 17. Rising Sun Flag representing the Imperial Japanese Army from 1870-1945.

As such, Chim↑Pom mimics the actions of colonisers in uncomfortable ways through the planting of the flag. On the one hand as I have suggested, that action points to the ways radiation spreads and causes damage; on the other, it could be seen generously as a self-critical move that channels the Tokyo-based artists' own complicity in the disaster through their, and the entire city of Tokyo's, reliance on this nuclear power plant for daily life. Seen from the perspective of the contamination, the artist group is acting as colonial agents of radiation heralding the arrival of the invisible substances. The raising of the flag marks not only radiation as the new colonial force in the landscape but also heralded the opening of a new epoch.

In contrast to the unbounded spatialisation of radiation fallout, there is a limited temporal regime that accompanies the fallout. Against the imperceptible almost ethereal physical presence, the radioactivity of the particles has a definitive and precise longevity. If the half-life marks the midway point of the degradation of the radioactive potency of the isotope then it means that the caesium released from the Fukushima Daiichi Nuclear Power Station would cease to emit radiation in 2071. Thus the act of raising the flag marks not only the spatial presence of the radiation but also functions as a marker in time of the start of the radioactive decay of these elements and the start of their decade's long presence on the land. In an act of art prefiguring reality, the day after Chim↑Pom undertook their performance the Nuclear Safety Board announced that it was raising the seriousness of the event to Level 7, the highest level of a nuclear event on the IAEA scale. Chim↑Pom hoisting of the flag in front of the melting down plant, merging the symbol of the Japanese state and the alliance with industrial capitalism in the form of the power plant, in order to mark their failure after 3.11. Thus the planting of the flag by Chim↑Pom not only marks the colonisation of land by radioactive nuclides, but the failures that brought about this disaster. Imbricating the filming of this act with the close-up shots of the smouldering nuclear plant incorporated a level of putting the artists' bodies at risk. With the ritual taking place at a bluff that previously functioned as an "observation point," Chim↑Pom's intervention brings into view the insensible and deadly particles, as well as provide real and independent images of the nuclear plant in the process of melting down which the media was unable to provide due to the radiation levels.

Distance and Risk

The group provided these new and independent images of the state of the damaged power plant, which had hitherto mainly been seen through footage mediated by the company. The imaging of the critical action taken at the site of the meltdown had an added valence of import: as the media was reluctant to enter the contaminated area, the images taken by Chim↑Pom were able to provide an independent look at the unfolding disaster. The images were at once a critique as well as rare documentation of the melting down reactors at the plant. While the documentary aesthetic had long been bound up with art and the moving image, from filmmaker Dziga Vertov's extortion for film, "Long live life, as it is!" to the more mobile consumer video cameras starting in the 1960s, yet the genre went through a boom in 1990s and into the 2000s.[165] While many artworks utilise historical footage or produce images that record events, rarely have artists been in the midst of disaster and putting their lives at risk to undertake filming. The type of images in *Real Times* developed by Chim↑Pom was in stark contrast to the other images of Fukushima in circulation. The domestic and international media coverage of the nuclear disaster was largely at a distance, outside of the twenty-kilometre evacuation zone. Hence the picturing of the event unfolded with infamous grainy images, such remoteness of the video capturing the explosions in the reactor buildings in the first week of the crisis. These elaborated images, as noted by Larissa Hjorth, Sarah Pink, Kirsten Sharp, and Linda Williams were constructed by the media "supposedly filming from kilometres away and touching up the images to make them look as

[165] Vertov was quoted in Maria Lind, ed., *The Greenroom: Reconsidering the Documentary and Contemporary Art, #1,* (Berlin: Sternberg Press, 2008), 15. For further on the period see T. J. Demos, *The Migrant Image: The Art and Politics of Documentary during Global Crisis*.; Sven Lütticken, *History in Motion: Time in the Age of the Moving Image* (Berlin: Sternberg Press, 2013).; Julian Stallabrass and James Agee, eds., *Documentary*, (London: Whitechapel Gallery, 2013).

though they were filmed from more intimate positions."[166] The densely pixelated images and remote location of the cameras reinforced the sense of distance of the disaster even though the release of radiation was being distributed across vast swaths of land. While plumes of fallout were wafting across prefectures, settling on homes, gardens, animals, and crops, the picturing of the disaster focused on its site of production at the Fukushima Daiichi Nuclear Power Station. Yet these distant images of the plant belied the unbounded nature of radiation and its dangerous intimacy. Underscoring this distance was the threat posed by going too close to the nuclear power plant.

It was Chim↑Pom's own distance from mainstream society that allowed them to take the risk to get the close images of the power plant. In the immediate aftermath of the disaster, Chim↑Pom felt the urgent need to do something and also not to remain silent while the catastrophe was in the midst of unfolding.[167] Yet they waited to go to the area around the power plant vehicles until the search and rescue operations from the earthquake and tsunami were halted twenty days after 3.11 so they wouldn't interrupt the flow of emergency vehicles. Underscoring this desire to go was their relative freedom—all of the artists were in their late twenties or early thirties, none was married or with children—although this situation was not necessarily by choice. As sociologist and art critic Yoshitaka Mōri points out, Chim↑Pom partakes in the "lost generation" coming of age in the wake of the 1980s bubble economy, when it was difficult to find steady employment.[168] By contrast, many of those in the mainstream media taking images from the

[166] Larissa Hjorth, Sarah Pink, Kirsten Sharp, and Linda Williams, *Screen Ecologies: Art, Media, and the Environment in the Asia-Pacific Region,* Cambridge: The MIT Press, 2016, 103-104.
[167] De Wachter, "Chim↑Pom Interview with Ellen Mara De Wachter," 149.
[168] Yoshitaka Mōri, "New Art and Culture in the Age of Freeter in Japan: On Young Part Time Workers and the Ideology of Creativity," *KONTUR: Culture, History, Politics* 20 (December 23, 2010), 48.

periphery of the 20-kilometre zone were likely holding “salaryman” positions, stable middle-class employment that was a cornerstone of the post-war economy and family in Japan.[169] Chim↑Pom did not partake in this normative culture, on one hand, by choice, but also a product of economic and structural social exclusion. Chim↑Pom sees the class distinction in sharper terms referring to themselves as *kasu*, a vulgar term meaning a leftover or useless byproduct, also commonly denoting subhuman status.[170] Yet self-identifying with this “worthless” caste did not diminish their concern for their own lives. Chim↑Pom's sole female member Ellie, for example, did not join the trip to the power plant where *Real Times* was taken, as there were concerns of the effect on a future possible pregnancy; however she did go on other trips to Fukushima. In addition, all of the members were anxious during their trip to limit their exposure.[171] However as they were caught in the double-bind of economic precarity and the new danger of radiation, Chim↑Pom moved closer to the latter condition, mobilising their exclusion to shed light on the opaque source of the crisis. Within these dangerous conditions that transcended both practices of site-specificity and the wilderness, *Real Times* captured the strange contradictions inside the evacuated area that even the media couldn't report.

The action that Chim↑Pom undertakes in the zone also shows an agency within this space that diverges from the strict objective documentary account and their approach also differed in an affective register to media. Instead, their action undertaken in work is closer to the practice of documentary in contemporary that is generally more self-reflexive, yet rarely contains original

[169] Philip G. Altbach, ed., *Paying the Professoriate: A Global Comparison of Compensation and Contracts* (New York: Routledge, 2012), 191.
[170] Ryuta Ushiro and Ellie, Line message with the Author, April 2, 2018.
[171] Ibid.

newsworthy footage of global events. Yet Chim↑Pom chose not to broadcast the images either on the internet or through a media outlet, rather they took a more intimate approach to the circulation of these images as we will see shortly. However, it will first be useful to see how another artist approached performance, image production, and circulation from inside the power plant. Utilising their conditions of labor and the existing infrastructure of streaming video that TEPCO had in place to draw attention to a different aspect of the crisis.

Finger Pointing Worker & Labour



Figure 18. Finger Pointing Worker, *Pointing at Fukuichi Live Cam*, 2011. Webcam video capture. Courtesy of the Finger Pointing Worker's representative Kota Takeuchi.

At 10:08 am on August 28, 2011, a figure in a white Tyvek suit with a full face mask appeared on a grainy live web camera feed broadcasting from the Fukushima Daiichi Nuclear Power Station that TEPCO set up its own live streaming web cameras to facilitate its own fixed perspective on the disaster. [Figure 18.] Initially, it seemed that the worker was passing through this part of the ruins of the plant that had become one of the largest radioactive work sites. It soon became apparent that this figure was different; as opposed to traversing the frame, the enshrouded worker was walking slowly and intentionally toward the camera, watching a mobile phone it was holding with both hands. Then the figure stopped, taking a few steps to the side until it was directly in the middle of the frame. Its right arm dropped from the device sharply to its side extending an index finger down, then stretching out the arm laterally 90 degrees continuing deliberately and slowly rotating up to the sky and then back level pointing straight ahead, directly at the camera.

What was the intention of this gesture and who was it addressing? These and other questions were asked by government officials, the media, and those watching on the live feed.[172] With the lack of trustworthy information coming out about the disaster, there were rumours the figure was

[172] ANN News, "Worker complains about mystery to Surveillance Cameras at Fukushima Daiichi" ANN News, 29 August 2011. https://www.youtube.com/watch?v=pUWiXOgJlhM [Accessed 25 October 2021.] Government and media reactions covered in Edan Corkill, "Are We Pointing at the Right Guy?," *The Japan Times*, March 8, 2012, https://www.japantimes.co.jp/culture/2012/03/08/arts/are-we-pointing-at-the-right-guy-2/. 2channel BBS with reactions to viewers watching the TEPCO feed live and commenting on it, https://hato.5ch.net/test/read.cgi/lifeline/1313991721/505-604.

someone warning of another disaster or even a spectral or extraterrestrial presence.[173] At an exhibition in Tokyo six months later, a recording of the surveillance footage from TEPCO of that day appeared in a solo exhibition by the artist Kota Takeuchi, who claimed to be the agent for the so-called Finger Pointing Worker. How did this relationship between the worker and artist form, and what this pointing gesture mean?

Takeuchi, who had graduated a few years earlier from Tokyo University of the Arts, had been working odd jobs around Hyogo Prefecture in west of Japan at the time of the disaster. As with many artists he necessitated employment to support himself. In the midst of the ongoing nuclear disaster, Takeuchi decided to take a job with a subcontractor for TEPCO working on the remediation efforts and stemming the fallout in and around the nuclear power plant. Taking this job can be seen as part of an effort of residents from Tokyo and elsewhere who came to volunteer in the areas affected by the tsunami, earthquake, or nuclear catastrophe. Deciding to move to the area to work on the remediation operation is a contribution to the area by the artist that goes beyond just his contribution to being an artist in the area. Moreover Takeuchi's coming to Fukushima has turned into a long term commitment as he has been based there for over a decade as of 2022. Unlike other artist work arrangements such as the British collective Artist Placement Group, there was no negotiation with the organisation for an artist to undertake labour in order to come up with an artistic proposal for the job. Rather Takeuchi took the job out of the sheer need for the salary and did not expect to do any artwork at his place of work.

[173] Ibid.

After March 11, 2011, there was an outpouring of support by artists for those affected by the tsunami, earthquake, and nuclear disaster. Theorist Sabu Kohso talks about this movement of activists and citizens as "those who go north" after the disaster, who came as a form of direct action to aid those affected.[174] This was different from the previous northern movement of industry which largely went up north as part of an extractive economy to service Tokyo. Contributions came in the form of money and materials, as well as the labour of many who drove up from Tokyo and elsewhere to help residents after the disaster. While a number of art auctions to support victims and recovery efforts were held, Japan Art Donation, founded by curator Kenji Kubota, was unique in that it raised money for future culture developments in the area instead of immediate supplies. Other artists besides Takeuchi also transplanted to the affected areas, such as Haruka Komori and Natsumi Seo who went to the tsunami ravaged landscape further north. Intertwining social commitment with the employment and artistic practice enacts a commitment where the ethical engagement is bound up with a more indistinguishable boundary between art and the means of supporting one's life. While it is was common to debate the role artworks have in addressing the crisis, such as in the exhibition *Artists and the Disaster* at Mito Art Tower opened in October 2011 seven months after the disaster that focused in the role of artists documenting the disaster as well as creating artworks in response. Beyond their artwork, what is not addressed is for those few artists who moved to and stayed in Fukushima, such as Takeuchi, what was role and importance of their labour, contribution to the community, and participating in everyday life of in the area. While this is outside the bounds of this thesis, and perhaps the discipline of art history is poorly equipped to undertake such a study, with the discourse of the

[174] Sabu Kohso and Jason Waite, "Nuclear Energy and the Commons – A Workshop," Arts Catalyst, London, May 31, 2017.

intertwining of art practice and life that this should be of future consideration.[175] The artwork of Takeuchi undertaken while being a clean up worker at the nuclear power plant is perhaps on the borderline of this discussion of the entanglement of labour and art.

Takeuchi and the actions of the Finger Pointing Worker [*Yubi-sashi sagyō-in*], positions his body in the midst of the site of the work, in order to recentre labour and advocacy in relation to projects that relate to the ongoing land transformations by the remediation efforts. [Figure 18.] By centring the labour, the performance combines both their occupation and this performative gesture, to move in a space beyond work and the land, in order to address those elsewhere and those in power. This example also challenges and extends the traditional notion of the "art worker." The notion of labour in art has a long history, but it gained a particularly political dimension with developments in the 1960s in New York. Looking at this particular period, art historian Julia Bryan-Wilson argues that the role of the art worker was seen as 1. re-defining art production as labour to highlight the political position of the artist; and 2. acknowledging domestic labour and other unpaid forms of care work into art. What was absent in this move is the incorporation of paid work—undertaken as a way to support one's self—into the art or politics of the notion of art worker.[176] Takeuchi's practice not only stems from non-art work, but importantly the politics of reproduction for himself and others after Fukushima drove the artist north to work in the clean-up operation. This move foregrounds both the attention to reproduction, especially in the case of a catastrophe, and highlights the role of the artist as a

[175] See for example Nato Thompson, ed., *Living as Form: Socially Engaged Art from 1991-2011* (Cambridge: The MIT Press, 2012).
[176] Julia Bryan-Wilson, *Art Workers: Radical Practice in the Vietnam War Era,* (Berkeley: University of California Press, 2009).

concerned compassionate citizen. Leading to a commitment to intervene to support those affected areas, firstly through the role of supporting daily reproduction in the form of paid labour. This weds artists' care for others with the necessity of supporting themselves outside of the art market. There is also an important distinction that the work came first and any art work only developed much later. This is distinct from engaging in sites of disaster with the sole purpose of creating art work, a mode that has the potential to become a form of "parachuting" into a context to produce work in an area or extract images from that area. Takeuchi's practice rather necessitated the labour relationship with the site, and from this work, grew a mode of speaking with others and for oneself through situating oneself more deeply in a context. A form of longer-term relationship which Takeuchi has also maintained, as he is still to this day based in Fukushima.

Gesture Beyond Language

The appearance of the figure on the live security camera stream could be perceived to be an illegal action potentially by the worker - or artist or activist posing as a worker – trespassing and undertaking a guerrilla action. However, in reality, the action is not entirely legal, but rather the methodology of following the rules here provided an even more prescient action. While TEPCO had its own issues with transparency and the release of information, many of the workers in and around the plant were outsourced, working for smaller subcontractors, who in the immediate

aftermath were encouraging silencing their workers through *sontaku*, a form of social peer pressure and preventative censoring that has become a particularly important feature in post 3.11 Japanese society and culture, especially with the advent of the Abe administration in 2012 and the subsequent media crackdown.[177] *Sontaku* can take many forms but is generally a subordinate taking action or self-censoring that the subordinate thinks will appease those in power. As there are not clear or specific directives by those in power, this makes *sontaku* a particularly insidious means of self-censorship as one takes the initiative to take action (or not take action) based on one's own perception. This means there is not necessarily a direct causal link in *sontaku* and it is that vagueness which makes it particularly difficult to contest. In the context of the nuclear power plant this mean there was social pressure on workers not to speak out about the conditions.[178] Threading this line between "not speaking out" and also not getting an subcontractor in trouble for their workers breaking the rules, the act by the Finger Pointing Worker neither brought filming equipment into the plant nor made illegal recordings, but rather utilised the existing video streams available to the public. Furthermore, no verbal statement was made, for the silent gesture was without words or text; even when it appeared in an exhibition in Tokyo all that could be heard was the worker's laboured breathing. This act maintained a silence and yet was able to transcend language at the same time.

How can the ambiguous gesture be understood as a form of critical communication? Pointing a finger has an indexical quality, attempting to identify something and yet simultaneously has an

[177] Kota Takeuchi, Line Message with the Author, September 25, 2018., and Matthew M. Carlson, "*Sontaku* and Political Scandals in Japan," *Public Administration and Policy* 23, no. 1 (April 10, 2020): 33–45, https://doi.org/10.1108/PAP-11-2019-0033.
[178] Takeuchi, Line message, September 25, 2018.

accusatory nature. This could be seen as the physical equivalent of Louis Althusser's interpellation.[179] In his "Notes on Gestures," Giorgio Agamben claims the notion of the gesture as a form that transcends language, "meant to compensate a loss of memory or an inability to speak."[180] Masked in the suit the coated figure is seemingly stripped of its ability to speak, yet without the fundaments of speech maintains its capacity for an affective exchange through the embodied gesture.

For Agamben the gesture has been the expressive form of addressing the viewer, but also something deeply physical and emotional. Agamben writes: "What characterises gesture is that in it nothing is being produced or acted, but rather something is being endured and supported."[181] In the durational nuclear crisis, which is both urgent at each moment and yet persists for years, endurance and support of the cleanup workers that will be labouring on the site for decades necessitates its own care, maintenance, and advocacy. Perhaps it is the form of the gesture here that can transcend temporalities—maintaining urgency through its affective yet inscrutable intent. In such a way it can remain a potent symbol of the clean up workers and their needs for years to come.

In the context of the largely shrouded plant, which was hiring bodies at a rapid pace to work in the toxic environment in and around it, the FPW's critical gesture by a labouring body takes on an even more meaningful role to unpack the complexities of the disaster, those it affects, and

[179] Louis Althusser, *On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses* (London: Verso, 2014).
[180] Giorgio Agamben, *Means without End,* (Minneapolis: University of Minnesota Press, 2000), 58.
[181] Ibid., 56.

who should be held responsible. The finger as a gesture also embodies a multiplicity of potent meanings. Pointing out from the debilitated reactors, the figure on the one hand points to the viewer, to us. This can highlight our own entanglement with the ongoing catastrophe. Either as a victim of the borderless circulation of radiation, and/or for those customers of TEPCO, the perpetrator: consumers of the power that was originating at the plant. This distant culpability is highlighted by the fact that the electricity produced at the Fukushima Daiichi Nuclear Power Station was not even used by those in the vicinity, but rather all shipped south to Tokyo. This aggregation of resources without bearing the brunt of the fallout of production serves as a microcosm of the larger displacements global capital has had on localities. With the extraction of resources and production of pollution in areas with poor and vulnerable populations while the consumption happens at a distant centre of power.

Capacity of Poor Images

While the images by Chim↑Pom and the Finger Pointing Worker were the first images by artists of the plant in meltdown from outside and inside the nuclear plant, they had similarities with other image production from sites of disaster. Chim↑Pom's work was filmed on what appeared to be widely available consumer-grade cameras while the Finger Pointing Worker made use of an existing grainy surveillance image broadcast in real time, embedding the gesture within the live feed as a form of critique. Amateur quality images, surveillance images and the YouTube upload of the Finger Pointing Worker all partake in the low-resolution quotidian image that is distinguished, by artist and theorist Hito Steyerl, as a "poor image" in contrast with the high-

quality cinematic image.[182] The 35mm cinematic image in this account is slow and is out of time as it relies on a heavy infrastructure of project, sound system, and a theater in order to come into existence. As such the quality of these images, when seen, imply that one is watching something that happened in the past and has gone through an intensive process of production. On the other hand the poor image of the surveillance camera are around us everyday, for example, walking into a shop and seeing oneself in the moment on a screen in the store's security camera footage. This is an image that is showing the moment of now, and the context in which one is in. Hence, Steyerl argues that the impoverished image ultimately serves to reveal its "own real conditions of existence."[183] The poor image of the gesture by Finger Pointing Worker utilises this reflexive medium of the surveillance camera to draw attention to the ongoing conditions of the labourers at the plant while simultaneously opening a discussion to the culpability of the disaster itself. By utilising this poor image of a surveillance camera, this image resonates with the now and the potential immediacy of this action—happening now, or just having happened—therefore the images convey continual urgency of the situation across time. The surveillance image can also signify that a crime has been committed and we are watching these closed-circuit images in order to be vigilant and aware of our surroundings for a culprit. Although the gesture of the Finger Pointing Worker, perhaps signals that the culprit is not in the frame of the image, but perhaps the person watching the image.

Likewise, Chim↑Pom's shaky handheld camera emoted a "poor image" that in the context

[182] Hito Steyerl, "In Defense of the Poor Image", e-flux Journal, No.10, November 2009, https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image/.
[183] Ibid.

brought an important tension to the work. A well-balanced tracking shot or a fixed tripod long take would certainly provide a clearer image; however, the shaky and sometimes blurred image of the camera person trying to catch up with the walking figures or navigate the surroundings, helps the viewer to better feel what it was like for the members of the group to walk through this landscape that was both damaged by the earthquake and in the midst of absorbing the duration effects of the radiation. While both the actions inside the poor images of both the Finger Pointing Worker and Chim↑Pom had a resonance with the political protest—that often also employ similar poor image production—undertaking these actions inside a site of ongoing disaster and imminent threat took on a different characteristic.

In the past, clear actions against powerful entities involved in disasters, such as protests or banner drops have taken place at government buildings and corporate headquarters, tactical media, fake press conferences, and critical or political art can be part of what Julia Bryan-Wilson, Jennifer Gonzalez, and Dominic Willsdon have termed visual activism.[184] The Finger Pointing Worker and Chim↑Pom are unusual in that the action takes place on a remote site of contamination. These distant contaminated locations often have a lack of visibility because other urgencies of an ongoing disaster usually supersede the importance of image production—for example the imperative to protect oneself instead of being in or filming in a conflict zone. Yet the recent emergence of a different form of moving images circulating in and outside of sites of conflict provides a critical parallel movement. It is helpful to compare the artists' work with images circulated from war zones traditionally that have been the realm of news reporters and

[184] Julia Bryan-Wilson, Jennifer Gonzalez, and Dominic Willsdon, "Editors' Introduction: Themed Issue on Visual Activism. *Journal of Visual Culture* 15, no. 1 (April 14, 2016), p. 6.

photojournalists who are usually absent from the frame and strive to “objectively” record the surroundings and those in it. One example is the start of the United States’ illegal invasion of Iraq in 2003, beginning with a “shock and awe” bombing campaign that was captured by media cameras only at a safe distance. The images that circulated were sanitised flashes across the night sky and plumes of smoke but what was lacking was a real sense of damage the illegal bombing campaign had on the local residents. With social media those individuals capturing images have expanded to include those with cameras by the conflict, often taking images of violent events that those making the recordings are either witnessing or directly affected by. Agency with regards to making videos in such sites is usually considered propagandist: we can think here of the videos produced by the Islamic State in Syria or the Syrian government's own media infrastructure putting forth their own ideological narrative. Recently an alternative mode of image-making has formed, led by artists and citizens such as Abounaddara, an anonymous collective founded in spring 2011 during the Syrian uprising that aims to provide dignity and diversity in images coming from the conflict. Instead of images from foreign journalists who visit war zones, the group produces high-quality videos of everyday life in the zone or non-sensational interviews that provide a space to share and reflect on the ongoing disaster within the community while also challenging the dominant images coming out of Syria. Abounaddara enacts an agency with regards to local residents producing their own images of their experience, which are not necessarily focused on violent struggle, but rather images that share a resilience and self-reflection of events occurring at the moment. Abounaddara provided a platform via weekly uploads to video sharing site vimeo as well as circulating footage through art exhibitions. Consequently, the production and sharing of images do not hinge on their relationship to the

war—a prerequisite for most footage entering foreign news coverage of the area. Rather their depth and breadth of images and narratives traverse daily life and allow for the communities to represent their culture and daily life beyond what is just affected by the war.

A similar form of agency can be found in the Rojava Film Commune that makes fiction films inside the zone of live conflict of Kurdish held Syria. Rojava Film Commune makes a claim for the continuation of cultural production even in the midst of conflict and importantly insists on producing films in Kurdish which until the late 1990s had been banned. Here the films reflect the present state of the communities, while opening up a space for the critical imagination during a time of conflict, and also a contribution to the cultural heritage of the Kurds which is one largest stateless minorities in the world.

While the bodily danger in zones of conflict is more immediate than the slow violence of radiation, there is a parallel between the critical forms of image production within sites of risk. The Finger Pointing Worker enacts a similar agency as part of the community in the power plant as a worker with access to the plant to utilise an existing form of image production infrastructure in the company's live web cameras. Putting the Finger Pointing Worker's own body on display both draws attention to those bodies sacrificing in the zone but yet maintains agency through an intention and self-reflexive performance. It is however the ambiguity of the gesture which defies simple explanation or advocacy. This ambiguity could negate its use-value as visual activism, and yet it is also the unclear intentionality of the gesture which stokes the critical imagination accelerating the image's circulation.

In the case of Chim↑Pom their work could be read as choosing to go to the power plant and in doing so putting themselves at risk. This would be in contrast to both Abounaddara and the Rojava Film Commune where conflict came to their homes. However as shown in the Japanese government's surveys on the distribution of radiation [Figure 19.], the human-made radiation from TEPCO also blew down to Tokyo so that part of the city was already sharing similar conditions to parts of Fukushima. While the radiation levels in Tokyo were not as high as in the areas adjacent to the plant where Chim↑Pom went to, this shared condition of radioactivity helps to underscore why going to the source of the contamination was also important for the group. They were not coming from the outside into Fukushima, but in a way traversing the shared condition of human-made radioactivity that was inflicted on both lands.

Affective Slow Media

The relative remoteness of the power plant from Tokyo made it even more difficult to get to the origins of the human-made radiation and required both Chim↑Pom and the Finger Pointing Worker to develop alternative ways to circulate the images of their actions at the plant. I argue that artists utilise the mediated practices developed by land artists such as Robert Smithson and Nancy Holt in order to intervene in, visualise, and contest the nuclear disaster. The scale of the disaster and its impact is difficulty to see since the most affected areas lie far from the urban centres share certain conditions with the works of land art produced in the 1960s and 1970s. I am not suggesting that the Fukushima disaster is a form of land art, à la 9/11 as a form of

performance art as Karlheinz Stockhausen infamously asserted.[185] Instead, I contend that Chim↑Pom and the Finger Pointing Worker used similar practices to those undertaken in land art. In particular, how land art practices made the remote urgent and the vast more comprehendible.

In order to show the relevance of land art to the works in this chapter, it is first important to set forth a common understanding of the practices. Land art is traditionally seen as a type of minimalist and post-minimalist practice occurring in the 1960s and 1970s in Europe and perhaps most iconically in the western, rural part of the United States. Typical of this understanding of land art is the catalogue to curator Willoughby Sharp's seminal 1969 *Earth Art* exhibition held at Cornell University in New York. Sharp describes land art as being concerned with the simplicity of material or an action; sensitive to its environment; the dimension of time as being important; needing to be experienced in person; and anti-urban.[186] All of the artists in this exhibition had individual practices, identified as male, and with the exception of David Medalla, were all white and from the US or Europe. The images in the catalogue were usually void of humans except to occasionally show the male artist working alone on the land. Subsequently, other curators and writers have considered a diversity of individual and collective practices to be considered land art.[187] The reading of land art in this chapter is based on the revisionist approach by Miwon Kwon and Philipp Kaiser, articulated in the catalogue to their groundbreaking show *Ends of the Earth* originally held at the Los Angeles Museum of Contemporary Art as well as informed by

[185] Karlheinz Stockhausen, "'Huuuh!' Das Pressegespräch Am 16. September 2001 Im Senatszimmer Des Hotel Atlantic in Hamburg," *MusikTexte* 91 (2002): 69–77.
[186] Willoughby Sharp, *Earth Art* (Ithica, NY: Andrew Dickson White Museum of Art, Cornell University, 1970).
[187] See Suzaan Boettger, *Earthworks: Art and the Landscape of the Sixties* (Berkeley: University of California Press, 2002).; Max Andrews, ed., *Land, Art: A Cultural Ecology Handbook* ([Edinburgh: Royal Soc. for the Encouragement of Arts, Manufactures & Commerce [u.a.]], 2006).; Amanda Boetzkes, *The Ethics of Earth Art* (Minneapolis: University of Minnesota Press, 2010).

the Japan-focused research by art historian Reiko Tomii in her book, *Radicalism in the Wilderness*.[188] Both expand the notion of land art to account for a range of practices in that period, before and after, as well as practices all around the world active in that period developing practices that resonate with one another even if they weren't aware of each other at the time.

