

Ethnographic Lettering: “Pursed Lips: A Call to Suspend Damage in the Age of Decommissioning”

Ryo Morimoto, Princeton University



The Memorial Stone Tablet for the Iwaki Airfield at the TEPCO Fukushima Daiichi Nuclear Power Plant, Okuma Town, Fukushima Prefecture. Photographed by the author.

Dear Grandma,

I am sorry that I have yet to pay proper respect to you by visiting Minamisoma. It has been over a year since I last visited. It feels bizarre not to see you and be in coastal Fukushima, where I have spent significant time since July 2013. I still cannot believe you passed away so suddenly. Your grandson sent me a picture of you surrounded by flowers and your beloved family and friends. You died, as you wished, not as an evacuee. I hope this fact allowed you to rest peacefully. Selfishly, I already miss eating your pickled vegetables, which, before my fieldwork, I never liked. I tried making them myself, but they do not taste like how you prepared them. Maybe where the vegetables came from (the home garden we created to help you stay active) and various memories of our time together in Minamisoma produced their sweet, sour, and salty tastes.

Like you joked, Minamisoma has indeed become my second hometown (*kokyō*). Minamisoma is where I changed forever, thanks to people like you, as a person and scholar. As an interlocutor and grandma (*ba-chan*, or in Soma dialect, *bappa*), you taught me more than anyone. I learned from you what it means to live despite hardships; to

inherit, cultivate, and to nurture soils and land; and to be patient because many things in life are beyond one's control. You would probably gloss these as an unremarkable mentality of a farmer.

Even though I only know postfallout coastal Fukushima, I still long to be there. Many people in and outside Japan advised me against going to Fukushima if I wanted to live long and well. However, I went there in the summer of 2013 to try to understand why people like you decided to remain in the area despite the negative image outsiders held. I admit that I, too, thought Minamisoma was an unsafe place to live. I thought its residents were in denial of the known radiological risks. I believed the existing scholarship and media reports on nuclear accidents like the events in coastal Fukushima, Chernobyl, Three Mile Island, and more. I imagined that my fieldwork would expose the unarticulated danger and people's profound fear of invisible radiation. I hoped to uncover corporate and governmental secrecy about the scale and extent of contamination as well as visible, though silenced, health defects among the residents. After all, aren't nuclear-related accidents all about radiation exposure and its detrimental biological and environmental consequences?

I thought that the primary rationale for the long-term evacuation and the multibillion-dollar decontamination project had to do with protecting people like you from irradiation so that you could remain alive and healthy. Yet, I met people like you, Grandma, who showed me otherwise. You stayed on the edges of evacuation zone because you wanted to go back to your home. You said it was the only way for you to be able to die well and peacefully. To you, the governmental radiation safety regulations became a hurdle; years of waiting took a toll on your ability to resume the kind of livelihood you desired.

Grandma, you fundamentally challenged my assumptions about the nuclear accident, contamination, radiation exposure, and Fukushima. I was wrong. You demonstrated how nuclear power is violent not only because of the risks it poses to individual bodies. More important, it is a problematic social technology and industrial structure that produces regional, social, domestic, and ideological divisions. A series of social disintegrations was what you experienced after the 2011 accident. Much of your postfallout life had to do with trying to recover severed connections with your family and relatives, community, home, soil, land, and ancestors.

I recognize how people like you have been theorizing, however vernacularly, everyday life with radiation and its real, imagined, or ghostly presence and absence. Taking your perspective seriously, I am choosing to call the Fukushima accident a "TEPCO accident."

I am writing this letter to you today because I was asked to write about this past decade of postfallout Fukushima (yes, me of all people!). Initially, I tried to write an academic-sounding piece. But then I thought that people like you in coastal Fukushima would laugh at me, accuse me of sounding like the bureaucrats, radiation safety experts, or others. You found their language and thought process alienating, if not humiliating. Writing to you, I want to acknowledge our long-term collaborative work to figure out the TEPCO accident's messy aftermaths. Also, I recognize how people like you have been theorizing, however vernacularly, everyday life with radiation and its real, imagined, or ghostly presence and absence. Taking your perspective seriously, I am choosing to call the Fukushima accident a "TEPCO accident." I want to make it clear the accident occurred on the property owned by Tokyo Electric Power Company in coastal Fukushima.

