

The Fukushima Nuclear Disaster and the Tokyo Olympics

Koide Hiroaki

Norma Field, Translation, Introduction and Notes

Introduction: “No One Who Is Alive Today ...” An introduction to “The Fukushima Nuclear Disaster and the Tokyo Olympics”

Norma Field

To the question, when did you decide to commit to the abolition of nuclear power, Koide Hiroaki replies without hesitation, “October 23, 1970.”¹ It was March 2015 when Koide retired as assistant professor from the Kyoto University Research Reactor Institute. If we add together the lead-up to that decision and his activities following retirement, we come up with a half-century of dedication to the cause of stopping the nuclear generation of electricity, a keystone of postwar national policy.



Koide Hiroaki, Matsumoto, July 2018

How is it that Koide can point so precisely to that date, to any date? At the time, he was in his third year in the nuclear engineering department of Tohoku University. In adolescence, geology had been his passion. He was the head of his high school club even in his senior year, when it would have been commonsensical to dedicate every hour to preparing for university entrance exams. (To that endeavor he conceded a scant month or so, the January of the year he would matriculate in April.) Walking mountain trails, noting the things that geologists study, was the expression of an individual, a personal, love. At university, he was determined to do something beneficial

to society. Like many youths with scientific leanings, Koide dedicated himself to the dream of “peaceful uses of atomic energy.”² Tellingly, it was only the former imperial universities that offered programs in nuclear engineering. For someone who hated hot weather, the only options pointed north, to Hokkaido and Tohoku.

As campuses exploded in the 1968-69 student movement, Koide attended his classes still wearing the student uniform—black, buttoned to standup collar—already cast off by most college students. Disliking politics, a position he asserts to this day,³ he nevertheless took the trouble to try to understand the point of the student movement. His conclusion: to understand the social significance of one’s field of study and to assume responsibility for it.

He found, close at hand, a site where he could immediately put this recognition into practice. In 1968, Tohoku Electric Power Company (Tepco) decided to site a nuclear power plant in Onagawa, Miyagi Prefecture, a fishing village that barely used electricity. Why, Koide puzzled along with the villagers, would such a project not be sited in the metropolis of Sendai, where company headquarters were located? He searched for the answer, which he subsequently understood was glaringly obvious: while the electricity generated by nuclear power plants was desirable for large cities, their operation posed too great a risk and therefore necessitated remote siting.⁴ (Recall that the Fukushima nuclear power stations of Tepco functioned solely to produce electricity for Tokyo.) He listened to the villagers and argued with the professors who promoted nuclear power. October 23, 1970 was the day of the first large gathering of the Alliance Resolved to Oppose the Onagawa Nuclear Power Plant (Onagawa Gempatsu Hantai Kisei Dōmei). Koide began to split his life between Sendai, where Tohoku University was located, and Onagawa. He and fellow carless comrades walked the hamlets of the area, handing out flyers, talking with lonely

seniors but also jumping into pits dug by power shovels in order to delay construction. When arrests were made, they launched the first lawsuit in Japan to challenge the safety of nuclear power.

Koide’s direct connection with Onagawa ended in 1974, when he entered the Kyoto University Reactor Research Institute.⁵ There, he would come to have five like-minded colleagues who would be critically and then popularly known as the “Kumatori Gang of Six” (Kumatori Rokuningumi). The “gang” portion was meant to invoke the “Gang of Four,” leaders of China’s Cultural Revolution, later considered “treasonous” and imprisoned, just as these nuclear scientists were frequently presented by their critics as traitors to their mission; “Kumatori” refers to the location of the Institute in Osaka Prefecture, inconvenient to access, far from Kyoto University, which itself attests to community displeasure over the prospect of living near a nuclear reactor, even a research reactor.⁶ These scientists dedicated their expertise to making the dangers of nuclear power understandable to the general public. They were, understandably, distinctive—a presence apart from the academic world of promotions and lavish grants. Yet Koide has repeatedly denied that he was subject to any pressure: his speciality at the Institute was radiation measurement, and as part of the Nuclear Safety Research Group, he was tasked with overseeing the disposal of radioactive waste, including effluent. So long as he responsibly fulfilled his official obligations, he was free to pursue whatever research and activities he chose, including the antinuclear work with his colleagues. This, he said, was possible because it was not Tokyo University that he worked for, but Kyoto, with its tradition of emphasis on basic research and respect for the individual researcher. Retiring in 2015 at the lowest academic rung—in other words, not having anyone under him—also suited his inclinations.⁷ Moving to Matsumoto City in Nagano Prefecture, he has cut back on

the punishing schedule he maintained after March 11, 2011, but continues to participate in those activities to which he feels he can make a contribution, mostly in the form of lecturing and writing. As a citizen committed to opposing war, he stands on the third day of every month in front of Matsumoto Station carrying a poster with the words, “We say ‘no!’ to Abe politics” (Abe seiji o yurusanai).

