

BOOK REVIEW

## Nuclear Ghost: Atomic Livelihoods in Fukushima's Gray Zone

By Ryo Morimoto, 2023. p. 356. Hardback, \$85.00 USD, ISBN: 9780520394100. Paperback, \$29.95, ISBN: 9780520394117. Ebook, \$29.95, ISBN: 9780520394124

Chiara Ramponi 

Graduate School of Environmental Studies, Tohoku University, Sendai, Japan  
Email: [chiara.ramponi.s4@dc.tohoku.ac.jp](mailto:chiara.ramponi.s4@dc.tohoku.ac.jp)

(Received 20 November 2023; accepted 21 November 2023)

Morimoto has chosen a captivating title for his monography on post-disaster Fukushima and from its very outset one might approach it picturing the “ghost” of the uncanny presence of radioactivity, a lingering danger invisible to human senses. Indeed, this image would resonate with the famous passage of *Risk Society* in which Ulrich Beck says that “the risks of [post-modern] civilization today typically escape perception and are localized in the sphere of physical and chemical formulas (e.g. toxins in foodstuffs or the nuclear threat)” (Beck, 1992, p. 21). However, the book aims to look beyond stereotypical image of what it means to live with radioactive contamination: the “ghost” will turn out to be a complex metaphor for the disruption against which the Minamisoma community is struggling.

Minamisoma is one of the biggest municipalities in Fukushima prefecture. In March 2011, it was affected by both the earthquake and the tsunami; shortly after, it was impacted by the radioactive fallout caused by the explosions that occurred at the nuclear power plant, triggered by the prolonged power outage in its cooling systems. The contamination (mainly from Caesium 134 and 137) was scattered on the ground by the whims of the wind and the rain and created a mosaic of pollution. Gradually, the institutional mapping of this contamination has drawn lines that subdivide the whole region into sections deemed more or less suitable for the residents to stay. The essential criterion was how radical of a decontamination procedure would be needed to make a specific area permanently habitable again. How much debris and topsoil removal, how much scrubbing and cleaning the streets and the public and residential building surfaces would be necessary for the people to live in an environment where radioactivity is “as low as reasonably achievable” (ALARA) according to ICRP regulations (International Commission on Radiological Protection, 1966)? Morimoto’s analysis does not focus on the intricacies of the institutional policy-making behind these public safety regulations, nor exactly on the ways in which citizens have engaged (and still do engage) in negotiations over those quantitative standards, like other scholars have (Aldrich *et al.*, 2015; Kimura, 2016; Kimura, 2017; Polleri, 2019; Slater *et al.*, 2014). Rather, he is committed to showing how this parcelling process, minute and disorienting, involving both the space and the citizens’ body (by regulating residents’ timing of return and access to monetary compensation), has turned Minamisoma into a layered socio-political space. The author argues that individuals’ and communities’ relationship to the place and livelihood is being disrupted by the nuclear-centred logic of the remediation policies enforced in the prefecture; and that, while a large part of the work on Fukushima has so far centred mostly on technological and biomedical aspects of post-2011, we should be looking differently at the delicate balance between residents’ risk perception, life priorities, and attachment to the landscape. Thus, as a foreword, Morimoto appeals to the reader’s open-mindedness and suggests that a deeper understanding of his informants’ stories can be achieved only by leaving the radioactive contamination in the background.

One of the controversies of the post-Fukushima disaster, something any researcher will have to confront when looking at the livelihoods of the people who decided to stay in the region or returned to their homes after the decontamination, is the fact that the dangers of living with low-intensity radiation exposure are much less easy to assess than one would like to think. Rather than a matter of objective scientific assessment, this epidemiological question has grown into an ideologically charged subject of discussion. Mentioning ideology when talking about potential health risks linked to environmental pollution evokes immediately a scenario where political institutions and corporations are trying to conceal a known hazard, despite the citizens' concerns about noticeable physical manifestations. Indeed, Japan is not unfamiliar with cases where political and economic powers were deaf to the residents' bodily experiences. In Minamata, Yokkaichi and Toyama, citizens were trying to prove the toxicity of a specific pollutant in the face of a visible pathological outcome. In Fukushima's case, not only is there no background scientific consensus over the long-term consequences of this type of exposure (Baverstock, 2014; The Chernobyl Forum, 2006; Tsuda *et al.*, 2022), but apparent organic evidences on residents' physical health seems not to be agreed upon (or might not yet have been acknowledged by the local and international medical institutions).<sup>1</sup>