In this letter, I have decided to do what my colleague Laurence Ralph calls "ethnographic lettering" and write this to you.¹ This is my attempt to think with you about the last ten years since the TEPCO accident in the two temporal markers of already (*mou*) and still (*mada*). It has *already* been a decade, yet the damaged plant *still* poses countless

¹ Ralph, Laurence (2020). *The Torture Letters: Reckoning with Police Violence*. Chicago: The University of Chicago Press.

challenges to the locals, workers, and people in Japan and elsewhere. The government has *already* finished most of the infrastructural recovery in coastal Fukushima, yet many evacuees are *still* unable to or unwilling to return home.

I want to focus not on the story of how the TEPCO accident damaged your body and that of others in coastal Fukushima. It has *already* been a decade, and it is about a time to learn something about coastal Fukushima other than much-told stories of “nuclear victimhood.” With your help, I am calling for the suspension of damage. An indigenous scholar, Eve Tuck, proposes this to break the reproductive logic of damaged-centered research that is premised on identifying damaged subjects than removing harm.² The accident and its aftermaths have damaged people like you enough; you were subjected to irradiation, forced evacuation, and long-term waiting. Grandma, you certainly do not need me to tell you, yet again, that the TEPCO accident indeed damaged you. What does that do other than to deny your struggles to overcome the accident and its protracted aftermaths?

If you let me, then I want to explore your postfallout “atomic livelihood” — how and why you lived with radiation. With your experience, I want to think about how the radiation damage- centered discourse was and is *still* damaging residents, undermining their hopes to return to their lands and reestablish their personal, social, and spiritual ties. I worry that the idea that radiological exposure is the only issue of coastal Fukushima does not help encourage long-term engagements by the locals and outsiders alike with the region’s troubles. I am speaking of issues like declining population, aging society, wildlife outbreaks, decommissioning of the damaged plant, and so on. So, I ask you, Grandma, how did you try to live and die well in postfallout coastal Fukushima despite radiation?

You were in your early seventies, tending to the family farm as usual, when an enormous earthquake shook you on March 11, 2011. You endured over two minutes of the rattling earth without anything to hold on to in the open field. Then, you heard the news that the tsunami was overcoming the coast, almost devouring your natal home, located a few kilometers inland (we often forget, but the tsunami killed 638 people in Minamisoma and over 1,600 people throughout coastal Fukushima). Immediately following the second hydrogen explosion on March 13 at the TEPCO Fukushima Daiichi Nuclear Power Plant, about twelve kilometers south of your residence, your family fled. You did not bring much with you and left your cat because you believed you could return in a few days. However, in less than a month, you and your family became some of the over 60,000 evacuees from Minamisoma, swelling to over 160,000 evacuees throughout Fukushima Prefecture at its peak in 2012.

Unlike some other Minamisoma residents, the evacuation did not mean, to you, a transitory absence from your home. On average, most evacuees relocated four times. Like them, after moving to several locations in and out of Fukushima Prefecture, you ended up in a house in the Kashima district, Minamisoma. You hoped that this location could enable you to tend to your evacuated home and till its land in the Odaka district, about fifteen kilometers south. In April 2011, the governmental reterritorialization designated the Odaka district an exclusion zone. Within a year, you discovered that the western part of Odaka where you had lived was more contaminated than the rest of the city. The government regulations designated Odaka “uninhabitable” until July 2016. Then in late 2016, they demolished your house as part of the decontamination process, and you could not resettle immediately, as you had to rebuild. After three more years of waiting, in the summer of 2019, you finally returned to your Odaka home. Before you passed away in 2020, you were one of over 3,750 Odaka returnees, close to one-third of the district’s preaccident size.

Putting your experience of the TEPCO accident chronologically, it sounds like your perseverance paid off. However unsatisfactorily they acted, the government had assisted people like you to eventually return to their homes. But I know that every day and month of waiting haunted your mind and soul. You did not voice it even to your family, yet at night you frequently had a dream in which your ancestors appeared to guilt you about not taking care of the family land. Your eight years of waiting were not the linear accumulation of time but oscillating waves of the already and still.