It stands to reason that Koide should be asked to address the matter of the 2020 Tokyo Olympics. In his Buenos Aires speech on September 7, 2013, two years and four months after the start of the Fukushima disaster, Prime Minister Abe proclaimed to the International Olympic Committee that the situation was “under control,” that the Fukushima accident had “never done and never [would] do any damage to Tokyo.”⁸ Abe’s statement was decisive in bringing the games to Tokyo for the first time since 1964, even though his elaboration in a subsequent press conference that contaminated waters were confined to the .3 square kilometers of the harbor created consternation for none other than Tepco: it had admitted to tank leaks only recently, in late August. A silt fence, it felt compelled to explain, could not perfectly keep the contaminated water within the harbor.⁹

Such quibbles aside, we might pause over predictions that the 2020 Olympics-Paralympics may end up costing 3 trillion yen (approximately 26.4 billion USD), many times the original budget for what was promised to be the most “compact Olympics” ever.¹⁰ These games are often touted as the “recovery Olympics” (fukkō gorin). It is not hard to conjure ways that these monies might have been used to benefit the entire region afflicted by the triple disaster and especially, the victims of the enduring nuclear disaster. A pittance of the Olympics budget would have sustained modest housing support for evacuees, compulsory or “voluntary.” Instead, the highly restricted, arbitrarily drawn evacuation zones

have been recklessly opened for return of evacuated citizens despite worrisome conditions prevailing over wide swaths of the region. The J-Village soccer center, which had served as a base for disaster workers, where they slept, donned protective gear, and were screened, are scheduled to become the training site for the national soccer team, with hopes that others might follow suit. It has even been proposed as the starting point for the Olympic torch relay. One baseball and six softball games are to be held in Fukushima City.



Aerial view of temporary storage site for flexible container bags containing soil from decontamination. Hōrai District, Fukushima City, April 2018.

Making Invisible the Visible Artifacts of Invisible Radioactive Contamination

Radioactivity is invisible, but the decision to have people live with it has produced an unsettling crop of white cylindrical “[monitoring posts](#)” to measure its presence in the air and unsightly banks of “[flexible container bags](#)” filled with contaminated yard waste and soil. Both are awkward for Olympic hosts. The Nuclear Regulation Authority (NRA) is moving toward [removal](#) of the posts. Fukushima City, scheduled for several events, has prepared a temporary storage site within its perimeters. The green mass in the center likely represents five rows of bags covered with a heavy plastic sheet. The smaller black

masses will eventually be covered with the same green wrap when their blocks are filled.

Source

In the meanwhile, French prosecutors have indicted the head of the Japanese Olympic Committee on corruption charges over the bidding process.¹¹ A nuclear physicist influential with policy makers has been found to have underestimated citizen exposure by a factor of three.¹² Dr. Yamashita Shinichi, prefectural health adviser, who ten days after the disaster was assuring the people of Fukushima not to worry, that people who kept smiling would not be affected by radiation, was at the same time telling experts that he believed there was reason for serious concern about child thyroid cancer.¹³ In April 2011, Dr. Akashi Makoto, then director of the National Institute of Radiological Sciences (NIRS), advised the prime minister's office that there was no need to conduct epidemiological studies in anticipation of thyroid cancer risk.¹⁴ In other words, we are beginning to have evidence that, from the earliest days of the disaster, responsible authorities made a concerted effort not only to deny the possibility of health effects from exposure, but to prevent or at least minimize the creation of potentially inconvenient records. As medical journalist Aihara Hiroko observes with not a little irony, "Surely the Tokyo Olympics will be a superb occasion for displaying 'recovery from disaster,'" but also for revealing to the international community the "real consequences of the human-made disaster resulting from the national nuclear energy policy: the imposition of long-term evacuation and sacrifice on the part of area residents."¹⁵

Should foreign visitors fail to see through the

Potemkin Village that will be the 2020 Tokyo Olympics, however, they will not be exempt from the grave implications of their participation, spelled out by Koide Hiroaki in the essay that follows: "The Tokyo Olympics will take place in a state of nuclear emergency. Those countries and the people who participate will, on the one hand, themselves risk exposure, and, on the other, become accomplices to the crimes of this nation."



