

Japan's 3.11 Nuclear Disaster and the State of Exception: Notes on Kamanaka's Interview and Two Recent Films

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This essay accompanies Katsuya Hirano's Interview with Kamanaka Hitomi, "Fukushima, Media, Democracy: The Promise of Documentary Film"

Documentary filmmaker Kamanaka Hitomi's interview with historian Katsuya Hirano takes the post-Fukushima debate in a number of fresh directions.

At the level of facts, Kamanaka draws from her vast knowledge of Japanese nuclear politics and the global nuclear industry to share developments that may startle even those who have tried to keep up with the unfolding crisis.

At the level of political critique, she finds synergy with Hirano and his insights as a chronicler of post-3.11 local politics to develop two broad points. First is that nuclear "recovery" (fukkō) as charted in Fukushima is neoliberal in the sense defined by Michel Foucault and developed by political theorists like Wendy Brown. Understanding the value of human life purely in economic terms, neoliberalism dismantles democracy by reducing all politics to market principles. Although Kamanaka and Hirano do not use the term "neoliberal," I'll argue that their criticism of neoliberal politics is explicit. The second point is that the suspension of human rights required by Fukushima's "recovery" is a prime example of the state of exception that Giorgio Agamben identifies as an increasingly dominant paradigm of government in modern democracies. Kamanaka and Hirano reference Agamben's work directly, and I'll elaborate why they find it useful.

At the level of activism, the interview also extends beyond critique to develop an affirmative theory of artistic practice for change. For much of the conversation this falls under the rubric of "the exercise of democracy." When Kamanaka and Hirano use this term, they do not mean simply that documentary cinema prompts people to elect better leaders. Rather, they mean that documentary cinema empowers viewers to intuit the difference between politics and economics, which collapses under neoliberalism, and between good government and executive expediency, which collapses during a state of exception. The first three sections of the interview focus on how to inspire people to reopen these gaps, which are essential to a functioning democracy.

Also concerning activism, Kamanaka advances a second affirmative practice that she refers to evocatively toward the end of the interview as a "revolution of sensibility" (kanjō no kakumei) and "a revolution underfoot" (ashimoto no kakumei). Here, in two much shorter sections, the emphasis falls less on reopening gaps than on closing them: between reality as we construct it (however democratically) in language, politics, economics and law, on the one hand, and reality as we live it materially and bodily ("underfoot," "through our senses") on the other. What would it mean to stop operating under the standard modern assumption that the two are separate? What would it mean to close the distance between our discursive reality and internal radiation, in the worst case scenario, but also between



discursive reality and what sustains daily life: food, shelter, clothing and energy at their most elemental? Although the interview stops short of fully developing these points, it is possible to read Kamanaka's two post-Fukushima documentaries as answers to precisely these questions. Focusing on the power of nuclear care and carework by doctors and mothers, Living Through Internal Radiation (Naibu hibaku o ikinuku, 2012) and Little Voices of Fukushima (Chiisaki koe no kanon, 2015) suggest that the nuclearized body is a site not only of suffering, but also of insight, perhaps even the energy to sustain activism. This is what I argue in the second part of this essay.

How Neoliberal is Fukushima's "Recovery"?

Wendy Brown has written that neoliberalism replaces democratic values like law, participation, and justice with marketplace strategies like "benchmarks," "buy-ins" and "best practices." The milestones the Japanese government has set for Fukushima are good examples. Rather than actual decontamination, which is extremely difficult, the Ministry of the Environment asks Fukushima Prefecture to measure its recovery in the same increments as its soil removal (josen) campaign, with elaborate graphs, maps and percentages updated regularly online and at its local office in Fukushima-city. Prime Minister Abe Shinzō, in a famous speech, pegs recovery much more simply to the year 2020, and the opening of the Tokyo Olympics.² More recently, the administration has begun marking the end of the crisis with the end of subsidized evacuation, and the successive opening of more and more areas within the thirteen towns initially impacted by restrictions and mandatory evacuations.3 In this way, benchmarks and timelines focus collective thinking on shared economic goals ("recovery!") in order to avoid acknowledging

the true scale of the disaster, and erase the need to negotiate conflicting interests. What makes the process uniquely perverse is the active consent of those who suffer most. In Wendy Brown's words, "the citizen releases state, law and economy from responsibility for and responsiveness to its own condition and predicaments and is ready when called to sacrifice to the cause of growth." It's a phenomenon Hirano says Fukushima activist Mutō Ruiko told him she's witnessed time and again: the moment when even a long-term antinuclear ally will buy into the reassurances of government-dispatched "safety experts" when faced with the prospect of economic collapse.

True, radiation makes Fukushima's recovery different from the United States' recovery from the crash of 2008, on which Brown focuses. When Americans were persuaded to accept the intensification of inequality as basic to capitalism's health, the resulting reductions in jobs, pay and benefits affected their bodies with much less cellular precision than the food from the stricken area ("Namie Dishes" and "Fukushima Plates") that Kamanaka describes Tokyo University students eating in the name of economic solidarity. There is also a difference in levels of awareness. The American neoliberal subject theorized by Brown is better able to understand what he or she is being asked to sacrifice, economically, than the cesium 137exposed Japanese subject is able to understand it, biologically. Nevertheless, one of the main points to which Kamanaka opens our eyes in the interview is that, like the American stock market which was supposed to be "smart" and "rational" but was actually unstable, the Japanese nuclear industry was also a "too big to fail" behemoth which proved to be incapable of making money without massive infusions of state cash. According to Kamanaka, the true source of the industry's profitability for the past thirty years has been a national Y600 billion (\$US 5.5 billion) Energy Development Budget (Enerugii kaihatsu yosan), of which 60 or 70 percent every year goes to plant