The first few years were difficult because of the sudden displacement and overall uncertainty. You felt frustrated that it

² Tuck, Eve. 2009. “Suspending Damage: A Letter to Communities.” *Harvard Educational Review* 79, no. 3: 409–28.

had *already* been a few weeks, months, and years but you were not back at home. At the same time, you were *still* hopeful because the government promised your prompt return. I vividly remember discussing your experience of waiting in July 2016 when the government finally reopened the Odaka district. Hearing the news, I said to you optimistically that it had only five years and that you could *still* resume your life in Odaka. Objecting to my comment, you lamented, “In five years, I *already* aged so much. I am almost eighty now. My body no longer moves like how it used to. Even if I go back, I am probably unable to farm. And there is no one there, so what is the point of returning?” Thinking about it now, your comment helps me to see that a decade is not merely a symbolic milestone for people like you who lived with the accident. In a decade, many things can and do change. Decontamination, for example, destroyed the ancestral land you inherited and the soil you nurtured and, consequently, your hopes and desires for resuming your life at the place you called home.

By focusing primarily on the technoscientifically discernable contaminants across coastal Fukushima, the government communicated to you and others that the TEPCO accident’s only issue was the problem of contamination. The implication of this approach is this. Removing contaminants should enable evacuees like you to be free from any harm, but, Grandma, we know, this is not so. I decided to call this radiation-centered policy a *half-life politics*. The singular focus on the presence and absence of radiation in a specific locale made everything else less relevant. Yet I learned that your idea of home was inseparable from the kind of livelihood you had lived as a farmer, which decontamination made no longer possible.

One detrimental effect of half-life politics is the extension of evacuation time. In Fukushima, long-term evacuation impacted individuals’ health and well-being more than radiation exposure. The number of the so-called disaster-related deaths (*shinsai kanren shi*) in the last decade is over 2,300. This number does not include all the unclaimed and denied disaster-related death cases since in each case, the government must evaluate and agree that evacuation did cause death. Remember your acquaintance who was found dead in his Odaka residence? That was before the reopening of the district. Hearing the news, you commented sympathetically, “At least he was able to die at his house, not in a temporary housing.” As you experienced, the TEPCO accident and its aftermaths threatened to rid people of their right to choose where to live and die.

Despite the government’s (and I dare say the general public’s) chief focus on radiation safety, you were very cooperative. You let the government transform your rice fields into infrastructure for moving decontaminated waste. The government threw away your old personal belongings and farming machinery, removed your persimmon tree, and demolished your house. You watched them cut off the forest that your ancestors, yourself, and your son dutifully maintained with the hope of using tall Japanese cedar trees to build a new home one day. Your ancestral land was destroyed and transformed into decontaminated waste in black container bags, which are now being sent to destroy other people’s lands in coastal Fukushima. To you, decontamination was the ultimate denier of life.

Turning eighty, you wondered what all these sacrifices meant to your life that you felt was already winding up. You did not know whose interest decontamination was serving. In exchange for your losses, you received an amount of money you had never had before. It never made you feel fulfilled, though. As you said, “I cannot take the money to the grave. I’d be happier if the money went to younger generations.” But younger generations became scarce in Minamisoma; over one in every three residents now is above sixty-five. In Odaka, the ratio is almost one in every two.

The past years of your personal sacrifices amount to, according to scientific reports, a 30 to 50 percent reduction of ambient radiation levels in residential areas throughout the region. This type of numerical abstractions manifested in residents’ everyday life as no longer checking radiation levels with monitoring posts, personal Geiger counters, or dosimeters. I am not implying that residents no longer care about radiation; they have learned which areas are more contaminated and how to avoid being unnecessarily exposed. There are still many hot spots in Minamisoma, and in this sense, the city is *still* contaminated. Only curious outsiders in search of “hidden” contamination go near these spots, though. Radiological contamination is strange in this sense, isn’t it? It is ubiquitous and hyperlocal at the same time. Despite Rachel Carson’s warning of *already* irradiated bodies in Silent Spring in 1962, many people *still* operate with the logic of containment; only some, like Fukushima residents, are thought to be exposed.

Grandma, for you, whether contaminants existed in a specific local or not was less critical. Instead, it mattered which vegetables and fruits were less likely to get contaminated. We went to a regional monitoring center to test items like plums, potatoes, mushrooms, bamboo shoots, and persimmons grown at your Odaka house. You struggled to understand the radiological science the government and experts communicated to you. With your homegrown vegetables, however, you understood more intuitively how the ecological transfer of contamination occurred. Even if the soil was contaminated, this did not mean that vegetables grown in that soil were also contaminated. You did not suffer passively and blindly follow what the government, experts, and the media told you. Your desire to return transformed your home garden into a lab where you learned to attune to a new life with contamination. Odaka was *already* not the same place you knew; your postfallout life was about learning to accept the vicissitudes of time and the always already contaminated world.