Kwon and Guy importantly reposition land art not as a form of outdoor sculpture, but rather as a media project. For example, the consequences of someone digging a hole in Gifu that resonated in Tokyo as with the art collective Group I's work *Hole* (1965). Or how pouring asphalt down a ridge in the Italian countryside resonated in New York City as with artist Robert Smithson's *Asphalt Rundown* (1969). In both cases the works were mediated by images of their happening. Given the remote locations of the actions, in many cases, these images would be the only aspect of the work that the audience would see. As such Kwon and Kaiser claim that the work is happening in two places, not just where the event took place in rural location, but also that via showing images the work was also happening in urban places. To this end Kwon and Guy contest the assumption that land art is a rural practice; they argue instead that it is fundamentally an urban practice because of the importance of its mediation to urban centres like New York, but also that many of the artists went from urban areas to undertake the works and then returned to cities. Kwon and Guy's reading of land art practices as a media practice and fundamentally an urban practice is critical to understanding the dynamics of the two artworks addressed in this chapter, and how the artists undertook actions in and around nuclear power plant but whose

[188] Philipp Kaiser, Miwon Kwon, and Museum of Contemporary Art (Los Angeles, Calif.), eds., *Ends of the Earth: Land Art to 1974* (Los Angeles, The Museum of Contemporary Art, 2012).; Reiko Tomii, *Radicalism in the Wilderness: International Contemporaneity and 1960s Art in Japan* (Cambridge: The MIT Press, 2016).

intended audience was much broader.

While Kwon and Guy's revision of land art is critical to shift the understanding of how documentation images functioned to traverse the remoteness of the actions, art historian Reiko Tomii's notion of wilderness helps to go even further to situate the condition that Chim↑Pom and the Finger Pointing Worker faced in Japan. Tomii's reading of wilderness came from practices in Japan in the 1960s and 1970s. However, the context is still relevant to artists intervening in Fukushima today. Wilderness for Tomii has four main facets. Firstly, it is understood as a desolate landscape, usually remote and without people. Second, Tomii describes wilderness as involving happenings in areas situated outside Tokyo, the centre of cultural production in Japan, and therefore seen as peripheral. Third, as these practices occurred outside of Euro-American centres, they were as Tomii puts it, "doubly out there" and labelled as a "regional avant-garde."[189] Fourth and finally, in Japan, there is the connotation of the phrase "being in the wilderness", meaning not participating in society, which is similar to the countercultural notion of "dropping out."[190] Tomii along with Kwon and Guy help us to situate the toolkit of artistic practices that Chim↑Pom and the Finger Pointing Worker were drawing from. Yet it is important to situate the material qualities of radiation in relation to the site-specific practices that Tomii, Kwon and Guy are referencing and how the dispersed aspect of fallout provides a different landscape in Fukushima and beyond.

[189] Tomii, *Radicalism in the Wilderness*, 7.
[190] Ibid., 7-8.

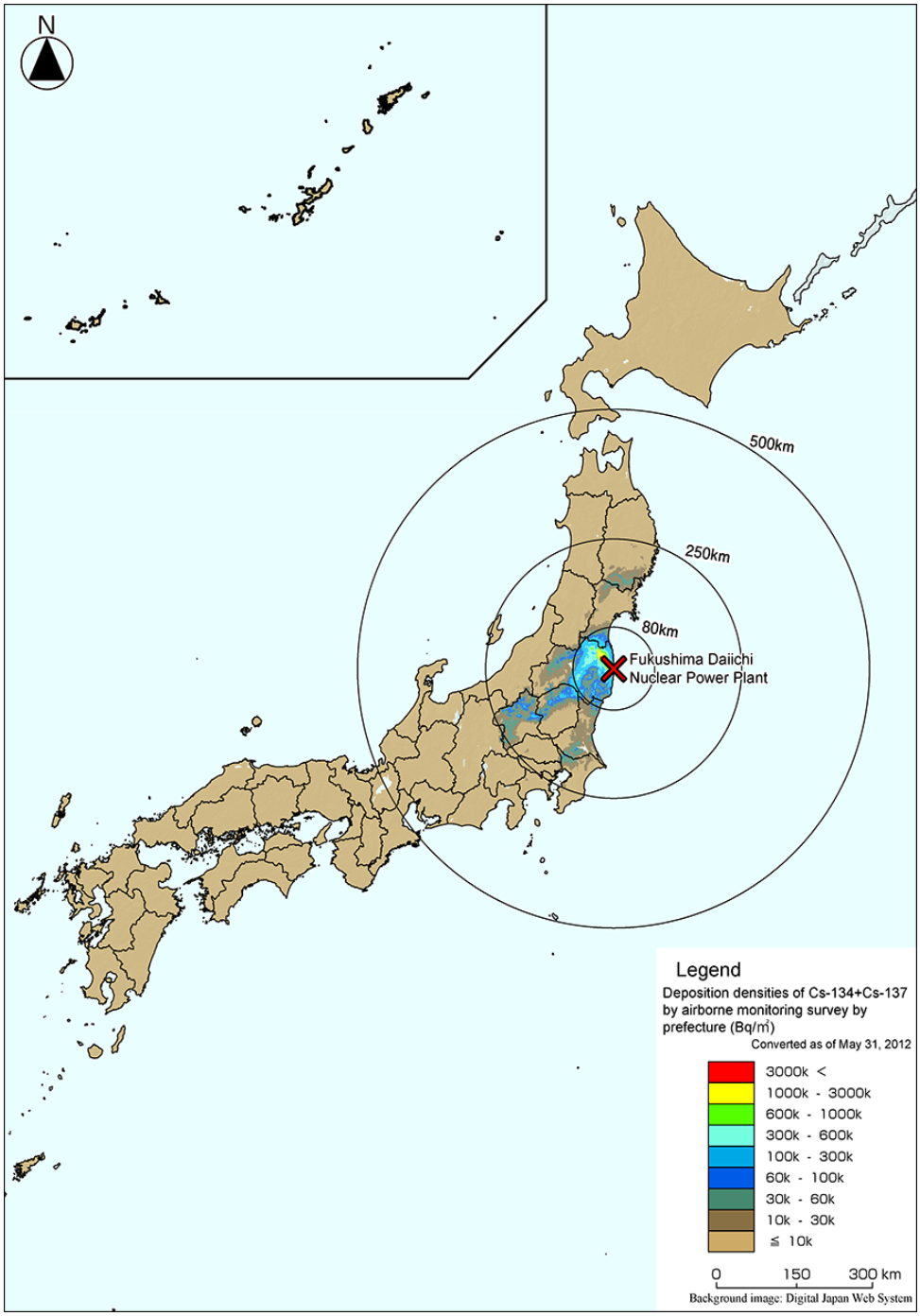


Figure 19. Ministry of Education, Culture, Sports, Science and Technology of Japan, *Results of Deposition of Radioactive Caesium of the Airborne Monitoring Survey by Prefecture, decay correction: May 31, 2012, Cs-134 and Cs-137*, 2012. Source: Japan Atomic Energy Agency, http://emdb.jaea.go.jp/emdb/en/portals/b1020201/, [Accessed 1 September 2021].

While land artists were generally working in remote areas, Fukushima after the nuclear disaster produced a unique set of conditions that differ from the contexts of land art and wilderness. Radioactive contamination problematises the geographic specificity associated with land art, as human-made radioactive fallout is not bounded by borders or contained to particular sites. The movement of fallout is unregulated as it traffics across environments producing unusual geographies of contamination that form an amalgam of sites with similar conditions. With radioactive particles blowing on the wind and carried by water currents, the spread does not have symmetry; rather, it is disparate and uneven. Dispersion through air currents in the atmosphere and onto the land means that not all of the sites of contamination are contiguous. This is evident in the Japanese government's airborne survey of the radioactive particles caesium 134 and caesium 137, which make up the bulk of the fallout from the power plant [Figure 19.]. The patchy distribution of caesium with varying intensities shows the extent of the fallout in an archipelago formation spanning from the Tokyo metropolitan area across the northern half of Honshu island up to Iwate prefecture. This means that diverse geographic areas from rural to urban can all share the same condition of radiation, even from the same disaster and yet not be physically close or even connected. Similarly, plumes formed in the Pacific Ocean and have even traversed the ocean from Fukushima to North America. This contamination implicates the aquatic biome itself and the fish, which can accumulate radioactive particulates, can be caught, distributed, and consumed throughout the world. Thus the condition of radiation is geographically diverse and can cover all areas of the human landscape and the non-human environment. This movement of fallout demonstrates the problematic notion of site-specificity

when applied to a condition with uneven geographies and intensities.

We will first look at Chim↑Pom's work *Real Times* and how it incorporated these modes of work and how the unique conditions of human-made radiation forced a different way of working. Opening on May 20, 2011, Chim↑Pom held a week-long exhibition titled *REAL TIMES* in Tokyo. The show included the eponymous video as well as other works the group had undertaken in Fukushima. Despite this small venue of a private art gallery and its short run, the exhibition attracted 3500 visitors.[191] Holding this exhibition in Tokyo collapsed this distance of the wilderness of Fukushima from the cultural and political centre of Japan, but this did not mean that it was situated within mainstream culture. Chim↑Pom comes from an urban counter-culture emerged following from the implosion of the 1980s economic boom and after the "Cool Japan" period typified by pop artist Takashi Murakami. Only one of the Chim↑Pom members formally studied art, the others had survived doing odd jobs and participating in the street culture around the youth areas in Tokyo such as Shibuya and Shinjuku. Their embeddedness in this street counter-culture finds them in affinity to Tomii's fourth aspect of wilderness as a position of exclusion from the mainstream. Chim↑Pom worked to create its own ecologies, such as the artist-run space *Garter* in the Koenji neighbourhood of Tokyo. These ecologies, on one level, support exhibitions and artistic production, and more profoundly provide an alternative infrastructure to allow different forms of being together outside of mainstream culture. These experiments such as *Garter* which can exist on different social economic structures such as mutual aid or a gift economy, can also be considered a type of prefigurative politics, distinct in

[191] Lisa Mundt, "Back to Politics: Artistic Disobedience in the Wake of 'Fukushima,'" published in Lisette Gebhardt and Yuki Masami eds, *Literature and Art after "Fukushima": Four Approaches*, (Berlin: EB-Verlag, 2014), 90-91.

this case from the hyper-consumerism that dominates Tokyo. These alternative ecologies to enact a prefigurative politics developed by Chim↑Pom, provide spaces of difference from social-political normative structure, but do not necessarily advocate for overthrowing it—rather, they offer the founding of a new way of being inside the old shell of society that they eventually aim to replace.

In the case of the exhibition of *Real Times*, Chim↑Pom stayed within their alternative ecology, instead of showing their images in the media or a museum. They chose to exhibit at Mujin-to Productions, a relatively new space founded by Rika Fujiki which focused on showing emerging artists and Chim↑Pom was just the third artist or art-group she represented. The young gallerist and the collective developed a close relationship, which still continues in 2021. Showing in the space of their gallerist allowed a great deal of flexibility in the timing and also the contents of the exhibition, in comparison with showing in public institutions which would have encountered the difficulty of navigating the sensitive subject of Fukushima as these institutions are largely headed by more conservative local government officials. While the small gallery is indeed a commercial one, its economy is focused on sustaining the artists and the space rather than an aggressively capitalistic form of investment and expansion. In addition, the affective dimension of Chim↑Pom having a close relationship with Rika Fujiki situated *Real Times* inside the familiar social environs of Mujin-to and firmly embedded the work in the social sphere of Chim↑Pom. Situating the actions in Fukushima inside such an alternative infrastructure in Tokyo allowed for an intimate engagement and added a direct social dimension within which was embedded a different ethos for social relations, one based on friendship and collaboration rather than simply the

exchange-value of images.

Environmental historian Libby Robin has written about how an exhibition can be seen as a "slow media" that allows for a more durational and perhaps in-depth experience than a simple news media report.[192] Robin argues that the exhibition can be an effective means of story-telling in a longer format. This can be useful when thinking about Chim↑Pom as well as Takeuchi's insistence on circulating their work with in the art world and art exhibitions. Yet the notion of a clearly defined story or narrative arc is elusive in both of these artworks. With the absence of text, spoken language, or narration, the artworks are more ambiguous with their intensions and symbolism. That said both works provide a strong feeling of what it is like to be in the midst of a nuclear disaster as well as providing a critical framework, as such I propose to term them *affective slow media*. The development of this type of affective slow media allowed for the distribution of these prescient images within an ongoing crisis and constitutes a novel response to the conditions of crisis—a practice developed from the immanence of the catastrophic conditions. While wilderness is the point of departure with Chim↑Pom's own social exclusion from the mainstream and the remoteness of Fukushima, the radioactive fallout brought a shared set of urgent conditions that necessitated a collective and innovative response.

Tyvek Suit

[192] Robin, Libby. "Museums in the Long Now: History in the Geological Age of Humans." *Journal of the Philosophy of History* 14, no. 3 (November 19, 2020): 359–81. https://doi.org/10.1163/18722636-12341448.

An important component of the figures in both artworks, is their common clothing: the Tyvek suit. Alongside the destroyed reactor buildings, and black construction bags of low level nuclear waste, the Tyvek suit is has become an iconic marker of the nuclear disaster. As the radiation itself is invisible to the naked eye, or any other human senses, the Tyvek suit has functioned as a representation of the presence of radionuclides. Yet the suit's roots also lie in the same nuclear military industrial complex that produced the nuclear disaster. The suit is composed of microfibres of thermoplastics that are melt blown together. This Tyvek material was developed in 1954 at the US Naval Research Laboratories in order to collect radioactive particles in the upper atmosphere as part of the process of monitoring the testing of nuclear weapons.[193] The flexible material was later commercialised by DuPont, the US company which played an important role in the Manhattan project's development of nuclear weapons and civilian uses of nuclear technology, DuPont introduced Tyvek in 1967—the same year construction began on the Fukushima Daiichi Nuclear Power Station. Thus the development of the Tyvek suit is bound up with what theorist Sabu Kohso calls the Janus face of the nuclear, the inextricable relationship between nuclear weapons and nuclear energy technology.[194]

While human bodies were used in documentation of land art to share their scale, Chim↑Pom and the Finger Pointing Worker utilised their bodies in order to visually represent the conditions of the contaminated land itself. While the landscape is altered, the radioactivity remains unseen so the artists centred their bodies and in particular the Tyvek suit as an index of the larger disaster.

[193] John G. McCulloch, "The History of the Development of Melt Blowing Technology," *International Nonwovens Journal*, Volume OS-8, Issue 1, March 1,1999.
[194] Kohso, *Radiation and Revolution*.

This polyethylene coverall, which is generally worn over clothing and covers the entire body, is emblematic of the presence of a threat. As art historian Gunhild Borggreen argues the suit is "an indexical sign of the invisible and ephemeral materiality of contamination such as hazardous biochemical matter, sarin gas, or nuclear radiation." It is these often invisible substances which are brought to the foreground through the shrouding of the body. Borggreen goes on to argue that the suit is "a real thing" connecting the "object" and "the contamination."[195] For Borggreen this wedding of the body's reaction to its environmental surrounding is a powerful signal of the contaminate's presence. In the opening of Chim↑Pom's *Real Times*, the car is driving in a destroyed landscape but the scope of the disaster does not become clear until the car pulls up to the entrance to the nuclear power plant and three figures in Tyvek suits are standing outside of the gate. The moment of seeing the shrouded figures changes the reading of the entire landscape. Seeing the exterior of the Tyvek suit we realise that Chim↑Pom is in the interior of a greater disaster which envelopes not only the quaked ground but the entirety of the atmosphere. In order to traverse the terrestrial landscape Chim↑Pom dons their own Tyvek suits which we see in the next frame as they navigate the disaster. However the presence of the suit also provides a false sense of security that the body can be protected via the technology of the suit, when in fact this is not the case.

I would like to explore the ontology of the Tyvek suit further in relation to the contaminate, and how the presence of the suit discloses the presence of two worlds. In Chim↑Pom's *Real Times*

[195] Gunhild Borggreen, "Re-Vision: Waste and Memory in Post-War Japanese Visual Art." Aomori Museum of Art, Aomori, Japan: Keio University Art Center, 2015, http://www.art-c.keio.ac.jp/site/assets/files/6376/psitohoku-proceedings-isbn978-4-9909155-0-6.pdf#page=35, Accessed 17 May 2019, p. 40.

the figures walk through the contaminated landscape, providing a figuration of contamination. Our experiences of moving through terrestrial landscapes is usually thought of limitless movement except for the resistance provided by difficult terrain, our own stamina, or political borders. This uninhibited, largely borderless movement in many, if not all, everyday lives shifts when one on puts on a Tyvek suit. The thin layer of polymer of the suit delineates the border the inhabitable and the toxic. The border of the safely inhabitable world now rests between the body and the small space between it and the suit. Beyond that barrier is a potentially inhospitable landscape to life. Wearing the hazmat suit one carries with it the border of the inhabitable that exists outside of the suit a few centimetres away from their body. The hazmat suit thus calls into question the ease with which we can move through the terrain. This thin boarder recasts the terrestrial landscape from the seemingly safe to the actually perilous, similar a scuba diver descending underwater in an environment where there is life but humans need similarly bordered suits to survive. Both the scuba diver and the hazmat suit wearer in a contaminated environment peer out through the suit, which filters their experience of their surroundings. But how, in turn, does seeing the Tyvek suit in the landscape potentially recast our understanding of our own relationship to being in and moving through that landscape?

David Foster Wallace writes in *Infinite Jest* of a parable of a fish in water unable to recognise its own conditions of existence: one fish asks others how they are enjoying the water and the other fish respond, what is water?[196] Looking at figures shrouded in Tyvek suits while in the landscape one sees the other side of the border of the inhabitable. The sight of the suit reveals one's own

[196] David Foster Wallace, *Infinite Jest*, New York: Back Bay Books, 1996, p. 445.

body's vulnerability to the contaminated landscape. This recognition that one is in the negative relief, looking at the confines of the habitable but from the wrong direction, situates the person in the environment on the outside of a safe space. As the "safe space" only exists in that small space between a single body and the border of the suit, any figure not in their own suit is living in the external contaminated reality of another. The hazmat suit brings into immediate relief two different experiences of the terrestrial landscape. Being on the outside of a hazmat suit is being inside a contaminated landscape unprotected; seeing the hazmat suits brings that otherwise invisible and insensible experience into being. Being on the wrong side of the hazmat suit is being on the wrong side of knowledge, the wrong side of technology, the wrong side of science. Seeing the suit in the landscape signifies that the human body does not hold the adequate means to be there. Hence, any un-suited humans are thus being subjected to same contaminate or environment forces as the non-humans around them.

In the case of disasters caused by an invisible presence such as radiation, the Tyvek suit becomes a constant mnemonic for the ongoing threat to the body, environment, and non-humans. While the suit announces the presence of a threat, it actually does little to protect the individual body. As it cannot shield the body from gamma radioactivity, the suit's use is actually aimed at longer exposure and exposure of others from particles settling on the body, clothes, and hair, that then could be transported outside of a contaminated area.[197] Thus the Tyvek suit produces a double isolation—both from the environment and the surrounding community—ensuring that only the individual body receives the radiation dose. Conversely rather than substantially defending the

[197] Dupont, Nuclear industry protection, https://www.dupont.co.uk/personal-protection/nuclear-protective-clothing.html.

body the Tyvek suit can produce a false sense of protection. While the suits reduce the transfer of radioactive materials outside the Fukushima exclusion zone, the polyurethane gives a false impression that there is a simple technological solution to the contamination. Thus the suit's presence both critically signals the presence of a contaminant but also gives an impression that the body can shielded from the gamma radiation with a thin layer of polymer, when in fact to prevent exposure from gamma radiation would take a shielding of forty centimetres of lead or two metres of concrete—which would mean living in a bunker to eliminate the threat from the exposure.[198] The protection from radiation therefore necessitates a very real bunker, a static form that would immobilise us. It is impossible to move through a contaminated landscape and not interact with radioactivity, therefore moving through an irradiated landscape is synonymous with risk—even if it is perhaps not clear what that risk is.

DuPont refers to the Tyvek suit as a "second skin" due to its protective and flexible nature.[199] Yet this polyurethane epidermis comes with its owns forms of "second skin" discrimination. Those who have worn this second skin can be seen as potentially "infected" or less desirable mates due to the perception of genetic damage to their reproductive abilities, as such some workers have become stigmatised inside and outside of Fukushima.[200] Here it is not the construction of skin but rather the penetration into the genomic structure, a presumption of mutation, or the invisible harm done were in discrimination lies. While understanding the relationship between risk and the

[198] American Nuclear Society, "Protecting Against Exposure," accessed October 27, 2021, http://nuclearconnect.org/know-nuclear/science/protecting.
[199] Dupont, Nuclear industry protection.
[200] Masaharu Maeda and Misari Oe, "Mental Health Consequences and Social Issues After the Fukushima Disaster," *Asia Pacific Journal of Public Health* 29, no. 2_suppl (March 2017): 36S-46S, https://doi.org/10.1177/1010539516689695. and Yuri Kageyama, "Stigmatized Nuclear Workers Quit Japan Utility," *Associated Press*, July 10, 2014, https://apnews.com/article/684588dbe6a4487ebe23fc8b51d130d7.

lowly radioactive landscape is little studied, a long-term study on low level radioactive exposure only came out in 2015 and shows a 30% increase in the chance of leukemia.[201] This study of nuclear power workers shows the increasing internal venerability this substance persists. While the risk of cancer does not necessarily signify its presence or contamination of the individuals—a 2020 United Nations Scientific Committee on the Effects of Atomic Radiation report has shown that the situation is much better than expected—yet discrimination against workers and residents of Fukushima has been intense.[202] Much like the discrimination against the survivors of the Hiroshima bombing, known as *hibakusha*, the new contamination has fuelled prejudice against those in Fukushima and those who were forced to move elsewhere.[203] These radioactive refugees to other parts of Japan face discrimination due to the presumption of exposure or mutations in the form of school children being bullied, refugees unable to find romantic partners, or through societal shunning.[204]

This chapter does not aim to add to that discrimination. Rather I am trying to unpack the complexity and multiplicity of the effects of radiation beyond the biological. Theorist Rob Nixon has used the term "slow violence" to encapsulate the varied and durational effects of environmental disasters, that include not only any physical effects of the toxicity but the affective and social effects such as post-traumatic stress, mental illness, discrimination, and poverty that

[201] Klervi Leuraud et al., "Ionising Radiation and Risk of Death from Leukaemia and Lymphoma in Radiation-Monitored Workers (INWORKS): An International Cohort Study," *The Lancet Haematology* 2, no. 7 (July 2015): e276–81, https://doi.org/10.1016/S2352-3026(15)00094-0.
[202] United Nations Scientific Committee on the Effects of Atomic Radiation, "Levels and Effects of Radiation Exposure Due to the Accident at the Fukushima Daiichi Nuclear Power Station."
[203] Robert Jacobs, "The Radiation That Makes People Invisible: A Global Hibakusha Perspective," *The Asia-Pacific Journal Japan Focus* 12, no. 31 (July 28, 2014), https://apjjf.org/-Robert-Jacobs/4157/article.pdf.
[204] Masaharu Maeda and Misari Oe, "Mental Health Consequences and Social Issues After the Fukushima Disaster," *Asia Pacific Journal of Public Health* 29, no. 2_suppl (March 2017): 36S-46S, https://doi.org/10.1177/1010539516689695.

can have generational impact.[205] The artists in this chapter have tried to utilise ways to make sense of the enormity of this environmental disaster at its early stages, given the particular difficulties of the senseless form of radiation whose invisibility to the naked eye makes its magnitude and impact hard to fathom. In the case of Chim↑Pom, marking a new temporal epoch and working with slow affective media to share their experiences of the disaster contests the amnesia-inducing short media cycles of CNN-style news outlets. Instead the slow affective media not only produce another type of framework for the production and reception of images but centres it in an art ecology of spaces—galleries and museums—where there can a durational relation with the image for the viewer. This time can not only produce a greater understanding than the short news clips, but it can convey an emotional knowledge of experience that is not dependent on language or narration. Situating the works in art spaces is also situates the artwork within a network of care for the images—conservation, storage, analysis—which can prolong their existence also be made accessible to the public again and again.

In this dissertation I have argued that nuclear disaster is not the cause of the catastrophic condition in Fukushima but rather a symptom of the pre-existing catastrophic condition in the region caused by colonisation and the loss of collective agency that allowed extractive economies to institute a long-term state of precarity in the area for human and non-human life. There is a great potential to misunderstand the nuclear disaster through a cursory reading of these two artworks, as they were undertaken at the early stages of the disaster. For example, in the case of *Real Times* the effects of the earthquake can still be seen in the surrounding landscape and all

[205] Nixon, *Slow Violence and the Environmentalism of the Poor*.

the people seen in the landscape are wearing Tyvek suits—usually the sign of an extraordinary relationship between the human body and a threat in the landscape. In 2021, the physical infrastructure has been repaired and few effects of the earthquake or tsunami can be seen in the landscape. Outside of the Fukushima exclusion zone, no one wears Tyvek suits and inside the zone it is suggested by the government but not mandatory. So while the destruction of the earthquake and tsunami can no longer be seen, the low-radioactive landscape persists. It can be easy to read these works in isolation as just dealing with a local problematic of the landscape in Fukushima. However the artistic tools they develop to diagnose and contest the damaged landscape—a slow affective media and gesture beyond language—can be utilised not only for the durational nuclear disaster but also against the catastrophic condition at large. Moreover the artworks grapple with what it means to live and work in a damaged landscape—a condition no longer just the domain of radioactivity and industrial contamination, but with the present climatic shifts altering the environment and the conditions of survival, the damaged landscape is becoming the new reality elsewhere across the planet.

The next chapter expands the space of the study from Fukushima to Tokyo to look at how one collective of cultural workers has attempted to resist the catastrophic condition in Tokyo itself in the aftermath of the meltdowns and how collective agency can function in spaces to attempt to restore a community's self-determination.

Chapter 4. Amateur Riot: Constructing a Para-zomia against the Catastrophic Condition

> *I want to devise a means of creating a space where it is easy to make a life in the broadest sense, encompassing personal connections and the local area. This is an area-wide, self-sufficiency strategy for all the poor. Wow! To put it another way, if we can devise an amazing fools' area in which places of work, of play and housing are lumped together, then we wouldn't have any reason to be afraid.*[206] Matsumoto Hajime

In previous chapters, I have read the "catastrophic condition" in Fukushima through the matrix of internal colonisation and extractivism that led to the meltdown of the Fukushima nuclear reactors and mass forcible displacement caused by the invisible contamination. As detailed in the Chapter Three, one of the meltdown's constitutive causes was the neoliberal transformations driving short term profit through cost cutting efforts, which ultimately degraded TEPCO's approach to safety at the Fukushima Daiichi Nuclear Power Station. In this chapter, I want to follow the electricity lines from Fukushima down to the capital of Tokyo. In particular, I will look at how the policies and ideology in that centre of power, particularly neoliberal reason, had precaritising effects on younger people including musicians, artists, and cultural workers in Tokyo. In countering this cultural and economic shift towards precaritisation, I'll examine a

[206] Matsumoto Hajime, *Binbōnin No Gyakushū: Tada de Ikiru Hōhō [Counter-Attack of the Poor: How to Live for Free]* (Tokyo: Chikuma shobō, 2008), 56. Translated in Alexander James Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo: Power Struggles*, (New York: Routledge, 2018), 91.

loose cultural collective called Amateur Riot that, based on a different logic, worked to re-establish agency and collective social reproduction, and to form what I call, following the writings of political theorist James C. Scott, a "para-zomia"—a self-organised community embedded within an urban area. If I argue that the catastrophic condition is a loss of agency which then precipitates precarity and propensity for disaster, then this chapter looks at how Amateur Riot worked to establish a form of collective agency that would both sustain themselves and form a nourishing ecology for artists, musicians, cultural workers, and others in the Koenji neighbourhood of Tokyo. This ecology would be extended to form the first large scale political protest in response to the disaster in Fukushima.

This chapter centres around the activities of the collective, which has artists and cultural workers as a part of it but does not consider itself either strictly an art collective or one undertaking the production of artworks. This turn away from explicit art practice, narrowly defined as the intentional production of artworks, charts instead a move toward the borderlands of practice that extends beyond what usually considered part of the art community. This intersectional space—involving actions, performances, protests, gatherings—parallels the diversity of contemporary art and performance, and indeed many of the comparative examples through the chapter reference contemporary art practices. My interest in this practice is not in what the members of Amateur Riot label their actions as, but rather how a collective practice has developed an infrastructure to address the material conditions of precarity affecting artists and cultural workers, and how the collective's interventions in public extended the space for gatherings, cultural activities, and protests to take place. This is not to disregard the importance of art, but rather to look to examine

how collective practices have been able to contest the precaritising conditions of the catastrophic condition in both material and cultural ways.

Neoliberal rationality

This section describes the implementation of a neoliberal rationality, whose effects on TEPCO was an important factor that The Independent Investigation Commission on the Fukushima Nuclear Accident documented throughout their report.[207] Yet it was not TEPCO and industry affected, neoliberal rationality led to a large socio-economic shift and conditions of precarity which needed to be confronted by artists, activists, cultural workers, and others in the 1980-1990s. Beyond seeing neoliberalism as a set of economic policies aiming to separate markets and capital from democratic governance, theorist Wendy Brown argues that neoliberalism is itself a "rationality."[208] It is a force structuring the notions of the commons and society itself, which culminated in such infamous beliefs as those—as articulated by former British Prime Minister, Margaret Thatcher that "there is no such thing as society. There are individual men and women and there are families."[209] This philosophy aimed to undue the mutual obligations to support one another in a collective society and instead break down the social safety net. Brown parses economist Fredrick Hayek's writings on neoliberalism to show that the notion of the free individual was bound by "traditional morality – both securing and

[207] The Independent Investigation Commission on the Fukushima Nuclear Accident, *The Fukushima Daiichi Nuclear Power Station Disaster: Investigating the Myth and Reality*.
[208] Wendy Brown, *In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West*, The Wellek Library Lectures (New York: Columbia University Press, 2019), 21.
[209] Ibid., 115.

emanating from the family."[210] Hence, neoliberalism, far from opening a space for experimentation in individual subjectivity, underscored the patriarchal and heteronormative order. Foregrounding neoliberalism as a rationality helps to understand it firstly as a force to structure culture, atomising individuals and heteronormative family units as the basis of society. This neoliberal turn toward atomising society stands in contrast to seeing the individual as always already co-consitutive of overlapping groups that structure social reproduction and collective agency. Thus neoliberalism breaks down the former multiplicity of overlapping collectives of which one would be a part, whether that be the collectives developed in or through a particular building, neighbourhood, trade, kinship, commons, or environmental relation. In its place, neoliberalism establishes an isolating dichotomy between individual and society, thus emphasising the role of the individual as a consumer or an individual as a voter. Utilising this framing of neoliberalism as a rationality helps to highlight its deployment as a means to shift culture through policy, and this chapter aims to show how collective work aimed to push against this cultural shift.