construction. Kamanaka explains that, in addition to having new infrastructure underwritten by the government, electric companies are allowed to add a 3.8% surcharge to capital expenditures, which they tack onto peoples' electricity bills. Given that these same electric companies receive a "subsidy for electricity generating locations" (dengen ritchi kōfukin) directly from the tax base, it is easy to see how the bigger the "nuclear village" grows, the more money the state and electricity consumers are obligated to feed it. So while claims that "nuclear is the lynchpin to economic growth" had been accepted as gospel since Japan's 54 reactors were first built in the 1960s and 70s, in actual fact it is just the reverse: nuclear power is a house of cards that tumbles quickly in the absence of state subsidies, as demonstrated in the wake of the 3.11 triple disaster.

As evidence Kamanaka offers the fates of Toshiba and Mitsubishi, and their relationships with two corporate purveyors of nuclear fuel and technology, Westinghouse in the U.S. and Areva in France. Both Westinghouse and Areva have seen losses mount in the face of demands for greater safety after Chernobyl, 9/11 and Fukushima, and both are currently mired in long-overdue construction projects that push them further and further into the red. What does it say about the Japanese nuclear industry, Kamanaka asks, that Toshiba and Mitsubishi have been willing to step in with infusions of cash just as other investors are backing away? In the months since her interview with Hirano, her insight into nuclear unprofitability has been borne out spectacularly in the case of Toshiba, which all but bankrupted itself purchasing Westinghouse and hitching its star to failed reactor construction at the Vogtle Plant in Georgia. Meanwhile, Mitsubishi's president, his company having underwritten heavy losses at Areva's twelve-year late project in Olkiluoto, Finland, insists that fresh investments are safe even while the Nikkei Asian Review wonders whether Mitsubishi is "doubling down out of a sense that it is in too deep to pull out."6

What Kamanaka underscores are the accounting gymnastics required to perpetuate the myth that nuclear energy and economic growth go hand in hand. She notes that when all 54 of Japan's reactors were idled between September 2013 and October 2015, government officials and business leaders complained that to continue indefinitely in the absence of nuclear power would be like "returning to the Edo Period." Her point, in contrast, is that Japan's standard of living went largely unchanged, and what was actually set back was the bottom line of what fellow filmmaker and antinuclear ally Kawai Hiroyuki calls the "immense profit-sharing community" comprised of the electric companies and their subsidiaries.8 It is this community that benefits now as the Abe administration ends its aid responsibility to evacuees and puts its full weight behind nation-wide reactor re-starts. Although neither the profits nor the hardship are shared, people are convinced that the government is doing its job because economic growth has become both its end and its legitimation. Meanwhile Kamanaka is left worrying, like Wendy Brown, "What happens to the constituent elements of democracy - its culture, subjects, principles, and institutions when neoliberal rationality saturates political life?"9

Watching Documentaries as "An Exercise in Democracy"

One of the most emotionally difficult points Kamanaka makes – and perhaps one she would only make in an English-language publication – is that whereas neoliberalism generally charts a hollowing out of liberal democracy, places like Fukushima may have never enjoyed democratic culture to begin with. It was vulnerable to plant construction in the 1960s and 1970s because it lacked the sense of local

autonomy it would have needed to recognize TEPCO's promised wealth as a poor substitute for control over its own land, safety, and solidarity. And it was further hurt by what Kamanaka identifies as one of the electric company's favorite tricks, setting pro- and antinuclear factions against each other. Animosities would revive and deepen when the community was forced to decide whether or not to evacuate after 3.11. Kamanaka's account of these disputes is one place where she speaks of the need to reassert democracy by opening the kind of civic space or gap by which it functions. That is, in places with strong histories of civic activism - she mentions Hokkaido, Nagano, Shiga, Shimane and various Kyushu Prefectures - experience with collective action allows "people to work toward a single goal even with those with whom they disagree." The goal acts as a rallying point, and what keeps the community together is not achieving it but orbiting around it, despite differences. Conceptually, this is the same gap to which Wendy Brown gestures when she says that even though liberal democracy almost always falls short of its ideals, it is precisely the divide "between formal principles and concrete existence [that] provides the scene of paradox [and] contradiction that social movements of every kind have exploited for more than three centuries."¹⁰

So how can documentary film help open this divide? Early in the interview Kamanaka identifies factual accuracy as a key subject of her films. Especially with *Living Through Internal Radiation* in 2012, her goal was to empower viewers by replacing the safety myth with "radiation exposure literacy." But to inquire after the divide in question is to linger on lengthier passages at the heart of the interview that focus on ideals rather than facts. With reference, one imagines, to the joyfulness at the center not only of *Living Through Internal Radiation* but also of *Rokkasho* from 2006, *Ashes to Honey* from 2011 and *Little Voices* from 2015, Hirano remarks, "Your films

make us feel especially keenly your conviction that democracy is fundamentally a matter of building community in the place where you live, by your own will and determination, according to your own vision." It's an evocative phrase, "In the place where you live." Kamanaka's films are full of scenes of hands, mouths and bottoms in contact with the soil, the sea, and the food they provide. What sustains viewers amidst themes of nuclear sacrifice and collusion are the bonds between the people attached to these hands, mouths and bottoms, and their celebration, against all odds, of living lightly on and with the earth.