Nonetheless, the irony is this: many outsiders *still* believe Fukushima is uninhabitable. They imagine that the land and residents like you are irreversibly exposed. It is as if people think Fukushima is an isolate and has been frozen in time. You have experienced the stigma stemming from the firm association between Fukushima and the irradiation the TEPCO accident produced. It was damaging to your identity. Remember when you instructed me never to be ill in the United States? You were worried that people would assume that my sickness had come from having lived in Minamisoma. I never told you before, but it did happen to me a few times. Once, people stepped away from me when I mentioned that I lived and researched in coastal Fukushima. It is not necessarily the fault of those people; they did not know any better. It is partly a function of persistent and biased representations of Fukushima. The use of radiation exposure to sensationalize Fukushima is what I want to change in the tenth year of the TEPCO accident.

Since March 2011, you found every January to March depressing. Domestic and international news reporters, journalists, and researchers alike would come to expose and document the persistence of radiological danger “hidden” in the region. Radiation sensationalism is strong, and it sells. The image of Fukushima exists outside of and independent of various changes and emerging livelihoods in Fukushima. This is the general sense of many individuals in coastal Fukushima; decisions are always made without them. It makes me wonder if the Japanese government’s aim for promoting radiation safety in Fukushima is actually to appease people outside Fukushima and their general fear of radiation. And it is not so much about, as they frame it, helping coastal Fukushima to recover from the harm done by the accident.

I would be convinced otherwise if, in this tenth year, the media starts featuring a group of hopeful returnees in Odaka. They would report enthusiastically: “Even though we now have significantly fewer people, Odaka is an exciting place. Only people who desire to be here live here!” Or if they showed young returnees near the damaged power plant for whom the area is full of possibility because “nothing is here, so we can create a place we want.” I bet the public would not hear those stories. Even if they did, those stories would be read as not genuine and as a governmental campaign. You experienced a disabling logic of victimhood; victims are expected to suffer, period.

If anyone else reads this letter, they might think I am a pronuclear person who is not critical of the government or TEPCO for causing harm. One of the most damaging effects of the TEPCO accident is that it has divided people socially, domestically, and ideologically. Observing the aftermaths of the Chernobyl accident in 1986, sociologist Ulrich Beck anticipated this postfallout social disintegration. A year after the accident, he said, “Everyday and political rigidifications and fanaticizations proliferate in the contradiction between survival and the perception of dangers. The most extreme positions are adopted: some refuse to perceive the dangers at all, while others energetically insist on blanket condemnations in the name of ‘self-protection’ or the preservation of ‘life on this earth.’”³ The social disintegration is what I observed you and others suffered more acutely than invisible radiation in the environment.

As Hiroshi Kainuma puts it, postfallout Fukushima is “difficult to tell” (*katarinikui*).⁴ There is no one truth, one reality, one

³ Beck, Ulrich. 1987. “The Anthropological Shock: Chernobyl and the Contours of the Risk Society.” *Berkeley Journal of Social Sociology* 32: 153–65.

⁴ Kainuma, Hiroshi. 2015. *Hajimeteno Fukushima-gaku*. Tokyo: East Press.

narrative that could capture all that has happened since March 2011. Some people left Fukushima and never came back, around 233 children and young adults have been diagnosed with thyroid cancer, and others died from the tsunami or the long-term evacuation. Simultaneously, many struggled with alcoholism, mental health issues, and secondary health problems; some died by suicide because of the loss of hope or financial and other struggles; and others profited from the accident. Depending on perspective, various images of Fukushima emerge. Grandma, I feel compelled to say this because I feel that academic and public discourses have homogenized Fukushima and its people as “the damaged.”

I have been exposed to perspectives of people like you, who remained in the region despite the threat of radiation exposure. Highlighting your situated narrative in this letter, however, I do not downplay the importance of radiological contamination. Instead, the problem you helped me see is how contamination has become the primary optic used by the government, experts, and public alike for rendering coastal Fukushima and its people (in)visible. You taught me that contamination has not been and should not remain the only problem of the region or the only approach to nuclear-related issues. As Haruki Murakami puts it, “Violence does not always take visible form, and not all wounds gush blood.”