While Brown's analysis of neoliberal rationality centres around its US and UK origins and ongoing implementation, it helps unmask the contemporary condition of isolation as not just a byproduct effect of policy but rather an integral part of the implementation of ideology. This neoliberal rationality, while operating in the US and UK on a slightly different timeline and with different characteristics, nonetheless also played an important part in restructuring Japanese

[210] Ibid., 96.

society at the end of the twentieth century.[211] Important to the rise of neoliberalism in Japan was economist Chiaki Nishiyama, who studied at University of Chicago under Hayek and was classmates with Milton Friedman.[212] Nishiyama translated many of Hayek's books into Japanese in the 1970s, introducing Hayek's thought there whilst also publishing his own works.[213] Another influential figure was government advisor Kenichi Koyama who founded Group 1984, named after George Orwell's novel, a collection of scholars that advocated for neoliberal reforms.[214] While neoliberal policies began to be implement in the US and UK in the 1970s, it was not until 1980 when a deepening fiscal crisis hit Japan that the country started to undertake similar neoliberal policies, a transformation that has continued unabated until today.[215] The result has been the implementation of low wages and insecure employment fostering conditions of precarity along with the atomising of the individual and its social isolation that has particularly affected large swaths of the youth and cultural workers.[216]

During the 1980s economic boom in Japan, known as the bubble economy, a new type of flexible part-time work came to prominence: *furītā*, anglicised as freeter, a word derived from the

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[211] For the development of neoliberalism in Japan see Tamotsu Nishizawa and Yukihiro Ikeda, *From New Liberalism to Neoliberalism*, vol. 1 (New York: Oxford University Press, 2017); Toichiro Asada, *The Development of Economics in Japan: From the Inter-War Period to the 2000s*, 2016; Richard Reitan, "Narratives of 'Equivalence': Neoliberalism in Contemporary Japan," *Radical History Review* 2012, no. 112 (January 1, 2012): 43–64,; and David Harvey, *A Brief History of Neoliberalism*, Reprinted (Oxford: Oxford University Press, 2011), 87-94.; Makoto Itoh, "Assessing Neoliberalism in Japan", in Alfredo Saad-Filho and Deborah Johnston, eds., *Neoliberalism: A Critical Reader* (London: Pluto Press, 2005), 244

[212] Reitan, 45.

[213] See for example Friedrich Hayek, *The Collected Works of F.A Hayek*, ed. Chiaki Nishiyama, 10 vols. (Tokyo: Shunjusha, 1986). and Chiaki Nishiyama, *Nihon Keizai, Hontō Wa Dō Na No Ka [The Japanese Economy]* (Tokyo: PHP Kenkyūjo, 1987).

[214] Ibid., 46.

[215] Makoto Itoh, "Assessing Neoliberalism in Japan", in Alfredo Saad-Filho and Deborah Johnston, eds., *Neoliberalism: A Critical Reader* (London: Pluto Press, 2005), 244-251.

[216] For a gender analysis of the impact of neoliberal reforms see Takeda Hiroko, "Structural Reform of the Family and the Neoliberalisation of Everyday Life in Japan," *New Political Economy* 13, no. 2 (June 2008): 153–72, https://doi.org/10.1080/13563460802018224.

English "free" and the German "Arbeiter" or worker.[217] The term freeter was originally used in employment magazines in Japan in the 1970s but later developed into a widespread cultural usage. Theorist Sabu Kohso notes how Japanese company management was based on a traditional household-type relational structure, and that neoliberalism brought a bifurcation where this still existed for a few employees on permanent contracts while shifting as much of the workforce as possible to short term precarious contracts.[218] While the freeter allowed for a greater flexibility in working which also allowed for time to pursue cultural activities, this was intended to be seen as a phase which young workers would go through before eventually finding full-time employment. However, the economic declines of the 1990s saw a loosening of labour laws to allow for more temporary contracts, in lieu of the robust full time employment contracts that fuelled the post-war boom. Freeters were situated in a group consisting of convenience store clerks, factory workers, construction workers, supermarket workers, gig workers, and those working in fast food, cultural field, and other part time services. This transformation in the possibility of living a stable life through work continued to decline and become a widespread phenomenon in Japan throughout the 2000s, with precarious labour growing to 40% of the labour force by 2015.[219] It was a transition toward precarity in the labour force which benefited corporations' profits through access to a pool of what Marx called surplus labour, which could be readily exploited with longer hours, lower pay, and little to no job security. As opposed to a

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[217] For more see David Slater, "The Making of Japan's New Working Class: 'Freeters' and the Progression From Middle School to the Labor Market," *The Asia-Pacific Journal Japan Focus* 8, no. 1 (January 4, 2010), https://apjjf.org/-David-H.-Slater/3279/article.html.; Andrew Gordon, "New and Enduring Dual Structures of Employment in Japan: The Rise of Non-Regular Labor, 1980s–2010s," *Social Science Japan Journal* 20, no. 1 (February 1, 2017): 9–36, https://doi.org/10.1093/ssjj/jyw042.; Carl Cassegård, *Youth Movements, Trauma and Alternative Space in Contemporary Japan* (Leiden ; Boston: Global Oriental, 2014).

[218] Sabu Kohso, *Radiation and Revolution*, 127-129.

[219] Andrew Gordon, "New and Enduring Dual Structures of Employment in Japan: The Rise of Non-Regular Labor, 1980s–2010s," *Social Science Japan Journal* 20, no. 1 (February 1, 2017): 1.

transition into full time labour, many freeters became a permanent class of precariat. This process is mirrored in the contemporary cycle of the gig economy in the 2020s with such businesses as Uber or Instacart, with some workers joining for greater flexibility only to be met with an exploitative and precarious existence. Some freeters, while initially enthusiastic about working fewer hours, have been trapped into a long term cycle of precarity. This economic victimisation has not only harmed the precariat but has also impacted society as a whole by reducing economic growth, home purchases, and population growth, thereby contributing to the wider economic decline and population reduction in Japan. Theorists Michael Hardt and Antonio Negri have also recognised the greeter as an important component of contemporary global society. They see the freeter through a prism wherein the victim of economic injustice becomes the culprit: "Japanese media and politicians pin the blame for ever greater levels of labour and social precarity not on the neoliberal transformations but on the victims themselves: youth have a bad attitude toward work, they maintain, and are too lazy to commit to the hard work of a stable job. In the inverted reality of neoliberal ideology the only freedom imaginable is that of the freeter, a freedom of poverty and insecurity."[220] Here, Hardt and Negri articulate the alienating effects of neoliberalism re-inscribed as the isolating effects of individuation under a banner of self-responsibility, which produces a set of conditions that fix bodies in a state of precarity.

Dovetailing with neoliberalism in Japan was the rise of neoconservatism that looked to foster the ideology of Japanese identity as a single people with a unique "spirit," one that fostered a "social harmony," encapsulated in the 1979 nine-volume report with contributions by more than 200

[220] Michael Hardt and Antonio Negri, *Assembly*, Heretical Thought (New York: Oxford University Press, 2017), 210.

scholars entitled *The Era of Culture* [*Bunka no jidai*].[221] This myth of homogeneity excluded the consideration of indigenous groups such as the Ainu or the large Korean ethnic minority from being considered part of Japanese society—further pushing these groups to the social and economic margins of society. Wendy Brown articulates the underpinning ideology of neoliberal rationality as the disaggregation of society into individuals and the nuclear family, could be read as at odds with this neoconservative project in Japan that emphasised the population as a homogenous mass. However within the notion of the social harmony the family unit was critical in underpinning the social and economic order, yet this was a traditional Japanese family unit and did not take into account other ways of living. Thus when the economic effects of neoliberalism were felt on individuals, such as job loss and precarious employment practices it would be up to the family to try to help. So the dynamic between neoliberalism and neoconservatism actually complemented each other as being able to mask the shortcomings and deleterious effects of each other.

With the postwar economic boom, by the 1970s the notion of Japan as a middle class society was promoted by the government with the narrative that income to all workers was to be distributed more fairly in order to effectively erase class distinctions between middle, working, and lower classes.[222] In reality, however, class distinctions remained, and as we saw above, the working and lower classes were increased due to the precaritising effects of neoliberalism and the rise of the freeters. Thus neoconservatism helped to mask the societal inequity exacerbated by neoliberalism centring the role of the family instead of the state as a social safety net. Meanwhile

[221] Reitan, 49.
[222] Reitan, 46-49.

neoconservatism's emphasis on a homogenous culture created expectations that one would live a middle class lifestyle, which led to extraordinary social behaviour such as laid off workers pretending to go to work every day to hide their reality of unemployment from their family or neighbours.[223] The shame associated with losing a job or only being able to find freeter-type work was not seen as a systemic issue of neoliberalism but rather an individual failure, as Hardt and Negri had also highlighted above. Moreover those who were not a part of the middle class, particularly the unemployed, freeters, or underemployed youth were thus deemed to be "at fault" for not participating fully in society and dismissively called "social parasites."[224]

Neoliberal rationality also transformed the urban space of Tokyo. Previously the city was largely low level interconnected neighbourhoods, with residents living throughout the city due to strong zoning that allowed for historic neighbourhoods to be preserved throughout the city.[225] In the 1980s, Prime Minister Yasuhiro Nakasone deregulated the strict building code and allowed for widespread re-zoning.[226] This drastically altered the city's landscape and led to a construction boom of mid- and high-rise buildings that not altered the physical landscape, but also undid the

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[223] Howard French, "The Pretenders," *New York Times*, December 3, 2000, sec. Magazine, https://archive.nytimes.com/www.nytimes.com/library/magazine/home/20001203mag-french.html.

[224] Masahiro Yamada, *Parasaito shinguru no jidai [The Era of the Parasite Single]*, Dai 17 satsu, Chikuma shinsho 218 (Tōkyō: Chikuma shobō, 2004).

[225] For an overview of the effects of neoliberalism on the built environment in Tokyo see: Theodore C. Bestor, *Neighborhood Tokyo* (Stanford: Stanford University Press, 1991).; Andr Sorensen, "Building World City Tokyo: Globalization and Conflict over Urban Space," *The Annals of Regional Science* 37, no. 3 (August 1, 2003): 519–31, https://doi.org/10.1007/s00168-003-0168-3.; Michael Hebbert and Norihiro Nakai, "Deregulation of Japanese Planning in the Nakasone Era," *The Town Planning Review* 59, no. 4 (October 1988): 383–95.; André Sorensen, Junichiro Okata, and Sayaka Fujii, "Urban Renaissance as Intensification: Building Regulation and the Rescaling of Place Governance in Tokyo's High-Rise Manshon Boom," *Urban Studies* 47, no. 3 (March 2010): 556–83, https://doi.org/10.1177/0042098009349775.

[226] Andr Sorensen, "Building World City Tokyo: Globalization and Conflict over Urban Space," *The Annals of Regional Science* 37, no. 3 (August 1, 2003): 519–31, https://doi.org/10.1007/s00168-003-0168-3.; Michael Hebbert and Norihiro Nakai, "Deregulation of Japanese Planning in the Nakasone Era," *The Town Planning Review* 59, no. 4 (October 1988): 383–95.

neighbourhoods as a primary centre for social life: large scale apartment buildings transformed social life from the horizontal connections developed at street level to a more atomised way of life played out in separate apartments on separate floors in the alienating high-rise buildings.[227] This re-zoning also allowed for the creation of large office buildings in multiple areas throughout the city, displacing entire neighbourhoods and their residents to the outer suburbs. Thus neoliberal rationality was shifting ways of both working and living, fracturing many of the previous neighbourhood support networks.

As the relationship with labour became more precarious, the previous ecology of the communities was becoming altered. Freeters, artists, musicians and other cultural workers who weren't able to fit into the neoconservative order of the middle class, were increasingly shifted to the margins of societies without the help of previous support structures. Pushing against both the precaritising and atomising effects of neoliberalism was the group Dameren [The League of Good-for-Nothings], founded in 1992.[228] Formed by students and freeters, the group had a small space called Akane near Waseda University in Tokyo, with many members living in Koenji and the areas around. They advocated for a "dropping out" from society and experimenting with different ways of life and subjectivities. Physical space was important for them as a site for deep discussion and to foster and maintain relationships in person with each other; communities particularly supported were neurodiverse, as well as those with depression and other effects of social withdrawal.[229] Dameren both embraced precarity and aimed to support its effects on

[227] Bart Wissink and Arjan Hazelzet, "Social Networks in 'Neighbourhood Tokyo,'" *Urban Studies* 49, no. 7 (May 2012): 1527–48, https://doi.org/10.1177/0042098011415437.
[228] Thanks to Yoshitaka Mōri and Sabu Kohso for the reference of Dameren.
[229] For a fuller accounting of Dameren activities see, Carl Cassegård, *Youth Movements, Trauma and Alternative Space in Contemporary Japan* (Leiden ; Boston: Global Oriental, 2014). and Alexander James Brown, "Power

mental health, while undertaking a cultural activism in the form of meetings and publications. While not an art collective, it provided a space for those engaged in culture, activism, or experimenting with subjectivities outside of the normative framework to find a space to meet. While providing an important space for gathering and a diagnosing of social problematics, Dameren did not materially contest the difficult conditions many of its members faced. Yet it was able to lay the groundwork for a self-organised response to the newly atomising conditions put in place through the government's implementation of a neoliberal rationality. Years later another collective was able to form in Koenji which had a similarly ambiguous relationship to art, but was able to foster a creative infrastructure that was utilised by many artists, cultural workers, musicians, and other freeters to both contest their precarious conditions produced by neoliberalism as well as advance a cultural contestation of neoliberal rationality. That collective was Amateur Riot.

Postcapitalist Prefigurative Practices

Amateur Riot was initially formed by activist Matsumoto Hajime, artist and designer Yamashita Hikaru, hip-hop critic Shin Futatsugi, Rui Mochitsuki, and Keita Ogasawara in 2005.[230] Hajime and Hikaru had previously sold second-hand items and clothes to make a living and the group opened an eponymous shop together, Shiroto no Ran Shop No. 1 [Amateur Riot No.1], in the working-class western Tokyo neighbourhood of Koenji. Amateur Riot developed into a loose

Struggles: The Strategies and Tactics of the Anti-Nuclear Movement in Contemporary Tokyo" (PhD Dissertation, Wollongong, University of Wollongong, 2015).

[230] Julia Obinger, "Aufstand Der Amateure!: Alternative Lebensstile Als Aktivismus in Urbanen Räumen Japans," 2013, https://doi.org/10.5167/UZH-87959, 49.

collective that grew into a bric-a-brac of artists, musicians, cultural workers, and friends all centred around the neighbourhood, organising local film screenings, dance and music performances, and even an English class called Amateur Riot University.[231] Besides organising cultural events, they were also shaping their environment by putting in place an infrastructure of re-sale shops, bars, an art gallery, radio station, and a guesthouse to support their collective social reproduction. This combination of infrastructure and events formed part of a dense mesh of cultural activity, knowledge sharing, and collective social reproduction amongst the precariat in Koenji. As part of this mutual aid, the group shared their knowledge of how to undertake this activity of finding second-hand clothes and items to re-furbish and sell, thus enabling others to open their own re-sale shops, which, in turn, formed an important part of the local ecology by providing a low-cost way for many to survive. Friends opened their own stores run in the area, utilising the name and adding a subsequent number as they were established Shiroto no Ran Shop No. 2, Shiroto no Ran Shop No. 3, etc. Although they shared the same name, the stores were not a chain or franchise; they were all independently owned and run.[232] Thus the practice of recycling and reselling electronics, household items, and clothes became an open source tool that was shared throughout the community as a means of supporting both those in Amateur Riot and their friends.

The physical spaces of the stores also had various uses for the group, such as a meeting space, a place to hangout, a node for organising protests, performances, and interventions—some of

[231] Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo*, 56.
[232] Matsumoto Hajime, interview by Magazine9, 2007, http://www.magazine9.jp/interv/hajime/hajime.php.

which are detailed in this chapter. Thus the infrastructure of the store as a shelter and gathering place, along with its tools including phone, computer, toilet, and kitchen, could be re-purposed for multiple and overlapping activities such as events or demonstrations. This is evident in the 2011 film *Radioactivist*—an independent documentary following the group after 3.11—which depicts Hajime fielding calls for an upcoming protest on his shop's phone and other scenes of the spaces used for banner-making, communal meals, and meetings.[233] This shows that the site of work for Amateur Riot can be a means of subsistence and also be simultaneously bound up with other forms of the production of everyday life. While these multiple modes of life are integrated they can also be in tension. As Hajime notes, "My greatest anxiety now is how to maintain the balance between the shop's function as a mainspring of my and the staff's living, and its function as a base of riots and commotion."[234] This concern highlights how labour and social reproduction can still cause stress when space is created to allow for a greater freedom to undertake a multiplicity of other activities. Seen through this quote, the goal of the store is not capital accumulation, but rather, the fostering of a fertile, diverse ecology where those experiencing economic precarity and social exclusion could flourish with little means. The activities and alternative infrastructure can be seen as part of an experimental praxis attempting to construct a postcapitalist prefigurative set of practices that aim to reconfigure ways of living outside of neoliberalism in the present.[235]

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[233] Julia Lesser and Clarissa Seidel, *Radioactivists - Protest in Japan after Fukushima* (Ginger and Blonde Productions, 2011).

[234] Matsumoto Hajime, *Binbōnin daihanran – Ikinikui yo no naka to tanoshiku tatakau hōhō [The great pauper rebellion: How to struggle against a hard world while having fun]*, Tokyo: Asupekuto, 2008. Quoted and translated in Carl Cassegård, *Youth Movements, Trauma and Alternative Space in Contemporary Japan* (Leiden: Global Oriental, 2014), 108.

[235] Alexander James Brown has undertaken a study of the term of prefigurative politics in Japan, and the critical role of Sabu Kohso's translation as *yojiteki seiki* in 2006 and its subsequent usage as detailed in Alexander James Brown, "Translating Prefigurative Politics: Social Networks and Rhetorical Strategies in the Alter-Globalisation Movement," *The Translator*, April 15, 2020, 1–13, https://doi.org/10.1080/13556509.2020.1750262.

This postcapitalist prefigurative ethos was articulated in Hajime's book, *Counter-Attack of the Poor* (2008) that was both a wry critique of capitalist consumer culture and also a practical toolkit for surviving in the urban environment with ways to forage for and reuse materials, and other strategies for a low-cost subsistence.[236] The book calls for areas in the cities where the poor can exist with an alternative economy. While being a practical guide, and outlining a theoretical framework, the book can also be seen as an artistic and cultural manifesto that channels and articulates a set of practices integrating cultural and independent subsistence initiatives as part of a broader ethos that undoes the perceived barrier between art and life. As a result it is difficult to pin down the participants and bookend a practice, as Amateur Riot became a vibrant ecology that supported a living culture of anti-capitalism that included reducing consumption, increasing recycling, and sharing as constant production, as well as a different value angled more toward sustaining life than capital accumulation or circulation. The question of whether Amateur Riot could, in fact, create an alternative, especially in the centre of a dense urban city operating largely under a neoliberal rationality, or whether alternatives are possible within the hegemon of capitalism, turns on the concept of the "outside" in postcapitalist prefigurative practices.

While the notion of postcapitalist prefigurative practices is premised on the notion of constructing a way of living and working outside of the capitalist mode of production, this is a contested assertion. Debates about whether this an "outside" to neoliberalism or capitalism more generally were seeded in Marx's articulation of primitive accumulation—seen as the process of

[236] Matsumoto Hajime, *Binbōnin No Gyakushū: Tada de Ikiru Hōhō [Counter-Attack of the Poor: How to Live for Free]*.

"divorcing the producer from the means of production"—constituent to the spatialisation of instituting the capitalist mode of production.[237] Marx understood the process of primitive accumulation as read through the British historical example of the enclosure of the commons and the expropriation of farms that drove the subsequently landless people to the cities, leading to widespread wage labour that laid the foundation for the capitalist mode of production in England. Marx extrapolated this teleological understanding and by 1867, at the time of publishing the first volume of *Capital*, claimed the process of primitive accumulation in Western Europe as more or less complete, which drove the need for colonisation to expand primitive accumulation and the capitalist mode of production.[238] A hundred years later writing in Paris, Guy Debord theorised that primitive accumulation had not only incorporated all of the labour and resources in capitalist societies but also all social relations.[239] Writing at the end of twentieth century Michael Hardt and Antonio Negri in their book *Empire* argue that neoliberalism expanded the reach of the capitalist mode of production to every part of the globe, where even if a social formation was not fully capitalist, resources were being extracted to serve production elsewhere, hence the outside was already immanent.[240] Hardt and Negri also expanded what was being accumulated—not only physical resources but also imaginaries, information, language, communication, and affects—thus this expansion was not only territorial but was also weaving into the production of every subject as a universal condition.[241] This critical narrative was accompanied by the end of the USSR and thus the fall of an alternative hegemonic sphere, which

[237] Karl Marx, *Capital: A Critique of Political Economy, Volume 1* (London: Penguin Books, 1981), 875.
[238] Ibid., 931.
[239] Guy Debord, *The Society of the Spectacle* (New York: Zone Books, 1994).
[240] Michael Hardt and Antonio Negri, *Empire* (Cambridge: Harvard University Press, 2003).
[241] Ibid., 384-385.

presumably contested the possibility and existence of enacting forms of relations outside of capitalist modes of production.[242]

While this account is not exhaustive those mentioned above do share the condition of writing in the midst of the urbanity in Europe and the United States. As theorist Boaventura de Sousa Santos reminds us such a reading is grounded in an episteme that does not necessarily represent the diverse histories and experiences across the Global South.[243] This draws into question such broad and sweeping assumptions around the extent to which diverse lived experience is inculcated or comes in contact with the capitalist mode of production. Yet even with this limited episteme there are divergent readings, such as those by autonomist Massimo De Angelis, who contests the extent of enclosures within an understanding of primitive accumulation within the Global North.[244] While still working within a Marxist framework, theorist Silvia Federici has emphasised examples of how women in communities in Latin American have instituted collective forms of reproduction that provide material evidence of diverse forms of relations not mediated by the capitalist mode of production.[245] Similarly, David Graeber's anthropological approach to the outsides of capitalism looks at how diverse cultures, such as in rural Madagascar, have long organised their way of life differently to capitalism.[246] The feminist economist collaborative duo J.K. Gibson-Graham also see capitalism as an overly broad interpretative mode, and in fact only representative of a small portion of relations existing in the world. Indeed,

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[242] Francis Fukuyama, *The End of History and the Last Man* (New York: Free Press, 1992).
[243] Boaventura de Sousa Santos, *The End of the Cognitive Empire: The Coming of Age of Epistemologies of the South* (Durham: Duke University Press, 2018).
[244] Massimo De Angelis, *The Beginning of History: Value Struggles and Global Capital* (London: Pluto, 2007).
[245] Silvia Federici, *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle* (Oakland: PM Press, 2012).
[246] Graeber, *Possibilities: Essays on Hierarchy, Rebellion, and Desire*.

while capitalism and neoliberal rationality have had a profound effect on humanity and the planet, Gibson-Graham argue against a totalising theory of capitalism and instead posit a diverse economy of relations existing both historically and presently.[247] They cite specific forms of relations such as transactions which occur in alternative markets including the barter and alternative currencies, labour relations which can be cooperative, in-kind, or care-based, and organisations that can be alternatives within or alongside capitalism, such as nonprofit or state or social enterprises, or noncapitalist organisations that are communal. These diverse forms of human and non-human relations are occurring within modernity as well as in other relations constituted in indigenous communities across the globe, including within Europe and North America. Gibson-Graham see these multiple modes of production and relations as part of an ontological reframing that acknowledges first that not all relations and production are mediated by capitalism, and second, that within this ample non-capitalist terrain they see the possibility for further experimentation, enactment, and imagining of forms of postcapitalism in the present.[248] For Gibson-Graham, the term postcapitalism does not represent a concrete future materiality, but a linguistic move that gestures beyond the presumption of neoliberal capitalism as constituting the end of history, and toward the new and already existing forms of relations rooted in a diverse relational economy outside of that structured by capitalism.[249] Thus, postcapitalist prefigurative practices can be seen as materially working through the present conditions to enact different alternative frameworks to structure relations. Through Graham-Gibson's expanded reading of the

[247] J. K. Gibson-Graham, *A Postcapitalist Politics* (Minneapolis: University of Minnesota Press, 2006). J. K. Gibson-Graham, *The End of Capitalism (as We Knew It): A Feminist Critique of Political Economy* (Minneapolis: University of Minnesota Press, 2006).
[248] Gibson-Graham, *A Postcapitalist Politics,* xxx.
[249] Fukuyama, *The End of History and the Last Man*.

economy of relations, it is clear that not only does an outside of capitalism exist, but that most human and non-human relations lie outside of a capitalist mode of production. This expanded frame grounds not only an outside of capitalism but a host of postcapitalist prefigurative practices that construct different forms of relations. Among them can be situated Amateur Riot's activities and self-organising ethos, which develops a way of life and relations which is both anticapitalist and works through the problematics of an alternative forms of living together through quotidian experimentation.

In the context of Japan, scholar Alexander James Brown also sees a form of prefigurative practice in Amateur Riot's use of the mode of *ikki*. This is a Japanese term which Brown defines as "a strategy of developing dense social relationships that are capable of sustaining the urban poor."[250] *Ikki* historically signified agrarian and peasant revolts and movements as well as the 1867 urban uprising at the end of Edo period [1603-1867]. These uprisings and movements had a diversity of causes such as land rights, unjust ruling lords, over-taxation and so on, and targeted policies, rulers, and even the socio-economic system. Brown argues that the *ikki* Amateur Riot partook in and also developed was a mode of mutual aid, low impact, and low cost living that aimed to support themselves, friends, and others who primarily existed in a new class that was emerging under neoliberalism. While Amateur Riot was situated within Tokyo, their practices were largely divergent from the mainstream form of life as there was no means to support the consumerist lifestyle that was being promoted societally since the economic boom. Instead of

[250] Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo*. For more on historical *ikki* in English see Vlastos, *Peasant Protests and Uprisings in Tokugawa Japan*. The context of the outside can also be interpreted through indigenous groups in Japan such as the Ainu and warrants further research but lies outside the bounds of this project.

enacting a capitalist mode of production focused on extracting surplus value and capital accumulation, Amateur Riot fostered a means of collective reproduction. Openly sharing the process for how to live from recycling clothes and goods within the community of freeters and cultural workers, Amateur Riot aimed to create an accessible way to survive in the city. It offered a mode of living that working that was not centred around individual gain but rather a methodology that nourished the community and ecology against a neoliberal eschatology. This collective support of the poor and precarious workers through the processes of recycling can also be seen as a means of revolt against the capitalist mode of production, which the word *ikki* is most appropriate to describe.

With many artists and cultural workers coming from this freeter class, the notion of *ikki* that Amateur Riot supported became important as a means of community participation towards collective survival. Art and cultural practices were entangled in these communities of mutual aid through the presence of numerous artists, musicians, designers, and other cultural workers. By countering the isolating tendencies of the catastrophic condition of neoliberalism, the practices of Amateur Riot can be set against the socio-economic framework of this freeter class. I argue that it is not just Amateur Riot participating and experimenting with these practices but by tracing how Amateur Riot spatialised this *ikki*, we can understand the recycling shops, bars, and cultural venues they opened as forming an infrastructure to support an alternative form of existence in the neighbourhood of Koenji. This was facilitated by their seeking to produce this more permanent zone where they could support one another as both a means to survive and able to provide DIY platforms for culture and social movements. I aim to demonstrate in this chapter that it was this

spatialisation which was critical not only to their collective but to supporting a creative ecology in Koenji and developing a nourishing environment for a large scale political response to the nuclear meltdown.

Para-zomia

While the collective Dameran created a space in Koenji for individuals to experiment with subjective formation so they can drop out of society, Amateur Riot developed a broader prefigurative infrastructure in the neighbourhood to create the conditions for cooperation and collective formation. In this prefigurative infrastructure in Koenji, Amateur Riot cultivated the spatialisation of a nourishing ecology where a community could survive as well as express themselves through various cultural outlets. As opposed to moving to the countryside to build a new society in "terra nullius," there was a recognition and desire to be together in urban space and support such practices there.