Kamanaka speaks in the interview of a "chemical reaction of consciousness" (ishiki no kagaku henka) that she wants audiences to experience at her community screening events. 11 With this phrase, she gestures toward at least two kinds of transformation. "This is how angry I am at the government for telling lies," she wants them to be able to say out loud, especially if for the first time. "This is how much I want to begin speaking about the crushing anxiety I've been feeling." This is one transformation. The second, more classically democratic transformation, begins, "This is how much I too want to build a community-inplace." "This is how much I admire the people in Kama's film, who find a way to begin speaking with each other, across fear, across isolation, across differences." Her films set up a yearning, a desire to bridge the gap between the reality and the ideal. Audiences may arrive afraid and alone, pressed by what characters from Little Voices identify as the government's perceived injunctions: "Evacuate or not! Live or die! It's your responsibility! You choose!" (Figure 1). But after an hour of post-screening discussion they break free from the lonely quarantine of neoliberalism's "responsibilized" individuality and find themselves part of a group. As Hirano remarks with admiration, "It's the spontaneous birth of activism."



Figure 1: Noro Mika in Little Voices of Fukushima

Will You Still Say No Crime Has Been Committed? Agamben and the Japanese Constitution

One of the most gratifying moments in the interview is when Kamanaka and Hirano speculate about how a post-3.11 "state scholar" (goyō gakusha) like Yamashita Shun'ichi could have justified his actions to himself. When the Nagasaki University Medical Professor and author of a World Health Organization study of Chernobyl's epidemiological legacy¹² was dispatched to Fukushima after the triplemeltdowns to assure residents that children didn't need to take iodine pills and that there were "no immediate health risks," was he himself convinced? Of course not, Kamanaka replies. But this is where political theorist Giorgio Agamben's work is relevant, as Hirano points out by introducing the phrase reigai jōtai no kōzō, or "state of exception." What Hirano means is that Yamashita is thinking in much the same way as mid-century political theorists like Carl Schmitt and Clinton Rossiter, who justified authoritarianism with the logic that "no sacrifice is too great for our democracy, least of all the temporary sacrifice of democracy itself."13 Agamben cites thinkers like Schmitt and Rossiter in order to warn us that "states of exception" have come to define modern democracies. They are not, as we like to think, extreme cases: rare situations in which democracy fails when executive orders override the rule of law. Rather, states of exception increasingly operate as democracy's default mode.

In Fukushima, when Yamashita put nation ahead of region; when he put "what the Japanese government ha[d] decided" over what the people of Fukushima deserved, he perhaps more vividly than any single actor helped abandon Fukushima to what Agamben calls "the no-man's land between public law and political fact."14 The Japanese constitution of 1947 guarantees "individual dignity" (Article 24), "public health" (Article 25) and "life and liberty" (Article 31); this is the law. 15 But according to Kamanaka, the political fact, at least in Yamashita's mind, was that securing these rights for the majority would require denying them to Fukushima. Rather than acknowledge that public law would be suspended, he convinced himself that the safety myth would do a better job of "avoiding the escalation of fear, social panic, and community destruction" that would have been caused by mandatory evacuations. This is how the government rescinded basic human rights without anyone speaking about criminal responsibility. 16

Meanwhile, as Kamanaka points out, there is no better way to destroy a community than to force it to disavow its own panic and accept temporary crisis measures as permanent arrangements. Here the raising of the legal allowable annual radiation exposure from 1 to 20 millisieverts is but one obvious example. A compelling moment in the interview comes when Kamanaka describes the psychological effects of inhabiting the compressed temporality of this sort of endless emergency:

It's as if people are living only by their reflexes, playing some sort of



mindless video game. They no longer think in terms of contexts and narratives; there's no sense of history, or reflecting on cause and effect within the flow of time and the particulars of chronology. What we're seeing is the proliferation of a style of living only with what is right in front of one's eyes.

By using social media to gather community members and put her films in front of their eyes, each others' voices in their ears, Kamanaka aims to reopen time, reopen contexts and narratives and relationships. It's a task made difficult, she says, first by the Japanese education system's failure to nurture self-expression, and second by the post 3.11 pro-nuclear faction's success in labeling those who give voice to the collective injury of sustained worry as part of the problem - as circulators of "fūhyō higai" or "harmful rumors." Kamanaka's point is that it is essential to reopen a space between the mainstream media as sole purveyor of truth, and alternative media as at least equally true. The harder it is to open the distinction, the more valuable it is for Japanese democracy.

She explains that back in March 2011 local newspapers like Fukushima Minpō and Fukushima Minyū had no idea that high radiation readings were making the failure to evacuate many areas of the prefecture a violation of national law. 18 The reason these papers waited to report on the accident until Tokyo told them what to say, repeating it obediently with no analysis, was that the very possibility of local investigative journalism had long since been shut down by the nuclear industry itself. Since the 1960s when the plants were first built, TEPCO had been the single biggest source of advertising revenue for every newspaper, television and radio station in the prefecture. As a result, there was no history of interest in or talent for nuclear reporting

beyond the safety myth. This is how it was possible for Yamashita Shun'ichi to reaffirm that myth at precisely the moment it seemed most absurd. By contesting it, Kamanaka is making a crucial intervention.