What Morimoto highlights is how the technocentric approach adopted by the State to the remediation of the region, pursued with the only objective of repopulation/resettlement, focuses merely on reducing the levels of environmental radioactivity while ignoring more complicated questions about the locals' connection to the "place" and its current liveability. In his analysis, he refers repeatedly to the concept of *en*: a thick word that translates into a deep sense of interconnectedness and almost fateful belonging. *En* is a way for the author to convey the rooted-ness of his interlocutors' lives, the "experiential and expressive ways places are known, imagined, yearned for, held, remembered, voiced, lived, contested and struggled over" (Feld and Basso, 1996, p. 11). Additionally, *en* becomes for Morimoto an auto-ethnographic tool to reflect upon his own impalpable connection to these events and the people affected, despite being a *yosomono*, an outsider.

Broadly speaking, the unspoken background for Morimoto's analysis is the theme of boundaries between rationality and irrationality among people confronted with hazardous situations. The question of what constitutes "rational" behaviour dates back to one of the most basic ways in which anthropology as a discipline has approached "the other," shifting away from a hierarchical understanding of a supposed "primitive non-/a-rational mind" to the idea of any culture holding internal coherence. Anthropology has unveiled the multitude of ways in which culture affects risk perception in a non-deterministic fashion, depending on historical, socio-economic and political factors. This "perception" of the stakeholders is thus not purely cognitive or psychological, but both (a) the socially mediated acknowledgement and assessment of a hazard, and (b) the broader worthwhileness of a specific outcome for the people who are making choices and resolving to withstand their unwanted consequences (Douglas and Wildawsky, 1982).

Similarly, Morimoto tries to deconstruct the alleged irrationality of his interlocutors as rather the product of the observer's bias, a sort of tunnel vision focused on the supposed "factuality" of the nuclear disaster that ends up overshadowing the complex meaning of the locals' experiences. Since the introduction and throughout the first chapters, the author describes, during a preliminary fieldwork, his relationship as an interpreter for a foreigner documentary film director. The director is obsessed with exposing TEPCO and documenting the gruesome reality of an on-going disaster in Minamisoma; for this reason, he is frustrated with the seeming lack of adherence to this narrative from the part of the residents. The recounting of their interactions, with the eventual demise of

<sup>1</sup>Cf. UNSCEAR Report 2020/21. I would argue that separating mind and body when looking at the issue of Fukushima citizens' wellbeing is as questionable of an approach as in any other case study; nonetheless, the distinction made in this instance is that, even though clinical evidences of psychosocial distress have indeed been associated with the experience of the evacuation, the evidence regarding the biological impact of low-intensity ionizing radiation exposure has not been considered compelling based on the dose assessment included in the Fukushima Health Management Survey. Regarding the high incidence of paediatric thyroid cancer in the region, this topic is only briefly mentioned in the book as an ongoing epidemiological controversy. Overall, this succinct way of addressing the issue does not undermine Morimoto's analysis.

their collaboration, functions as a storytelling device to outline the conflict between the technocentric point of view and the one of the locals; a friction that Morimoto grows into understanding more as *he* develops an attachment to Minamisoma. This ethnography elucidates how the *tōjisha* (the people broadly “involved” in the disaster) experience the discourse centred around engineering and biomedical issues as depriving them of a deeper and more authentic tie to the land, through farming (an ecological kind of relationship, displayed especially in chapters 7 and 9) and owning a generational home (cultural and spiritual relationship, elucidated in chapter 8). The connection to “the land” acquires at times an almost literal connotation in the recollections of Morimoto’s informants: Hatsumi, who managed a Buddhist temple and its cemetery and who first came up with the image of the “nuclear ghost”; Naoko, a relocated farmer who, when talking about the sense of alienation produced by the decontamination process, states:

I spent sixty years of my life, since my marriage, in Odaka cultivating the soil, and my in-laws before me spent more years before that. The soil is the history of this house, and the soil is what they [decontamination workers] take away and put in those black bags. (p.186)

Another main theme, that emerges from these very words, is of course the one of victimhood. The experience of victimhood is both connected to Morimoto’s interlocutors’ positionality within the intricate compensation policies of TEPCO/State and to their sense of loss of something difficult to even explain (*katarinikui*). How are damages defined and how are the people affected by the disaster navigating the system? What is the nature of their suffering and how should we look at it as anthropologists?