Tokyo 2020 Olympics/Paralympics Mascots

Miraitowa ("future" + "eternity"), the official mascot for the Tokyo Olympics, is said to be both traditional and innovative, "with a strong sense of justice" and also "athletic."

Someity (a variety of cherry blossom evocative of the phrase "so mighty"), the official mascot for the Tokyo Paralympics, is "usually quiet but can demonstrate great power," nature-loving with a "dignified inner strength."

Source

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The original Japanese text is available [here](#).

What was the Fukushima Nuclear Accident?

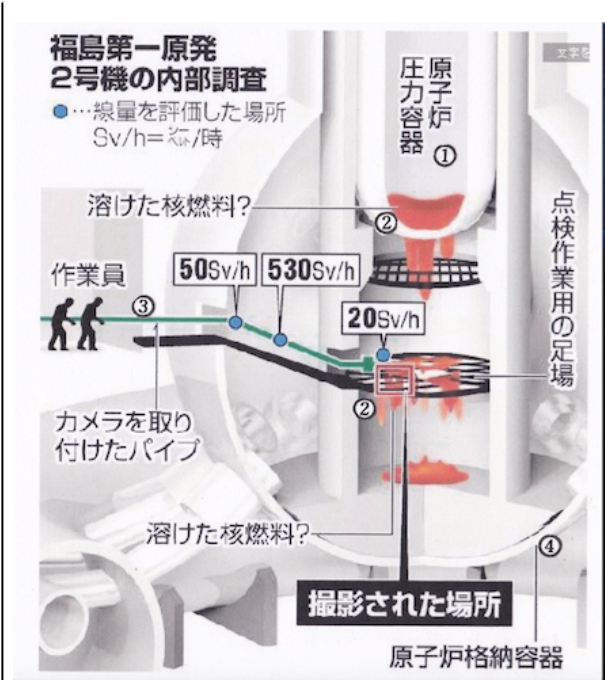
On March 11, 2011, the Tokyo Electric Fukushima Daiichi Nuclear Power Plant was assaulted by a severe earthquake and tsunami, leading to a total power outage. Experts had been agreed that total outage would be the likeliest cause of a catastrophic incident. And just as anticipated, the reactors of the Fukushima Daiichi Nuclear Power Plant suffered meltdowns and released enormous quantities of radioactive materials into the surrounding environment. According to the report submitted by the Japanese government to the International Atomic Energy Agency (IAEA), this accident released 1.5×10^{16} becquerels (Bq) of cesium 137 into the atmosphere—the equivalent of 168 Hiroshima bombs. One Hiroshima bomb's worth of radioactivity is already terrifying, but we have the Japanese government acknowledging that the Fukushima disaster released 168 times the radioactivity of that explosion into the atmosphere.^a

The cores of reactors 1, 2, and 3 melted down. The amount of cesium 137 contained in those cores adds up to 7×10^{17} Bq, or 8000 Hiroshima bombs' worth. Of that total, the amount released into the atmosphere was the equivalent of 168 bombs, and combined with releases into the sea, the total release of cesium 137 into the environment to date must be approximately equivalent to 1000 Hiroshima bombs. In other words, most of the radioactive material in those cores remains in the damaged reactor buildings. If the cores were to melt any further, there would be more releases into the environment. It is in order to prevent this that

even now, nearly 8 years after the accident, water continues to be aimed by guesswork in the direction where the cores might be located. And because of this, several hundred tons of contaminated waste water are accumulating each day. Tokyo Electric Power Company (Tepco) has constructed over 1000 tanks on site to store this water, but the total volume now exceeds one million tons. Space is limited, and there is a limit as well to the number of tanks that can be constructed. Tepco will be compelled to release these waters into the sea in the near future.