Another reason Agamben is useful for framing Kamanaka's intervention is that he keeps us from reading Fukushima's state of exception as a uniquely Japanese political phenomenon, a return of pre-war Japanese fascism. As Hirano points out, Kamanaka's films, particularly Hibakusha at the End of the World (2003), show how Japan learned to mix its schizophrenic cocktail - both affirming the need for nuclear sacrifice and denying the extent of nuclear harm -- directly from the United States. At the Cold War nuclear production site in Hanford Washington, featured in the film, only a small fraction of cancers suffered by people living downwind of nine nuclear reactors and five large plutonium processing complexes is publically acknowledged to be the effect of radioactivity. What is more, when Kamanaka interviews Hanford families for her 2003 film, we witness their willingness to justify this small percentage with a rhetoric of heroic sacrifice: "This is how we won the Cold War" they say, in Hirano's paraphrase.

Agamben's point is that this sort of suspension of human rights is integral not only to the smooth operation of fascism but increasingly, throughout the 20th century, to those very democracies that like to uphold themselves as examples for the rest of the world: England, France, Italy, the United States. He helps us see how vulnerable we have been to authoritarianism all along, and how crucial it is to strengthen democracy not by petitioning our respective executive branches, which are already far too good at overriding the legislative branch, but by practicing representative government locally, in towns and villages. It's in this context that we can perhaps best appreciate Kamanaka's remark,



Especially when faced with "national this" and "the Abe administration's that," I think being able to decide how to solve problems at a local level - the problems we face in the places where we live, and where we've put down roots - is crucial to cultivating a democratic society. That's why I don't spend much time at weekly protests in front of the Prime Minister's Residence (kantei mae). If I'm always making the rounds with my films. . . to the prefectures, it's because I've come to believe that the center has no hope of changing if these other places don't change first.

Two Different "Revolutions Underfoot"

There's no question that when Kamanaka speaks of "ashimoto no kakumei" at the end of the interview she is referring to this sort of "revolution from below" -- to democratic activism as an exercise in local autonomy. But let me quote from the final sections to suggest an additional meaning. Kamanaka says:

True transformation emerges from everyday living, not from historical principles or dogma. In this sense I have to say that, like Mutō Ruiko, I believe in "women's sensitivities" (onna to iu kanjō). 19 It's because women are the ones who live daily life most intimately. Whether they live in the city or the countryside, women cook, women do laundry, and women sort the trash. [...] Where the maintenance of daily life is concerned, [they] are the ones who do it closest to the source. Of course one could object

that statements like this presume natural gender differences. But my point is that in society as it actually exists, clearly it's overwhelmingly women who do this work. Isn't that why women are the ones who are best able to sustain political movements that derive from daily life? The discovery of potential within the act of living itself seems old, but it's quite new.

In the interview, Kamanaka stops short of explaining how the kinds of carework (cooking, laundry) she references can fuel political transformation. But what's remarkable about both her post-3.11 films is that they document the potential inherent in nuclear carework in particular - the potential unleashed when people attempt to keep food and bodies safe from an ionizing radiation whose impact can never be fully measured or known. In addition to "revolution from below" as radical democracy in the form of local autonomy, the films also document a revolution that begins from a lack of autonomy. That is, they document what happens when we acknowledge that humans are not in control of the unfolding nuclear event, and that its bearing on our health is as much in the hands of external material forces as in our own.

How is this revolutionary? As the fields of philosophy of science and Science and Technology Studies have long argued, what Kamanaka calls "the potential within the act of living" is a material potential, a physical impetus that forces innovation in both thinking and living. Living Through Internal Radiation, from 2012, documents this innovation in the affective labor of frontline radiation doctors. Little Voices of Fukushima, from 2015, documents it in the affective labor of mothers. What we appreciate watching the films together is that they portray the doctors and the mothers doing much of the same work,



work that philosopher of science Isabelle Stengers has dubbed "small-s" science for the humility and patience necessary to acknowledge "the possibility that it is not man but the material that 'asks the questions,' that has a story to tell, which one has to learn to unravel."21 Attuning themselves to the interval between what Kamanaka calls in her interview "the time it takes for the radioactive material to establish itself in the body, and for the body to begin changing in response," her doctors and mothers know that to study radiation is to listen as it asks its own questions of the bodies it affects, and not assume that they are in charge. Hida Shuntarō, the Hiroshima oncologist who became a mentor to Kamanaka when she returned from making Hibakusha at the End of the World in Iraq, explains the medical consequences of this with wonderful simplicity. He says, "there is no treatment for exposure itself; there is no safe amount of exposure; any amount can cause illness. But there is healthcare for extending life."22

The Four Doctors of Living Through Internal Radiation

We get a vivid example of this kind of healthcare from the first doctor in Living Through Internal Radiation, Valentina Smolnikova. Working as a pediatrician in a town in Belarus 160 kilometers from Chernobyl, Smonikova discovers that thyroid cancer, the most direct effect of nuclear exposure, is far from the dominant problem.²³ Given that the half-life of Cesium 137 is 30 years, and that internal exposure through contaminated food, air and even placental nutrients lodges in the body, what Smolnikova says she has treated most frequently since 1986 are compromised immune systems, anemia, weak bones, low birth weights, congenital defects, respiratory problems and, not least, mental health (stress, headaches, insomnia, fear). Kamanaka's film gives equal attention to the long arc of Smolnikova's expertise, built over decades of experience, and to short snatches of her maternal care -- for her own family, and for patients like a depressed orphan in his late teens, abandoned when his parents turned to alcohol. These scenes underscore the interrelationship of medical care and affective care, emphasizing the emotional intensity of both, and the patience and humility necessary to understand how radiation manifests differently in different bodies over time.