Grandma, you would agree that our time together taught both of us that radiological contamination is not an event but a process. More importantly, we have experienced that radioisotopes have multiple half-lives. The experts would only talk about physical half-life. The most prominent contaminant in Fukushima—cesium 137—has a known half-life of about thirty years. In thirty years, the original radioactivity becomes half, and after about ten cycles (over three hundred years), it becomes null. But didn’t we also experience that there is a social half-life to radiation, which concerns the public imagination of the persistence and irreversibility of radiation exposure? Historian of nuclear technologies [Robert Jacobs puts](#) the broader effect of radiation like this: “Radiation makes people invisible” by denying all of their previous identities, histories, and livelihoods. You felt this social effect when you became one of the Fukushima evacuees (but not one of the evacuees from Odaka) after the TEPCO accident.

Radiation exposure can cause cancer. The postfallout Fukushima policies seem to be driven by this dictum, and I feel that policies are there to prevent residents from claiming this particular physical harm from the TEPCO accident. Grandma, you know exactly what I am talking about; protecting your health was how the government justified your long-term evacuation, sleep deprivation, and the wrecking of your home and land. When you were confronted with this dominant radiation-centered narrative, you would say nothing but purse your lips together. I witnessed your pursed lips over and over and over during our times together. With your pursed lips, you endured and resisted a perspective that only attended to your losses, suffering, and anger while ignoring your hopes and desires.

I know that you suffered, and you were angry and sad. Still, those experiences themselves do not define who you were or what it meant for you to live in postfallout coastal Fukushima. I remember a gigantic smile on your face when your great-granddaughter visited you for the first time from Tokyo. You were proud to take her to see the millennial-old samurai horse festival (*Nomaoi*) in the region. I also witnessed the sheer joy when you found out that your homegrown plums were not contaminated. You were elated not because you could eat them but because you could share your pickled plums with others. That was how you made new friends around your temporary residence and tried to repair and maintain the existing ties with family, relatives, friends, and neighbors damaged by the TEPCO accident. Grandma, you showed me how people could still enjoy and find meaning in life despite the threat of chronic low-dose radiation exposure. People like you should no longer be made to purse their lips and endure. So, in this tenth year, let me call for suspending radiological damage to explore a different “Fukushima” than how it has been imagined and entertained.

As an outsider, I will never know everything about coastal Fukushima and differently situated individuals’ experiences of the accident. One thing I want to say, though, (and I bet you would agree with me) is this. I find it unproductive and even harmful when people talk about “Fukushima” without specifying a location. Fukushima is the third-largest

prefecture (equivalent to the US state of Connecticut in size) with three regions, each with distinct history and culture. In 2021, the exclusion zone amounts to only 2.5 percent (370 square kilometers) of the prefecture (slightly larger than the US Virgin Islands). Like any other place, Fukushima is a place where over 1.8 million people live, struggle, and eventually die. If the decade has taught me anything, then first and foremost, it is that geographical specificity matters when discussing this “difficult” place. The accident and elevated risks of radiation exposure cannot and should not elide the rich histories and cultures with which people live.

I loved hanging out with you, Grandma, because you showed me many facets of coastal Fukushima that I did not find in books about the TEPCO accident. With stories, you showed me the palimpsests of memories and histories in Minamisoma now hidden underneath the fallout debris. For example, you shared the story of the Toyama persimmon in Minamisoma, which helped me situate Minamisoma and wider coastal Fukushima as the place of settlement and survival. The cultural biography of permission you told me was this. The migrants from the Hokuriku region brought it to coastal Fukushima in the early nineteenth century. Why? They were recruited to help recover coastal Fukushima from the Great Tenmei famine between 1782 and 1788, contributing to the loss of eighteen thousand residents. The migrants, the ancestors of many of the current residents, planted persimmon trees as they reclaimed barren fields to make coastal Fukushima their home. This story of yours helped me understand why many residents felt compelled to remain and protect their lands despite the accident and its ongoing aftermath.

You also told me about witnessing the US army firebombing Minamisoma in 1945 ([see video here](#)). At the time, you did not know why it happened. Now I know it was because Minamisoma hosted an army airfield where Imperial Japan trained so-called kamikaze pilots. This memory of yours helped me identify another army airfield (Iwaki airfield) raided on August 9 and 10, 1945, located on the current TEPCO Nuclear Power Plant property [see image above]. The connection between World War II and nuclear power complicates how I understand the accident and coastal Fukushima’s relationship to central Japan. It taught me how “Fukushima” should not be a moniker only for contamination or the TEPCO accident in 2011. Its significance is much more profound than that. I like how your son put it: “With the name of ‘Fukushima’ attached to the nuclear accident, no one takes responsibility but us residents who have to live with the name.