Following the author’s accurate description of “zoning” in Minamisoma, the partition of different districts depending on the state of the remediation works, the reader comes to grasp the minute and sometimes invisible internal differences in the harm endured by the residents. Also, what becomes clear when becoming immersed in the logic of the “compensation game”, as the author calls it, is the tautological nature of the institutional definition of victimhood: where the harm is stated as being “anything reasonably correlated [to the accident].” This definition, apart from being intentionally ambiguous so to make the litigation more difficult to settle in favour of the claimants, is strictly centred on the idea of the damages being material and quantifiable; a logic that benefits the institutions, which are eventually able to give closure to the crisis once an appropriate quantity of compensation has been assessed and granted. However, the damages are not necessarily material, nor easily quantifiable (how would one quantify having to chop down the old trees surrounding the family temple in order to lower the environmental radioactivity, or the impossibility of picking the *kaki* fruit from the tree in the backyard?). Thus, the residents’ hardship in coming to terms with the accident and making sense of their current situation becomes difficult to grasp. Their struggle is connected to the fact that no environmental disaster exists as a finite casualty, like a dot on a line. A disaster is an on-going event: its meaning for the affected community (and even the rest of the world, in a time of globalisation) and the nature and extent of the harm caused by it, are ever shifting. Morimoto further elaborates on this idea by making the argument that there are lasting structural factors that contribute to the perpetuation of the *tōjishas*’ suffering. One is the notorious “myth of safety” (*anzen shinwa*), the exaggerated sense of security towards nuclear energy technologies, fed to the public for decades by the national and international lobby. The 2011 accident shook this myth at its core and fostered a sense of betrayal; a sudden inversion of the expectations that people from the remote agricultural North used to hold towards the blessing of economic opportunity brought by this technology. Similarly, the case of *fuhyō higai* (damages caused by unfounded rumours) exemplifies the saying “when it rains, it pours”; farmers, despite an outstanding commitment to food supply chain testing and controls, still withstood long-lasting economic losses due to reputational damage.

Overall, the analysis shifts away from landscape engineering and biomedical technology towards a more holistic understanding of the residents’ atomic livelihoods and, drawing on Tuck (2009), the

author locates his ethnography in the emerging post-victimhood analysis of Fukushima (Kumaki, 2022), in reference to Kim Fortun's work on the Bhopal disaster (Fortun, 2001). Fortun's introduction to *Advocacy for Bhopal*, describes advocacy as a practice arising from the tension between particularism and universalism. Simply explained, advocacy is a historically and culturally situated attempt of balancing the specific claims made around a cause with what makes such a cause universally compelling. That is why, she argues, advocacy should not be merely regarded as the pragmatic actions undertaken to reach a precise goal, but as an imaginative effort in the field of ethics. By drawing on Fortun's work, I believe Morimoto implies that we should avoid taking an unintentionally ethnocentric "Western" posture by judging Fukushima's residents' attempts to fight for preserving their livelihoods through the lens of modernist ideals. By deconstructing what advocacy means and disentangling its objectives from a pre-packaged teleology, both Fortun and Morimoto aim at depicting in a non-judgemental manner different "possible responses" to the contradictions faced by victims in the scenario of an environmental disaster.

Finally, Morimoto's book lays itself open to two points of criticism, the same ones raised by Polleri (2022) in his commentary to one of the author's previous papers (Morimoto, 2021). The first is that a post-victimhood approach risks degenerating into an ethically specious cultural relativism that ends up underestimating the pressure exerted by power structures on individuals' choices. In other words, however dutiful it is to structure an analysis of the post-disaster that does not obliterate the agency of the *tōjisha*, this is a fine line to walk. To come to view the residents' stories as the result of a free choice unintentionally risks exonerating institutions and corporations from their responsibilities, past and especially future. In my opinion, on this occasion Morimoto escapes, at least partially, this criticism, because his recourse to the category of structural violence and the depth of his analysis of the historical remoteness and marginalization of the region highlights how some of the factors contributing to the on-going victimization of Fukushima residents are independent from their complicated attempts at rebuilding normalcy. On the other hand, I would argue that the second point mentioned by Polleri still hits the mark. This criticism has to do with the fact that a post-victimhood approach, while acknowledging the residents' experiences, is also highly advantageous to the Japanese institutions which, over the course of the past twelve years, have massively resorted to a liberalist and hyper-individualist rhetoric when talking about Fukushima reconstruction. This rhetoric, centred on the aforementioned ALARA standards, co-opts the citizens into thinking that the only sensible way of facing the consequences of the disaster is taking upon themselves the burden of daily and life choices.