Obstacles to containing the disaster

Of course, the greatest priority is to secure the melted cores in as safe a condition as possible, but even with the passage of nearly eight years, neither their location nor their condition has been ascertained.^b The reason is that it is impossible to access those sites. Had this accident occurred at a thermal power plant, the problem would have been simple. In the beginning, there might have been fires burning over several days, but once they died down, it would have been possible to go to the site, investigate, repair, and restart operations. In the case of a nuclear power plant, however, anyone approaching the site would die. The government and Tepco have attempted to send in robots, but robots do not stand up well to radiation. The reason is that once their microchips are exposed, their programs get rewritten. Accordingly, almost all the robots sent in to date have failed to return.



Reactor 2 Interior Probe, Fukushima Daiichi Nuclear Power Station

1. Reactor pressure vessel
2. Melted fuel debris?
3. Tubing attached to camera
4. Primary containment vessel

"The melted core has fallen through the pedestal and out of the reactor pressure vessel. It cannot be retrieved. One hundred years from now, this accident will still not have been contained."

-Koide Hiroaki

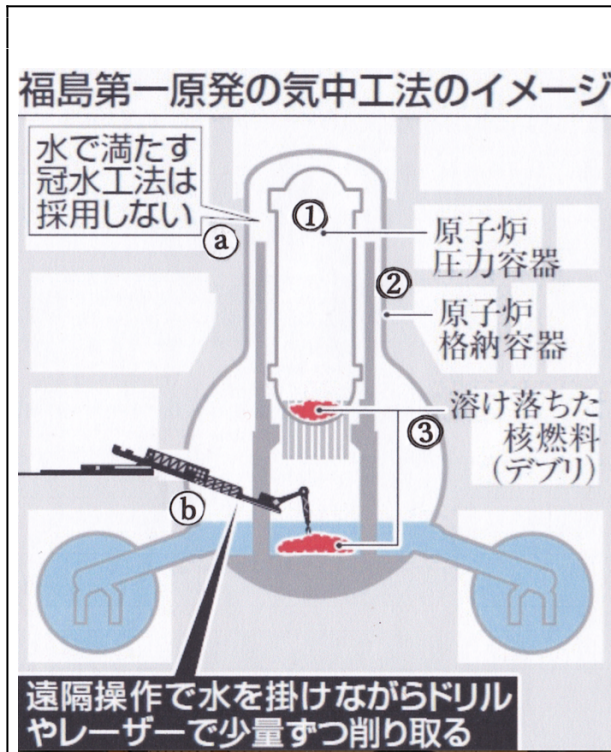
[Source](#)

Toward the end of January 2017, Tepco inserted a device resembling a remote-controlled endoscope into the concrete platform (pedestal) under the reactor pressure vessel. A large hole that had opened up in the steel scaffolding used by workers during maintenance, located directly under the pressure vessel, made it possible to ascertain the following: the fuel core had melted through

the pressure vessel and fallen further down. The investigation yielded something even more important, however. For human beings, exposure to 8 sieverts (Sv) will result in certain death. The area directly under the pressure vessel measured 20 Sv/hour, but along the way, levels as high as 530 or 650 Sv were detected. These measurements, moreover, were found not inside the cylindrical pedestal, but between the wall of the pedestal and the wall of the containment structure. Tepco and the government had scripted a scenario wherein most of the melted core had been deposited, dumpling-like, inside the pedestal, to be retrieved and sealed inside a containment structure in the course of 30-40 years. According to this scenario, the conclusion of this process would signify the achievement of containment. In reality, however, the melted nuclear fuel had flowed out of the pedestal and scattered all around. Forced to rewrite their "roadmap," the government and Tepco began talking about making an opening on the side of the containment structure through which the melted fuel could be grasped and removed. That, however, is an impossibility. It would entail severe worker exposure.^c

From the beginning, I have maintained that the only option is to construct a sarcophagus, covering the plant, as was done at the Chernobyl site in the former Soviet Union. That sarcophagus deteriorated to such an extent in 30 years' time as to require coverage by a second sarcophagus, put in place in November 2016. The second sarcophagus is expected to last for 100 years. We do not yet know what measures will be available at that point. No one who is alive today can expect to see the containment of the Chernobyl disaster. All the more so in the case of Fukushima: the containment of this disaster will not have been achieved even after all who are alive today have died. Moreover, even if it were hypothetically possible to seal the molten core inside the containment structure, that will not mean that the radioactivity will have vanished.