Let me offer the name of what happened in coastal Fukushima. To me, it was the result of “radioactive colonialism.” Indigenous scholar Ward Churchill coined the term to name the persistent structural inequality configured by and through radioactive world-making.⁵ Over the six years that we hung out, I found many similarities between coastal Fukushima residents and Indigenous peoples in the American Southwest or the Pacific Islands. As I learned about their long-term struggles, your decision to return to your home despite the enduring radiological risk made sense. The accident led you and others to realize the necessity of keeping the land to prevent the government, private companies, or colonizers for that matter from using and abusing it to (re)produce harm. Your postfallout life testifies that the TEPCO accident is not merely about the radioactive danger. It is also a struggle for the land.

I regret not knowing better before. I failed, just like the government, to hear and understand your hopes to resume your familiar life earlier. If your desires had been seriously considered, there could have been a discussion for an alternative way to approach the postfallout coastal Fukushima. I take responsibility for my ignorance. I promise to work harder to let others know that low-dose radiation is, like any other, a risk people sometimes accept to try in order to live their lives as fully as possible.

Grandma, I trust you are still with me, so I want to tell you this; you were not alone in desiring to live and die at the place you called home despite radiological contamination. Anthropologist Magdalena Stawkowski offers one example in her studies of Koyan community members near the Semipalatinsk Nuclear Test Site (the Polygon) in Kazakhstan. They came to think of themselves as “radioactive mutants”—people who have adapted to and thrive in a radioactive

⁵ Churchill, Ward, and Winona LaDuke. 1983. “Native America: The Political Economy of Radioactive Colonialism.” *Insurgent Sociologist* 13, no. 3: 51–78.

environment.⁶ When I read about the state-neglected Koyaners, they made me think of you and others in coastal Fukushima. You also resisted the way the accident threatened to sever your ties to the history and culture cultivated in the region. You did not desire to become a mere victim in the eye of the government and the public. You challenged the narrative that radiation was the only harm of the TEPCO accident.

Coastal Fukushima, the American Southwest, the Pacific Islands, Kazakhstan, and so on—all over, people have been living with radiation. Those cases together lead me not to ask what risk nuclear power imposes on individual bodies. Instead, I ask, who becomes exposable? What structures and thoughts maintain this categorization? And how do people relate to their land to try dismantling the enduring nuclear infrastructure that has caused them grave losses? Grandma, you taught me that in order to answer these questions, I need to learn what residents of irradiated places hope and desire, not to glorify and justify their lives with radiation but to seriously act on bettering our relationship with fellow humans and to the world, the energy, and the environment.

Before I end this letter, let me say a few things about the future. Thinking about the future is a much more challenging task, and I feel insecure that I no longer have you to think with. Frankly, I wrote this letter because I want people to remember someone like you instead of contamination when they think of Fukushima. At the same time, I worry people might stop caring about Fukushima if the radiological danger in coastal Fukushima becomes less significant, fearful, or mundane. But as you know, the region's urgent problems endure, and for that, we need all to stay with its troubles.

I remember you pursing your lips when you heard the outcry from central Japan's energy consumers, demanding the termination of nuclear power. You agreed but also thought this position was naive. It was your experience that stopping nuclear energy generation does not mean the power plants and their contamination would magically disappear.

I am talking about a way to confront the arrival of the age of decommissioning (*Hairo no Jidai*). As of today, the plan is to decommission twenty-four out of fifty-four reactors in the country. I remember you pursing your lips when you heard the outcry from central Japan's energy consumers, demanding the termination of nuclear power. You agreed but also thought this position was naive. It was your experience that stopping nuclear energy generation does not mean the power plants and their contamination would magically disappear. Someone must labor to decommission them, and some land needs to be sacrificed to isolate the waste. And that most likely involves people like you, your community, family, friends, relatives, and neighbors who have remained in the region. The TEPCO accident has demonstrated what and who it takes to undo our collective nuclear legacy. It requires a community of people and their commitment to live in a contaminated environment, maintain their land, and make them better for the next generation to come and stay in the region. It requires some people and land to be exposed to protect others. Nuclear power is a social technology that produces and reproduces a community of the exposable.