In conclusion, Morimoto excels at illustrating how Minamisoma residents strive to cultivate a meaningful relationship to a place that has dramatically changed, still yearning for individual, family, and community identity. His ethnography masterfully portrays the anthropological failure of the technocentric project of remediation and shows how government policies ended up further harming, in subtle and unforeseen ways, the very victims they were set out to compensate. It also shows how, as social scientists, we should not want to add to this harm by flattening the informants' experiences, centring the analysis on the mere biomedical aspects of living in Fukushima. However, I believe the author fails to elaborate more on the problematic pitfalls of a post-victimhood approach to this case study. How to avoid making this theoretical stance complicit in the further cycle of victimization of the *tōjisha*, one where the post-disaster risk management is mainly portrayed as a matter of "personal choice", is an open question. The fact that preserving the memory of the accident, in order to hold the institutions and corporations accountable, might hinder the recovery of the people affected is also an uncomfortable issue that still lingers in the background of Fukushima studies and that future works will have to confront more directly.

## References

- Aldrich D.P., Oum S. and Sawada Y. (eds) (2015). *Resilience and Recovery in Asian Disasters. Community Ties, Market Mechanisms, and Governance*. Tokyo. Springer Japan.
- Baverstock K. (2014). 2013 UNSCEAR Report on Fukushima. A critical appraisal. *Egaku* 84(10), 1–8.

- Beck U.** (1992). *Risk Society. Toward a New Modernity*. London: Sage.
- Douglas M. and Wildawsky A.** (1982). *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*. Berkeley: UC Press.
- Feld S. and Basso K.** (1996). *Senses of Place*. Santa Fe: SAR Press.
- Fortun K.** (2001). *Advocacy after Bhopal: Environmentalism, Disaster, New Global Orders*. Chicago: University of Chicago Press.
- ICRP.** (1966). *Recommendations of the International Commission on Radiological Protection*. ICRP Publication 9. Oxford: Pergamon Press.
- Kimura A.H.** (2016). *Radiation Brain Moms. The Gender Politics of Food Contamination after Fukushima*. London: Duke University Press.
- Kimura A.H.** (2017). Citizen science in post-Fukushima Japan: the gendered scientization of radiation measurement, *Science as Culture* 28(3), 327–350. <https://doi.org/10.1080/09505431.2017.1347154>
- Kumaki H.** (2022). Suspending nuclearity: ecologies of planting seeds after the nuclear fallout in Fukushima, Japan. *Cultural Anthropology* 37(4), 707–737. <https://doi.org/10.14506/ca37.4.05>
- Morimoto R.** (2021). Ethnographic lettering: “Pursed Lips: A Call to Suspend Damage in the Age of Decommissioning”, *criticalasianstudies.org* Commentary Board, March 22. <https://doi.org/10.52698/ASPR7364>
- Polleri M.** (2019). Conflictual collaboration: citizen science and the governance of radioactive contamination after the Fukushima nuclear disaster. *American Ethnologist* 46(2), 214–226. <https://doi.org/10.1111/amet.12763>
- Polleri M.** (2022). *Ethnographies of nuclear life: from victimhood to post-victimization*. Platypus. The castac blog, March 2022. <https://blog.castac.org/2022/03/ethnographies-of-nuclear-life-from-victimhood-to-post-victimization/>
- Slater D.H., Morioka R. and Danzuka H.** (2014). Micropolitics of radiation. *Critical Asian Studies* 46(3), 485–508. <https://doi.org/10.1080/14672715.2014.935138>
- The Chernobyl Forum: 2003–2005 (second revised edition).** (2006). *Chernobyl’s Legacy: Health, Environmental and Socio-Economic Impacts and Recommendations to the Governments of Belarus, the Russian Federation and Ukraine*. IAEA Division of Public information, Vienna.
- Tsuda T., Miyano Y. and Yamamoto E.** (2022). Demonstrating the undermining of science and health policy after the Fukushima nuclear accident by applying the toolkit for detecting misused epidemiological methods. *Environmental Health* 21, 77. <https://doi.org/10.1186/s12940-022-00884-6>
- Tuck E.** (2009). Suspending damage: a letter to communities. *Harvard Educational Review* 79(3), 409–428.