Indeed, it would be necessary to protect any such structure for hundreds of thousands to a million years.



Imaging the aerial method of fuel debris retrieval at Fukushima Daiichi

"[Having determined that the flooding method of debris retrieval would be too difficult, Tepco] has been driven to propose an "aerial method" wherein the reactor core that had melted through the pressure vessel would be retrieved through a hole drilled into the side of the containment vessel. That, however, would necessitate enormous amounts of exposure."

-Koide Hiroaki

1. Reactor pressure vessel
2. Primary containment vessel
3. Melted-through nuclear fuel (debris)

- a. Water flooding method of retrieval rejected
- b. Remotely controlled drills and lasers to scrape off debris bit by bit under continuous spray of water

Source

Declaration of a Nuclear Emergency: The human consequences

Tragedy continues to unfold in the environs of the plant. On the day of the disaster, the government issued a Declaration of a Nuclear Emergency, and mandatory evacuation zones were expanded, beginning at 3 kilometers from the plant, then 10, then 20. Residents in those areas had to leave their homes, taking only what they could carry. Livestock and pets were abandoned. That is not all. Iitate Village, located 40-50 kilometers away from Fukushima Daiichi, received no warnings or instructions immediately after the accident, but one month later, because of extreme contamination, the entire village was ordered to evacuate.

What do we mean when we talk about happiness? For many people, happiness likely supposes uneventful days, one unfolding after the other, in the company of family, friends, neighbors, lovers. This is what was ruptured, one day, without warning. Evacuees first went to centers, such as gymnasiums, then to cramped temporary housing, then to "reconstruction" housing or public housing temporarily "declared" to be evacuee quarters. Family members with shared lives until then were scattered apart. Their livelihood destroyed, people have been taking their own lives out of despair.

This is not all. Even outside the mandatory evacuation zones, there emerged vast

contaminated areas that by all rights should have been designated “radiation control zones.”^d These are areas where only radiation workers, those who earn their living by handling radiation, are permitted entry. And even those workers, once they enter a control zone, are not permitted to drink water or eat food. Naturally, it is forbidden to sleep. There are no toilets. The government, on the grounds that an emergency situation prevails, has scrapped the usual regulations and abandoned several million people to live in contaminated areas. These people, including infants, drink the water, eat, and sleep in those areas. They have of course been burdened with the risks associated with exposure. And thus abandoned, they are all surely subject to anxiety. Some, seeking to avoid exposure, gave up their jobs and evacuated with their entire families. Others, wishing to protect at least their children from exposure, have split up, with fathers staying behind to pursue their jobs in contaminated areas and mothers leaving with their children. But this has damaged household stability and wrecked family relationships. Staying in contaminated areas hurts the body, but evacuation crushes the soul. These abandoned people have been living in anguish every day for nearly eight years.

On top of this, in March of 2017, the government instructed those it had once ordered to leave, or those who had left of their own volition, to return to those contaminated areas so long as the radiation levels did not exceed 20 millisieverts/year (mSv). The housing assistance it had offered these people, however unsatisfactory, was terminated. This has inevitably meant that some people are forced to return. In Fukushima today, reconstruction is considered the highest priority. If people feel no choice but to live there, then of course, reconstruction becomes desirable. They cannot tolerate living in fear day after day. They would like to forget about the contamination, and fortunately or not, radioactivity is invisible. The central and local governments take active

measures to make them forget. Anyone voicing concern or referring to contamination is subject to criticism: they are obstructing reconstruction.

20 mSv per year is the level of exposure permitted only for radiation workers, such as I once was. It is hard to forgive the fact that this level is now being imposed on people who derive no benefit from exposure. Moreover, infants and children, who are especially sensitive to radiation, have no responsibility for the recklessness of Japanese nuclear policy, let alone for the Fukushima disaster. It is not permissible to apply occupational levels of exposure to them. The government of Japan, however, says nothing can be done given the Declaration of a Nuclear Emergency. We can understand an emergency lasting for one day, a whole week, one month, or depending on the circumstances, even for one year. But in fact, the Declaration of a Nuclear Emergency has not been rescinded even after nearly eight years have passed. The government is eager to make people forget about the Fukushima disaster. Media have fallen silent. Most Japanese have been driven to forget that conditions are such that make it impossible to rescind the Declaration even while the regulations that should prevail have been scrapped. The principal culprit in radioactive contamination is cesium 137, with a half-life of 30 years. Even after the passage of 100 years, it will have diminished by only one-tenth. In point of fact, even after 100 years, Japan will be in a state of nuclear emergency.