Japan is *still* under the Nuclear Emergency Situation declared on March 11, 2011, at 4:36 p.m. JST. Each day, over four thousand workers are laboring to decommission the damaged reactors. Despite that, TEPCO expects (optimistically) the plant's cleanup to take thirty to forty more years. The global pandemic has *already* delayed the process, and continuing aftershocks from the 2011 earthquake *still* constantly threaten the damaged structures' precarity.

⁶ Stawkowski, E. Magdalena. 2016. "I Am a Radioactive Mutant": Emergent Biological Subjectivities at Kazakhstan's Semipalatinsk Nuclear Test Site." *American Ethnologist* 43, no. 1: 144–57.

Grandma, you taught me that I could no longer participate in deferring the responsibility to some far future, some technological innovation, or somebody to irradiate themselves for the rest. Like you were coercively made to realize in March 2011, I can no longer be in denial of our always *already* radioactive world. As an individual, I might only be able to do a little, but I promise to witness the decommissioning project's end in coastal Fukushima in order to honor the life you so generously shared with me. Even if it means I am your age or even older when it happens.

It will be a very long time, but it's okay. It just means that I get to visit you at your grave many times and feel proud of how hard you fought to stop your land from being stolen by the TEPCO accident and its aftermaths. I will make sure to bring your grandson with me and a bottle of the yuzu cider you liked. This is the very least I can do to express my gratitude to you. Thank you, Grandma, for teaching me to see the importance of suspending damage from low-dose exposure in order to bring other critical issues into view. You challenged the logic of victimhood that tried to disempower you by categorizing you as the damaged and voiceless. You forged the path for others to follow in your atomic livelihood. As you taught me, the age of decommissioning requires that all of us remaining to learn to live with radiation and respect the land where legacies of people like you will keep living on. I, for one, will not forget how you lived and died in Minamisoma.

Miss you very much,

Your adopted grandson

Ryo

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Discussion Comments

by **Tim Oakes**, University of Colorado Boulder

Vernacular theorizing and the uncertainty of knowledge: Learning from our interlocutors in Ryo Morimoto's "Pursed Lips"

Ryo Morimoto's "Pursed Lips" is a lovely account that balances empathy, rigor, nuance, criticality, and accessibility. One thing we've seen in all of the accounts of life in and around Fukushima over the past decade (and this is reiterated by Sulfikar Amir's film *Healing Fukushima* as well) is the overwhelming *uncertainty of knowledge*, of people being forced to make decisions in relation to the unseen or hidden nature of harm and risk posed by radiation exposure. Morimoto's paper offers not simply a testimonial to this uncertainty, but more importantly a way to confront and perhaps move beyond what Hirokazu Miyazaki, in his keynote presentation for this workshop, called the "crisis of expertise" following the 3/11 triple disaster.

Morimoto's ethnographic lettering format, and the inversion of knowledge it implies, offers a gentle rejoinder to Miyazaki's "crisis of expertise." This lettering format involves several important positions. One is that we approach the field, and the entire research endeavor, from a *position of vulnerability* rather than of expertise and holder of knowledge. While we may be trained to, or have a desire to 'make visible,' via our knowledge, something that is 'invisible' to locals, we must ultimately make the effort to truly learn from our interlocutors. In Morimoto's account, it's the *vernacular theorizing* of our interlocutors that matters: how to live with radiation, how to live an 'atomic livelihood', and not just how to be a victim, a refugee suspended between life and death. Another way of saying this is that the struggle for life in post-fallout Fukushima is not just a struggle with radiation, but a *struggle over land*. And here we see Morimoto's efforts to rearticulate the question of post-fallout life in settled, grounded terms that are empowered by connection to land, identity, and history, rather than the unsettled and disrupted terms of contamination that disempower and create

victims.

This is partly a question of technopolitics (or, as Morimoto terms it ‘half-life politics’). Nuclear power does not just divide atoms; is a technology that produces social divisions. It also “produces and reproduces a community of the exposable.” Who is exposable? Who is not? These are deeply political questions generated by the nature of one’s connection to the technologies of nuclear power infrastructure. While the 3/11 disaster initiated a cascade of social disintegrations and divisions, it was in turn rendered technical, as simply a problem of contamination, a problem that then calls for a technical response (evacuation, safety monitoring, and so on). This has the abstracting effect of rendering people invisible, by denying all their previous identities, histories, and livelihoods. They become vessels for contamination, either already contaminated or waiting to become contaminated.

