After Fukushima: The Silence of Environmental Organizations on Nuclear Catastrophe

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The nuclear catastrophe at the Fukushima plants in Japan in 2011 raised global awareness of the massive dangers inherent in nuclear energy and led to the shutdown of almost all reactors in the country. Today, Japan is reopening reactors despite public opinion against it. In this article, the authors show that the silence of most environmental organizations reveals their widespread co-optation by a political and industrial establishment that has, since the Kyoto Protocol, promoted nuclear energy as a solution to global warming.

In the wake of the March 11, 2011 9.0 Tohoku earthquake and tsunami, which tore through the Fukushima Daiichi power plants, the future of nuclear energy in Japan was thrown into serious question. Following the horrendous disaster and nuclear meltdown, large citizen mobilizations escalated from the spring of 2011 to the late summer of 2012. Demonstrations of 20,000 to 75,000 people were reported several times in Tokyo, with protesters chanting "Sayonara nuclear power."[1] Interestingly, these citizen challenges did not, for the most part, arise from the established environmental groups in Japan. As mass protests continued over the course of a year and much of Japanese society grew critical of the hazards of the nuclear industry, a review of news reports, photos, and lists of event endorsers revealed a striking lack of environmental organizations.[2] Why were these organizations relatively silent on the largest environmental crisis in the country's history? Did their close ties to industry and government stifle action, thereby dampening the popular movement and accelerating a return to business as usual?

[1] *USA Today*, reporting via the Associated Press from Tokyo, captured this common refrain (Associated Press 2011).

[2] Our assertion stems from a comprehensive examination of all the web-active groups in the Environmental Restoration and Conservation Agency (ERCA 2007) database, a national survey of all environmental organizations in Japan, including over 4,800 groups. Our extensive coding of these organizations' websites for a period of a year after the Fukushima disaster revealed that some 5.2% publicly denounced nuclear power. Of the members of the anti-nuclear coalition that organized the national protests, only four organizations listed in the ERCA database were found.

Figure 1

Figure 2

Grassroots mobilizations and state-facilitated environmentalism in Japan, 1950–2000

Rapid industrialization after World War II brought significant levels of pollution across Japan. Figure 3 presents major environmental events in Japan (and internationally) alongside an estimate of the number of new environmental organizations formed each year. Significant anti-pollution campaigns surged in the 1960s and early 1970s (Broadbent 1998; Funabashi 1992). Several potent examples of pollution and major public health problems drove the movement at this time, beginning with mercury poisoning in Minamata and extensive air pollution in Yokkaichi. These campaigns were successful in terms of favorable litigation for the victims but also in prompting the development of an incipient environmental regulatory apparatus in Japan. Various pollution control and regulatory acts passed through the Diet, culminating in the creation of the Environmental Agency (renamed Ministry of the Environment in 2001).

Figure 3: Growth of environmental organizations in Japan

Scholars point out that the grassroots anti-pollution movement quickly stalled during the latter half of the 1970s and 1980s (Hasegawa 2004). However, as Figure 3 reveals, growth in Japanese environmental organizations surged from the late 1980s through the mid-2000s, nearly tripling the number of environmental organizations that existed prior to 1980.

From a social-movement perspective, it might appear that environmentalism gained a significant political voice associated with organizational growth in the 1990s. But, as Miranda Schreurs, Professor of Comparative Politics at the Freie Universität Berlin notes (2002), the sea change in Japan's environmental policy posture from passive to proactive was sparked by a decision made by leaders in the Liberal Democratic Party (LDP) to target "the environment" as an international policy arena for Japanese leadership. This strategy was as much a foreign affairs strategy as an environmental priority (Hattori 2000). The decision to "go green" and promote Japan as a model of efficient and green modernization was an act of political pragmatism. Additionally, corporate leaders in Japan's central business organization, Keidanren (similar to the Business Roundtable in the US), adopted this green modernization early in the 1990s, largely in sync with political leaders.

Greening the nuclear industry

In the early 1990s, while business and state leaders were actively encouraging the development of nuclear power and fuel recycling facilities for years, particularly after the second oil crisis in 1979, the Atomic Energy Commission of Japan (AEC), and the Ministry of Education, Culture, Sports, Science and Technology (MEXT) began insisting that nuclear power was essential for mitigating climate change (AEC 1990; MEXT 1994). By October 1990, the Action Program to Halt Global Warming was adopted with the intent of reducing per-capita CO_2 (Kondoh 2009). Keidanren coordinated these goals closely with leaders in the Liberal Democratic Party and officials in the Ministry of Economy, Trade and Industry – as well as internationally – promoting nuclear energy as a solution to global warming.