Looking at an ecology of space that supports both social reproduction and alternative cultures the notion of "zomia" can be useful in situating the practice of Amateur Riot in a longer trajectory in Asia. The word "zomia", common across the Chin/Kuki/Mizo language group in Southeast Asia, means "remote peoples" or "hill people," and was highlighted by the historian Willem van Schendel as a way of describing the highlands that form a largely contiguous trans-national area ranging from southeast China down to Vietnam and across to eastern India.[251] Political scientist

[251] Willem van Schendel, "Geographies of Knowing, Geographies of Ignorance: Jumping Scale in Southeast Asia," *Environment and Planning D: Society and Space* 20, no. 6 (December 2002): 647–68, https://doi.org/10.1068/d16s.;

and anthropologist, James C. Scott, in his landmark book *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*, described the area composed of predominantly hilly and mountainous terrain as a "riotous heterogeneity" of indigenous people and historic and contemporary refugees.[252] Due to the difficult topography there is little to no presence of the state in this vast area. In its absence Scott describes the way in which self-governance has occurred. The case studies largely focus on the Burmese ethnic areas, but also include different groups across the terrain. While diverse in their language, customs, ethnicities, and types of societies, cultures in this region are connected largely through the absence—whether through refusal, inability, or indifference—of state control. Unlike the Temporary Autonomous Zones theorised by Hakim Bey, which see self-organised areas only through a finite temporality likened to forms of uprising, zomia is not a temporary manifestation but rather an uneasy topography around whose inhabitants—indigenous, refugees, transients—largely evade sovereign state control.[253] This allows for diverse means of self-organisation to flourish, from indigenous governance and revolutionary movements to composite communities that develop their own ways of being together. This is not intended to idealise the difficult conditions across these highlands or their results social composites. But evoking zomia here helps to 1. Foreground the shared environmental and topological conditions in affecting culture; and 2. posit a non-nation state orientation of commonalities across east and southeast Asia. With Scott's interpretation of the term, zomia helps to articulate the dynamic between the diverse languages, cultures, and

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Arkotong Longkumer and Michael Heneise, "The Highlander," *The Highlander: Journal of Highland Asia* 1, no. 1 (December 21, 2019): 1–18, https://doi.org/10.2218/thj.v1.2019.4185.

[252] James C. Scott, *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia* (New Haven: Yale University Press, 2009), 26.

[253] Hakim Bey, *T.A.Z: The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism*, 2nd rev. ed (New York: Autonomedia, 2003).

histories of these areas by positing an environmental reading of their shared conditions that produced a more self-governed existence.

Through Amateur Riot's practice in Koenji and beyond, I aim to articulate how a form of zomia can exist in urban space. This might seem antithetical to the notion of zomia, in that its distinguishing features relate to its altitude and remoteness, which makes it difficult for state power to access the zomia. While Koenji is not only lowland, it is a neighbourhood of Tokyo—the geographic centre of the nation state apparatus. I posit an elaboration on the concept that takes into account the varied terrain of urban space itself. Despite often being a centre of power in the nation, the urban terrain can be a composite of cracks and fissures that have the capacity to evade certain forms of state control. My proposal for understanding Amateur Riot's community in Koenji is as a para-zomia, which seeks to extend an understanding of zomia beyond a geographic condition of refuge to an economic and social mesh that can be established in the midst of a diverse urban topography. The prefix distinguishes the para-zomia from the specific geographic determinate of the hill side, and instead posits another site of topological resistance within the urban space itself. This framing lies adjacent to an understanding of the transcultural geographical underpinnings of zomia, but recognises an urban topology where a set of conditions can produce a similar sense of removal from the state and an intersectional self-governance. A reading of the physical terrain of Koenji elucidates its unique conditions that sets it both in and apart from the rest of Tokyo, and how Amateur Riot was able to utilise this terrain to develop collective social reproduction and agency.

Koenji has historically been farmland supporting the nearby city of Tokyo. After World War II, urban migration caused a rapid expansion of the city with many new arrivals building dwellings on the outskirts, such that Koenji was gradually but unevenly incorporated into Tokyo itself. In this respect, while partaking in a traditional geography of the agricultural lowlands characterised by Scott as having easy access for state control, Koenji's irregular and quick transformation led to the forming of a patchy unstable warren of alleys that defied the ease of movement and control. While it is the natural landscape which hinders state control of zomia in southeast Asia, in particular the navigation of the hills and mountains, a similar logic can be applied to Koenji's winding alleyways that hinder monitoring by police and authorities. Inside the otherwise heavily policed city of Tokyo, the winding alleys and underpasses of Koenji provided a space for different subjectivities to experiment and flourish outside of the disciplinary measures of social controls. It is within this dense urban maze that Amateur Riot formed a para-zomia.

In order to understand Amateur Riot's community in Koenji, I argue that the expansion of the term zomia can be extended beyond a geographic condition of refuge. Koenji can therefor be understood better as a para-zomia—an urban space which self-organises an alternative economic, social, and cultural mesh to support different modes of experimenting with living and working together. The area's winding passageways and dense housing engender a closer relationship between neighbours and the community through which we can see a different set of relations to those enabled and promoted by capitalism, a resistance that has its roots in the Japanese term *ikki*. Thinking *ikki* through a para-zomia highlights the spatial manifestation of Amateur Riot's loosely self-organised community. Hajime articulated Amateur Riot's approach

in the DIY-book-cum-manifesto of *Counter-Attack of the Poor:*

> I want to devise a means of creating a space where it is easy to make a life in the broadest sense, encompassing personal connections and the local area. This is an area-wide, self-sufficiency strategy for all the poor. Wow! To put it another way, if we can devise an amazing fools' area in which places of work, of play and housing are lumped together, then we wouldn't have any reason to be afraid.[254]

The reflexive humour of a "fools' area" underscores the lightness of the approach, but does not detract from the seriousness of the proposal fostering a generative ecology that attends to collective social reproduction intertwined with cultural practices. While propositioned as an "area-wide, self-sufficiency strategy" the forming of this para-zomia has not been a top down implantation of a plan, but rather a more ad hoc collective development based on the needs and desires of largely economic refugees from the precarity caused by the catastrophic condition of neoliberalism. The physical spaces of the small shops and cultural spaces in networked support and cooperation re-established a sense of collective agency that contested economic precarity, evidenced in its duration at sustaining its community over the past 15 years and as well providing a fertile terrain for new generation of artists, cultural workers, and collectives to emerge in the area (including Chim↑Pom, whose work we examined in Chapter Three). The para-zomia was founded with and through artistic and cultural practices of many of its members. Art, music, and culture were not a creative by-product of the community. The events provided sites where it was possible for the community to get together. Just as important they provided space to experiment

[254] Matsumoto Hajime, *Binbōnin No Gyakushū: Tada de Ikiru Hōhō [Counter-Attack of the Poor: How to Live for Free]* (Tokyo: Chikuma shobō, 2008), 56. Translated in Alexander James Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo: Power Struggles* (New York: Routledge, 2018), 91.

with ideas and subjectivities whose diversity was constitutive of the founding of the para-zomia.

Other self-organised microbiomes in Tokyo could also be considered para-zomias. The day labourer area of Sanya has built up mutual aid organisations and street theatre. The Yoyogi Park encampment has had a diverse mixture of artists and activists living and working in the park and putting on a weekly barter cafe. Koenji differed from these neighbourhoods in Tokyo as it had a concentration of precarious workers, artists, and cultural workers. Yet the para-zomia in Koenji has not produced a process gentrification like in other metropolis such as New York. For example, in Brooklyn, artists and cultural workers gravitated toward poorer areas in the city, leading to a cultural and lifestyle development that eventually caused gentrification transforming the neighbourhood with hugely raised rents and thereby forcing out previous residents, either intentionally through the action of landlords, or unintentionally through others wanting to move into the area. This has not happened in Koenji because Tokyo does not have the same centralised development of gentrification as seen in Brooklyn.[255] In Tokyo, there is not a trend of renovating dilapidated buildings; instead, home and apartment prices are generally set around the year of the building's construction and these only depreciate over time. This means that new buildings, in particular large-scale apartment towers, are a generator of gentrification, as was the case with Mori Tower in Roppongi and the recent development of commercial office towers around Shibuya for the tech industry.[256] Thus, the forces of gentrification are predominantly large

[255] Ralph Lützeler, "Population Increase and 'New-Build Gentrification' in Central Tōkyō," *Erdkunde* 62, no. 4 (December 2008): 287–99.
[256] Roman A Cybriwsky, *Roppongi Crossing: The Demise of a Tokyo Nightclub District and the Reshaping of a Global City* (Athens: University of Georgia Press, 2011), http://site.ebrary.com/id/10457038.; Munehisa Ishida, "The Changing Face of Shibuya: Renewal Speeds up Shift from Cultural Center to IT Hub," *The Mainichi*, January 7, 2020, https://mainichi.jp/english/articles/20200106/p2a/00m/0bu/022000c.

development corporations and municipal planning, which raze entire areas for large-scale new developments. By contrast, the living ecology produced by Amateur Riot has not led to an increase in rent or forced our previous residents. Rather, Amateur Riot has joined the existing residents such as the local committee of shopkeepers. One example of this was how Amateur Riot both researched and contested a municipal plan in 2018 to bisect the neighbourhood with a major thoroughfare, which would change the neighbourhood's character of an intimate network of alleyways and small streets.[257] Amateur Riot raised awareness of the city's plan and organised a protest in the neighbourhood that created a channel for the collective agency of many in Koenji who disliked the planning approach of the larger municipal authority which would have radically altered the character of the area. In addition, contesting the change was intended to help Koenji maintain its dense topography, which has allowed the para-zomia formed by Amateur Riot to continue to flourish. As opposed to gentrifying the neighbourhood, Amateur Riot fought to preserve the form and character of the neighbourhood in the face of central planning to develop and thus potentially fundamentally shift the area's character.

Type of Collective

As evidenced in the various actives and infrastructures Amateur Riot has engaged in, it has been difficult for writers to categorise them. Amateur Riot has variously been described as an "Activist network"; "used-goods shop-*cum*-activist group"; "anarchistic collective"; "street

[257] William Andrew, "Residents and Activists Protest Proposed Kōenji Gentrification Plan," *Throw Out Your Books* (blog), September 25, 2018, https://throwoutyourbooks.wordpress.com/2018/09/25/residents-activists-protest-proposed-koenji-gentrification/.

protest movement"; "part of the music scene"; "a group of friends"; and "a community movement."[258] Ranging from a network to a collective, a movement to a group of friends, these many interpretations of the grouping demonstrate the diversity of the cultural and political terrains they traverse. While the diversity of modalities also perhaps represents the different interests of the writers, there are nonetheless common forms of spaces, culture, activism, and friendship that weave through the group, its cultural practices, and community into the fabric of life and social reproduction.

To complicate any definitive characterisation of the grouping, even the composition of Amateur Riot is not entirely clear to its founders.[259] People come in and out of the group regularly, so that the grouping's name functions as a kind of open commons and floating signifier which can be claimed by anyone, and as such events just appear under the moniker Amateur Riot. Hence, the grouping is not necessarily a formal collective but rather a shared moniker which could be utilised by anyone organising events or shops, such that there was not a formal membership or affiliation structure. As opposed to notions of central planning, the living ecology in Koenji is much more ad hoc and is reflected in the form of Amateur Riot itself.

I would like to set this notion of a loose collective against the framework of "collective

[258] Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo*, 7.; Noriko Manabe, "Music in Japanese Antinuclear Demonstrations: The Evolution of a Contentious Performance Model," *The Asia-Pacific Journal Japan Focus* 11, no. 42 (October 18, 2013): 2.; Azumi Tamura, *Post-Fukushima Activism: Politics and Knowledge in the Age of Precarity* (New York: Routledge, 2018), 28.; Bob Dickinson, "Art and Catastrophe," *Art Monthly*, January 2012, 3.; Kenji Kubota, On Amateur Riot and the post-3.11 protests, interview by Jason Waite, August 13, 2020.; Yoshitaka Mori interviewed in Julia Lesser and Clarissa Seidel, *Radioactivists - Protest in Japan after Fukushima* (Ginger and Blonde Productions, 2011).; Lu Pan and Hyunjoon Shin, "Uncommon Commons: Rethinking Affects, Practices, and Spaces of Urban Activism in Asia," *Inter-Asia Cultural Studies* 19, no. 3 (July 3, 2018): 355–58, https://doi.org/10.1080/14649373.2018.1497893.

[259] Matsumoto Hajime, Amateur Riot, interview by Jason Waite, translated by Kenji Kubota, March 21, 2017.

formations and collaborative practices" in the arts articulated by curator Okwui Enwezor in order to further clarify the form of Amateur Riot.[260] Enwezor argues that the modern history of collectives have largely come about under the conditions of crisis, "social upheaval," and "political uncertainty."[261] He describes two modes in which cultural practitioners have operated together, one being a sustained, fixed group of collaborators whose practice is always collectively authored under the groups title. As discussed in Chapter Three, Chim↑Pom would be exemplary of this form as the individual members only see their art practice under the collective title. The second formation as described by Enwezor is what he terms a "networked collective," described as "tend[ing] to emphasise a flexible, nonpermanent course of affiliation, privileging collaboration on a project basis rather than on a permanent alliance."[262] Amateur Riot, with its fluid and ever-changing composition, fits closer to Enwezor's idea of a "networked collective."[263] As a result, it is difficult to pin down the participants and bookend a practice as Amateur Riot became a living ecology that supported a culture of anti-capitalism which included reducing consumption, recycling and sharing of as constant production, and a different value focused more toward sustaining life rather than capital accumulation or circulation.

While Amateur Riot is not an art collective, some projects they undertake resonate with collective performance art, and the group's relationship to the art world has been largely through its influence on artists and cultural workers in creating the conditions upon arts and culture can

[260] Okuwi Enwezor, "The Production of Social Space as Artwork:," in *Collectivism after Modernism*, ed. Blake Stimson and Gregory Sholette, The Art of Social Imagination after 1945 (University of Minnesota Press, 2007), 225.
[261] Ibid.
[262] Ibid.
[263] Ibid.

thrive. As socially engaged art desires to effectuate change, whether by influencing the actions of the viewer through a representation of change, or actually changing the material or conceptual reality in small communities or on a larger scale. Here, I'm interested in following the reverse by looking at the loose collective of Amateur Riot as an assembly of cultural workers, activists, and members of the precariat who looked first to nurture an ecology where they could survive in the city and undertake cultural and alternative ways of being. This diverse practice of Amateur Riot does not exist as a synthetic form of artistic practice. Rather the diversity of the group, their interests, and activities spills over the label of art, but is Amateur Riot an isolated example of such diverse practices conjoining and coalescing to resist catastrophic conditions? Here, I want to compare Amateur Riot with the approach taken by art collective, the Jakarta-based ruangrupa, which has similarly set up a cultural infrastructure in order to incorporate art into a daily existence. This comparison will demonstrate the cultural relevance of these activities as well as the compositions of their collectives, how they developed decision making processes that were inclusive, and finally, their differing approaches to higher authority.

ruangrupa formed out of a precarious and exuberant environment of *Era Reformasi* [Reform Era], the transition period from Suharto's thirty-two year authoritarian rule to a democracy. During this time, neoliberal reforms were instituted to address the repercussions of the 1997 Asian financial crisis. ruangrupa, like Amateur Riot, is based in a political and economic urban centre—Jakarta. It is the unruly urbanity of Jakarta that ruangrupa sees as a method, interlocutor, and collaborator. Like Amateur Riot they have generated an infrastructure over the years. Originally it was a house in a residential neighbourhood that held their meeting/event spaces,

office, RURU gallery, and shop for artists-made goods. Expanding beyond this house they formed OK Video (an international video festival screened in public around the city) and 32 degrees Jakarta Festival (an annual exhibition and event space for university students). These function as shared platforms for community and cultural production. In an environment with little cultural infrastructure, these initiatives provided a nourishing and necessary infrastructure, albeit one that could be more a nourishing community network of art and culture rather than a self-sustaining form of social reproduction. The loose revolving members of ruangrupa have previously found support outside of the group through their own individual artistic practices or other labour.[264]

For ruangrupa, like Amateur Riot, the embeddedness within the community blurs the boundary between their activities as being partitioned into "community activities" and the "group's activity." Rather, acknowledging the overlaps in shared community and space reflects the social meshing in which they both partake. In the case of ruangrupa, this approach has worked to develop and entirely "alternative system" in Indonesia, or what co-founder Ade Darmawan called a "mix-and-match of activities and destruction and reconstruction of practices so as to accord with local needs. What is dysfunctional is functional."[265] For ruangrupa, "the debate over whether or not something is considered 'art' eventually disappears."[266] This does not negate art or its critical importance, but rather articulates the shift of art integrating with the everyday.[267]

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[264] Andan, 595.
[265] Quoted in Marion von Osten, "The End of Contemporary Art (as We Knew It)" (Iaspis, Stockholm, December 2, 2013).
[266] Ibid.
[267] For more on ruangrupa's practice and methodology see Mirwan Andan, "All for Jakarta – a Note on the Tenth Anniversary of Ruangrupa: *Decompression #10, Expanding the Space and Public*," *Inter-Asia Cultural Studies* 12, no. 4 (December 2011): 591–602, https://doi.org/10.1080/14649373.2011.603921; Thomas Berghuis, "Ruangrupa:

This strikes at a tenet of art historian Claire Bishop's understanding of "participatory art," which she sees as "embedded in the world *and* at one remove from it."[268] ruangrupa and Amateur Riot oppose this disaffected distance from the world, in the infrastructure they create there is a further integrating of art with life so that can become indistinguishable. Their practices form generous containers for bodies, affect, relations, to coexist in a materially different way and overflow the boundaries of a more traditional understanding of art as necessarily being separate in some way from life. Rather what we see in the infrastructure ruangrupa and Amateur Riot create is a rich cultural and vital tapestry that shifts the sensibility and everyday life.

Nongkrong

Delving into how these collectives make their decisions reveals a similar care and attention as well as certain limits to their forms as scaleable prefigurative models. In particular, the question of how decisions are made within the collectives can reflect their own internal dynamics as point of departure to consider how their relations unfold. Amateur Riot uses a consensus model that relies heavily on face-to-face meetings instead of emailing or messaging. According to activist Narita Keisuke, who has collaborated with Amateur Riot, "There is a much more relaxed and fun atmosphere where everyone can set out their ideas or opinions compared to other activist groups.

What Could Be 'Art to Come,'" *Third Text* 25, no. 4 (July 2011): 395–407, https://doi.org/10.1080/09528822.2011.587684.; Reinaart Vanhoe, *Also-Space: How Indonesian Art Initiatives Have Reinvented Networking* (Eindhoven: Onomatopee, 2016).

[268] Claire Bishop, *Artificial Hells: Participatory Art and the Politics of Spectatorship* (London ; New York: Verso Books, 2012), 7.

Once we find a good idea, all participants add things and refine the idea."[269] This free-flowing process is evidenced in the documentary *Radioactivists,* where a small room is crammed full of dozens slowly and playful discuss how to organise a protest together. It is a relaxed and thoughtful atmosphere, with participants drinking beer or smoking and reflecting on the previous protest, an analysis that is then brought into the composition of the next event. There is a sense of lightness amongst the group and a jovial atmosphere.

Ruangrupa has a similar mode of decision making that they call *nongkrong*, meaning "hanging out" in Bahasa Indonesia, but which is a more durational exercise than Amateur Riot's method. As Mirwan Andan from ruangrupa's recounts, these *nongkrong*, "can last from late afternoon to midnight. The long duration is caused by the digression in the discussion, from the topic of the meeting to the culinary world, the flora and fauna, or something to laugh about."[270] This similar form of consensus also involves a good amount of humour and lightness in both the *nongkrong* and Amateur Riots meetings. However the *nongkrong* differs in its long duration, allowing discussion to be sidetracked for long passages. This tends toward a blurring in the gathering which could be just be an evening hanging out together having fun along with the creative and constructive process to ideate projects. Both Amateur Riot and ruangrupa utilise these in person long and longer form consensus modes that refute a representational mode of collective governance. These in person affinity groups, instead of a representative model, operate as one form of prefigurative practice to repair agency through the affective and collective decision-

[269] Narita Keisuke, correspondence with the author, 9 October 2020.
[270] Andan, "All for Jakarta – a Note on the Tenth Anniversary of Ruangrupa: *Decompression #10, Expanding the Space and Public*," 595.

making practice. While it means that everyone largely decides on things big and small, this provides agency in the decisions that affect one's own and each another's lives. This long process can be laborious, hence the importance of humour and lightness in their approaches.

This is not say that conflicts can't or won't arise in such groups, as anyone who has worked in small groups will know. Feminist theorist Jo Freeman's in her experience in feminist activist collectives, has written about how structural issues in "leaderless groups" can arise. For example each member in a group not having time to spend on making the decisions so small cliche can end up making decisions.[271] As we have seen above that an adherence to the consensus model can be lengthy, the groups have blended it into hangout with one another and having fun as a way of both making the process engaging and also melding it with their everyday activities. Freeman also identities four qualities that leaderless groups require to work well together: 1. They are task oriented 2. They are small and share a similar background 3. There is a high degree of communication 4. The members can interchange in a number of the roles that they take.[272] As we have seen in the description of both Amateur Riot and ruangrupa, and how they operate they both can be seen as embodying these four characteristics. These points perhaps help to highlight how the two groups have been so successful in their respective environments, and how they have both managed to stay together for so many years.

Amateur Riot and ruangrupa found a way to subsist and reproduce oneself through collective

[271] Thanks to Harold Batista and Leah Pires for the recommendation, Jo Freeman, "The Tyranny of Structurelessness," 1973, https://www.jofreeman.com/joreen/tyranny.htm.
[272] Ibid.

means with and through expression via art, music, or other individual and/or collective initiatives within their respective urbanities. These activities worked to rehabilitate collective agency, providing the ground upon which collective decisions could be made and effected, and seeing the results in their immediate surroundings. These two groups diverged in how this collective agency addressed and extended to larger institutional forms such as the municipality or nation-state.

In Indonesia, with *reformasi* society underwent large transitions resulting in the formation of a new civil society including NGOs, journalism, art and culture. In this period of firsts, entirely new infrastructures were possible with a strong degree of fluidity within their organisation. In this context ruangrupa and its members also coopted larger organisations and their structures to provide support to it and other collectives, as evidenced by Darmawan becoming the head of Jakarta Art Council from 2006-2009 and later directing the Jakarta Biennale. Both were critical moves to provide more funding for other artist collectives and non-commercial art practices. Darmawan also shifted the biennale into a project which is closer to the city and its artists communities. Intervening in these larger organisations and coopting—or commoning—their resources provided an opportunity to shift cultural policy on a much larger scale.[273] Darmawan states:

> Over the last ten years, we have witnessed the rise of independent art groups in Java, from big cities like Jakarta, Bandung, Yogyakarta, Surabaya, and Cirebon to Jatiwangi in West Java. They emerged as new vibrant cultural centres where large-scale activities,

[273] This is also the case with other collectives in Indonesia such as Jatawagi Art Factory, whose member became mayor of the town, and their local ceramic music festival they have organized has become an important artistic and cultural site around the requalification of traditional modes of artistic and industrial heritage in the area, as well as developing collective plans for the town and surrounding area.

> such as international biennials and festivals, are taking place with a DIY spirt that connects these events to local and state infrastructure. The creation of national and international networks among art projects with critical ideas, social impact and new artistic approaches is an interesting phenomenon, which works to redefine and correct the relation between centre and periphery. Artists and cultural activists are now the negotiating partners of the government, and are allowed to participate in the decision-making process, in spaces that would otherwise be impossible to access.[274]

In contrast, Japan's political and cultural scene was much more entrenched in static institutions, engagement with this rigid institutionalism was not of interest to Amateur Riot. Matsumoto Hajime did run for local ward council in 2007, however it was without the intention of actually holding an official position. Rather, the intention was to utilise the privileges afforded to political campaigns to hold rallies and gatherings in an otherwise highly regulated public spaces. Running under the party name of Koenji ikki (Koenji Uprising), Amateur Riot invited activists to speak and held a series of concerts from their campaign truck, usually parked in front of Koenji Station.[275] Utilising these political class privileges, Amateur Riot was able to transform and appropriate public space for large unlicensed gatherings and concerts from 8:00am - 8:00pm without being harassed by the police or authorities.[276] This deftly turns the apparatus of campaigning into a tool of commoning space. Amateur Riot repurposing the spatial privileges of an individual running for office into a means to open public space to creative expression in the form of concerts. Despite actively trying not to win the seat, Hajime came close to doing

[274] Nuraini Juliastuti, "Ruangrupa: A Conversation on Horizontal Organisation," *Afterall*, Summer 2012, https://www.afterall.org/journal/issue.30/ruangrupa-a-conversation-on-horizontal-organisation.
[275] Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo*, 53.
[276] Matsumoto Hajime, interview by Magazine9, 2007, http://www.magazine9.jp/interv/hajime/hajime.php.

so—this could be due in part to Amateur Riot's strong relationship with neighbourhood. The fact that Hajime did not run for office again, even though perhaps he could have won given the strong showing despite little to no effort, underscores Amateur Riot's lack of interest in larger forms of governance in relation to its practice. While Amateur Riot maintained good relations in their local area even with the formal Shopkeepers' Association, it had a more contentious relationship with municipal authorities and the police. Instead of working within these larger structures—such as to some degree ruangrupa did—Amateur Riot attempted to shift these structures to accommodate their collective needs and desires through street protests. This attempt was characterised by their unique form of protest/gathering/performance as a means of both reinforcing and extending their community, often times with performative troupes, visual imagery, and music while simultaneously addressing a critical need or issue to/with higher authorities.

This comparison shows how Amateur Riot is not alone in its prefigurative practices, and that other collectives are working in ways which have strong parallels. The comparison has fleshed out a fuller understanding of how decisions are made in these contemporary practices in Asia and how the forms of loose self-governance work. They worked to demonstrate how prefigurative infrastructure can function as well as support an ecology for arts and alternative culture. The next section will look further at Amateur Riot's practice as it spilled out into public space, manifesting as gatherings, protests, and performances, which both brought these practices to the public as well as reinforced and extended their community.

Experimenting with Public Space

While the para-zomia references the spatial infrastructure—both individual and collective—that Amateur Riot and their community established in Koenji, this section looks at their relationship to public space, and how they worked to temporarily appropriate areas for communal initiatives that functioned as both performative events and a means of social reproduction. As public space in Tokyo is limited and highly regulated, Amateur Riot's initiatives often challenged this order through the repositioning of everyday activities such as cooking dinner, which served to both find and expand their community.

As a precursor to Amateur Riot and its development of an alternative infrastructure, Yamashita Hikaru, who was previously part of the artist collective Okagarō, had initiated Bashoppu, a serial gathering which utilised the word "shop" in its title but where nothing was bought or sold. Instead, it was an informal gathering for discussion in front of the Koenji train station. This "shop" with no walls and no commerce shifted the notion of what a "store" could be—a transformation which continued to develop after the co-founding of their first actual used clothing store, which also served a multiplicity of non-commerce related activities. Bashoppu however manifested this alternative non-shop "shop" as a vehicle to gather in public space. Taking place in front of the train station, which was a common place for locals to meet friends and then go elsewhere together, Hikaru extended that meeting into a gathering in this otherwise transitory non-space. The site of Bashoppu was also significant as it was a convenient location for friends or potential participants to stumble upon the gathering. Thus, Bashoppu was able to

function as a public experiment with different forms of being together that both reinforced who partook in the community and also potentially grew it through affinity.

The transposition of quotidian activities to take on another valence in public in a manner that contested the normative use of that space and its authority was also present in other gatherings that were more performative. In December 2007 members of Amateur Riot met near Shinjuku station to undertake Smash Christmas, cooking and eating a hot pot dinner together in the streets. When police arrived Matsumoto challenged the police officers by asking what was so disturbing about sharing food in the street. The documentation of the activity by Nakamura Yuki in his film Shirōto no ran [Amateur Riot] (2008) intersplices the question in text on the screen "But what is a public place? To whom does the city belong?"[277] This underscores how Amateur Riot transposed their own reproduction and the joy of a community dinner into public space, while challenging the fundamental "ownership" and governance of common space in a democratic society. The politics of space here are important as the neoliberal effects on the city have moved to privatise space and to control where one can be and what one can do in the ever-shrinking public space. Amateur Riot's defiance in and questioning of public space can be situated within a lineage of urban movements that contest neoliberal rationality by claiming what David Harvey articulates more broadly as a "right to the city."[278] This framing of an innate right to the space provides a similar ground to that for which Amateur Riot advocates in staking a claim to collective social reproduction in public space. These collective performances by Amateur Riot challenged the intense disciplinary regime around public space in Tokyo by producing small

[277] Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo,* 101.
[278] David Harvey, *Rebel Cities: From the Right to the City to the Urban Revolution* (New York: Verso, 2012).

temporary autonomous zones that nurture different subjectivities while simultaneously contesting larger sovereign claims to the space. This can be seen in contrast to previous collective performances that transpose other domestic maintenance activities to public space.

While performative in nature, and small in scope, these public acts of social reproduction contrast with other formal artist collectives that have repositioned quotidian actions as a means of critique. Most notable among them is the Tokyo-based art collective Hi-Red Center, which was active in the 1960s. In response to the massive urban changes in preparation for the 1964 Olympics in Tokyo, Hi-Red Center organised a satirical performance Be Clean! and Campaign to Promote Cleanliness and Order in the Metropolitan Area—commonly referred to as the Cleaning Event—wherein the members donned white coats, face masks, and gloves to clean a section of a sidewalk area in the central Ginza district. From sweeping, to polishing a fire hydrant, to washing the pavement, or using a small brush and a magnifying glass to remove small blemishes on the walkway, these actions were exaggerated in their microscopic, overly obsessive detail toward preparing the city to be a "good host" for the international visitors, evidenced by the accompanying sign they displayed in English and Japanese. "Be Clean!". These largely domestic cleaning routines that were now transposed to the street served as a critique of the government's large program of urban transformation to underscore the city's modern innovations for Japan's international post-war coming out party, yet during its duration, the action largely went unnoticed by passers-by.[279] On the one hand, then, the performance lampooned the processes of municipal beautification by intensifying the labour process at the most minute level. On the other, however,

[279] KuroDalaiJee, "Performance Collectives in 1960s Japan: With a Focus on the 'Ritual School,'" *Positions: Asia Critique* 21, no. 2 (March 1, 2013): 426, https://doi.org/10.1215/10679847-2018301.

although it functioned as symbolic gestural critique, labour in the performance was overlooked by the passersby and even complimented by the local authorities, as evidenced in one of the photos of the performance where a police officer looks on approvingly.