This state of being in relation to the contamination of airborne radiation can be called *a condition of suspension*. Or, said a different way, the social disintegrations and divisions launched by the disaster *produce* a condition of suspension. Government safety regulations, for example, hold people in a condition of suspension, forcing them to endure years of waiting. Morimoto organizes his discussion around the temporal markers of ‘already’ (*mou*) and ‘still’ (*mada*) – marking time in suspension or, “suspension of damage” as he puts it. These come in oscillating waves; denying a linear accumulation of time. Here I’m reminded of the way ‘suspension’ has come to define a particular aspect of the temporalities of infrastructure. Akhil Gupta for example has noted that instead of being understood as a temporary state between the start of a project and its completion, suspension “needs to be theorized as its own condition of being. The temporality of suspension is not between past and future, between beginning and end, but constitutes its own ontic condition just as surely as does completion.”¹

This ontic condition is one captured by the metaphor of an unstable mixture in which particles are carried within a fluid body of something else. That fluid body might be thought of as government safety regulations or, probably more accurately, as the airborne isotopes themselves. But the metaphor of suspended particles in a fluid or atmosphere suggests that suspension is not only temporal but also *spatial*. It comes to define a spatial zone of exclusion, or exception, a space that remains uninhabitable in popular imagination, frozen in time. Here I’m reminded of Turkovsky’s 1979 film, *Stalker*, which offered a stunning prelude to the nuclear exclusion zones of Chernobyl and Fukushima. “The Zone” of the film is a space of suspension, but also of desire. Inhabiting it, perhaps, becomes the secret to breaking free of that suspension. And the *atmospheric* nature of this condition takes us to the work of Tim Choy and Jerry Zee who suggest that our study of the condition of suspension can be “a way of posing the question of the present as an atmospheric condition rather than the expansion of anthropogenic powers.”² By this they mean to decenter our analytical focus on human agency such that we take on “an atmospheric form of thought and being,” focusing on what it means to “be in this air”. In their case, the “air” is the warming atmosphere of the Anthropocene. But they identify a thanatopolitics of compromised life which includes not just the air of a warming planet, but also Cold War mushroom clouds, windblown radioactive isotopes, nuclear accidents, chemical leaks, and tear gas assaults on protestors. All of these have been and are increasingly aspects of daily life in many parts of the world.

Interestingly, Choy and Zee ask the following question, which seems relevant to Morimoto’s discussion: “...in a history of damages, might there lurk other ways of exploring atmosphere? The question of the Atmospheric Anthropocene might thus be reframed—from who holds responsibility for the air’s contents to what it means now to attend to those contents, to conditions of and for being held and moved in air.”³ Suspension can be “an injunction to an art of noticing, of living in and thinking with atmospheres, their capacities and contents.”⁴ I suspect Morimoto might reply that this conceptual embrace of a condition of suspension flies in the face of the desires of his interlocutors to be deposited back on their land. But it also might offer a framing that recognizes the condition of suspension as an increasingly normalized one.

¹ Gupta, Akhil. 2015. “Suspension.” <https://culanth.org/fieldsights/suspension>.

² Choy, Timothy and Jerry Zee. 2015. “Condition – suspension.” *Cultural Anthropology* 30(2), p. 211.

³ Ibid., p. 212.

⁴ Ibid, p. 213.

This, then, raises a key question regarding the forces that have produced this condition in the first place, the TEPCOs, the state regulations, the needs of global capital. And that is this: is suspension the desired state of being for capital? For the state? This is where the question of *the struggle over land* becomes acute. This is a struggle that posits a connection to the land as perhaps a mediating condition of one's connection with the infrastructures of nuclear power, a way of making that connection bearable. And a way of shifting the condition of suspension to one of deposition.

Finally, I'm struck by the issue of place naming disaster that Morimoto raises. Is calling the 3/11 disaster "Fukushima" akin to calling COVID-19 the "Chinese virus"? ("Spanish" flu? "Ebola" virus? Which was named after a river in the Congo). These names in turn become suspended in meaning, forever attached to disaster. That is also a struggle over land, over place. And so my final thought is about sense of place. I'm thinking here of work by my fellow human geographers, such as Doreen Massey, Tim Cresswell, and others, and whether or not there is something to be gained from understanding Naoko's struggle in terms of a *politics of place*, in addition to the technopolitics I've been discussing in this response.

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