Holding the Olympic Games in a state of nuclear emergency

The Olympic games have always been used to display national might. In recent years, they have become tools for businesses, especially construction companies, which create, and then destroy, large public structures, leading to a colossally wasteful society from which they

derive stupendous profit. What is important now is for the state to mobilize all its resources so that the Declaration of a Nuclear Emergency can be rescinded as soon as possible. The priority should be to give relief to those who continue to suffer from the Fukushima nuclear disaster, and at the very least, to protect children, who are blameless, from exposure. The greater the risks facing a society, the more those in power seek to avert peoples' eyes. The mass media will try to whip up Olympic fever, and there will come a time when those who oppose the Olympics will be denounced as traitors. So it was during World War II: the media broadcast only the proclamations from Imperial Headquarters, and virtually all citizens cooperated in the war effort. The more you thought yourself an upstanding Japanese, the more likely you were to condemn your fellow citizens as traitors. If, however, this is a country that chooses to prioritize the Olympic games over the blameless citizens it has abandoned, then I shall gladly become a traitor.

The Fukushima disaster will proceed in 100-year increments, freighted with enormous tragedies. Casting sidelong glances at the vast numbers of victims, the perpetrators, including Tepco, government officials, scholars, and the media, have utterly failed to take responsibility. Not a single one has been punished.⁹ Taking advantage of this, they are trying to restart the reactors that are currently stopped and to export them overseas. The Tokyo Olympics will take place in a state of nuclear emergency. Those countries and the people who participate will, on the one hand, themselves risk exposure, and, on the other, become accomplices to the crimes of this nation.

August 23, 2018

Translation Notes:

a. Cesium 137, with a half-life of approximately 30 years, is a major source of long-term

contamination after atmospheric nuclear weapons tests and nuclear power plant accidents. It has been the principal radionuclide of concern in Fukushima. The comparative calculation given here is based on Fukushima estimates released by the Japanese Government in its June 2011 "Report by the Japanese Government to the IAEA Ministerial Conference on Nuclear Safety—The Accident at TEPCO's Fukushima Nuclear Power Stations" (see [here](#) for whole report with links to subsequent revisions and [here](#) for Chapter VI, "Discharge of Radioactive Materials to the Environment"). The information on releases appears in table form as part of an August 26, 2011 Ministry of Economy, Trade and Industry (METI) "News Release" on "Tokyo Denryoku Kabushikigaisha Fukushima Daiichi Genshiryoku Hatsudensho oyobi Hiroshima ni tōka saretā genshibakudan kara hōshutsu saretā hōshaseibushutsu ni kansuru shisanchi ni tsuite" [On the estimates of radioactive materials released by Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station and the atomic bomb dropped on Hiroshima] (see [here](#)). For its estimates of radionuclides released into the atmosphere by the Hiroshima bomb, this report cites the UNSCEAR [United Nations Scientific Committee on the Effects of Atomic Radiation] 2000 Report to the General Assembly with Scientific Annexes: "Sources and Effects of Ionizing Radiation," [Annex C](#), "Exposures to the Public from Man-made Sources of Radiation." The reference is surely to Table 9 (p. 213), "Radionuclides produced and globally dispersed in atmospheric nuclear testing," wherein the radionuclides are listed in identical order as the METI chart on Hiroshima, minus, of course, plutonium 239, 240, and 241 (the Hiroshima bomb, unlike Nagasaki, was a uranium weapon).

b. On 13 February 2019, Tepco released photos showing first contact with melted fuel debris in unit 2. See [here](#).

c. See “[Important Stories of Decommissioning 2018](#)” by the Agency for Natural Resources and Energy, METI, for the government account of the roadmap, especially pages 20-24 on fuel retrieval.

d. Standards for such designation vary from country to country and within agencies of a given country. Koide’s discussion here is based on the standard of 40,000 Bq/m² as the threshold of contamination, above which an area should be designated a control zone according to Japanese law.

e. There are currently more than 30 civil cases winding their way through the courts, but only one criminal proceeding in Tokyo District Court, with three former Tepco executives as defendants, charged with professional negligence resulting in death and injury. Since public prosecutors had twice declined to indict, the criminal charges and the trial came about only through the tenacity of a citizens’ group and a little-known system of judicial inquest, somewhat comparable to the US grand jury system minus prosecutorial involvement. See “[Five-year prison terms sought for former TEPCO executives](#),” *Asahi Shimbun*, December 26, 2018.