Figure 2: Valentina Smolnikova in Living Through Internal Radiation

Humility and emotion are emphasized also by a second doctor, Smolinkova's Japanese colleague Kamata Minoru, when he explains the key concept of "hoyo," or respite care. Recalling his own work in Belarus, Kamata relates how studies undertaken in part through the Japan Chernobyl Foundation in the 1990s and 2000s proved that regular respite care in clean environments with clean food can reduce internal radiation significantly.²⁴ Although these reductions are measured in discrete units, the emotional support and nutritional cleansing that coax them to happen are impossible to quantify. Precisely because the cause-effect relationship remains imperfectly understood, Kamata asserts (Figure 3), "It's not enough to check kids' thyroids. We need to have a system for looking after the body in its entirety, the

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emotions in their entirety." In such scenes, Kamanaka affirms that radiation is asking its own questions of childrens' bodies and minds, and that the responses can only begin to be unraveled, however partially, by doctors for whom paradigm-shifting epidemiological discoveries like hoyō are linked to everyday care.



Figure 3: Kamata Minoru in Living Through Internal Radiation

In perhaps the most powerful scene from *Living Through Internal Radiation*, 94-year-old Hida Shuntarō, himself a Hiroshima survivor, moves seamlessly from the technical language he needs to explain recent developments in oncological science to the elemental language he needs for his medical practice, and his own self-care. Having cited a paper by a Russian researcher that proves ionizing radiation causes illness not, as everyone had assumed, by harming genes in the nucleus of cells, but rather by affecting cytoplasm and mitochondria outside the nucleus, he continues (Figure 4):



Figure 4: Hida Shuntarō in Living Through Internal Radiation

There is only one thing humans can do, and that is,

use the force of living to gather all their might,

and determine to live a long healthy life.

Thinking and living this way require courage and stamina.

. . . .

You can never live just any old way.

From the way you eat your meals, to the way you sleep at night,

to the way you make love, to the way you work,

and the way you play.

You have to concentrate [your courage and stamina].

This is the only way to fight ionizing radiation.

Kamanaka's cinematographer Iwata Makiko



lingers over Hida's fingers here, and his healthy skin, and the way he leans back in his leather chair in his own home, comfortable and open, as she records the precision with which his ninety-four year-old-lips form their syllables. Viewers' filmic interaction with Hida is thus itself quite loving, and helps us intuit how Kamanaka decided to follow up her 2012 doctors' film with a 2015 mothers' film. Kodama Tatsuhiko, 25 a medical doctor who directs the Radioisotope Center at the University of Tokyo, is the fourth doctor she introduces in Living Through Internal Radiation. In this scene (Figure 5), he makes the connection between doctors and mothers explicit:



Figure 5: Kodama Tatsuhiko in Living Through Internal Radiation

Mothers who are taking radiation seriously are truly turning the tide in Japan; I'd be grateful if you could convey my thanks to them. Watching their efforts, we [scientists] find it easy to cheer them on, and we're pleased that they exist not only in Fukushima but throughout the country. [. . .] Government officials are constantly telling them that a

certain level of radiation is fine, that they shouldn't worry. But they are having none of it, and their arguments are revolutionary. I think they should absolutely be proud, and continue fighting.

Because the sound quality of Kodama's clip is not good, Kamanaka may have vacillated on whether to include it. No doubt she kept it because Kodama is rebutting so forcefully the idea that carework amounts only to unpaid, apolitical female labor.²⁶

Care as Filmmaking, Filmmaking as Pedagogy: Little Voices of Fukushima

In Japanese, the title of Little Voices of Fukushima is Chiisaki koe no canon: A Canon of Little Voices. Because this film too emphasizes what post-Fukushima Japan can learn from post-Chernobyl Belarus, "canon" may conjure a single melody sung first in one place and then another. Yet we soon realize that there is little straightforward repetition. Little Voices toggles between lessons learned and taught first by Smolnikova and other mothers in Belarus, second by a group of mothers in the town of Nihonmatsu, Fukushima, and third by the women directors of a respite care center in Hokkaido where both Belarusian and now Japanese children come to recover.²⁷ In each case, women struggle mightily first to master the melody and keep it going. Because it can only be sung in harmony with radiation itself, it takes its toll. In this sense, the "littleness" of the voices refers also to their tentativeness. Each new chorus must attune itself to a different set of material circumstances, a differently irradiated set of bodies.

We follow the Nihonmatsu mothers as they begin to channel their fear and anger into acts of resistance that are also acts of radiation care: starting a vegetable co-op to distribute safe produce, removing contaminated vegetation along school routes, taking tentative first respite-care trips with their kids, and, Kamanaka is careful to emphasize, providing the emotional support for each other that sustains the mental health of the entire community. Despite triumphant scenes of the formerly apolitical mothers attending a Prefectural Health Survey meeting and speaking out at an anti-nuclear rally in Tokyo,28 their gains are summarized most poignantly late in the film. After letting us enjoy the high spirits of the expanding vegetable co-op, Kamanaka takes us outside alone with Endo Fumiyo, whose chubby face, ready wit, and tearful doctor visits have endeared her to us in several earlier scenes. When Kamanaka asks, "do you feel supported?" she replies "Yes. Things are expanding in a circle, no, - no, in a spider's web. And it must be rough for [our supporters who send us the vegetables and invite us on respite trips], because we're all so heavy!" What Endo has discovered is that the kind of health care capable of extending irradiated life is not geometrically sturdy like a circle. Rather, it is delicate and fragile, almost invisible, like a spider web. Difficult to spin and even more difficult to inhabit, it is what she has learned she must count on, nonetheless.