The symbolic performance by Hi-Red Center neatly folds artistic labour into what is considered permissible for public space, even if it does so a bit eccentrically. In contrast, Amateur Riot's Smash Christmas, by undertaking collective social reproduction in public space—in the form of cooking for one another and eating together—defied what the authorities considered acceptable. This act of sharing a meal as a performative transgression was not intended to fit into a frame of art and yet it resonates with that field. As a collective undertaking it serves multiple needs, from forming a community gathering, to a large common dinner, to experimenting with social formations in public space. It recalls other guerrilla social performative gatherings, such as the 1969 Shinjuku uprising, where a youthful crowd gathered for impromptu musical performances, eating, and drinking in the train station as a way of gathering, finding one another, and collectively defying the law as well as normative cultural and spatial structures of the city. In doing so, they sought to draw attention to their needs and demonstrate solidarity with a number of other movements such as, amongst others, student strikes, the anti-Vietnam war struggle, and the protest against the US occupation of Okinawa.[280] A more recent instantiation of such a cultural and political gathering that challenged public space as transitory was the 2011 Occupy movement, which similarly focused on social reproduction such as cooking, cleaning, and

[280] William Andrews, "The Shinjuku West Gate Underground Plaza Protest Movement, 1969 and Today: Japan's Invisible Civil Society and Phatic Silence in Urban Space," *Throw Out Your Books* (blog), September 9, 2019, https://throwoutyourbooks.wordpress.com/2019/09/09/shinjuku-west-gate-underground-plaza-protest-movement-1969-today-japans-invisible-civil-society-phatic-silence-urban-space/.

sleeping as well as daily assemblies for collective moments of discussion as a means to self-organise, to share knowledge, and to act in solidarity with other encampments. Amateur Riot was aware of the Shinjuku uprising and also later visited Occupy in New York, both of which influenced the group's later activity; however, the more intimate Smash Christmas helps to locate the early form of their collective actions in public and situates them in and against artistic performance as well as cultural and political gatherings. In doing so, the action underscored Amateur Riot's focus on transposing collective social reproduction into public space as a form of transgressive and at the same time playful means to make and sustaining community.

Other early experiments in public space conducted by Amateur Riot were more focused around a concerted political aim that would potentially affect their livelihoods and those of their fellow precariat in Koenji. Amateur Riot organised a 2006 protest against the Product Safety Electrical Appliance and Material Law which would have added burdensome restrictions on the sale of second-hand electronics and required special certification from the government. Amateur Riot utilised these second-hand electronics as a means to resist the reforms, fashioning them into a sound system to provide a demonstration of their use as well as a platform for protest. This protest, coordinated with other groups but held in Koenji, showed their collective response to national issues which affected them. On a smaller scale, there was a 2005 protest against the city ward impounding bicycles left by the Koenji train station, humorously titled "Give me my Bike Back" and a protest the same year for rent to be made free. While both issues were affecting the precariat, rather than forming part of a concerted political campaign, the protests were a vehicle for the use of public space in a different way, such as collective and individual creative

expression, that was similar to the previous performances. These protests and gatherings might attract around one-hundred friends, supporters and curious bystanders. These were hybrid forms of protest and gathering, and often involved music, all of which brought out and together a number of people who had never protested before. As we will see in the following section, this type of public protest was different from earlier political protests in Japan and were informed by the local ritual gatherings in communities. The following section sketches a loose history of political and cultural forms of gathering in public space to help situate these practices of Amateur Riot and provide a background for the type of protest gatherings that took place before March 11, 2011.

Political and Cultural Gatherings

It is important to highlight the contrast in the forms of Amateur Riot's protest with the previous protest movements in the mid-twentieth century. These include earlier large-scale protest movements against United States presence and occupation in Japan and Okinawa, such as the mass uprising against the re-signing of the U.S.-Japan Security Treaty (Anpo) in 1960 that would continue the presence of US military facilities and the potential that they could be used for military actions beyond the defence of Japan, as well as anti-Vietnam war protests later in the decade. While large-scale peaceful protests with a diversity of participants were an important part of these movements, at some of the protests there would be a small minority of protesters who would clash with the police. This was particularly evident with the student group Zengakuren (All-Japan League of Student Self-Governments), which would intentionally battle

with the police and come prepared to do so. There was various infighting between the several subgroups within Zengakuren that culminated in the United Red Army (Rengo Sekigun) killing some of its own members in a mountain hideout and a subsequent, widely-televised 10-day hostage stand-off and shootout with police in 1972. This damaged the left and associated social movements with violence in the minds of the general public. Some protests continued, notably by farmers whose land was being compulsorily acquired to build the Narita International Airport, however the events of 1972 generally marked the end of mass protests in the subsequent decades.

In addition to the stigma that tarnished protest following the United Red Army's violent purge, there were other elements of state and societal repression that sought to limit public participation in protests. Police have the right to detain people for up to 23 days without charge, and in 2011 protesters were held for an average of 11 days, during which people's absence from work could lead them to be fired.[281] Many students are concerned about being seen and stigmatised for attendance at protests, which could hurt their job prospects; consequently, fewer younger people will generally attend protests.[282] Amid this popular and student aversion, freeters, artists, musicians, cultural workers, and those on the fringes of society were critical to organising and participating in protests. While the stigma surrounding protest shows the difficulties that Amateur Riot had in organising these events, it speaks to how their hybrid form of protest including music was able to overcome the challenges of that period.

This hybrid form of protest, gathering, and concert was also influenced by the development of

[281] Manabe, *The Revolution Will Not Be Televised*, 57.
[282] Ibid., 59.

"sound demonstrations" or "sound demos." Ethnomusicologist Noriko Manabe has documented the development in Japan of "sound demos," a term coined during the 2003 Anti-Iraq War protests, as demonstrations involving music broadcast from mobile trucks, suggesting this turn to include music added to the energy of the protest and brought an additional cultural element.[283] In addition to the music a "sprechchor" or speaking chorus of call and response was also integrated into the protests, which involved a participatory form of collective voicing to amplify chorus's mutual needs and desires to the higher authorities as well as the surrounding community. The evolution of sound demos were influenced by activists participating in Pride in Europe, the Reclaim the Streets movement in the UK, and anti-corporate globalisation protests such as in Seattle, all of which occurred in the 1990s.[284] These manifestations and protests incorporated music and dance as ways of counteracting the increasingly stringent limitations on public space to "liberate the streets" for other means, as well as, in the case of Pride, a collective joy and a political presentation of the actualisation of the individual in public as a way of shifting the hegemonic heteronormative culture.[285]

Members and friends of Amateur Riot had participated in and were influenced by the emergence of sound demonstrations; however, local gathering traditions were also an important reference point. In particular, the traditional neighbourhood shrine festivals called matsuri that incorporated processions and street performances as well as shrines being carried through the

[283] Ibid., 185-186.
[284] Ibid., 175.
[285] Brian Holmes, "DIY Geopolitics: Cartographies of Art in the World," in *Collectivism After Modernism: The Art of Social Imagination After 1945*, edited by Gregory Sholette and Blake Stimson, 273–93 (Minneapolis: University of Minnesota Press, 2006).

streets. Koenji has an especially well known matsuri called Awa Odori, or fool's dance, which originated as a type of carnival with choreographed street dances and drinking brought to Koenji by economic migrants from Tokushima in the post-war period.[286] According to sociologist Yoshitaka Mori, this generative social mesh has interwoven with local culture and sound demos to become a central part of a freeter activism outside of traditional leftist politics.[287]

Another historical form of enacting different ways of being in public in order to bring about a shift in society has an important precedent in the largely urban phenomena of *ee ja nai ka* [why not?]. These were collective manifestations during a period of social and economic crisis in 1867-1869 in Japan.[288] After successive years of bad harvests only recently overcome, rising food prices, political unrest amongst competing ruling lords, the effects of the opening of trade with the US and Europe via military force, and the emergence of new religious sects led to a period of social unrest which contributed to the development of an understanding that radical social transformation was needed. This change was encapsulated in the notion of yonaoshi [remake the world].[289] In this revolutionary spirit, spontaneous mass gatherings emerged often in commercial areas of the city to share food, drink, dance, and sing, producing an atmosphere that has been likened to a carnival, all of which defied existing regimes of law and order. Ee ja nai ka was a refrain that appeared in improvised and endless songs either about the festivities or

[286] Terence Lancashire, *An Introduction to Japanese Folk Performing Arts*, (Farnham: Ashgate Publishing, 2011), 63-64.
[287] Yoshitaka Mōri, "Culture = Politics: The Emergence of New Cultural Forms of Protest in the Age of *Freeter*," *Inter-Asia Cultural Studies* 6, no. 1 (March 2005): 17–29, https://doi.org/10.1080/1462394042000326888.
[288] Many thanks to Kenji Kubota for pointing out the historical similarity. Kenji Kubota, On Amateur Riot and the post-3.11 protests, interview by Jason Waite, August 13, 2020.
[289] For an overview of the period and the development of *ee ja nai ka* in English see George M. Wilson, "Plots and Motives in Japan's Meiji Restoration," *Comparative Studies in Society and History* 25, no. 3 (July 1983): 407–27, https://doi.org/10.1017/S0010417500010525, and Takashi Miura, "The Ee Ja Nai Ka and the Meiji Restoration," *Journal of Religion in Japan* 7, no. 3 (June 14, 2019): 201–18, https://doi.org/10.1163/22118349-00703001.

lampooning local merchants that unfolded throughout the manifestations. There was not a specific political faction or ideology being advocated for in these celebrations, thereby creating ambiguity surrounding their aims and purpose. Certain scholars have considered them nonsensical while others have focused on how the everyday actions transgressed social and ethical norms, experimenting with different ways of being together.[290] Historian George M. Walker further develops an analysis of these transgressions, suggesting that

> Such efforts to defy public mores and mold new realities amount to political acts of violence against the old regime. This is so whether or not the commoners involved were subjectively trying to attack the status quo. All these new mass phenomena involved acts of radical desperation committed by people whose world view transcended the existing situation in Japan. Through the disorders in which they took part, they were attempting to design new patterns for the ultimate purpose of reintegrating Japan. The effect, they hoped, would be to realign their conception of the world with the cultural ethos through which they experience.[291]

Walker sees in the unbounded public gatherings a form of trying out different modes of relating that, in their enactment, contest the normative hegemony but more profoundly try to align a practice of living to a new moment of instability. Thus, the streets became a shared space to try different ways of being together even if each of these gatherings only lasted a few days.

[290] Ibid., 419-420.
[291] Ibid., 420.

Although what Amateur Riot organised was less bacchic than the *ee ja nai ka*, the role of music was crucial to both occasions in providing an energetic atmosphere and at times a *joie de vivre* that would mix with or in spite of a latent anger set against a backdrop of ongoing crisis. *Ee ja nai ka* could be seen to focus on engendering a more ecstatic liberation through reforming relations with one another. For Amateur Riot, by contrast, the hybrid protest gatherings and experiments in public space became sites of a loose community to come together and also to potentially expand by meeting new like minded precariat, artists, and musicians. What this focus on the historical form of *ee ja nai ka* and the neighbourhood Awa Odori festival have shown is that there are diverse political and cultural examples that Amateur Riot evoke in their actions. These examples also ground the Amateur Riot's form of gathering/protest/performance in a ways of being together in public that can have political potency, beyond just the immediate lineage of sound demos. If we can see Amateur Riot's gathering/protest/performance as developing a novel cultural practice in public space then the diversity of the traditions they draw on help us to understand how this multifaceted form has certain unique and endogenous origins. It would also be the quotidian cultural traditions that Amateur Riot was drawing on which would help to differentiate their gatherings from traditional protests of the 1960s and 1970s, that would help broaden the public appeal of joining such events as we will see in the post-3.11 context.

Super Huge Anti-Nuclear Rock Festival Demo

In the immediate period after 3.11 at the start of the nuclear disaster, social gatherings were

cancelled, while fear, sombreness, and shock produced an oppressive silence in Tokyo. The water in the city was deemed unsafe to drink, and there was concern over contamination in food. The rupture in the security of daily social reproduction touched everyone in the city, causing widespread anxiety. And yet, there was also a pervasive sense of subduedness and self-restraint in Japan that was part of the mourning for the disaster where tens of thousands died or were missing due to the earthquake and tsunami.[292] There was concern among some that this restraint was also masking the culpability and anger at the ongoing nuclear disaster. Theorist Franco 'Bifo' Berardi noted how this restraint could be seen as acquiescing to the new contaminated reality, what he called the "Fukushima effect" of people staying in the city drinking bottled water and wearing face masks but otherwise continuing life as normal.[293] This perception of acquiescence to the conditions of nuclear fallout also seemingly extended to the continuation of nuclear power as well. While there was anger at TEPCO and the nuclear industry, this was not reflected in the media or public discourse.[294] In this context of sombreness and fear, and with the city operating largely as normal much to the growing distrust of the residents, Amateur Riot proposed a *Super Huge Anti-Nuclear Rock Festival Demo* to be held April 10, 2011—the day before the one-month anniversary of the start of the disaster.

While this was not the first protest after 3.11—there were small demonstrations by the Diet—Amateur Riot's protest was unique in that it aimed to be a boisterous gathering with musicians, artists, friends, and cultural workers. Amateur Riot invited a number of musicians and

[292] Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo,* 61.
[293] Franco Berardi, *The Uprising: On Poetry and Finance* (Los Angeles: Semiotext(e), 2012), 10.
[294] Manabe, *The Revolution Will Not Be Televised*, 179.

groups to partake in the demonstration, either bringing mobile sound systems or to perform in the street or on the back of trucks. While they had expected a few thousand people, perhaps, they were overwhelmed with an estimated 15,000 people who joined, making it the largest anti-nuclear protest to date.

The protest was to begin in a local park in Koenji in western Tokyo where they were based, and then proceed through the neighbourhood and end at the small plaza in front of the Koenji station. The music framed the protest into three sections, each headed by a truck or drum corps. The demonstration included two sound trucks loaded with speakers, one with rappers and DJs including the female rapper Rumi, and Rankin Taxi, and the other with punk bands.[295] While one of the members of Amateur Riot organised the hip hop truck, the other truck was organised by a friend in a hardcore band. This more relaxed and self-organised approach was pervasive throughout the protest with different groups and performers showing up and joining in. Thousands joined in the protest/gathering/performance—from artists, cultural workers, and musicians, to neighbours, shopkeepers, families with children. The diverse gathering had an energetic and lively atmosphere, and homemade signs and costumes abounded in the crowd. Due to its length, participants could choose their own sonic environment, as trucks or the drum corps were spaced out throughout the procession.

The turnout to the 2011 protest contrasts strongly with turnouts to earlier gatherings in Koenji organised by Amateur Riot. Such as the small 2005 protest against the city ward impounding

[295] Ibid., 3.

bicycles left by the Koenji train station humorously titled "Give me my Bike Back," as well as a protest the same year for rent to be made free. These protests were not part of larger civic campaigns, rather they functioned to highlight their importance to the residents living in the neighbourhood and also provided a vehicle for the use public space for collective and individual creative expression. These protests and gatherings might attract around hundred friends, supporters and curious bystanders. The number of participants here is not qualitative but rather helps to frame the unusually large outpouring of support of the *Super Huge Anti-Nuclear Rock Festival Demo*. The collective anxiety that produced by the nuclear meltdowns, fuelled such a large outpouring of support to this demonstration that surprised even the organisers.[296] Where hundreds had showed up to these previous protests, an estimated 15,000 people joined the *Super Huge* gathering. This was driven not only by the urgency of the situation and the perception of government and corporate failure in their inability to meet the ongoing crisis, but also the lack of other means of advocating for change. The number of people who came to the demonstration also had a special significance in Japan, according to political scientist, Chigaya Kinoshita, "When 250,000 people participate in a demonstration in Germany, or 100,000 in a rally in France, it's taken for granted. But a 10,000 person turnout in Japan means that something genuinely dynamic is going on and that it's transforming Japanese society."[297] Kinoshita alludes to the greater cultural impact of Amateur Riot's demonstration in their neighbourhood and to the project of collective agency being produced in Koenji having an impact on the rest of society.

[296] Noriko Manabe, "Music in Japanese Antinuclear Demonstrations: The Evolution of a Contentious Performance Model," *The Asia-Pacific Journal Japan Focus* 11, no. 42 (October 18, 2013): 3.
[297] Julia Lesser and Clarissa Seidel, *Radioactivists - Protest in Japan after Fukushima* (Ginger and Blonde Productions, 2011).

Spatialisation of Bodies and an Irrational Politics

The diversity partaking in the protest was not without conflict. The police attempted to contain the protest to a single lane of traffic and the sidewalk, with mixed success as the massive protest snaked through Koenji. Many followed their instructions. Others undertook acts of disobedience, for example dancing, or marching outside of the boundaries. Video documentation even shows the open mocking of the authorities by performers in clown costumes.[298] The acts of disobedience that the crowd engaged in can be seen in two distinct, though overlapping, categorises. There was, first, an ecstatic disobedience—consisting of dancing and moshing, generated by the music and collective atmosphere—where participants would break the bounds of the authorities, run into the police, or climb up on objects. A second form of intentional disobedience was deployed by those who deliberately disobeyed police instructions not to walk beyond the cordon, and would occasionally push or yell at the police, or in at least one case, diverge in a traffic intersection to wave large flags.

There was a hardcore punk truck with aggressive music, organised by Anamizu Masahiko, with bands that had costumes involving blood makeup on their face.[299] This aggressive tone and more extreme form of performance concerned some and, in the diverse group of the protest, others were worried it might repel potential participants. In such a large-scale protest that included families and shopkeepers alongside artists and cultural workers, it was difficult to navigate the

[298] shivuyaku, "Anti-Nuclear Demo @ Koenji, Tokyo / 反原発高円寺デモ 2011.4.10," October 4, 2011, https://www.youtube.com/watch?v=NRFKfcNrL28.
[299] Manabe, *The Revolution Will Not Be Televised*, 179-181.

diverse needs and expressions of the group. There was discussion within Amateur Riot about the hardcore punk truck and whether they should be invited to future protests, but ultimately it was decided that it was important to include the subculture and those who express themselves through such means.[300] Those offended could join a different section of the protest with different music. This acknowledged and incorporated into the protest a form of agonism—a relation as described by Chantal Mouffe not as enemies but rather as friends who differ in opinion but share a mutual respect and recognition as being "friendly enemies."[301] Mouffe underscores the importance for "agonistic pluralism," seeing contestation and internal discussion, debate, and dissent as critical to any form of collective governance.[302] This complicates a straight-forward consensus model, understanding that there will also be differences between participants and that the expression of these differences is critical to the collective and its formation. Yet she also differentiates agonism from antagonism: whereas antagonism is a binary structure of enmity, agonism is based on adversaries who have a difference of opinion that can be sharply debated but there is an underlying respect for one another. As such, how Amateur Riot's protest actions incorporated different and sometimes competing perspectives can be seen as forms of what I call spatial agonism. As shown above in the composition of the protest Amateur Riot was able to form a space to hold both diverse musical expressions that had different underlying ideologies on how performance should be undertaken to further a movement. Moreover the space was also able to attract and hold a diverse contingent of participation from families with small children, to freeters, to the elderly.

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[300] Ibid.
[301] Chantal Mouffe, *The Democratic Paradox*, (London: Verso, 2009), 13.
[302] Ibid, 101.

For Amateur Riot there was a desire to not only contest spatial order of the city but also question the basis of what "rational" positions can be included in public debate. Japan received thirty percent of its energy from nuclear power, turning off these plants and forcing a transition to alternatives seemed impossible if not a long-term multi decade goal. With Tokyo and parts of the country shrouded in radioactive elements, Amateur Riot contested the notion that a so-called rational solution to energy needs was constitutive to making demands. This was a challenge to the normative forms of democratic participation in discourse as philosopher Jürgen Habermas elucidated in his notion of the public sphere and who is permitted to take part in public discourse.[303] Habermas sees rationality as a key underpinning to participation in the public sphere and governances, a sphere which shrank under the structuring force of "neoliberal rationality." Amateur Riot adhered to the right of the irrational, allowing the urgent and imperative rights of life to outweigh its potential conditions. As Futatsugi Shin of Amateur Riot wrote, "I think we ought to criticise, even if we don't have an alternative. I think fools should keep giving voice to their ideas."[304] Creating this space of protest is not solution-oriented space per-se. Rather it opens a process by which to begin to address urgent and critical problems. As can be seen in the description of the protest, it does not have to be an entirely rational space, but rather can be an emotional, musical, creative space that can address many senses and many different people. What this then does is form a space for a diverse heterogeneity to address concerns. When, for example, the urgent problematics are so large in scale—whether it is

[303] Jürgen Habermas, *Reason and the Rationalization of Society, Volume 1*, Translated by Thomas MacCarthy (Boston: Beacon, 2007).
[304] Brown, *Anti-Nuclear Protest in Post-Fukushima Tokyo*, 64.

nuclear power that is one third of an entire nation's energy supply, or global climate change—this critical problematic can be addressed without necessarily knowing the ends. In this way, how this space of protest sets up the conditions for an ongoing constitutive process is not determined. It can be compared to artists' projects wherein a conversation and framework for engagement is fashioned and what actually gets done is worked out bit by bit. The protest in this case can be seen as such an artistic framework.

While holding space for what is perceived as the irrational to enter public discourse, there was also a material practice at work by Amateur Riot. The act of demonstrating meant that people were also not consuming but rather making claims for a different way of life in society. For Amateur Riot, constitutive to that way of life was reducing energy consumption, underscored by their minimal living. The ethos of this reduction via recycling and reusing material was embedded in their practice in the way their para-zomia supported itself through second-hand shops. The demonstration can similarly be seen as an activity that negates material consumption and instead places bodies together for different forms of relations to emerge. While for Amateur Riot their actions were on a local scale in Koenji, this location had a history of small-scale initiatives that grew into influential forces which shaped Japan.

Situating Protest and Affinity

It was the ward in which Koenji is based, the ward of Suginami-ku, where the first petition against nuclear weapons in Japan began. It was founded by a reading group of housewives in the

area. They were particularly sensitive to the potential effects of radiation in the food supply and to themselves and others in their care network. In 1954, they founded the Suginami Petition Council Against Atomic and Hydrogen Bombs, which rapidly spread across the country, and a year later had 33 million signatures, around one third of the entire population of Japan.[305] This movement was depicted in the monumental painting *X "Petition"* (1955) by the painters Iri and Toshi Maruki and was part of the Hiroshima Panels series that they created after the war to share images of the destruction wrought by the nuclear attack on Hiroshima and its societal effects. Critically, the panels were taken around the country by the artists during a period of censorship by the US Military occupying regime, which suppressed images, personal accounts and other forms of knowledge about the nuclear attack and its effects until 1952 (the year of the US handover back to Japan). While Maruki's works were documenting and sharing information in a time of censorship, working as a form of alternative media;Amateur Riot could be seen as an extension of these practices wherein they decided to mobilise the community into making a living image of resistance to the invisible occupation of radiation and the government's and TEPCO's response. The physical neighbourhood of Koenji and the Suginami ward then becomes an important nexus for practices around social reproduction, from housewives starting the anti-nuclear petition as an extra-democratic effort to affect policy, to the Marukis' image making and circulation of these efforts as a form of slow media to replace a media during times of censorship, and on to Amateur Riot's large and diverse protest that attempted to channel the anxieties around the presence of radioactive particles into what will we later see became a large-scale social movement. This acknowledges the neighbourhood's lineage of hybrid anti-nuclear

[305] Manabe, *The Revolution Will Not Be Televised*, 37. and Jessica Hurley, *Infrastructures of Apocalypse: American Literature and the Nuclear Complex* (Minneapolis: University of Minnesota Press, 2020), 207.

activities as well as the extra-democratic ways in which this area of Tokyo has worked within itself to develop forms that have carried larger national and international effects.

The situating of the *Super Huge Anti-Nuclear Rock Festival Demo* was also critical in signalling Amateur Riot's form of prefigurative politics. As previously argued, the para-zomia in Koenji that Amateur Riot had co-constructed spatialised their *ikki* and formed a site for the experimentation in subjectivities, expression, and social reproduction that was the foundation of their collective activity. Through the mesh of initiatives in the neighbourhood, and collaboration with the existing shopowners association, the para-zomia became a site of refugee and cultural thriving for the precariat. Instead of staging the protest in front of the Diet, Prime Minister's office, or TEPCO headquarters, they situated the protest in their local neighbourhood of Koenji. Holding the protest in Koenji reaffirmed the community and their collective desires—following Amateur Riot's previous protests that they also held there and that similarly addressed local, national, or international issues—yet the scale of this protest was on a different order of magnitude.

The significance of the location denied the spatial power logic of centre/periphery. If the sovereignty in a so-called democracy does reside with the demos—the people—then holding the protest in a local neighbourhood, demanding a change to national policy works to re-establish this sovereign relation. By not protesting at the centre of legislative power, the Diet, Amateur Riot and its allies also negated that "centre" as the symbol of power and agency. Instead, the community's collective agency could be manifest and effective in Koenji and from this locality

have effects beyond it, like a centrifugal force. The site-specifity of the protest exposes the unusual and extra-democratic form of the protest itself.

One might presume that protests are a normative mode of assembly and expression, as traditional groups such as political parties, labour groups, and others use the form regularly in similar sites of perceived agency (such as in front of government or corporate buildings). However, it is important to underscore how the ontological basis of the protest is extra-democratic: in general, there is no prescribed mechanism for protest to create policy, enact laws, elect representatives or interact with the democratic structures that set the terms of governance. If there is no prescribed place for protest within democratic forms of governance, then how can we understand the democratic ontology of protest? In one way we can see protest as non-determinative, unruly assembly. Absent the formal mechanisms of governance, there are no bounds, and thus protest can take on a multiplicity of forms and impacts. The unruliness would often cause clashes with police, pushing the boundary of what is acceptable in public space.[306] It is within this disorder of music, bodies, and expression that the collective performativity of Amateur Riot is exceptional. This divergence from the traditional forms of protest—either the violence of previous generations or the strict orderliness that marks many present labour demonstrations—is one of the reasons they were able to attract such a diverse group of people who had not been to protests before.

This methodology of situating protests was utilised by Amateur Riot in subsequent protests.

[306] Noriko Manabe, "Music in Japanese Antinuclear Demonstrations: The Evolution of a Contentious Performance Model," *The Asia-Pacific Journal Japan Focus* 11, no. 42 (October 18, 2013): 12.

Instead of heading to locations of symbolic political power, Amateur Riot organised monthly protests in the everyday spaces where people congregate, hangout, eat, drink, and shop. These gatherings/performances/protests occurred in Shibuya (May 7, 2011), Shinjuku (June 11, 2011), Ginza (August 6, 2011), and Shinjuku (September 11, 2011) with similar trucks with music as in the first protest in Koenji. These subsequent gatherings/performances/protests continued to grow in participants ranging from 15,000 to 20,000 people.[307] Locating the protests in these familiar areas can be seen as a form of address that aims to focus on the public not elected representatives or government employees. These were also parts of the city where they already have strong ties such as Shinjuku, where Amateur Riot had previously held actions such as *Smash Christmas* and which was a popular hangout area for younger generations and various subcultures, along with more normative populations. Situating the protest in these well-known areas where most people had been before—as opposed to the austere area around the diet—provided a comfortable opening for first-time protesters to join or passersby to participate. As Matsumoto of Amateur Riot explicitly stated, "the places were chosen because the target audience for these demonstrations was not the government per se, but rather citizens who were either not aware of the issues regarding nuclear power or not speaking up, despite being against nuclear power."[308]

Yet I contend that the gathering/performance/protests were doing more than just providing an opportunity to voice a collective opposition to nuclear power. In what had become a largely a-political society since the backlash to the 1970s social movements and the complacency and conformity generated by the economic boom; the protests gave an opportunity to enact and

[307] Manabe, *The Revolution Will Not Be Televised*, 179.
[308] Ibid.

experiment with ways of being political in public. While these include manifesting signs and collectively voicing, they also extend to dancing, marching, and occupying space such as the street which is otherwise just traversed. The gatherings/performances/protests are an invitation to traverse the threshold of the curb and enter into the street. This is an important transgression at it already disrupts our normative way of navigating the city and where bodies can be, and moving across the threshold and into the street, into a space that one shouldn't ordinarily be occupying, affectively charges that moment. Within that charged and collective atmosphere, the gathering/ performance/protests provides a space to experiment and enact different ways of being which otherwise wouldn't be possible. Moreover these urban transitory spaces that the protests move through are transformed from transitory and often-overlooked into an affectedly charged space that is concrete and felt.

In the midst of the 3.11 crisis of nuclear meltdowns when the invisibility and potential omnipresence of nuclear radiation added to the sense of anxiety and isolation, gathering/ performance/protests provided a space of collective relief where the radioactive conditions might be there but the interpersonal space transformed the streets into a way of finding collective agency through the mutual support of being together to contest the societal fear and silence. Judith Butler calls this the "exercise of freedom," the enacting with each other of the opposite of what the oppression they oppose. Or as I have put it throughout this thesis, it offers a mode of prefiguration which can begin (or continue) in the streets, as the practice of what it means to be a participant in politics. It is, as Butler describes the "exercise of freedom", as something which is not given but rather co-constituted in our relations: "the exercise of freedom is something that

does not come from you or from me, but from what is between us, from the bond we make at the moment in which we exercise freedom together, a bond without which there is no freedom at all."[309] This prefigurative also extends beyond individual and collective experiment. For Butler this bodily enactment of assembling on the street is important in and of itself. While there might not be a consistent set of demands, the presence of the assembled bodies alone signifies, in Butler's words, that "we are not disposable, whether or not they are using words at the moment; what they say, as it were, is 'we are still here, persisting, demanding greater justice, a release from precarity, a possibility of a livable life.'"[310] Thus the presence of the body with others is always making claims to itself with others there and, as is implied in Butler's address, also to others watching. In the midst of a nuclear crisis the importance of a livable life is urgent, and yet as this thesis has shown the nuclear disaster has its roots in imperial colonisation, extractivism, and later neoliberal transformations—all of which allude to the systemic nature of the problem. As such the immediate action of going to the street to call for an end to nuclear power can be seen as synonymous with the need for a livable life. However in order for this to come about the underlying systemic problematics needed to be addressed. It is latent capacity of coming together in these gathering/performance/protests that can provide a fertile group for an unknown political horizon of the potentiality for change.