Acknowledgments

Let me begin by thanking colleagues at APJ-Japan Focus—Gavan McCormack, Satoko Norimatsu, and Mark Selden—for their encouragement in pursuing this translation. I am grateful to [Eiichiro Ochiai](#) and [Bo Jacobs](#),

whose work can also be found on this site, for their patient responses to my questions. Koide Hiroaki likewise responded generously. Errors that remain are my own (NF).

Koide Hiroaki wrote the original text in response to a request by Ms. Kusumoto Junko, who translated, printed, and shipped it along with her own [statement](#) to the various national Olympic committees. I am grateful to her for these actions. I also thank Mr. Koide for permission to produce this translation.

Related articles

- “[The Fukushima Nuclear Disaster Is a Serious Crime](#).” Interview with Koide Hiroaki by Katsuya Hirano and Hirotaka Kasai. APJ-Japan Focus, Vol 14, Issue 6:2, March 15, 2016.
- “[Save the Town](#)”: [Insolvable Dilemmas of Fukushima’s “Return Policy](#).” Interview with Namie Town Mayor Baba Tamotsu by Katsuya Hirano with Yoshihira Amaya and Yoh Kawano. APJ-Japan Focus, Vol. 16, Issue 3:2, February 1, 2018.
- David McNeill and Paul Jobin, [Japan’s 3.11 Triple Disaster: Introduction to a Special Issue 特集 3.11](#). APJ-Japan Focus, Vol 12, Issue 7:1, February 16, 2014.

Notes are by the translator.

The Following are the notes for the Introduction:

Koide Hiroaki, retired from the Kyoto University Reactor Research Institute (presently called the Kyoto University Institute for Integrated Radiation and Nuclear Science Research), is arguably the most celebrated critic of nuclear power and the handling of the Fukushima disaster. He is the author of numerous books in Japanese, one of which has been translated into English, *Rethinking Nuclear Energy: Autopsy of an Illusion* (2014) and French, *Penser le*

nucléaire: autopsie d'une illusion (2015). For a sustained, thoroughgoing interview in English, see [“The Fukushima Nuclear Disaster Is a Serious Crime”](#) (2016). A succinct early interview is available in French: [“Pour le nucléaire, il n’y a jamais de responsables. Trop d’intérêts sont mêlés”](#) (2011), also translated into English: [“Nuclear Irresponsibility: Koide Hiroaki Interviewed by Le Monde.”](#) A two-part, illustrated presentation at the University of Chicago is available [here](#) and [here](#). [The Trouble with Nuclear Power](#) is an extensive presentation at the Foreign Correspondents’ Club of Japan (2015).

Norma Field, translator, is a professor emerita, University of Chicago. **Recent publications include** [“From Fukushima: To Despair Properly, To Find the Next Step”](#) (2016); [For Dignity, Justice, and Revolution: An Anthology of Japanese Proletarian Literature](#) (co-editor, 2016); [Fukushima Radiation: Will You Still Say No Crime Has Been Committed?](#) (editor and co-translator, 2015); [Ima heiwa o honki de kataru ni wa: Inochi, jiyū, rekishi](#) ([To seriously talk peace today: Life, freedom, history] Iwanami Booklet, 2018).

Notes

¹ Much of the following account draws on Koide’s multiple public lectures and interviews as well as author interview on July 22, 2018. For the college years, see especially the evocative essay, [“Sōmatō no yō ni meguru omoide”](#) [Like memories swirling on a revolving lantern], *Narisuna* No. 201 (September 2005), available [here](#).