This sort of reliance on the most tenuous of connections can at times feel remote from the lessons Belarus is teaching. When Kamanaka shows us a map (Figure 6) that applies Belarusian safety standards to Fukushima, it seems clear that, at least since its independence from the Soviet Union in 1991, Belarus has taken much better care of irradiated citizens than Japan since 2011. As we see from the red shading for "enforced evacuation zone" (kyōsei hinan kuiki), if Endō's town of Nihonmatsu were in Belarus, it would have been declared uninhabitable and its citizens relocated with state support. Yet even if Belarusian measurements are confident and

straightforward, how the country treats exposed citizens is not.



Figure 6: Map of Fukushima with Post-1991 Belarusian Evacuation Standards Applied. Areas in red represent what Belarus would consider "mandatory evacuation" zones. Areas in pink show actual mandatory evacuation zones as determined by Japanese standards.

In a voiceover, Kamanaka explains that by means of a state respite care system, children between the ages of 3 and 17 who live in places with annual radiation readings greater than one millisievert are sent to one of 14 national recuperation centers for 24 days at a time, twice a year. 31 Little Voices spends a long time in these centers, observing what Kamanaka's voiceover calls "gentle, holistic and natural" treatments that eschew western-style drugs in favor of therapies like "mucous membrane stimulation for the immune system," "mineralrich asthma treatment," "carbon dioxide gasbaths to stimulate the production of oxygen," "massage for bronchitis and lung disease," and "salt therapy for respiratory issues." Viewers may feel a degree of prejudice toward the former Soviet Bloc's kooky-looking, low-tech medical apparati when they first watch these scenes. But what are these treatments if not

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ways to inhabit the interval between exposure and cellular response, and to cajole damaged DNA toward rest and regeneration? In the face of humanity's failure to control its most advanced technology to date, mucus membrane stimulators and carbon dioxide baths remind us again that it is not humanity but the material that gets to ask questions, which we must learn to unrayel.

Perhaps the most powerful scenes in Little Voices of Fukushima are shot in Hokkaido at the respite care (hoyō) center, which occupies a repurposed elementary school. When interviewing in Fukushima and Belarus, Kamanaka typically speaks to children and mothers directly, in respectful tones and at their height. In Hokkaido she asks fewer direct questions, and camerawoman Iwata Makiko's lens moves distinctly lower. Viewers find themselves increasingly alone with kids who are crying, or fighting, or urinating. With no other grownups in the frame, they talk to the camera as if it were the parent on duty. In one scene, the camera hurries over to two brothers on the school stage, one of whom has just burst out crying. When we arrive the other looks at the camera and explains, "He said he hit his head." (Figure 7)



Figure 7: At Noro Mika's Respite Care Center in Hokkaido, from Little Voices of Fukushima

plastic-lined pool dug into a ditch filled with warm water. One tumbles in head-first and wrenches his neck. Wailing, he looks at the camera while two others look at him and tell him he's an idiot. (Figure 8)



Figure 8: At Noro Mika's Respite Care Center in Hokkaido, from Little Voices of Fukushima

In a third scene, a toddler trails his fingers slowly along the wall of an empty corridor making his way slowly away from the camera, which is at his height. When he calls out "mommy?" "mommy?" we feel like answering him. (Figure 9)



Figure 9: At Noro Mika's Respite Care Center in Hokkaido, from Little Voices of Fukushima

In another, several boys are jumping in a

In a fourth, a child walks alone to the bathroom



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to collect a urine sample. Although we hear him talking to one of the women who runs the center, the camera does not show her. Instead it crouches with him at knee-level as he holds up his shirt with one hand and aims into the bottle with the other. Looking into the camera he asks, "could you hold it a little lower?" (Figure 10)



Figure 10: At Noro Mika's Respite Care

Center in Hokkaido, from Little Voices of Fukushima

Kamanaka's lesson for viewers is that we too have something to learn from carework. Rather than dismiss it as abject or apolitical, she performs it, and honors it. "True transformation comes from everyday living" when we learn how to close the distance between the discourses that govern our lives, and the material origins that sustain and challenge them.

I would like to thank Kamanaka Hitomi and Katsuya Hirano for giving me a window into their respective projects and politics, and for their inspiration and insight. I would also like to thank Norma Field for her support and passion, and Mark Selden for his editing.

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Notes

¹ The Ministry of Environment maintains a large "Decontamination Information Plaza" (Kankyō saisei purazā) at ☐960-8031 Fukushima Prefecture, Fukushima, Sakaemachi, 1-31. In addition to extensive decontamination charts updated regularly at the plaza, the Ministry maintains interactive web-maps of "prefectural decontamination information by every city, town and village."