During this same period, a series of legislative initiatives were launched with the aim of expanding "local partnerships" between state administrators and local prefecture-level elites to advance a green model of Japanese economy and society. New domestic political opportunities were opening for environmentalism as national elites sought domestic allies in order to assert Japanese leadership in the context of a high-tech vision for a carbon-efficient model of modernization. When Japanese environmental organizations (EOs) and other NGOs mobilized for the Third Conference of Parties (COP3) to the UN Framework Convention on Climate Change (FCCC), held in December 1997 in Kyoto, nuclear power was at the center of the carbon-reduction discussions. Hosting the COP3 meetings reinforced a view among national elites and local environmentalists that global warming was the problem and nuclear energy was the solution.[3]

From industry leaders to the national government, expanding investments in nuclear power were offered as an environmentally friendly solution, even though three major nuclear accidents had occurred in years prior.[4] In 1997, Keidanren made the following announcement:

> "[W]e should place nuclear energy at the center of key energy choices. Especially from the perspective of global-warming policy, nuclear power generation is necessary as it provides power stability and does not discharge CO_2 […]. It is essential to get understanding [*sic*] from Japanese citizens to proceed with the nuclear policy smoothly" (Japan Business Federation 1997).

[3] As Miyadai (2012) concluded, the promotion of nuclear energy as carbon neutral is misleading: "If we look just at the process of generating electricity, it appears that there is no carbon dioxide emission. But seen in light of the entire process – including mining, refinement and enriching of uranium; transportation; building of power plants; decades of cool temperature storage; and more than 10 years of plant closure – such claims turn out to be pure exaggeration" (p. 99).

[4] In 1981, at Tsuruga, a Level 2 leak occurred, resulting in the overexposure of 100 workers during repairs to the facility. A lesser Level 2 incident occurred at the Shika plant in June 1999, resulting in an uncontrolled reaction. Lastly, the Tokai-mura accident involved a Level 4 incident at a uranium processing facility in Ibaraki Prefecture in September 1999. Two workers were fatally exposed to neutron radiation and over 100 more were exposed.

Co-opting the environmental movement

In accordance with these political circumstances, the Environmental Agency endorsed nuclear energy as an essential measure for mitigating global warming. In October 1998, it enacted a law titled "Promotion of Measures to Cope with Global Warming," and established 55 National Centers for the Promotion of Activities to Cope With Global Warming. This program aimed "to comply with the necessary measures to limit greenhouse-gas emissions in everyday life" (Hiraoka 2005, p. 107). More than 370 local councils on global warming countermeasures were organized. Their purpose was to "promote local activities to address the global warming issue," but their activities were largely restricted to public relations and information dissemination (Hiraoka 2005, p. 107). During this period, legal and institutional changes expanded opportunities for new EOs to obtain funding for these green projects with "local partnership" funds, which opened channels for retired government officials to land on the boards of new EOs. This combination of "golden parachutes" for government officials, funding from public agencies, and the active program to open nonprofit status to more groups pushed many of the environmental organizations formed at this time to align with government and industry objectives. Many EOs formed after 1998 joined the official campaign and worked for it enthusiastically, either by intentionally hiding, or adopting indifference to, the risks of nuclear power. In this way, the state actively facilitated the development of a nuclear-friendly environmentalism. It minimized nuclear risks in the environmental discourse of newly forming environmental organizations during and after the Kyoto climate meetings.

The Democratic Party of Japan merely confirmed the deep-rootedness of Japan's environmental politics. It pledged to cut the country's 1990 carbon emissions levels by 25% by 2020 (Sugimoto 2012, p. 16) by developing some 10 new nuclear power plants. To this day, many established EOs and agencies embrace global-warming countermeasures that rely on nuclear energy as one of their primary missions. Could this historical context explain the silence of many EOs regarding the risks of nuclear energy following the Fukushima crisis?

Administrative and corporate embeddedness of environmental advocacy

Drawing on national survey data on environmental groups in Japan, we coded the websites of 2,223 environmental organizations for their responses to Fukushima. Of the organizations whose websites were coded for responses to Fukushima in the 18 months following the disaster, fewer than 6% posted any critical position on the nuclear hazards following the meltdown. In our statistical analyses, the EOs formed after the 1998 Nonprofit Law and the elite campaign to promote nuclear energy as a solution to global warming were significantly less likely to denounce nuclear energy. This finding reveals how the historical context described above has shaped environmental identities. It also invites us to explore how the silence on nuclear risks is rooted in overlapping fields of state, corporate, and environmental politics. To visually represent the data structure in our network analyses, and building on Broadbent's (1998) concept of a "ruling triad" (comprised of the ruling political party, a highly organized business community and the upper government bureaucracy), we present a network graph that maps relationships between a large subsample of EOs, corporations, and government agencies.

Using coordinates from an attraction/repulsion model of a co-membership matrix, Figure 4 plots the affiliations among a subsample of EOs, government agencies, universities, foundations, and corporations that result from common personnel on the boards of the respective entities. In this figure, each node depicts an organization or agency, and an arc between two nodes indicates at least one common member shared between the two. Environmental organizations are marked in green, energy companies in red, public administrations in black, and universities in blue.