A useful point of reference for thinking through the form and politics of the gathering/ performance/protests is Pride and its many radical renegade trans, queer, drag offshoots. In

[309] Judith Butler, *Notes toward a Performative Theory of Assembly* (Cambridge, Massachusetts: Harvard University Press, 2015). 52.
[310] Ibid.. 25.

Katherine McFarland Bruce's political reading of Pride, she demarcates two types of protests: those that target the state and those that aim to shift culture.[311] While Pride used the terminology of a parade, it is a multivalent manifestation that expresses what were oppressed and shunned subjectivities through affirmative or at times conflictual presencing, taking over public space, to both highlight queer presence in society and forms of collective affective expression.

She recounts the first Pride in NYC in 1969 to commemorate the Stonewall Riots the year before, marching from Greenwich Village to Central Park—from a queer neighbourhood to a public commons, and at that, one that was also a gay male cruising spot. The march was a refusal to hide, and a demand to be accepted by society as is, putting it on display while taking over public streets. There was worry by the organisers were worried that they would be met with violence or ridicule, but according to Bruce, they found instead that the bystanders were supportive. This dynamic between participant and spectator at Pride is also important to understanding subjective expression as a political and affective collective dimension, that can be seen but also shared. Spectators, those who come to watch or support, also can take part. But what are they there to witness and what is Pride there to show? By being open, forthright, affective, fun, confrontational, Pride produces a manifestation of subjectivity and sexuality that is otherwise oppressed or looked down upon by heteronormative society. Thus, performing oneself in public space is both expressive and a means of communing. The fighting for and claiming space in public is enacted through the process of Pride (although, as Bruce acknowledges, there are also significant problematics within Pride, especially when led by white, male-centric

[311] Katherine McFarland Bruce, *Pride Parades: How a Parade Changed the World* (New York: New York University Press, 2016), 9-14.

organisers— such that there would often be separate lesbian, trans, BIPoC queer manifestations, often without municipal or police permission, to enact a similar gatherings/performances/protests of their own communities). These struggles over culture did not supersede or bypass the important parallel changes in laws and institutions, but rather recognized that changes in laws alone would not necessarily produce a cultural change. Thus, the important work that the gathering/performance/protests of Pride as well as legislative transformations since 1969 to shift culture in New York, the US, and many places beyond is clear.

Looking at Amateur Riot's gathering/performance/protest through this lens, there is a similar cultural emphasis on the focus of the transformations in the manifestations allowing space to express one's anti-nuclear opinions or to enact collective transgressions in public space. This is evidenced through the locations and forms of the gatherings, and, secondarily, in the call for non-nuclear power, making demands for change in state policy as well. Bruce asserts that Pride was fundamentally an identitarian movement focused on achieving cultural equality for the LGBTQIA+ community. The title Amateur Riot chose, *Super Huge Anti-Nuclear Rock Festival Demo*, underscores the intertwining of the cultural and political aims of the group. Amateur Riot's protests utilised the claims of a state action by placing "Anti-Nuclear" in the event's title as well as the tongue-in-cheek promise a "Super Huge Rock Festival" to attract a larger audience. Whatever the reasons for the audience to attend we can see above the transformative power of such a gathering to produce an even great cultural shift.

Major Social Movement and After Effect

As previously mentioned, Amateur Riot was one group among others organising protests during the period after 3.11. In order to avoid the myriad of protests overlapping, in October 2011 Metropolitan Coalition Against Nukes (MCAN) was formed by fourteen groups including Amateur Riot, TwitNoNukes, No Nukes More Heart and others as a platform for information-sharing.[312] This coalition morphed from an infrastructure supporting inter-group knowledge sharing into a co-organisational framework. The first joint demonstration under the heading of MCAN was held to coincide with the Global Conference for a Nuclear Power Free World that took place in Yokohama in January 2012. While there was a mixture of groups in MCAN that were either focused on more culturally-orientated protests (like Amateur Riot) or more state addressed protests in front of the Diet or government ministries, MCAN ultimately decided to focus on addressing the state as a locus for change. Together, the Coalition, organised a Friday evening protest in front of the Prime Minister's office [*Kentei*] located near the Diet and thus in an area of Tokyo that houses many government ministries and offices. The first Friday evening protest took place on 29 Match 2012 with around 300 people. Protests then continued weekly, and ultimately grew into hundreds of thousands of participants, becoming the largest mass protest movement in almost a half century in Japan.[313]

[312] Alexander James Brown, "Power Struggles: The Strategies and Tactics of the Anti-Nuclear Movement in Contemporary Tokyo" (PhD Dissertation, Wollongong, University of Wollongong, 2015), 230. Manabe, *The Revolution Will Not Be Televised*, 177.
[313] Ibid.

There were a few differences between the MCAN's organised protests and Amateur Riot's gathering/protests/performance. MCAN utilised the form of sprechchor—the call and response of crowds in unison—often without music and sometimes initiated by a musician or rapper in attendance.[314] The aim of sprechchor by MCAN was to keep the crowd engaged through the vocal participation, and by utilising a simple collective form of expression, this act would channel the unified message of the crowd. The use of the sprechchor was also less agonistic—with fewer representations of different types of subcultures performing than at Amateur Riot's gathering/performance/protest—but more inclusive of a wider audience by the organisers. This was ultimately effective at drawing large crowds and directing the collective dissent toward the government.

Arguably what mattered most of all with MCAN's protests were their scale and reach.The largest mass protest movement in fifty years in Japan resulted in nuclear power plants being completely shut down for a period and made them more difficult to re-open. The movement also helped channel a cultural shift: both making large-scale protest as an acceptable means of redress and also helping to transform the public's view on nuclear power. As nuclear power provided 30% of the energy in Japan, this turn affected large-scale infrastructure. The plants have since largely remained shut except for a handful which have met new safety guidelines that were developed in part due to political pressures. Almost a decade after the disaster, in May 2019, there are only nine of thirty-nine reactors were still operating in Japan. Other reactors such as the Fukushima Daini Nuclear Power Station will, following a decision made in July 2019, be closed

[314] Manabe has in-depth account of the shift in the protest type with MCAN and acoustic analysis of the different forms of music, rap, and sprechchor as they evolved. Manabe, *The Revolution Will Not Be Televised*, 194-233.

permanently and decommissioned, a process that will take decades. Although the widespread anti-nuclear social movement in the wake of 3.11 has yet to fully denuclearise the country, it has made the re-opening of plants, including those that pass the new safety standard, a contested issue for the first time in the history of Japan.

The prefecture of Fukushima, which houses almost twenty percent of the country's reactors that are now being permanently decommissioned, has pledged to produce only renewal energy by 2040.[315] While the Japanese government and its energy companies have not completely abandoned nuclear power, they are working through a transition and looking to reduce "dependency on nuclear power as much as possible", according to national energy plan laid out in 2018.[316] The nuclear industry's own polling even shows that a majority of citizens are still against nuclear power.[317] The government has not explicitly banned nuclear power, but the public pressure has made it difficult for the industry to continue and few reactors have reopened. The result of both the 3.11 meltdowns and the mass protest movement helped to galvanise the public to advocate for large-scale infrastructural change in the country.

What began from Amateur Riot's para-zomia with the extension of their generous platform, their network, provided an opening and a local experiment that was later picked up and made into a

[315] Justin McCurry, "Fukushima Unveils Plans to Become Renewable Energy Hub," *The Guardian*, January 5, 2020, https://www.theguardian.com/environment/2020/jan/05/fukushima-unveils-plans-to-become-renewable-energy-hub-japan.
[316] Ministry of Economy, Trade and Industry, "Fifth Strategic Energy Plan," July 2018, https://www.enecho.meti.go.jp/en/category/others/basic_plan/5th/pdf/strategic_energy_plan.pdf, 4.
[317] Kaoru Ohno, "Japanese Opinion Poll Finds That Views on Nuclear Power Turn Slightly Positive," *Japan Atomic Industrial Forum* (blog), March 25, 2020, https://www.jaif.or.jp/en/japanese-opinion-poll-finds-that-views-on-nuclear-power-turn-slightly-positive/.

national movement. This collective movement of people coming together in opposition to the government and corporations that advocated for keeping nuclear power is one of the unheralded successes of the disaster. At thirty percent of the country's output, nuclear power constituted a huge portion of energy generation, but the people persisted, and the power plants were taken offline. This transformation shows that there can be a mass-driven and quick, substantial change in infrastructure if the public wills it. Looking at the future, this shows a political agency that still rests with the crowd and the people to radically transform their future.

This efficacy also shows the very real impact that artists and cultural workers had in the period after the disaster to organize an opposition to the status quo of the catastrophic condition that had produced such a disaster. While Amateur Riot was not based in Fukushima, 3.11 necessitated a form of working under the shared conditions of nuclear fallout in order to form solidarity with the people of Fukushima, as well as understanding this contamination as a shared negative commons.

The aesthetic relationship between performance and protest here is ambiguous. While there were creative strategies, performances, and song developments in the protest, these were means towards a goal of a ban on nuclear power. Having a concerted goal has generally been seen as a negative the long legacy of the aesthetic paradigm art for arts sake that includes such critics as Clement Greenberg and Michale Fried, where subjecting art to another cause is seen

instrumentalisation of art.[318] While this Amateur Riot ultimately achieved its goal of a the nuclear ban—albeit a temporary one—this ban is not considered an artwork, rather it is understood as an outcome of social forces. However, given the Amateur Riot's involvement and instigation, perhaps this ban could be requalified as part of the process of the artwork/ performance/collective. How can we reframe larger social forms as art, and is that even necessary? Could these outcomes of legislation also be seen as art, with intention or otherwise? If so, this would indeed show the power of cultural work and art as shaping not only the local, but also the wider society around it. The large protests regarding Fukushima opened up a portal through which a different reality could be seen: one of collective action and voicing by people to address the nation-state and work to articulate a desired mode of living together.

Conclusion

In this dissertation I have argued that the catastrophic condition is caused by a loss of agency which then precipitates precarity and a propensity for disaster. This chapter has shown how Amateur Riot worked to establish a form of collective agency in order to contest the neoliberal rationality and its precaritising effects. I've demonstrated how Amateur Riot utilised a prefigurative methodology to institute material and cultural practices to counter their collective condition. Amateur Riot formed an alternative economy in the neighbourhood of Koenji to develop what I have called a para-zomia to support the precariat, musicians, and artists and allow

[318] Clement Greenberg, *The Collected Essays and Criticism: Perceptions and Judgements: 1939-1944* (Chicago: The University of Chicago, 1988).; Michael Fried. *Art and Objecthood: Essays and Reviews* (Chicago: University of Chicago Press, 1998).

spaces for cultural experiments.

While Amateur Riot does not consider itself an art collective, I have shown how their prefigurative practices that blend cultural work and life have similarities with other art collectives in the region, primarily ruangrupa in Jakarta. In particular, I have emphasised how their interventions in public space have important performative parallels to contemporary art. These performative gatherings opened up temporary autonomous zones for cultural experimentation in public space, provided an opportunity for the group to reaffirm their community and expand it, and advocated for changes in society to support fellow precarits.

In the wake of 3.11, Amateur Riot utilised this style of gathering to organise what would become the first large scale political protest against the corporate and governmental policies of nuclearisation that led to the disaster. I've shown how their performative gatherings made it comfortable for a new generation of people to protest despite the stigma of protests from the end of the new left in the 1970s. The political protests would grow to become the largest social movement in Japan since the 1960s.

Conclusion: Beyond *Michi no Oku*/End of the Land

The title of the dissertation *Michi no Oku/End of the Land* comes from the pre-colonial name of Fukushima in the seventh century that was given by the southern imperial court. As covered in the introduction this title opens a portal to recall when the area was self-governed by the indigenous Emishi people and thus had a different society and culture than today. This distinction alludes to the fact that the present hegemony has not always been in place, and that something else can emerge. The title also has embedded in it a colonial myopia. From the southern imperial perspective we can see that the notion of land equates to a dominion of imperial control and knowledge, and thus land ended at the imperial border, and on the other side of that border—Fukushima and Tohoku—was termed "the end of the land." So while the horizon of the ground continued beyond that border of control, we can surmise from the title that little was known about the area, its inhabitants and their ways of life. Beyond the imperial notion of the land lay a different relationship with the ground, the environment, and its human and non-human inhabitants, so much so that it could not be considered "land." At the finitude of land, lay a different ground.

The nuclear fallout from 3.11 that spread over parts of coastal Fukushima, and beyond, also changed relationships with the land. The extractive industry of nuclear power—that lies at the nexus of capital and the state—which was servicing Tokyo collapsed with the spectacle explosions of hydrogen in multiple reactor buildings and the subsequent silent escape of

radiation into the surrounding environment. That area which had been colonised over a millennium ago, could no longer be inhabited: the Fukushima exclusion zone had become "the end of the land." Through the practices of artists and cultural workers responding to the effects of this disaster, and the broader catastrophic condition where it is situated, this dissertation has endeavoured to show what human and non-human life is like after land ends. By unpacking the longer history of colonisation in the area, the dissertation has attempted to widen the lens of the nuclear disaster, to show that this disaster is just one of many over years due to the endemic precarity caused by colonisation. This is not to minimise the scale or importance of the nuclear disaster, rather what this wider perspective enables is a way of reading the underlying causalities of the disaster as part of a systemic social and economic construction. Thus through this more ample understanding we can see that in order to affect change and prevent future disasters, it is this underlying hegemony that needs to be altered.

As such in the idea of the end of the land is a different relationship with the future terrain. If the land has changed then it necessitates a corresponding change in way of life to relate to that new ground. This dissertation has shown that past disasters such as famine, earthquakes, and mining disasters have provoked tragedy and yet the underlying catastrophic condition was able to remain intact. The artists in this dissertation—Kota Takeuchi, Bontaro Dokuyama, Chim↑Pom— have brought into a powerful form the breadth of the horizon of the disaster across human and non-human life, the environment, and the planet at large. These artworks have generated the interpretive framework for the catastrophic condition as well as a toolkit for germinating a different reality. From the perspective of the residents of Fukushima not being known or

understood by the South is something that can be seen as continuing to this day. The question is whether, within this opacity, another way of life can begin to flourish.

What March 11, 2011 in Fukushima revealed was the underlying catastrophic condition—the legacy of the loss of collective agency and a precaritisation of life over a long period such that when a powerful event occurs the influx of energy overwhelms the environment causing a disaster with pre-existing and new detrimental effects thus intensified. These catastrophic conditions are predicated on a loss of collective agency for the inhabitants both human and non-human, with sovereignty taken over by another entity. This renders the environment and its inhabitants subject to the extraction of resources and bodies. The artists in this dissertation have both traced the historical and present-day catastrophic condition in Fukushima, but have also given us a glimpse of what a different future in the area might look like. If indeed the nuclear disaster was able to be the final calamity in this catastrophic condition then what would a post-colonial Fukushima look like? What are the possibilities that could begin beyond the end of the land?

In this new reality, artist Kota Takeuchi in his work *Take Stone Monuments Twice* has underscored the importance of the ability to read the embedded knowledge in the landscape. Through the tsunami stones and their relationship with local residents, we saw in this chapter how, during times of disaster, this inter-generational knowledge can become extraordinary in its importance and have a real impact on whether (of knowledge, of life) can overcome rupture. As Takeuchi shows us, this sensitivity to reading embedded knowledge has the ability to function

not only where we lived or grew up but also can be a technique incorporated in our everyday lives wherever we might be.

The disorienting temporality of living in low-level radiation is central to Bontaro Dokuyama's artwork that highlights the transformed landscape and its contrast with the environment. Born in Fukushima and with his family still living near the power plant, Dokuyama conveys this anxiety of living in a low-level irradiated environment through the performance *Even After 1,000 Years*. Following the forced evacuation of many people from their homes in the large Fukushima exclusion zone, the number of non-human inhabitants such as wild boars has grown, showing that the irradiated landscape can also be a nourishing location for the non-humans.[319] While the environmental as an ideal—through the lens of eden or arcadia—can be consistent with a lack of human presence, Dokuyama underscores how Fukushima has altered this ideal to potential include toxic spaces where contamination has prevented human habitation. Dokuyama's work addresses the eco-melancholy of the disaster—and his own despair—seen through the apparent dolphin suicide in *1/150*, a proxy for all of those struggling with mental health issues in the wake of the disaster and those residents who have committed suicide. Dokuyama's work is situated in this entanglement between the landscape and environment, the deep time of radioactive half-lives and a single moment that could affect human and non-human life. Instead of leaving the area after the disaster, Dokuyama returns, again and again, ending in the landscape that bridges the past of Fukushima with a future that is not yet knowable. These two artworks also dwell in

[319] Donovan Anderson, Yuki Negishi, Hiroko Ishiniwa, Kei Okuda, Thomas G. Hinton, Rio Toma, Junco Nagata, Hidetoshi B. Tamate, and Shingo Kaneko, "Introgression Dynamics from Invasive Pigs into Wild Boar Following the March 2011 Natural and Anthropogenic Disasters at Fukushima," *Proceedings of the Royal Society: Biological Sciences* 288, no. 1953 (June 30, 2021): 20210874. https://doi.org/10.1098/rspb.2021.0874.

this landscape, not just to memorialise it or question its changes, but perhaps as a reparative act. Repairing his own relationship to the changed land as well as for those of us outside of Fukushima, the realisation that the place is more than just a terrain of disaster.

This repair is very real and tangible for Dokuyama and his family who continue to live in the area. In their case, low-level radiation is not a dislocating force but rather a condition that needs to be accommodated—an uninvited guest that ultimately ends up staying to live with you. This is not meant to reduce its potential threat, but rather it is as a heuristic to approach living in a low-level radiation environment, which continues to be a daily reality for those living in the area. What does this new assemblage of landscape and environment mean for our future entanglement of life on this planet? In many ways, Dokuyama and his family are not exceptional in the sense of coexisting with contamination. Even before the nuclear meltdowns at Daiichi, people were asked to consider the risk of eating fish during pregnancy due to the large amount of mercury already present in the oceans from decades of burning coal and other industrial pollution.[320] What Dokuyama's work helps to do is to provide a different means through which we can perceive this assemblage of landscape and environment, and in beginning to see our world through this lens how a joyful co-existence can emerge.

Chim↑Pom and the Finger Pointing Worker tried to utilise ways to make sense of the enormity of this environmental disaster at its early stages, given the particular difficulties of the senseless

[320] Food and Agriculture Organization of the United Nations and World Health Organization, eds., *Report of the Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption: Rome, 25-29 January 2010*, FAO Fisheries and Aquaculture Report, no. 978 (Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption, Rome: Food and Agriculture Organization of the United Nations : World Health Organization, 2011).

form of radiation whose invisibility to the naked eye makes its magnitude and impact is hard to fathom. In the case of Chim↑Pom, the artists marked a new temporal epoch and worked with a slow affective media, namely the art exhibition, to share experience of the disaster, contesting the amnesia-inducing short media cycles. Instead, the slow affective media not only produced another type of framework for the production and reception of images but centred it in an art ecology of spaces—galleries and museums—where there can be a durational relation with the image for the viewer. This time not only produces a greater understanding of the long durée of disaster than the short news clips, but it also situates the artwork within a network of care for the images which can prolong their existence and be accessible to the public again and again.

In *Real Times* by Chim↑Pom and the actions of the Finger Pointing Worker, circulated by Kota Takeuchi, the effects of the earthquake can still be identified in the surrounding landscape and all the people seen in the landscape are wearing Tyvek suits—usually the sign of an extraordinary relationship between the human body and a threat in the landscape. In 2021, the physical infrastructure has largely been repaired and few effects of the earthquake or tsunami can be seen in the landscape. Outside of the Fukushima exclusion zone, no one wears Tyvek suits and inside the zone it is suggested by the government but not mandatory. So while the destructive force of the earthquake and tsunami can no longer be seen, the low-radioactive landscape persists. It can be easy to read these works in isolation as just dealing with a local problematic of the landscape in Fukushima. However the artistic tools Chim↑Pom and the Finger Pointing Worker develop to diagnose and contest the damaged landscape—a slow affective media and gesture beyond language—can be utilised not only for the durational nuclear disaster but also against the

catastrophic condition at large. Moreover, the artworks grapple with what it means to live and work in a damaged landscape—a condition no longer just the domain of radioactivity and industrial contamination, but with the present climatic shifts altering the environment and the conditions of survival, the damaged landscape is becoming the new reality elsewhere across the planet.

If the end of the land demands a different way of life then Amateur Riot has shown how to establish a form of collective agency in order to contest the neoliberal rationality undergirding the catastrophic condition and its precaritising effects. Utilising a prefigurative methodology, Amateur Riot has instituted collective material and cultural practices to counter their individual precarity. Amateur Riot formed an alternative economy in the neighbourhood of Koenji, which I argue can be seen as a para-zomia, an urban ecology to support the precariat, musicians, and artists and which allows spaces for cultural experiments to take place. While Amateur Riot does not consider itself an art collective, I have shown how their prefigurative practices that blend cultural work and life have similarities with other art collectives in the region, primarily ruangrupa in Jakarta. In particular, I have emphasised how their interventions in public space have important performative parallels to contemporary art. These performative gatherings opened up temporary autonomous zones for cultural experimentation in public space, provided an opportunity for the group to reaffirm their community and expand it, while also advocating for changes in society to support the fellow precariat. In the wake of the nuclear disaster, Amateur Riot utilised this style of gathering to organise what would become the first large scale political protest against the corporate and governmental policies of nuclearisation that led to the

disaster. I've shown how their performative gatherings made it comfortable for a new generation of people to protest despite the stigma of protests from the end of the new left in the 1970s. The political protests would grow to become the largest social movement in Japan since the 1960s.

Cultural Worker and the Ethical Aesthetic Matrix

In the context of the catastrophic condition the ontological position of art needs to shift. What we see in Fukushima, and more broadly with climate change, is art as a struggle for life itself. The urgency and longevity of the crises substantially shifts the stakes of art. These crises strip away an "autonomy" of art and reasserts art back into the "web of life," fundamentally altering the relationship wherein the struggle for life necessitates an art of collective survival. This struggle for existence also asks for a reconfiguration of the category of "artist" itself; within this precarious terrain, the role of art work here is more fundamental to life. Hence to underscore that entanglement of art and life, shifting to discuss the conception of culture—as a mesh of human, non-human, material life encompassing art, food, dance, music, social, and politics—can be more representative of the more broadly encompassing practices that these crises demand. Thus the term *cultural worker* firmly places the artists inside this struggle for collective human life and makes explicit its impact on environment.

A contemporary use of this term can be found in the early twentieth century in Soviet state literature referring to artists, writers, and dancers in the USSR as well as American government

discussions around depression-era state support of artists and writers in the US.[321] While opposed in ideology, both of these uses emphasised the labour aspect in the arts and its role as an occupation. After the end of the Soviet Union and under the conditions of neoliberalism which had worked to dismantle labour unions and worker solidarity, the figure of the artist was considered an ideal subject of this order using such characterisations as innovators, entrepreneurs, and as people following their passion so art isn't even real work.[322] Yet after the financial crisis of 2008 that exposed the difficulty of living without a state or union safety net there was a return of the use of the term. Cultural worker became a self-definition by artists, curators, writers, and others in the US and Europe in the wake of the dismantlement of state supports arts programs as a way to dispel this neoliberal myth that their occupation was just a hobby and as a means of creating a larger sense of solidarity across creative fields and organisations.[323] My use of the term "cultural worker" builds on this contemporary understanding of the term and how this sense of solidarity, implicitly acknowledges the broad and collaborative undertaking of art work. As labour's relationship to art and culture is accentuated, an artwork comes to be understood as a series of relations, negotiations, and processes, instead of just a finished outcome. Thus by accentuating the role of work in the artwork, it encourages a broader reading of artwork as a series of moments of ongoing production and engagement that it is always engaged in. With an emphasis on this broader

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[321] See for example Soviet Union Society for Cultural Relations with Foreign Countries, *Literature of the Peoples of the USSR* (Moscow: Voks Illustrated Almanac, 1934), 95. and United States Congress, *The Congressional Record*, vol. 83 (Washington D.C.: U.S. Government Printing Office, 1938), 820.

[322] See for example Luc Boltanski and Ève Chiapello, *The New Spirit of Capitalism* (London: Verso, 2007).; Anthony Gardner, *Politically Unbecoming: Postsocialist Art Against Democracy* (Cambridge: The MIT Press, 2015).; Sven Lütticken, *Cultural Revolution: Aesthetic Practice After Autonomy* (Berlin: Sternberg Press, 2017).

[323] Greig De Peuter and Nicole Cohen, "Emerging Labour Politics in Creative Industries," in *The Routledge Companion to the Cultural Industries*, ed. Kate Oakley and Justin O'Connor (New York: Routledge, 2015).

understanding of artwork then more attention can be paid to each step of the process, and the relations and materials in that process which get taken into consideration for the social and artistic impact of the project. As such the continuity of these moments has been a transition in and through an ethics that guides it and is also developed and experimented within the process of the practices.

One can see that it is this ethics and its coming into being that then becomes the terrain of a certain contemporary aesthetic. The *ethical aesthetic matrix* that results from these developments comes as artists and cultural workers have been involved or are even spearheading some of these movements—for example the post-3.11 mass social movement to end nuclear power in Japan, the previous anti-WTO global movement at the start of the 2000s, or the recent Black Lives Matter movement in 2020—to transform a broader culture. These experiences, or their influence on others, has helped to shift practices and the framework of meaningful art, particularly around three notions: 1. small choices in the everyday; 2. durational form; 3. attention to our cohabitations with non-humans. Within the ethical aesthetic matrix, humans—as well as non-humans—come together as audience, community, artist(s), producers, consumers, manufactures, guards, institution, and so on. Art's emphasis can be on any of these of individual or group of these relations, and the understanding of the production of meaning is advanced in and through these relations. The mere fact of collaboration alone is no longer qualitative—if it ever was—but rather the way in which it happens and continues becomes of import. As Marx notes, cooperation can simply be a byproduct of social production and can get naturally folded into the capitalist

mode of production.[324] Rather the task at hand is how can forms of working together engender and produce a different underlying relation that can contest the catastrophic conditions. The ethical aesthetic matrix then is distinct from the representational approach to art that Claire Bishop advocated for, but rather the ethical aesthetic matrix works in and through groups discussed in this dissertation such as Amateur Riot and ruangrupa, although they are not the only cultural workers generating new social and cultural relations today; we can also think of Decolonize This Place in Turtle Island/North America, or Kunci in Indonesia, or a range of other collaborations and collectives that seek to produce new forms of praxis specific to our catastrophic conditions that are at once local and global.

In order to contest the catastrophic condition, the notions of art and the artist have shifted their ground to re-emphasise the "cultural" aspect of art. The reintegration of art into culture also underscores its inextricable relationship to life. This is summarised by scientist Hal Whitehead: "Culture is another inheritance mechanism, like genes. It's another way that information can flow through a population. But culture has distinct advantages over DNA when it comes to the pace and direction of information trafficking. Whereas genetic information can only move vertically, from parent to offspring, cultural information can flow vertically and horizontally: old to young, young to old, peer to peer, no bloodlines required."[325] Situating art explicitly within the notion of culture repairs the relationship between specific geographies, language, environment, history, politics, food, and flora. This return to a sense of culture does not necessarily understand

[324] Marx, *Capital*, 439-454.
[325] Natalie Angier, "Meet the Other Social Influencers of the Animal Kingdom," *The New York Times*, May 11, 2021, https://www.nytimes.com/2021/05/07/science/animals-chimps-whales-culture.html?searchResultPosition=1.

it as a fixed and enclosed entity, but rather as a situated, porous, and evolving texture of life. Central to such a future is an understanding of how these dynamics have existed in Fukushima and Japan after 3.11. In a space such as the Fukushima exclusion zone that has been forcibly depopulated by radiation, how can the knowledge of ways of life with the environment continue across generations, and how must they change in order to maintain the fragile thread of existence.

Bibliography

Abe, Kazuhiro. "Japanese Capitalism and the Korean Minority in Japan: Class, Race, and Racism." Dissertation, University of California, 1989. https://ezproxy-prd.bodleian.ox.ac.uk:2090/dissertations-theses/japanese-capitalism-korean-minority-japan-class/docview/303780599/se-2?accountid=13042.

Acosta, Alberto. "Extractivism and Neoextractism: Two Sides of the Same Curse." In *Beyond Development: Alternative Visions from Latin America*, edited by Miriam Lang, Dunia Mokrani, and Rosa-Luxemburg-Stiftung. Amsterdam: Transnational Institute, 2013.

AFP. "More Than 130 Dolphins Beach in Japan." *The Guardian*, April 10, 2015. https://www.theguardian.com/environment/2015/apr/10/more-than-130-dolphins-beach-in-japan.

Agamben, Giorgio. *Homo Sacer*. Stanford: Stanford University Press, 1998.

———. *Means Without End*. Minneapolis: University of Minnesota Press, 2000.