² A script of Abe's September 2013 speech to the International Olympic Committee in Buenos Aires is here. Documentary-makers Yoh Kawano (*Human Error*, 2017) and Kawai Hiroyuki (*Nuclear Japan*, 2014) both include a clip of the opening lines to underscore how defensive Abe's Olympic bid sounds when he insists Tokyo is "one of the safest cities in the world, now and in 2020." Despite the widely-reported dishonesty of this statement (see for instance www.reuters.com/article/us-japan-nuclear/abes-fukushima-under-control-pledge-to-secure-oly



mpics-was-a-lie-former-pm-idUSKCN11D0UF), the 2020 benchmark is being honored, both with the games at large in Tokyo and with baseball and softball events which will take place in Fukushima, to "show the world the extent of its recovery." See here.

These towns include, from north to south, Iitate, Kawamata, Minamisōma, Namie, Katsurao, Futaba, Tamura, Ōkuma, Kawauchi, Tomioka and Naraha. Fukushima Prefecture updates its status maps in nine languages. As Katsuya Hirano points out in his interviews with both Namie municipal worker Suzuki Yūichi and Namie mayor Baba Tamotsu, policies of "return" (帰還) and "recovery" (復興) do not make total sense even to those charged with implementing them. Nevertheless, that they are the only recognized government benchmarks is clear from the naming of the affected areas. Every effort is made to turn the most toxic "difficult to repatriate" zones (帰還困難区域) into purportedly less polluted "residence-restricted zones" (居住制限区域). In turn, "residence restricted zones" are assigned dates for transition to a third category, "zones in preparation for the cancellation of evacuation" (避難指示解除準備区域). Upon cancellation, these zones return to "normal."

⁴ Wendy Brown. *Undoing The Demos: Neoliberalism's Stealth Revolution* (New York: Zone Books, 2015) 219.

⁵ Kana Inagaki, Leo Lewis and Ed Crooks, "Downfall of Toshiba, A Nuclear Industry Titan," *The Financial Times*, February 14, 2017.

⁶ "Mitsubishi Heavy Doubling Down on Areva with Fresh Investment," Nikkei Asian Review, April 24, 2017.

⁷ In the interview Kamanaka paraphrases their complaint as "江戸時代に戻るわけにはいかないんだ."

⁸ Kawai Hiroyuki, *Nuclear Japan*, documentary, (2014; Tokyo: K Project), iTunes, 0:40:00.

⁹ Brown, *Undoing*, 27.

¹⁰ Ibid., 206.

In English, some of the best work on Kamanaka to date is by film scholar Hideaki Fujiki of Nagoya University. Fujiki discusses Kamanaka's films in the larger context of these *jishū jōei*, local self-screening events, in "Networking Citizens through Film Screenings: Cinema and Media in Post-3/11 Social Movements." *Media Convergence in Japan*. Ed. Patrick W. Galbraith and Jason G. Carlin. Online Publication: Creative Commons, 2016. Fujiki discusses Kamanaka's position on science, environmentalism, and documentary technique in "Problematizing Life: Documentary Films on the 3.11 Nuclear Catastrophe." *Fukushima and the Arts: Negotiating Nuclear Disaster*. Ed. Barbara Geilhorn and Kristina Iwata-Weickgenannt. London: Routledge, 2016.

¹² See Yamashita and Repacholi, Chernobyl Telemedicine Project 1999 - 2004: Final Report of the Joint Project with the World Health Organization, the Sasakawa Memorial Health Foundation and the Republic of Belarus. In the introduction to her study of Chernobyl, anthropologist Adriana Petryna cites the key role played by the World Health Organization in minimizing the accident's significance for local and global health (xv). Petryna's analysis of the supporting roles played by NGOs and other providers of "international assistance" singles out "the Japanese Sasakawa Fund" in particular for sending foreign experts to the Zone to abstract data without understanding the "complex interdependencies between thyroid and other physiological systems" (159). See Petryna, *Life Exposed: Biological Citizens after Chernobyl* (Princeton: Princeton University Press, 2013).

¹³ Clinton Rossiter in Constitutional Dictatorship (1948), quoted in Giorgio Agamben. State of



Exception. Trans. Kevin Attell (Chicago: University of Chicago Press, 2005) 9.