² Of course, it was US President Dwight Eisenhower who launched the strategic dream of “peaceful uses” with its special implications for Japan with his “Atoms for Peace” speech before the UN General Assembly on December 8, 1953, not three months before the fateful Castle Bravo shot on Bikini atoll on March 1, 1954. See Yuki Tanaka and Peter Kuznick’s [“Japan, the Atomic Bomb, and the ‘Peaceful Uses of Nuclear Power,’”](#) APJ-Japan Focus (May 2, 2011) and Ran Zwigenberg, [“The Coming of a Second Sun”: The 1956 Atoms for Peace Exhibit in Hiroshima and Japan’s Embrace of Nuclear Power,”](#) APJ-Japan Focus (February 4, 2012).

³ Even while acknowledging its importance: see [interview](#), “Koide Hiroaki-san ni kiku: ‘Genshiryoku mura’ de wa naku ‘genshiryoku mafia’ da” [Mr. Koide Hiroaki’s views: It’s not a “nuclear village” but a “nuclear mafia”] (March 24, 2015).

⁴ The relative poverty of the areas where nuclear power plants have been constructed is an integral aspect of siting considerations. Koide is acutely sensitive to these and other discriminatory practices. “Remote,” in any case, is an exquisitely relative designation in a country as small and densely populated as Japan. See [here](#) for a series of four maps of Japan, showing nuclear power stations in relation to major cities. If circles with a 20 km radius (12 miles) are drawn around each plant, major cities fall outside their perimeters. But the situation changes drastically if the circle is expanded to 100 kms (62 miles). Double that, to 200 kms (124 miles), and virtually all of Japan, never mind major cities, will be covered by overlapping circles.

⁵ As of April 2018, the Kyoto University Institute for Integrated Radiation and Nuclear Science

(Kyoto Daigaku Fukugō Genshiryoku Kagaku Kenkyūsho).

⁶ Koide moreover considers the Kumatori site as having been acquired by deception, inasmuch as Kyoto University signed an official agreement guaranteeing the impossible: that no radioactive materials would be released into the air or in the effluent discharged from the Institute.

⁷ See, for instance, “Tōdai nara katsudō dekinakatta; Kyōdai Koide jokyō ga konshun taishoku” [I couldn’t have sustained my activities at Todai; Kyodai assistant professor Koide retiring this spring], *Sunday Mainichi*, March 15, 2018; and “Koide Hiroaki Kyōdai jokyō teinen intabyū [Koide Hiroaki, Kyoto University assistant professor, retirement interview], *Tokyo Shimbun*, March 23, 2015, available [here](#).

⁸ Text of speech, delivered in English, [here](#).

⁹ See [here](#).

¹⁰ *Mainichi report*, beginning with actual Board of Audit accounting from October 2018.

¹¹ See “Japan’s Olympics Chief Faces Corruption Charges in France,” *New York Times*, January 11, 2019.

¹² “Radiation Doses Underestimated in Study of City in Fukushima,” *Asahi Shimbun*, January 9, 2019. See also “Journal flags articles about radiation exposure following Fukushima disaster” in *Retraction Watch*; and especially, Shin-ichi Kurokawa and Akemi Shima, “A Glass Badge Study That Failed and Betrayed Residents: A Study with Seven Violations of Ethical Guidelines Can Be No Basis for Government Policies,” *Kagaku*, Vol. 89:2, February 2019.

¹³ “Shinsaigo ‘hōshasen niko-niko shiteiru hito ni eikyō nai’ Yamashita Nagasaki-dai kyōju ‘shinkoku na kanōsei’ kenkai kiroku” [“No radiation effects on people who keep smiling” post-earthquake: Record of “serious possibility” noted by Nagasaki University Professor Yamashita], *Tokyo Shimbun*, January 28, 2019.

¹⁴ “Kantei ni ‘ekigaku chōsa fuyō’ Fukushima gempatsu jiko de Hōiken riji” [“No epidemiological study necessary”: Director of NIRS to Prime Minister’s Office following Fukushima nuclear accident], *Tokyo Shimbun*, February 18, 2019.

¹⁵ “‘Seika rirē’yūchi ni hisaichi Fukushima no jūmin ga hiyayaka na wake” [Why the disaster-afflicted residents of Fukushima are cool to hosting the ‘Olympic torch’ relay], *Shūkan Kinyōbi* (October 31, 2018). See also her “Follow Up on Thyroid Cancer! Patient Group Voices Opposition to Scaling Down the Fukushima Prefectural Health Survey,” APJ-Japan Focus (January 15, 2017).