Ahmed, Sara. *The Cultural Politics of Emotion*. Edinburgh: Edinburgh University Press, 2014.

Ahn, Joonhong, Catherine Carson, Mikael Jensen, Kohta Juraku, Shinya Nagasaki, and Santoru Tanaka, eds. *Reflections on the Fukushima Daiichi Nuclear Accident*. New York: Springer, 2014.

Aida, Makoto. "Makoto Aida on Chim↑Pom." *ArtAsiaPacific*, September/October 2011.

Alexander Brown and Vera C. Mackie. "Introduction: Art and Activism in Post-Disaster Japan." *The Asia-Pacific Journal Japan Focus* 13, no. 6 (February 16, 2015): 1–5.

Altbach, Philip G., ed. *Paying the Professoriate: A Global Comparison of Compensation and*

Contracts. New York: Routledge, 2012.

Althusser, Louis. *On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses*. London: Verso, 2014.

American Nuclear Society. "Protecting Against Exposure." Accessed October 27, 2021. http://nuclearconnect.org/know-nuclear/science/protecting.

Andan, Mirwan. "All for Jakarta – A Note on the Tenth Anniversary of Ruangrupa." *Inter-Asia Cultural Studies* 12, no. 4 (December 2011): 591–602. https://doi.org/10.1080/14649373.2011.603921.

Anderson, Donovan, Yuki Negishi, Hiroko Ishiniwa, Kei Okuda, Thomas G. Hinton, Rio Toma, Junco Nagata, Hidetoshi B. Tamate, and Shingo Kaneko. "Introgression Dynamics from Invasive Pigs into Wild Boar Following the March 2011 Natural and Anthropogenic Disasters at Fukushima." *Proceedings of the Royal Society: Biological Sciences* 288, no. 1953 (June 30, 2021): 20210874. https://doi.org/10.1098/rspb.2021.0874.

Andrews, Max, ed. *Land, Art: A Cultural Ecology Handbook*. Edinburgh: Royal Society for the Encouragement of Arts, Manufactures & Commerce, 2006.

Andrews, William. *Dissenting Japan: A History of Japanese Radicalism and Counterculture, from 1945 to Fukushima*. London: Hurst & Company, 2016.

———. "Residents and Activists Protest Proposed Kōenji Gentrification Plan." *Throw Out Your Books* (blog), September 25, 2018. https://throwoutyourbooks.wordpress.com/2018/09/25/residents-activists-protest-proposed-koenji-gentrification/.

———. "The Shinjuku West Gate Underground Plaza Protest Movement, 1969 and Today: Japan's Invisible Civil Society and Phatic Silence in Urban Space." *Throw Out Your*

Books (blog), September 9, 2019. https://throwoutyourbooks.wordpress.com/2019/09/09/shinjuku-west-gate-underground-plaza-protest-movement-1969-today-japans-invisible-civil-society-phatic-silence-urban-space/.

Angier, Natalie. "Meet the Other Social Influencers of the Animal Kingdom." *The New York Times*. May 11, 2021. https://www.nytimes.com/2021/05/07/science/animals-chimps-whales-culture.html?searchResultPosition=1.

ANN News. "Worker Complains About Mystery to Surveillance Cameras at Fukushima Daiichi," August 29, 2011. https://www.youtube.com/watch?v=pUWiXOgJlhM.

Anonymous. "2channel BBS." Accessed October 25, 2021. https://hato.5ch.net/test/read.cgi/lifeline/1313991721/505-604.

Aoyama, Michio. "Long-Range Transport of Radiocaesium Derived from Global Fallout and the Fukushima Accident in the Pacific Ocean Since 1953 Through 2017—Part I: Source Term and Surface Transport." *Journal of Radioanalytical and Nuclear Chemistry* 318, no. 3 (December 2018): 1519–42. https://doi.org/10.1007/s10967-018-6244-z.

Apter, Emily. "Planetary Dysphoria." *Third Text* 27, no. 1 (January 2013): 131–40. https://doi.org/10.1080/09528822.2013.752197.

Arakawa, H. "Meteorological Conditions of the Great Famines in the Last Half of the Tokugawa Period, Japan." *Papers in Meteorology and Geophysics* 6, no. 2 (1955): 101–15. https://doi.org/10.2467/mripapers1950.6.2_101.

Aristotle, and Jonathan Barnes. *The Complete Works of Aristotle: The Revised Oxford Translation*. Princeton: Princeton University Press, 1984.

Asada, Toichiro. *The Development of Economics in Japan: From the Inter-War Period to the*

2000s. London: Routledge, 2016.

Atomic Energy Society of Japan, ed. *The Fukushima Daiichi Nuclear Accident: Final Report of the AESJ Investigation Committee*. Berlin: Springer, 2015.

Badiou, Alain. *Being and Event*. London: Continuum, 2005.

Bakhtin, M. M. *Rabelais and His World*. Bloomington: Indiana University Press, 1984.

Barbagallo, Camille, Nicholas Beuret, and David Harvie, eds. *Commoning: With George Caffentzis and Silvia Federici*. London: Pluto Press, 2019.

Baxter, Stephen. *Ages in Chaos: James Hutton and the Discovery of Deep Time*. New York: Forge, 2004.

BBC. "Tepco to Pay Damages in Fukushima Suicide Case." *BBC News*, August 26, 2014. https://www.bbc.co.uk/news/world-asia-28933726.

Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press, 2010.

Berardi, Franco. *The Uprising: On Poetry and Finance*. Los Angeles: Semiotext(e), 2012.

Berghuis, Thomas J. "Ruangrupa: What Could Be 'Art to Come.'" *Third Text* 25, no. 4 (July 2011): 395–407. https://doi.org/10.1080/09528822.2011.587684.

Berlant, Lauren Gail. *Cruel Optimism*. Durham: Duke University Press, 2011.

Bestor, Theodore C. *Neighborhood Tokyo*. Stanford: Stanford University Press, 1991.

Bey, Hakim. *T.A.Z: The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism*. New York: Autonomedia, 2003.

Bishop, Claire. *Artificial Hells: Participatory Art and the Politics of Spectatorship*. London: Verso Books, 2012.

Blanchot, Maurice. *The Writing of the Disaster*. Lincoln,: University of Nebraska Press, 1995.

Boettger, Suzaan. *Earthworks: Art and the Landscape of the Sixties*. Berkeley: University of California Press, 2002.

Boetzkes, Amanda. *The Ethics of Earth Art*. Minneapolis: University of Minnesota Press, 2010.

Boltanski, Luc, and Ève Chiapello. *The New Spirit of Capitalism*. London: Verso, 2007.

Borggreen, Gunhild. "Re-Vision: Waste and Memory in Post-War Japanese Visual Art." Aomori Museum of Art, Aomori, Japan: Keio University Art Center, 2015. http://www.art-c.keio.ac.jp/site/assets/files/6376/psitohoku-proceedings-isbn978-4-9909155-0-6.pdf#page=35.

Brassier, Ray. *Nihil Unbound: Enlightenment and Extinction*. New York: Palgrave Macmillan, 2009.

Brown, Alexander. "Remembering Hiroshima and the Lucky Dragon in Chim↑Pom's Level 7 Feat. 'Myth of Tomorrow.'" *The Asia-Pacific Journal Japan Focus* 13, no. 7 (February 16, 2015). https://apjjf.org/2015/13/6/Alexander-Brown/4279.html.

Brown, Alexander James. "Power Struggles: The Strategies and Tactics of the Anti-Nuclear Movement in Contemporary Tokyo." PhD Dissertation, University of Wollongong, 2015.

———. *Anti-Nuclear Protest in Post-Fukushima Tokyo: Power Struggles*. London: Routledge, 2018.

———. "Translating Prefigurative Politics: Social Networks and Rhetorical Strategies in the Alter-Globalisation Movement." *The Translator* 26, no. 2 (2020): 117–29. https://doi.org/10.1080/13556509.2020.1750262.

Brown, Wendy. *In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West*.

New York: Columbia University Press, 2019.

Bruce, Katherine McFarland. *Pride Parades: How a Parade Changed the World*. New York: New York University Press, 2016.

Bryan-Wilson, Julia. *Art Workers: Radical Practice in the Vietnam War Era*. Berkeley: University of California Press, 2009.

Bryan-Wilson, Julia., Jennifer Gonzalez, and Dominic Willsdon. "Editors' Introduction: Themed Issue on Visual Activism." *Journal of Visual Culture* 15, no. 1 (April 14, 2016): 5–23.

Buesseler, K. O. "Fishing for Answers off Fukushima." *Science* 338, no. 6106 (October 26, 2012): 480–82. https://doi.org/10.1126/science.1228250.

Burton, W. Donald. "Peasant Struggle in Japan, 1590–1760." *The Journal of Peasant Studies* 5, no. 2 (January 1978): 135–71. https://doi.org/10.1080/03066157808438044.

Butler, Judith. *Giving an Account of Oneself*. New York: Fordham University Press, 2005.

———. *Notes Toward a Performative Theory of Assembly*. Cambridge: Harvard University Press, 2015.

———. "When Gesture Becomes Event." In *Inter Views in Performance Philosophy*, edited by Anna Street, Julien Aliot, and Magnolia Pauker, 171–91. London: Palgrave MacMillan, 2017.

Carlson, Matthew M. "Sontaku and Political Scandals in Japan." *Public Administration and Policy* 23, no. 1 (April 10, 2020): 33–45. https://doi.org/10.1108/PAP-11-2019-0033.

Carpenter, Ele. Carpenter, Ele, ed. *The Nuclear Culture Source Book*. London: Black Dog Publishing, 2016.

———."Getting Closer to Deep Time with Kota Takeuchi." *Research Z33* (blog), September 20,

2017. https://z33research.be/2017/09/ele-carpenter-getting-closer-to-deep-time-with-kota-takeuchi/.

Cassegård, Carl. *Youth Movements, Trauma and Alternative Space in Contemporary Japan*. Leiden: Global Oriental, 2014.

Chaisan, Kittisak, Jim T. Smith, Peter Bossew, Gerald Kirchner, and Gennady V. Laptev. "Worldwide Isotope Ratios of the Fukushima Release and Early-Phase External Dose Reconstruction." *Scientific Reports* 3, no. 1 (December 2013). https://doi.org/10.1038/srep02520.

Chakrabarty, Dipesh. *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton: Princeton University Press, 2000.

———. "ANTHROPOCENE TIME." *History and Theory* 57, no. 1 (March 2018): 5–32. https://doi.org/10.1111/hith.12044.

Chang, Hsiu-Luan, Yu-chia Huang, and Asia-Pacific Economic Cooperation Agricultureal Technical Cooperation Experts Group. *The Relationship Between Indigenous Animals and Humans in Apec Region*. Taipei: Chinese Society of Animal Science, 2004.

Chong, Doryun, Michio Hayashi, Kenji Kajiya, and Fumihiko Sumitomo, eds. *From Postwar to Postmodern: Art in Japan, 1945-1989*. 1st ed. Primary Documents. New York, NY: Museum of Modern Art, 2013.

Choudhary, Sofiya. "Deterministic and Stochastic Effects of Radiation." *Cancer Therapy & Oncology International Journal* 12, no. 2 (October 5, 2018). https://doi.org/10.19080/CTOIJ.2018.12.555834.

Corkill, Edan. "Are We Pointing at the Right Guy?" *The Japan Times*, March 8, 2012. https://

www.japantimes.co.jp/culture/2012/03/08/arts/are-we-pointing-at-the-right-guy-2/.

Cui, Limeng, Yasuyuki Taira, Masahiko Matsuo, Makiko Orita, Yumiko Yamada, and Noboru Takamura. "Environmental Remediation of the Difficult-to-Return Zone in Tomioka Town, Fukushima Prefecture." *Scientific Reports* 10, no. 1 (December 2020): 10165. https://doi.org/10.1038/s41598-020-66726-y.

Cybriwsky, Roman A. *Roppongi Crossing: The Demise of a Tokyo Nightclub District and the Reshaping of a Global City*. Athens: University of Georgia Press, 2011.

Danowski, Déborah, and Eduardo Batalha Viveiros de Castro. *The Ends of the World*. Cambridge: Polity, 2017.

De Angelis, Massimo. *The Beginning of History: Value Struggles and Global Capital*. London: Pluto, 2007.

De Roulet, Daniel, Anne Waldman, Silvia Federici, George Caffentzis, and Sabu Kohso. *Fukushima Mon Amour*. Brooklyn: Autonomedia, 2011.

De Wachter, Ellen Mara. "Chim↑Pom Interview with Ellen Mara De Wachter." In *Co-Art: Artists on Creative Collaboration*, 142–49. London: Phaidon, 2017.

Dean, Jodi. *The Communist Horizon*. London: Verso, 2012.

Debord, Guy. *The Society of the Spectacle*. New York: Zone Books, 1994.

Decamous, Gabrielle. *Invisible Colors: The Arts of the Atomic Age*. Cambridge: The MIT Press, 2018.

Deleuze, Gilles. *Pure Immanence: Essays on a Life*. New York: Zone Books, 2005.

Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press, 1987.

Demos, T. J. *The Migrant Image: The Art and Politics of Documentary During Global Crisis*. Durham: Duke University Press, 2013.

———. *Decolonizing Nature: Contemporary Art and the Politics of Ecology*. Berlin: Sternberg, 2017.

Derrida, Jacques. "No Apocalypse, Not Now (Full Speed Ahead, Seven Missiles, Seven Missives)." *Diacritics* 14, no. 2 (Summer 1984): 20–31.

———. "Archive Fever: A Freudian Impression." *Diacritics* 25, no. 2 (Summer 1995): 9–63.

Dickinson, Bob. "Art and Catastrophe." *Art Monthly*, January 2012.

Dokuyama, Bontaro. "Line Message with the Author," October 30, 2019.

———. "Line Message with the Author," February 17, 2020.

Drogan, Mara. "The Nuclear Imperative: Atoms for Peace and the Development of U.S. Policy on Exporting Nuclear Power, 1953-1955." *Diplomatic History* 40, no. 5 (November 2016): 948–74. https://doi.org/10.1093/dh/dhv049.

Dupont. "Nuclear Industry Protection," October 25, 2021. https://www.dupont.co.uk/personal-protection/nuclear-protective-clothing.htm.

Ehlers, Maren. "Benevolence, Charity, and Duty: Urban Relief and Domain Society During the Tenmei Famine." *Monumenta Nipponica* 69, no. 1 (2014): 55–101. https://doi.org/10.1353/mni.2014.0013.

Enwezor, Okuwi. "The Production of Social Space as Artwork." In *Collectivism after Modernism: The Art of Social Imagination after 1945*, edited by Blake Stimson and Gregory Sholette, 223–51. Minneapolis: University of Minnesota Press, 2007.

———. *Archive Fever*. Gottingen: Steidl, 2008.

Erwin, Douglas H., ed. *Deep Time: Paleobiology's Perspective*. Chicago: University of Chicago Press, 2001.

Eshun, Kodwo, and Jason Waite. "Fukushima and Visual Inquiry: Philippe Rouy Film Screening and Conversation with Jason Waite and Kodwo Eshun." Arts Catalyst, London, July 13, 2017. https://soundcloud.com/arts-catalyst/philippe-rouy-film-screening-in-depth-discussion-with-jason-waite-and-kodwo-eshun.

Fackler, Martin. "Tsunami Warnings, Written in Stone." *New York Times*, April 21, 2011.

Farris, William Wayne. *Heavenly Warriors: The Evolution of Japan's Military, 500-1300*. Cambridge: Harvard University Press, 1992.

Favell, Adrian, ed. *Before and After Superflat: A Short History of Japanese Contemporary Art 1990 - 2011*. Hong Kong: Blue Kingfisher, 2012.

Federici, Silvia. *Re-Enchanting the World: Feminism and the Politics of the Commons*. Oakland: PM Press, 2019.

———. *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. Oakland: PM Press, 2012.

Finger Pointing Worker. "Finger Pointing Worker," 2011. http://pointatfuku1cam.nobody.jp/e.html.

Flam, Jack, ed. *Robert Smithson, the Collected Writings*. Berkeley: University of California Press, 1996.

Food and Agriculture Organization of the United Nations, and World Health Organization, eds. *Report of the Joint Fao/Who Expert Consultation on the Risks and Benefits of Fish Consumption: Rome, 25-29 January 2010*. no. 978. Rome: Food and Agriculture

Organization of the United Nations : World Health Organization, 2011.

Foucault, Michel. *The Will to Knowledge: The History of Sexuality, Volume 1*. London: Penguin, 1998.

Fowler, Sherry D. *Accounts and Images of Six Kannon in Japan*. Honolulu: University of Hawai'i Press, 2016. https://doi.org/10.21313/hawaii/9780824856229.001.0001.

Free, Dan. *Early Japanese Railways 1853-1914*. Tokyo: Tuttle Publishing, 2012.

Freeman, Jo. "The Tyranny of Structurelessness," 1973. https://www.jofreeman.com/joreen/tyranny.htm.

French, Howard. "The Pretenders." *New York Times*, December 3, 2000, sec. Magazine. https://archive.nytimes.com/www.nytimes.com/library/magazine/home/20001203mag-french.html.

Friday, Karl F. "Pushing beyond the Pale: The Yamato Conquest of the Emishi and Northern Japan." *Journal of Japanese Studies* 23, no. 1 (1997): 1–24. https://doi.org/10.2307/133122.

Fried, Michael. *Art and Objecthood: Essays and Reviews*. Chicago: University of Chicago Press, 1998.

Friedman, Julia. "Chim↑Pom on Fukushima: 'Real Times.'" *Julia Friedman: Contemporary Art and Art History* (blog). Accessed March 12, 2018. http://juliafriedman.net/?p=1843.

Fujinawa, Akihiko, Takeshi Kamoshida, Atsushi Tanase, Kazuki Tanimoto, Youichi Nakamura, and Kazuo Kontani. "Reconsideration of the 1900 Explosive Eruption at Adatara Volcano, Northeastern Japan." *Bulletin of the Volcanological Society of Japan* 51, no. 5 (2006): 311–25. https://doi.org/10.18940/kazan.51.5_311.

Fukuyama, Francis. *The End of History and the Last Man*. New York: Free Press, 1992.

Furuhata, Yuriko. "Returning to Actuality: Fukeiron and the Landscape Film." *Screen* 48, no. 3 (January 1, 2007): 345–62. https://doi.org/10.1093/screen/hjm034.

Gardner, Anthony. *Politically Unbecoming: Postsocialist Art Against Democracy*. Cambridge: The MIT Press, 2015.

Garnier-Laplace, Jacqueline, Karine Beaugelin-Seiller, Claire Della-Vedova, Jean-Michel Métivier, Christian Ritz, Timothy A. Mousseau, and Anders Pape Møller. "Radiological Dose Reconstruction for Birds Reconciles Outcomes of Fukushima with Knowledge of Dose-Effect Relationships." *Scientific Reports* 5, no. 1 (December 2015): 16594. https://doi.org/10.1038/srep16594.

Garratt, Colin, and Max Wade-Matthews. *Illustrated Book of Steam and Rail*. Leicester: Anness Publishing, 2014.

Gibson-Graham, J. K. *A Postcapitalist Politics*. Minneapolis: University of Minnesota Press, 2006.

———. *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*. Minneapolis: University of Minnesota Press, 2006.

Gleason, Alan. "Nihilist Moralists for a Traumatized Japan: Chim↑Pom's 'Real Times.'" *Artscape Japan*, August 2011. http://www.dnp.co.jp/artscape/eng/ht/1108.html.

Gordon, Andrew. "New and Enduring Dual Structures of Employment in Japan: The Rise of Non-Regular Labor, 1980s–2010s." *Social Science Japan Journal* 20, no. 1 (February 1, 2017): 9–36. https://doi.org/10.1093/ssjj/jyw042.

Graeber, David. *Possibilities: Essays on Hierarchy, Rebellion, and Desire*. Oakland: AK Press,

2007.

Gramsci, Antonio. *Selections from Prison Notebooks*. New York: International Publishers, 1971.

Grant, Rachel, Anna Savirina, and Will Hoppitt. "Offshore Earthquakes Do Not Influence Marine Mammal Stranding Risk on the Washington and Oregon Coasts." *Animals* 8, no. 2 (January 26, 2018): 18. https://doi.org/10.3390/ani8020018.

Greenberg, Clement. *The Collected Essays and Criticism: Perceptions and Judgements: 1939-1944*. Edited by John O'Brien. Vol. 1. Chicago: The University of Chicago, 1988.

Greenpeace. "Fukushima Daiichi 2011-2021: The Decontamination Myth and a Decade of Human Rights Violations." Greenpeace, March 2021. https://www.greenpeace.org/static/planet4-japan-stateless/2021/03/ff71ab0b-finalfukushima2011-2020_web.pdf.

Habermas, Jürgen. *The Theory of Communicative Action: Reason and the Rationalization of Society, Volume 1*. Translated by Thomas MacCarthy. Boston: Beacon, 2007.

Hajime, Matsumoto. Interview by Magazine9, 2007. http://www.magazine9.jp/interv/hajime/hajime.php.

———. *Binbōnin No Gyakushū: Tada De Ikiru Hōhō [Counter-Attack of the Poor: How to Live for Free]*. Tokyo: Chikuma shobō, 2008.

———. Interview by Jason Waite. Translated by Kenji Kubota, March 21, 2017.

Halden, Grace. *Three Mile Island: The Meltdown Crisis and Nuclear Power in American Popular Culture*. New York: Routledge, 2017.

Haley, John. "Rivers and Rice." *The Journal of Japanese Studies* 36, no. 2 (Summer 2010): 313–49.

Hall, Stuart. *The Hard Road to Renewal: Thatcherism and the Crisis of the Left*. London: Verso,

1988.

Hane, Mikiso. *Modern Japan: A Historical Survey*. Boulder: Westview Press, 1986.

Hanihara, Kazuro. "Emishi, Ezo and Ainu: An Anthropological Perspective." *Japan Review*, no. 1 (1990): 35–48.

Haraway, Donna. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press, 2016.

Hardt, Michael, and Antonio Negri. *Empire*. Cambridge: Harvard University Press, 2003.

———. *Assembly*. New York: Oxford University Press, 2017.

Harney, Stefano, and Fred Moten. From Cooperation to Black Operation a Conversation with Stefano Harney and Fred Moten on the Undercommons, April 2016. https://transversal.at/blog/From-cooperation-to-black-operation.

Harvey, David. *A Brief History of Neoliberalism*. Oxford: Oxford University Press, 2011.

———. *Rebel Cities: From the Right to the City to the Urban Revolution*. New York: Verso, 2012.

Hayek, Friedrich. *The Collected Works of F.A Hayek*. Edited by Chiaki Nishiyama. 10 vols. Tokyo: Shunjusha, 1986.

Hebbert, Michael, and Norihiro Nakai. "Deregulation of Japanese Planning in the Nakasone Era." *The Town Planning Review* 59, no. 4 (October 1988): 383–95.

Hecht, Gabrielle. *Being Nuclear: Africans and the Global Uranium Trade*. Cambridge: The MIT Press, 2014.

Hegel, Georg Wilhelm Friedrich. *Aesthetics: Lectures on Fine Art*. Translated by Thomas Malcolm Knox. Oxford: Clarendon Press, 2010.

———. *Elements of the Philosophy of Right*. Translated by Allen W. Wood and Hugh Barr Nisbet. Cambridge: Cambridge University Press, 2011.

Hein, Laura Elizabeth. "Energy and Economic Policy in Postwar Japan, 1945-1960." Dissertation, The University of Wisconsin, 1986.

Hewlett, Richard G., Francis Duncan, Jack M. Holl, and Oscar E. Anderson, eds. *A History of the United States Atomic Energy Commission*. Berkeley: University of California Press, 1989.

Hirano, Katsuya. "Politics and Poetics of the Body in Early Modern Japan." *Modern Intellectual History* 8, no. 3 (November 2011): 499–530. https://doi.org/10.1017/S1479244311000333.

Hiroko, Takeda. "Structural Reform of the Family and the Neoliberalisation of Everyday Life in Japan." *New Political Economy* 13, no. 2 (June 2008): 153–72. https://doi.org/10.1080/13563460802018224.

Hirsch, Nikolaus and Jason Waite. *Don't Follow the Wind*. Berlin: Sternberg, 2021.

Hjorth, Larissa, Sarah Pink, Kirsten Sharp, and Linda Williams. *Screen Ecologies: Art, Media, and the Environment in the Asia-Pacific Region*. Cambridge: The MIT Press, 2016.

Hollingsworth, J. B. *The Illustrated Encyclopedia of North American Locomotives: A Historical Directory of America's Greatest Locomotives from 1830 to the Present Day*. New York: Crescent Books, 1984.

Holmes, Brian. "DIY Geopolitics: Cartographies of Art in the World." In *Collectivism After Modernism: The Art of Social Imagination After 1945*, edited by Gregory Sholette and Blake Stimson, 273–93. Minneapolis: University of Minnesota Press, 2006.

Hopson, Nathan. “Tohoku as Postwar Thought: Regionalism, Nationalism and Culturalism in Japan’s Northeast.” PhD Dissertation, University of Pennsylvania, 2012.

———. “Systems of Irresponsibility and Japan’s Internal Colony.” *The Asia-Pacific Journal Japan Focus* 11, no. 52 (December 27, 2013): 1–13.

———.“‘Christopher Noss’ Tohoku and “Survey of Rural Fukushima”: Portraits of Tōhoku a Century Before March 11, 2011.’” *Asian Cultural Studies*, no. 42 (March 2016).

———. *Ennobling Japan’s Savage Northeast: Tohoku as Postwar Thought, 1945-2011*. Cambridge: Harvard University Asia Center, 2017.

Hudson, Mark. *Ruins of Identity: Ethnogenesis in the Japanese Islands*. Honolulu: University of Hawai’i Press, 1999. https://www.degruyter.com/doi/book/10.21313/9780824864194.

Hurley, Jessica. *Infrastructures of Apocalypse: American Literature and the Nuclear Complex*. Minneapolis: University of Minnesota Press, 2020.

Imamura, Akitune. “Effects of Volcanic Dust on Solar and Terrestrial Radiations, with Special Reference to the Causes of the Tenpo and Tenmei Famines.” *Proceedings of the Japan Academy* 21, no. 3–10 (1945): 382–84. https://doi.org/10.2183/pjab1945.21.382.

Investigation Committee on the Accident at Fukushima Nuclear. “Final Report on the Accident at Fukushima Nuclear Power Stations of Tokyo Electric Power Company,” July 23, 2012. https://www.cas.go.jp/jp/seisaku/icanps/eng/final-report.html.

Ishida, Munehisa. “The Changing Face of Shibuya: Renewal Speeds up Shift from Cultural Center to It Hub.” *The Mainichi*, January 7, 2020. https://mainichi.jp/english/articles/20200106/p2a/00m/0bu/022000c.

Itoh, Makoto. “Assessing Neoliberalism in Japan.” In *Neoliberalism: A Critical Reader*, by

Alfredo Saad-Filho and Deborah Johnston, 244–51. London: Pluto Press, 2005.

Iwaki Coal and Fossil Museum. *Joban Coalfield Development Chronology*. November 15, 2015. Museum display.

Jacobs, Robert. "The Radiation That Makes People Invisible: A Global Hibakusha Perspective." *The Asia-Pacific Journal Japan Focus* 12, no. 31 (July 28, 2014). https://apjjf.org/-Robert-Jacobs/4157/article.pdf.

Jameson, Fredric. "The Dialectics of Disaster." *South Atlantic Quarterly* 101, no. 2 (April 1, 2002): 297–304. https://doi.org/10.1215/00382876-101-2-297.

———. *Archeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso, 2005.

———. *Postmodernism, or, the Cultural Logic of Late Capitalism*. London: Verso, 2008.

Japan Times. "65% of Fukushima Evacuees Have No Intention of Returning Home: Survey." *Japan Times*, November 28, 2020. https://www.japantimes.co.jp/news/2020/11/28/national/fukushima-evacuees-survey/.

Järvisalo, J., and N. E. Saris. "Action of Propranolol on Mitochondrial Functions-Effects on Energized Ion Fluxes in the Presence of Valinomycin." *Biochemical Pharmacology* 24, no. 18 (September 15, 1975): 1701–5. https://doi.org/10.1016/0006-2952(75)90009-x.

Juliastuti, Nuraini. "Ruangrupa: A Conversation on Horizontal Organisation." *Afterall*, Summer 2012. https://www.afterall.org/journal/issue.30/ruangrupa-a-conversation-on-horizontal-organisation.

Kageyama, Yuri. "Stigmatized Nuclear Workers Quit Japan Utility." *Associated Press*, July 10, 2014. https://apnews.com/article/684588dbe6a4487ebe23fc8b51d130d7.

Kai, Kenji, Hisashi Kitano, Chinatsu Shimizu, and Kieko Tamura. *Activity Report of the Center for Remembering 3.11*. Sendai: Sendai Mediatheque, 2015.

Kainuma, Hiroshi. *"Fukushima" Ron: Genshiryokumura Wa Naze Umareta No Ka*. Tokyo: Seidosha, 2011.

———. "Encyclopaedia of the Fukushima Daiichi NPPs Decommissioning." Forign Correspondents' Club of Japan, July 21, 2016. https://www.youtube.com/watch?v=oBp_nXPHszE.

Kaiser, Philipp, and Miwon Kwon, eds. *Ends of the Earth: Land Art to 1974*. Los Angeles: The Museum of Contemporary Art, 2012.

Karatani, Kōjin. *Origins of Modern Japanese Literature*. Durham: Duke University Press, 1993.

Kawanishi, Hidemichi. *Tohoku: Japan's Constructed Outland*. Leiden: Brill, 2016.