- ¹⁴ Agamben, 205.
- ¹⁵ See here.
- ¹⁶ It is in this context that the legal efforts of the "Complainants for the Criminal Prosecution of the Fukushima Nuclear Disaster" (Fukushima genpatsu kokusodan) are so significant. Norma Field and Matthew Mizenko have translated their publication Will You Still Say No Crime Was Committed? Statements by 50 Complainants, as an e-book available on amazon. For updates on the trial, see here and here. For accounts of activist Mutō Ruiko's central role in bringing the case to trial, see Tomomi Yamaguchi, "Mutō Ruiko and the Movement of Fukushima Residents to Pursue Criminal Charges against TEPCO Executives and Government Officials, *APJ-Japan Focus*, July 1, 2012. Also on Mutō Ruiko see Norma Field, "From Fukushima: To Despair Properly, To Find the Next Step, *APJ-Japan Focus*, September 1, 2016, and Katsuya Hirano, "Interview with Mutō Ruiko".
- ¹⁷ On the raising of annual allowable radiation exposure, see Note 18.
- ¹⁸ Until April 2011 the Japanese government followed standards set by the International Commission on Radiological Protection (IRCP) allowing a maximum exposure of 1 millisieverts per year for the general public and 20 millisieverts per year for nuclear workers. When Kamanaka remarks that Fukushima's local newspapers "did not know that by Japanese law people cannot live" (日本の法律で[放射線管理区域に]人は住めない) in areas with official measurements above one millisievert per year, she is referring to these standards. For more on the standards themselves, and the Japanese government's decision to raise them in April 2011, see Norma Field, "From Fukushima, To Despair Properly", note 7, and Katsuya Hirano, Yoshihiro Amaya and Yoh Kawano "Reconstruction Disaster: The Human Implications of Japan's Forced Return Policy in Fukushima," note 1.
- ¹⁹ On Mutō Ruiko, see Note 16.
- ²⁰ In science and technology studies, see Bruno Latour, especially *We Have Never Been Modern*, Trans. Catherine Porter (Cambridge: Harvard UP, 1993) and *Facing Gaia*, Trans. Catherine Porter (Cambridge, UK: Polity, 2017). In philosophy of science, see Isabelle Stengers, especially *In Catastrophic Times*, Trans. Andrew Goffey (Online: Open Humanities Press, 2015) and *Another Science is Possible*, Trans. Stephen Muecke (Cambridge, UK: Polity, 2018). In feminist philosophy, see Elizabeth Grosz, especially *The Incorporeal: Ontology*, *Ethics and the Limits of Materialism* (Chicago: University of Chicago Press, 2017).
- ²¹ Isabelle Stengers, *Power and Invention: Situating Science*. Trans. Paul Bains (Minneapolis: University of Minnesota Press, 1997), 126.
- ²² Hida Shuntarō, quoted in Kamanaka Hitomi, *Hibakusha: Dokyumentarii eiga no genba kara* (Tokyo: Kage shobō, 2009) 33. For a biographical sketch of HIda, see here.
- ²³ For a biographical sketch of Smolnikova, see here. After Chernobyl, Smolnikova's town of Buda-Koshelvo, 150 km from the disaster, accepted many refugees from towns that were closer and more contaminated. But she is careful to document significant health problems from radiation exposure among children from her own town, and among children born long after 1986.
- ²⁴ For a biographical sketch of Kamata, see here. On the Japan Chernobyl Foundation (JCF), see here.
- ²⁵ For a biographical sketch of Kodama see here. In his capacity as Tokyo University



Radioisotope Center Director, Kodama was assigned a leadership role in Fukushima decontamination. In July 2011 he delivered a livid speech before the House of Representatives Health Labor and Welfare Committee (shūgiin kōsei rōdō iinkai) decrying the government's failure to acknowledge the scale of the public health crisis or deal with it adequately. For Kyoko Selden's translation of the speech, see here.

This is the conclusion drawn in anthropologist Aya Hirata Kimura's major new book Radiation Brain Moms and Citizen Scientists: The Gender Politics of Food Contamination after Fukushima (Duke, 2016). Kimura argues that mothers who band together to monitor food safety after Fukushima are constrained by three mutually constitutive social forces: "scientism," neoliberalism, and post-feminism. When they measure and publicize radiation in food, their work is recognized as "scientific," but only to the degree that it satisfies the neoliberal expectation that private citizens take care of themselves rather than count on state protection. Like the philanthropic work of civil society writ large, which is allowed to compensate for aggressive profiteering but never question it, citizen science is gendered female: nurturing, non-productive, and non-threatening. In Kimura's analysis, the result is classic post-feminism: female citizen-scientists are allowed "an entry into the public sphere, but only on the condition of complacency with the existing power structure and of adherence to hegemonic femininity"(17). See Aya Hirata Kimura, Radiation Brain Moms and Citizen Scientists: The Gender Politics of Food Contamination after Fukushima (Duke University Press, 2016).

²⁷ The respite care center in Shiribeshi, Rusutsu-mura is run by Noro Mika and her organization "Bridge to Chernobyl," which began collaborating with Smolnikova's non-profit "Children of Chernobyl" in the early 1990s. For a biographical sketch of Noro, see here. The vegetable co-op is overseen by Sasaki Ruri at the Shingyōji Temple run by her husband, Pure Land priest Sasaki Michinori. For profiles and interviews with both Ruri and Michinori, see Iwakami Yasumi, *Hyakunin hyakuwa dainishū* (Tokyo: San'ichi shobo, 2014) 189-209.
²⁸ We see them react incredulously as the Review Board (kentō iinkai) of the 14th Fukushima Prefectural Health Survey (kenmin kenkō chōsa) announces that a 100-fold increase in thyroid cancer is the result of more extensive screening, not actual illness. For the published results of the survey see here. One of the anti-nuclear rallies they attend is the "Million Mothers' Tanabata Project" (Hyakuman'nin no hahatachi tanabata purojekuto) on 7 July 2013. For background see here.

²⁹ The map charts standards outlined in a piece of Belarusian legislation from November 12, 1991 that Kamanaka also introduces visually (in Russian,) "On the Legal Status of Territories Contaminated as a Result of the Chernobyl Accident." See English translation.

³⁰ In another scene we see Smolnikova explain to mothers in a Belarusian community center that "you can remove half the radiation in a child's body in 21 days" (1:09:05). At the hoyō center in Hokkaido, Bridge to Chernobyl NPO Director Noro Mika discusses hoyō in terms of one month: "It's hard work to go from 20 Becquerels to ND (not detected) in one month" (1:35:20). Interpreting the results of the Hokkaido urinalysis by bar graph (1:38:14), Kamanaka's voiceover highlights one boy whose numbers plummeted by 70% in just 12 days. As if in response to viewers' surprise that so much can be accomplished in so short a time, Noro says, "back [when we first started treating children from Chernobyl], we didn't understand why they recuperated so quickly. But now we think the reason kids recover in three weeks is because they're kids."