Figure 4: The Political-Organizational Embeddedness of EO Subsample, 2012

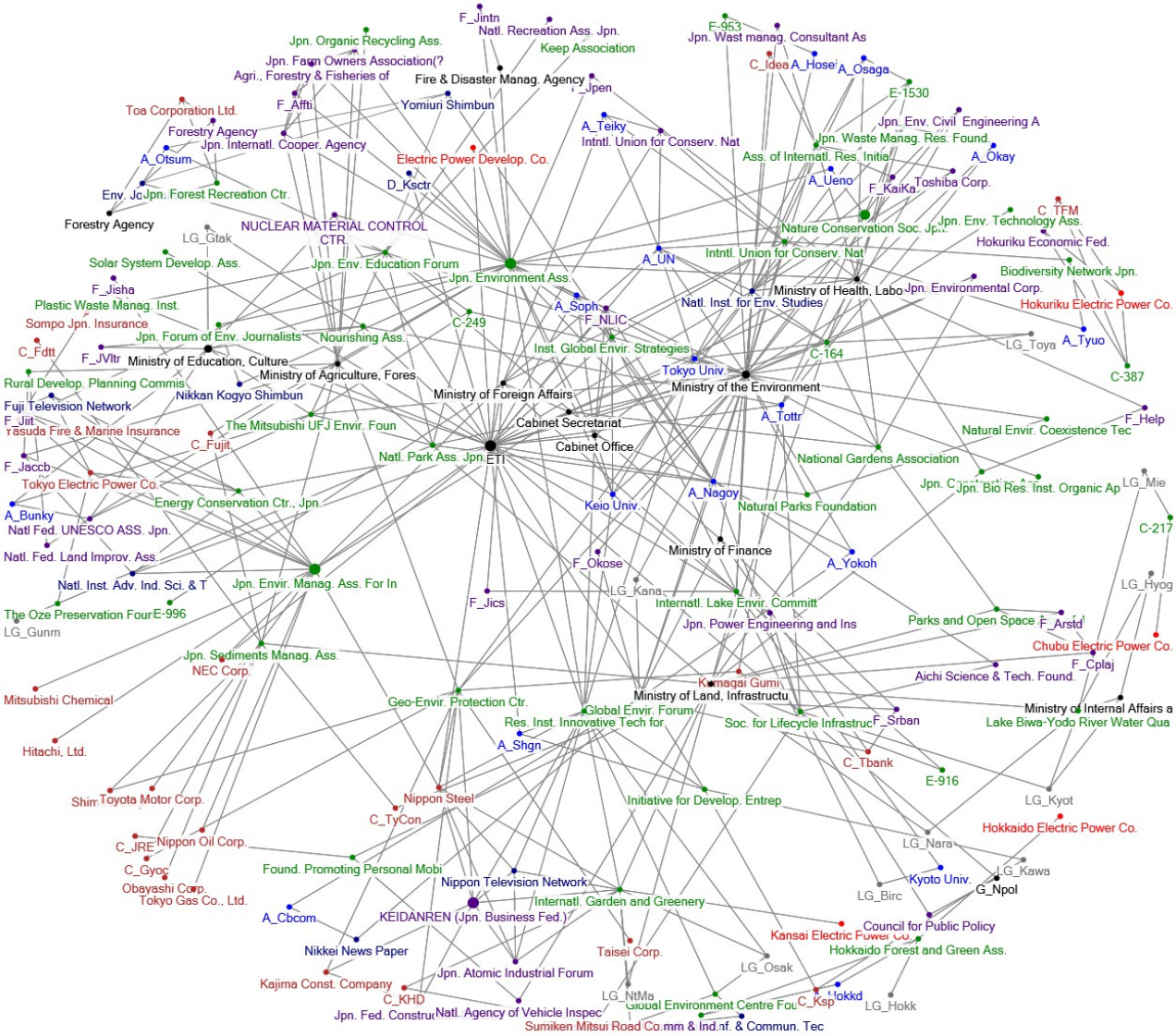

Figure 4 is a snapshot of the political-organizational embeddedness of our subsample of EOs. In reality, these networks are far more expansive. It is apparent that many EOs accept board members, from numerous government agencies. The figure also reveals dense connections between EOs and various industries, including the nuclear energy industry, by means of board appointments. Five major electric utility corporations, which own the nuclear reactors throughout Japan, have direct ties to EOs in our subsample. Major EOs are immersed in this network, including the Institute for Global Environmental Strategies, Japan Environmental Association, Japan Environmental Management Association for Industry, the Global Environmental Forum, the Japan Environmental Education Forum, and the Research Institute of Innovative Technology for the Earth. These organizations have multiple board connections with government agencies, corporations and other EOs. The density of network overlap between industries, government agencies and environmental organizations is thus interpreted as a highly constricted structure, *not* likely to support a critique of the nuclear energy industry. EOs embedded in this political-organizational network share a culture that curtails a reflexive critique of the risks of nuclear power in Japan.

As a result, leading EOs were a minor part of the citizen protests against nuclear energy after the Fukushima crisis. We conclude that national energy policy priorities are not determined by ecologically reflexive responses to disaster (human or environmental), but are instead propelled by

an interconnected complex of industry, the state and an often dependent nonprofit sector. The result is a distortion of ecological discourse and a failure to critically assess the ecological hazards of nuclear energy. This finding should serve as an essential caution as alternatives to carbon-intensive energy sources are devised around the world.

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