Kazumasa, Nishioka. "岡本太郎壁画に原発の絵付け足し　お騒がせ集団." *Asahi*, May 27, 2011. http://www.asahi.com/culture/news_culture/TKY201105270230.html.

Keisuke, Narita. "Email with the Author," October 9, 2020.

Kellner, Douglas, and Sean Homer, eds. *Fredric Jameson: A Critical Reader*. New York: Palgrave Macmillan, 2004.

Kester, Grant H. *The One and the Many: Contemporary Collaborative Art in a Global Context*. Durham: Duke University Press, 2011.

Kochi, Yoshiaki. "Regionalism and Endogenous Development Theory: A Point of View for the Analysis of Local Industry." Alternative: Institute for the Study of Humanities & Social Sciences, Doshisha University, May 31, 2017. https://doi.org/10.14988/pa.2017.0000015465.

Koen, Susan, Nina Swaim, and Friends. *Aint No Where We Can Run: Handbook for Women on the Nuclear Mentality*. Norwich: WAND, 1980.

Kogure, Yukio. 道ばたの神々 *[Gods of the Roadside]*. Tokyo: Sanshudo, 1981.

Kohso, Sabu. "Nuclear Energy and the Commons - A Workshop." Arts Catalyst, London, 2017. https://www.artscatalyst.org/nuclear-energy-and-commons-%E2%80%93-workshop.

———. *Radiation and Revolution*. Durham: Duke University Press, 2020.

Kohso, Sabu, and Jason Waite. "Confronting a Catastrophic World." Arts Catalyst, London, May 31, 2017. https://soundcloud.com/arts-catalyst/sabu-kohso-and-jason-waite-confronting-a-catastrophic-world.

Koji, Aoki. *Hyaskusho Ikki No Nenjiteki Kenkyu*. Tokyo, 1966.

Kubota, Kenji. On Amateur Riot and the Post-3.11 Protests. Interview by Jason Waite, August 13, 2020.

KuroDalaiJee. "Performance Collectives in 1960s Japan: With a Focus on the 'Ritual School.'" *Positions: Asia Critique* 21, no. 2 (March 1, 2013): 417–49. https://doi.org/10.1215/10679847-2018301.

Kwon, Miwon. *One Place After Another: Site-Specific Art and Locational Identity*. Cambridge, Massachusetts: MIT Press, 2002.

Lambert-Beatty, Carrie. "Make-Believe: Parafiction and Plausibility." *October* 129 (Summer 2009): 51–84.

Lancashire, Terence. *An Introduction to Japanese Folk Performing Arts*. Farnham: Ashgate Publishing, 2011.

Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. New York:

Oxford University Press, 2007.

Lerner, Steve. *Sacrifice Zones: The Front Lines of Toxic Chemical Exposure in the United States*. Cambridge: The MIT Press, 2012.

Lesser, Julia, and Clarissa Seidel. *Radioactivists: Protest in Japan after Fukushima*. Ginger and Blonde Productions, 2011.

Leuraud, Klervi, David B Richardson, Elisabeth Cardis, Robert D Daniels, Michael Gillies, Jacqueline A O'Hagan, Ghassan B Hamra, et al. "Ionising Radiation and Risk of Death from Leukaemia and Lymphoma in Radiation-Monitored Workers (Inworks): An International Cohort Study." *The Lancet Haematology* 2, no. 7 (July 2015): e276–81. https://doi.org/10.1016/S2352-3026(15)00094-0.

Lewis, Adam Gary. "Imagining Autonomy on Stolen Land: Settler Colonialism, Anarchism and the Possibilities of Decolonization?" *Settler Colonial Studies* 7, no. 4 (October 2, 2017): 474–95. https://doi.org/10.1080/2201473X.2016.1241211.

Lind, Maria, ed. *The Greenroom: Reconsidering the Documentary and Contemporary Art, 1 ; [On the Occasion of the Exhibition "The Greenroom: Reconsidering the Documentary and Contemporary Art, Presented at the Center for Curatorial Studies and Hessel Museum of Art, Bard College, September 26, 2008 - February 1, 2009]*. Berlin: Sternberg Press, 2008.

Loganovsky, K. N., and T. K. Loganovskaja. "Schizophrenia Spectrum Disorders in Persons Exposed to Ionizing Radiation as a Result of the Chernobyl Accident." *Schizophrenia Bulletin* 26, no. 4 (January 1, 2000): 751–73. https://doi.org/10.1093/oxfordjournals.schbul.a033492.

Loganovsky, K.N., and T.K. Loganovskaja. "Psychiatric Legacy of Chernobyl: Fukushima Projections." *European Psychiatry* 28 (January 2013): 1. https://doi.org/10.1016/S0924-9338(13)76373-9.

Longkumer, Arkotong, and Michael Heneise. "The Highlander." *The Highlander: Journal of Highland Asia* 1, no. 1 (December 21, 2019): 1–18. https://doi.org/10.2218/thj.v1.2019.4185.

Lütticken, Sven. *History in Motion: Time in the Age of the Moving Image*. Berlin: Sternberg Press, 2013.

———. *Cultural Revolution: Aesthetic Practice After Autonomy*. Berlin: Sternberg Press, 2017.

———."Apocalypse (Not) Now." *The Nordic Journal of Aesthetics* 24, no. 49–50 (2016).

———.Lütticken, Sven. "Shattered Matter, Transformed Forms: Notes on Nuclear Aesthetics, Part 1." *E-Flux Journal*, no. 94 (October 2018). https://www.e-flux.com/journal/94/221035/shattered-matter-transformed-forms-notes-on-nuclear-aesthetics-part-1/.

———.Lütticken, Sven. "Shattered Matter, Transformed Forms: Notes on Nuclear Aesthetics, Part 2." *E-Flux Journal*, no. 96 (January 2019). https://www.e-flux.com/journal/96/243057/shattered-matter-transformed-forms-notes-on-nuclear-aesthetics-part-2/.

———.Lütticken, Sven. *Objections, Volume 1: Forms of Abstraction*. Berlin: Sternberg Press, 2021.

Lützeler, Ralph. "Population Increase and 'New-Build Gentrification' in Central Tokyo." *Erdkunde* 62, no. 4 (December 2008): 287–99.

Maeda, Masaharu, and Misari Oe. "Mental Health Consequences and Social Issues After the Fukushima Disaster." *Asia Pacific Journal of Public Health* 29, no. 2 (March 2017):

36S-46S. https://doi.org/10.1177/1010539516689695.

Maeda, Masaharu, Misari Oe, Evelyn Bromet, Seiji Yasumura, and Hitoshi Ohto. "Fukushima, Mental Health and Suicide." *Journal of Epidemiology and Community Health* 70, no. 9 (September 2016): 843–44. https://doi.org/10.1136/jech-2015-207086.

Mainichi Japan. "No Connection Between Mass Strandings of Cetaceans, Powerful Quakes: Research," October 14, 2018. https://mainichi.jp/english/articles/20181013/p2a/00m/0na/036000c.

Manabe, Noriko. "Music in Japanese Antinuclear Demonstrations: The Evolution of a Contentious Performance Model." *The Asia-Pacific Journal Japan Focus* 11, no. 42 (October 18, 2013): 1–36.

———. *The Revolution Will Not Be Televised: Protest Music After Fukushima*. New York: Oxford University Press, 2015.

Maruyama, Masao. *Studies in Intellectual History of Tokugawa Japan.* Princeton: Princeton University Pres, 1974.

Marx, Karl. *Capital: A Critique of Political Economy, Volume 1*. London: Penguin, 1981.

Matsumura, Hirofumi, and Yukio Dodo. "Dental Characteristics of Tohoku Residents in Japan: Implications for Biological Affinity with Ancient Emishi." *Anthropological Science* 117, no. 2 (2009): 95–105. https://doi.org/10.1537/ase.080325.

Mbembe, Achille. "Necropolitics." *Public Culture* 15, no. 1 (2003): 11–40.

———. *Necropolitics*. Durham: Duke University Press, 2019.

McCulloch, John G. "The History of the Development of Melt Blowing Technology" OS-8, no. 1 (March 1, 1999).

McCurry, Justin. “South Korea Compares Japan’s ‘Rising Sun’ Flag to Swastika as Olympic Row Deepens.” *The Guardian*, October 29, 2019. https://www.theguardian.com/world/2019/oct/29/south-korea-compares-japans-rising-sun-flag-to-swastika-as-olympic-row-deepens.

———. “Fukushima Unveils Plans to Become Renewable Energy Hub.” *The Guardian*, January 5, 2020. https://www.theguardian.com/environment/2020/jan/05/fukushima-unveils-plans-to-become-renewable-energy-hub-japan.

McKee, Yates. *Strike Art: Contemporary Art and the Post-Occupy Condition*. London: Verso, 2016.

McNeill, John Robert. *Something New Under the Sun: An Environmental History of the World in the 20th Century*. London: Penguin, 2001.

Merleau-Pony, Maurice. *The Visible and the Invisible*. Evanston: Northwestern University Press, 1968.

Mill, John Stuart. *On Liberty*. Penguin Classics. Harmondsworth: Penguin, 1974.

Ministry of Economy, Trade and Industry. “Fifth Strategic Energy Plan,” July 2018. https://www.enecho.meti.go.jp/en/category/others/basic_plan/5th/pdf/strategic_energy_plan.pdf.

Misselhorn, Catrin. *Collective Agency and Cooperation in Natural and Artificial Systems: Explanation, Implementation and Simulation*. Berlin: Springer, 2015.

Mitchell, W. J. T., ed. *Landscape and Power*. Chicago: University of Chicago Press, 2002.

Miura, Takashi. “The Ee Ja Nai Ka and the Meiji Restoration.” *Journal of Religion in Japan* 7, no. 3 (June 14, 2019): 201–18. https://doi.org/10.1163/22118349-00703001.

Møller, Anders Pape, I. Nishiumi, and Timothy A. Mousseau. “Cumulative Effects of

Radioactivity from Fukushima on the Abundance and Biodiversity of Birds." *Journal of Ornithology* 156, no. S1 (December 2015): 297–305. https://doi.org/10.1007/s10336-015-1197-2.

Møller, Anders Pape, and Timothy A. Mousseau. "Interactive Effects of Ionizing Radiation and Climate Change on the Abundance of Breeding Birds." *Ecological Indicators* 99 (April 2019): 178–82. https://doi.org/10.1016/j.ecolind.2018.12.031.

Moore, Jason W. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso, 2015.

Mōri, Yoshitaka. "Culture=Politics: The Emergence of New Cultural Forms of Protest in the Age of Freeter." *Inter-Asia Cultural Studies* 6, no. 1 (March 2005): 17–29. https://doi.org/10.1080/1462394042000326888.

———. "New Art and Culture in the Age of Freeter in Japan: On Young Part Time Workers and the Ideology of Creativity." *KONTUR: Culture, History, Politics* 20 (December 23, 2010): 48–53.

———. "New Collectivism, Participation and Politics After the East Japan Great Earthquake." *World Art* 5, no. 1 (January 2, 2015): 167–86. https://doi.org/10.1080/21500894.2015.1047038.

———. Shiroto No Ran and the Post 3.11 Protest Movement. Interview by Jason Waite, August 18, 2020.

Morris-Suzuki, Tessa. "The Invention and Reinvention of 'Japanese Culture.'" *The Journal of Asian Studies* 54, no. 3 (August 1995): 759–80.

Mouffe, Chantal. *The Democratic Paradox*. London: Verso, 2009.

Mundt, Lisa. "Back to Politics: Artistic Disobedience in the Wake of 'Fukushima.'" In *Literature and Art after "Fukushima": Four Approaches*, 77–108. Berlin: EB-Verlag, 2014.

Naess, Arne. "Spinoza and the Deep Ecology Movement." In *The Selected Works of Arne Naess*, edited by Alan Drengson, 2662–87. Dordrecht: Springer, 2005. https://doi.org/10.1007/978-1-4020-4519-6_121.

Nagahiro, Toshitaka. "Japan's Coal Cartels in the Interwar Period." Frankfurt, 2014. http://www.worldbhc.org/files/full%20program/A6_B6_JapanscoalCartelsintheinterwarperiod_ToshitakaNagahiro_.pdf.

Nakahira, Takuma, Masao Adachi, and Yusuke Nakahara. "On Landscape." In *From Postwar to Postmodern: Art in Japan, 1945-1989*, edited by Doryun Chong, Michio Hayashi, Kenji Kajiya, and Fumihiko Sumitomo, 233–38. Primary Documents. New York: Museum of Modern Art, 2013.

Naito, Daisuke, Ryan Sayre, Heather Swanson, and Satsuki Takahashi, eds. *To See Once More the Stars: Living in a Post-Fukushima World*. Santa Cruz: New Pacific Press, 2014.

Namio, Egami. *The Formation of the People and the Origin of the State in Japan*. 23. Tokyo: Memoirs of the Tokyo Bunko, 1964.

Nancy, Jean-Luc. *After Fukushima: The Equivalence of Catastrophes*. New York: Fordham University Press, 2015.

Neimanis, Astrida, and Rachel Loewen Walker. "Weathering: Climate Change and the 'Thick Time' of Transcorporeality." *Hypatia* 29, no. 3 (June 2014): 558–75. https://doi.org/10.1111/hypa.12064.

Nelson, Sara. "Mystery Of Mass Japanese Dolphin Deaths Trigger Earthquake Speculation."

Huffington Post UK, April 13, 2015. https://www.huffingtonpost.co.uk/2015/04/13/dolphins-mystery-mass-japanese-dolphin-deaths-trigger-earthquake_n_7054800.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAACe_DA0t-ARE8QS3ocigPOZgIVD8vEW-p7y2ojJ5ysK0wvk-Lcz8fXzDOJjQMg80CNwsPJElOW5JisgMot3k601Zwu9QGl6bFS8DQYufSdvvB74uz76STtyNPBZe1eByRblWeyAFyXFd4urRswItrVL5mSKQ3njbd20RcI8TeZUY.

Nishiyama, Chiaki. *Nihon Keizai, Hontō Wa Dō Na No Ka [The Japanese Economy]*. Tokyo: PHP Kenkyūjo, 1987.

Nishizawa, Tamotsu, and Yukihiro Ikeda. *From New Liberalism to Neoliberalism*. New York: Oxford University Press, 2017. https://doi.org/10.1093/acprof:oso/9780190676681.003.0005.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge: Havard University Press, 2011.

Obinger, Julia. "Aufstand Der Amateure!: Alternative Lebensstile Als Aktivismus in Urbanen Räumen Japans," 2013. https://doi.org/10.5167/UZH-87959.

Ofuji, Kenta. "Fukushima's Non-Nuclear Power Plants: Their History, Damage by Disasters, and Prospects for the Future." *Energy & Environment* 24, no. 5 (October 1, 2013): 711–25.

Ohba, Kyoka. "Report on the Basic Survey on Disaster Recovery on Eight Towns and Villages in Futaba-Gun." Disaster Recovery Research Institute Edition. Fukushima City: Fukushima University, February 4, 2012. https://www.oecd-nea.org/rp/meetings/ISTC-STCU/docs/5-feb-fukushima/13%20K_Oba(Japan)_English.pdf.

Ohno, Kaoru. "Japanese Opinion Poll Finds That Views on Nuclear Power Turn Slightly

Positive." *Japan Atomic Industrial Forum* (blog), March 25, 2020. https://www.jaif.or.jp/en/japanese-opinion-poll-finds-that-views-on-nuclear-power-turn-slightly-positive/.

Okano, Ichiro, Yuki Midorikawa, Nobumasa Kushima, Yui Watanabe, Takuya Sugiyama, Katsutaka Mitachi, Kazuaki Shinohara, Takatoshi Sawada, and Katsunori Inagaki. "Penetrating Anorectal Injury Caused by a Wild Boar Attack: A Case Report." *Wilderness & Environmental Medicine* 29, no. 3 (September 2018): 375–79. https://doi.org/10.1016/j.wem.2018.02.007.

Orui, Masatsugu, Yuriko Suzuki, Masaharu Maeda, and Seiji Yasumura. "Suicide Rates in Evacuation Areas After the Fukushima Daiichi Nuclear Disaster: A 5-Year Follow-Up Study in Fukushima Prefecture." *Crisis* 39, no. 5 (September 2018): 353–63. https://doi.org/10.1027/0227-5910/a000509.

Osten, Marion von. "The End of Contemporary Art (As We Knew It)." Iaspis, Stockholm, December 2, 2013.

Pan, Lu, and Hyunjoon Shin. "Uncommon Commons: Rethinking Affects, Practices, and Spaces of Urban Activism in Asia." *Inter-Asia Cultural Studies* 19, no. 3 (July 3, 2018): 355–58. https://doi.org/10.1080/14649373.2018.1497893.

Petryna, Adriana. *Life Exposed: Biological Citizens after Chernobyl*. Princeton: Princeton University Press, 2002.

Povinelli, Elizabeth A. *Geontologies: A Requiem to Late Liberalism*. Durham: Duke University Press, 2016.

Reitan, Richard. "Narratives of 'Equivalence': Neoliberalism in Contemporary Japan." *Radical History Review* 2012, no. 112 (January 1, 2012): 43–64. https://doi.org/

10.1215/01636545-1416160.

Rich, Motoko. "Japanese Government and Utility Are Found Negligent in Nuclear Disaster." *New York Times*, March 18, 2017, sec. A.

Robin, Libby. "Museums in the Long Now: History in the Geological Age of Humans." *Journal of the Philosophy of History* 14, no. 3 (November 19, 2020): 359–81. https://doi.org/10.1163/18722636-12341448.

Rocker, Rudolf. *Anarcho-Syndicalism: Theory and Practice*. Edinburgh: AK Press, 2004.

Rudwick, M. J. S. *Bursting the Limits of Time: The Reconstruction of Geohistory in the Age of Revolution*. Chicago: University of Chicago Press, 2005.

Saad-Filho, Alfredo, and Deborah Johnston, eds. *Neoliberalism: A Critical Reader*. London ; Ann Arbor, MI: Pluto Press, 2005.

Saito, Ichiro. 近代いわき経済史考 *[The Economic History of Modern Iwaki]*. Iwaki: Tahisa Takaoki, 1976.

Santos, Boaventura de Sousa. *The End of the Cognitive Empire: The Coming of Age of Epistemologies of the South*. Durham: Duke University Press, 2018.

Sawaragi, Noi. "Real Times." *Bijutsu Techo*, July 2011.

Schendel, Willem van. "Geographies of Knowing, Geographies of Ignorance: Jumping Scale in Southeast Asia." *Environment and Planning D: Society and Space* 20, no. 6 (December 2002): 647–68. https://doi.org/10.1068/d16s.

Schneider, Keith. "Dying Nuclear Plants Give Birth to New Problems." *New York Times*, October 31, 1988, sec. A.

Schneider, Rebecca. *Performing Remains: Art and War in Times of Theatrical Reenactment*.

Oxford: Routledge, 2011.

Scott, James C. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven: Yale University Press, 2009.

Sharp, Willoughby. *Earth Art*. Ithica, NY: Andrew Dickson White Museum of Art, Cornell University, 1970.

Shaw, Vivian. "How Fukushima Gave Rise to a New Anti-Racism Movement." *Al Jazeera*, March 12, 2017. https://www.aljazeera.com/indepth/features/2017/03/fukushima-gave-rise-anti-racism-movement-170310103716807.html.

Shimazaki, Naoko. "Support for Workers Displaced in the Decline of the Japanese Coal Industry: Formal and Informal Support." *Japan Labor Review* 12, no. 2 (Spring 2015): 6–27.

Shimizu, Hiroko. "A New Perspective: Ichi Ikeda." *Women Eco Artists Dialog*, 2012. https://directory.weadartists.org/japanese-anti-nuclear-art-ichi-ikeda-interview.

shivuyaku. "Anti-Nuclear Demo @ Koenji, Tokyo / 反原発高円寺デモ 2011.4.10," October 4, 2011. https://www.youtube.com/watch?v=NRFKfcNrL28.

Slater, David. "The Making of Japan's New Working Class: 'Freeters' and the Progression From Middle School to the Labor Market." *The Asia-Pacific Journal Japan Focus* 8, no. 1 (January 4, 2010). https://apjjf.org/-David-H.-Slater/3279/article.html.

Smith, Terry. *Transformations in Australian Art*. Sydney: Craftsman House, 2002.

Sone, Sachiko. "The Reversible World of Japanese Coalmining Women." *The Australian Journal of Anthropology* 18, no. 2 (2007): 207–22.

Sorensen, André. "Building World City Tokyo: Globalization and Conflict Over Urban Space."

The Annals of Regional Science 37, no. 3 (August 1, 2003): 519–31. https://doi.org/10.1007/s00168-003-0168-3.

Sorensen, André, Junichiro Okata, and Sayaka Fujii. "Urban Renaissance as Intensification: Building Regulation and the Rescaling of Place Governance in Tokyo's High-Rise Manshon Boom." *Urban Studies* 47, no. 3 (March 2010): 556–83. https://doi.org/10.1177/0042098009349775.

Soviet Union Society for Cultural Relations with Foreign Countries. *Literature of the Peoples of the USSR*. Moscow: Voks Illustrated Almanac, 1934.

Stallabrass, Julian, and James Agee, eds. *Documentary*. Documents of Contemporary Art. London: Whitechapel Gallery, 2013.

Steyerl, Hito. "In Defense of the Poor Image." *E-Flux Journal* 10 (November 2009). https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image/.

Stockhausen, Karlheinz. "'Huuuh!' Das Pressegespräch Am 16. September 2001 Im Senatszimmer Des Hotel Atlantic in Hamburg." *MusikTexte* 91 (2002): 69–77.

Suzuki, Juri. *Being Double: Fukushima Catastrophe and Me*. Amsterdam: Sanberg Institut, 2015.

Suzuki, K., and S. Yamashita. "Low-Dose Radiation Exposure and Carcinogenesis." *Japanese Journal of Clinical Oncology* 42, no. 7 (July 1, 2012): 563–68. https://doi.org/10.1093/jjco/hys078.

Synolakis, Costas, and Utku Kânoğlu. "The Fukushima Accident Was Preventable." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 373, no. 2053 (October 28, 2015): 20140379. https://doi.org/

10.1098/rsta.2014.0379.

Takahashi, Ryohei. "Detection of Inobuta from Wild Boar Population in Japan by Genetic Analysis." *Reviews in Agricultural Science* 6, no. 0 (2018): 61–71. https://doi.org/10.7831/ras.6.61.

Takamura, Kotaro. "Talking Like a Child." Translated by Paul Archer. Accessed January 23, 2020. http://www.paularcher.net/translations/kotaro_takamura/the_chieko_poems/talking_like_a_child.html.

Takeuchi, Kota. "Working Conditions in Fukushima," 2012 2011. http://8to2.blog.shinobi.jp/Page/1/.

———."Stone Monuments and People." Gallery Handout. Snow Contemporary, Tokyo, February 3, 2017.

———. "Line Message with the Author," September 25, 2018

———. "Email Questions Around Stone Monument Twice to Author," November 15, 2019.

———. "Email Questions around Stone Monument Twice to Author," December 24, 2019.

———. "Email Metamorphosis to Author," February 9, 2020.

———. "Line Message with the Author," July 25, 2021.

Takeuchi, Melinda. "'True' Views: Taiga's Shinkeizu and the Evolution of Literati Painting Theory in Japan." *The Journal of Asian Studies* 48, no. 1 (February 1989): 3–26.

Tamura, Azumi. *Post-Fukushima Activism: Politics and Knowledge in the Age of Precarity*. New York: Routledge, 2018.

Tancons, Claire. "Occupy Wall Stteet: Carnival Against Capital? Carnivalesque as Protest Sensibility." *E-Flux Journal*, no. 30 (December 2011). https://www.e-flux.com/journal/

30/68148/occupy-wall-street-carnival-against-capital-carnivalesque-as-protest-sensibility/.

Teh, David. "Who Cares a Lot? Ruangrupa as Curatorship." *Afterall* 30, no. 1 (May 1, 2012): 108–17.

The Geological Society. "Tohoku Earthquake, Japan." *Plate Tectonic Stories* (blog). Accessed November 11, 2021. https://www.geolsoc.org.uk/Policy-and-Media/Outreach/Plate-Tectonic-Stories/Outer-Isles-Pseudotachylytes/Tohoku-Earthquake.

The Independent Investigation Commission on the Fukushima Nuclear Accident. *The Fukushima Daiichi Nuclear Power Station Disaster: Investigating the Myth and Reality*. Oxford: Routledge, 2014.

Thompson, Nato, ed. *Living as Form: Socially Engaged Art from 1991-2011*. Cambridge: MIT Press, 2012.

Tomii, Reiko. *Radicalism in the Wilderness: International Contemporaneity and 1960s Art in Japan*. Cambridge: The MIT Press, 2016.

Toshitaka, Nagahiro. "Japan's Coal Cartels in the Interwar Period," 2014. http://www.worldbhc.org/files/full%20program/A6_B6_JapanscoalCartelsintheinterwarperiod_ToshitakaNagahiro_.pdf.

Toufic, Jalal. *The Withdrawal of Tradition Past a Surpassing Disaster*. Beirut: Forthcoming Books, 2009. https://ulib.aub.edu.lb/ebk/ebk000090_jalal-toufic.pdf.

Tsing, Anna Lowenhaupt, ed. *Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press, 2017.

———.*The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*.

Princeton: Princeton University Press, 2017.

Ukeles, Mierle Laderman. "Manifesto for Maintenance Art, 1969! Proposal for an Exhibition, 'Care,'" 1969.

United Nations Scientific Committee on the Effects of Atomic Radiation. "Levels and Effects of Radiation Exposure Due to the Accident at the Fukushima Daiichi Nuclear Power Station: Implications of Information Published Since the Unscear 2013 Report." Scientific Annex B. United Nations Scientific Committee on the Effects of Atomic Radiation, 2020. https://www.unscear.org/unscear/en/fukushima.html.

United States Congress. *The Congressional Record*. Vol. 83. Washington D.C.: U.S. Government Printing Office, 1938.

United States Environmental Protection Agency. "Radiation Sources and Doses." *Radiation Protection* (blog). Accessed March 21, 2018. https://www.epa.gov/radiation/radiation-sources-and-doses.

Ushiro, Ryuta. "Line Message with the Author," March 14, 2018.

Ushiro, Ryuta and Ellie. "Line Message with the Author," April 2, 2018.

Vanhoe, Reinaart. *Also-Space: How Indonesian Art Initiatives Have Reinvented Networking*. Eindhoven: Onomatopee, 2016.

Vlastos, Stephen. *Peasant Protests and Uprisings in Tokugawa Japan*. Berkeley: University of California Press, 1990.

Wainwright, Joel and Geoff Mann. *Climate Leviathan: A Political Theory of Our Planetary Future*. London: Verso, 2018.

Wakeling, Emily. "Getting Serious: Chim↑Pom's 'Real Times' at SNAC." *Tokyo Art Beat*, June

10, 2011. http://www.tokyoartbeat.com/tablog/entries.en/2011/06/getting-serious.html.

Wallace, David Foster. *Infinite Jest*. New York: Back Bay Books, 1996.

Warner, Paul T. "The Development of the Anthracite-Burning Locomotive." *The Railway and Locomotive Historical Society Bulletin*, no. 52 (May 1940): 11–28.

Wilson, George M. "Plots and Motives in Japan's Meiji Restoration." *Comparative Studies in Society and History* 25, no. 3 (July 1983): 407–27. https://doi.org/10.1017/S0010417500010525.

Wissink, Bart, and Arjan Hazelzet. "Social Networks in 'Neighbourhood Tokyo.'" *Urban Studies* 49, no. 7 (May 2012): 1527–48. https://doi.org/10.1177/0042098011415437.

Wynter, Sylvia. "Black Metamorphosis: New Natives in a New World." Unpublished Manuscript. Schomburg Center for Research in Black Culture, New York Public Library, N.D.

———. "Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation--An Argument." *CR: The New Centennial Review* 3, no. 3 (2003): 257–337. https://doi.org/10.1353/ncr.2004.0015.

Yamada, Masahiro. *Parasaito Shinguru No Jidai [the Era of the Parasite Single]*. 218. Tokyo: Chikuma shobō, 2004.

Yoneyama, Shoko, ed. *Animism in Contemporary Japan: Voices for the Anthropocene from Post-Fukushima Japan*. New York: Routledge, 2019.

Yoshida, Reiji. "Fukushima Researcher Says Region Still 'Stigmatized' by 2011 Disaster." *The Japan Times*, March 11, 2016. https://features.japantimes.co.jp/march-11-radiation/#part2.

Yoshida, Reiji, and Fukada Takahiro. “Fukushima Plant Site Originally Was a Hill Safe from Tsunami.” *The Japan Times*, July 13, 2011.

Yusoff, Kathryn. “Mine as Paradigm.” *E-Flux Architecture*, Survivance, June 7, 2021. https://www.e-flux.com/architecture/survivance/381867/mine-as-paradigm/.

Zalasiewicz, Jan, Colin N. Waters, Mark Williams, Anthony D. Barnosky, Alejandro Cearreta, Paul Crutzen, Erle Ellis, et al. “When Did the Anthropocene Begin? A Mid-Twentieth Century Boundary Level Is Stratigraphically Optimal.” *Quaternary International* 383 (October 2015): 196–203. https://doi.org/10.1016/j.quaint.2014.11.045.

Zielinski, G. A., R. J. Fiacco, P. A. Mayewski, L. D. Meeker, S. Whitlow, M. S. Twickler, M. S. Germani, K. Endo, and M. Yasui. “Climatic Impact of the A.d. 1783 Asama (Japan) Eruption Was Minimal: Evidence from the Gisp2 Ice Core.” *Geophysical Research Letters* 21, no. 22 (November 1, 1994): 2365–68. https://doi.org/10.1029/94GL02481.