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The Satoyama Movement: Envisioning Multispecies Commons in Postindustrial Japan

In recent years, Japanese citizens have mobilized to restore *satoyama*, traditional agrarian landscapes, as a strategy for fighting the damages modern life was thought to inflict on both humans and the environment. In the *satoyama* forest revitalization movement, middle-class professionals, retirees, and students intermingle with farmers and use their spare time to plant rice, clear irrigation channels, and, most particularly, reenact the traditional resource use in *satoyama* forests. *Satoyama* has become not only the locus of nostalgia for harmony between humans and nature, but also the site of biodiversity conservation for a better future. This paper discusses one especially vigorous wing of the *satoyama* revitalization movement: the mobilization to recreate forests that produce highly valued matsutake mushrooms. These *satoyama* movements suggest the possibility of emerging “new commons” in a landscape deteriorated after the rapid industrialization of Japan.

Matsutake as a Puzzle

Matsutake is a wild mushroom that has long been treasured in Japan as an autumn delicacy. Historical records show that in ancient and medieval times, matsutake was used for ritual offerings to the deities. It was also an important item of gift exchange among aristocrats, and later became popular among commoners (Arioka 1997). The Japanese government and many businesses have invested in scientific research on matsutake. However, no one has yet artificially cultivated this mushroom: matsutakes are only harvested in the “wild.” Matsutake requires a specific symbiotic relationship with its host trees, which, in central Japan, are mostly red pines. By entangling with pine roots, matsutake form structures called mycorrhiza, literally meaning “fungus roots.” Through mycorrhiza, matsutake exchange nutrients with live trees. The mechanism of this symbiosis and the related interspecies relations still pose puzzles for scientists (Suzuki 2005).

Matsutake’s characteristics as an unpredictable and untamed wild mushroom have enhanced its charisma. Matsutake is not only one of the most expensive mushrooms on

the market and has gained international attention as the most cost-effective non-timber forest product (see Alexander et al. 2002), but it is also considered to be “a gift from the mountain deity” among Japanese pickers at home and abroad. At present, instead of relying on artificial cultivation, scientific experts have encouraged farmers and foresters to restore the entire forest landscapes back to a condition suitable for matsutake growth.

Satoyama and the Postindustrial Landscape

In central Japan the typical niche for red pines and matsutake is satoyama—secondary forests near human settlements. In satoyama, traditionally, humans have selectively coppiced and cleaned the forest ground to use wood, fallen leaves, and grasses for fuel and fertilizer. These human activities have created dry, open, and cleared forest ground with poor soil nutrition. The poor soil is an ideal habitat for matsutake because it is a weak competitor among fungi and microbes. If the soil is rich enough to provide food for other species, matsutake cannot thrive. It was therefore the human activities of coppicing woods and cleaning the forest ground that unintentionally created the niche ecological conditions for matsutake.

The decline of agricultural communities has been the major concern for many of the scientists studying matsutake. They have pointed out that due to the problem of depopulation, the satoyama forests were neglected, fallen leaves and trees piled up, and the soil grew too rich for mycorrhizal mushrooms to thrive (Hamada and Ohara 1970). The disappearance of the mycorrhizal relationship with matsutake further weakened pine trees and made them vulnerable to pine wilt disease. Rural areas were left with dense, unhealthy forests, and these “abandoned” forests became easy targets for industrial development. Many were turned into golf courses, suburban communities, factory complexes, or industrial waste dumps.

Due to the decline of satoyama, over 90 percent of matsutakes consumed in Japan are now imported from countries such as China, Korea, Canada, the US, Mexico, Bhutan, Turkey, Morocco, Sweden, and Finland, among others. For many satoyama activists, matsutake represents the serious problems facing agriculture and forestry in Japan accelerated by industrial development. Matsutake also symbolizes the heightened social concerns regarding Japan’s heavy dependence on imported food.

“New Commons”

Before the modern land-tenure system was introduced in the late nineteenth century, satoyama natural resources were under the control of local communities. While the lands were governed by feudal lords, the local villagers had the customary right to use the resource and were obligated to take care of the area in order to maintain the renewal of the resource. Each settlement has developed its own detailed rules and regulations, called *iriai*, reflecting the specific natural environment and the diverse resource-use practices.

After the Meiji government was established in 1868, the state attempted to “modernize” the land-tenure system, and numerous social and legal reforms were conducted to clarify land ownership. Many of the forests were categorized as private or national forests and some were designated as communal forests under the control of the local community. Despite this, *iriai* rights and obligations continue to exist and have been central in the practice of satoyama resource management (Murota and Mitsumata 2004).

Iriai is often translated and discussed as a version of “commons” among the forest economists who seek alternatives to governing practices based on the private property and market economy. They evaluate the potential of *iriai* as a form of commons integral to the sustainable development of rural agricultural communities (McKean 1992), and argue that the *iriai*’s detailed, regionally specific regulations represent the traditional wisdoms that redress Hardin’s thesis of the “tragedy of the commons” (1968). Tomoya Akimichi (1999), himself a leading advocate of commons studies in Japan, points out the fundamental differences between the English notion of commons and *iriai*, deriving from different epistemological and religious traditions. For example, while the subject who uses the commons is an individual, the subject of *iriai* is the community itself as a collective entity. While recognizing the difference between the English term commons and *iriai*, Akimichi promotes the studies of *iriai* and argues for its significance in environmental conservation.

Some scholars argue that this primacy of community over individual represents the remains of the feudal governmentality and the premodern authoritative control of the population. Therefore, they suggest that it was the “backwardness” of *iriai* that pushed people to leave the rural agrarian communities (Kikuma et al. 2008). The challenge

of satoyama movements is how to revitalize the wisdoms of communal land use as a “new commons” reflecting the contemporary notion of citizenship.

Since the 1990s, various experimental movements, based on the free and voluntary involvement of urban citizens, have emerged across the nation. Even though the labor is voluntary and without any economic rewards, some of these movements are achieving certain successes by reviving agrarian landscapes in suburban bedroom communities.

Matsutake Crusaders

Among the grassroots satoyama forest revitalization movements in Japan, the Matsutake Crusaders of Kyoto may be one of the most well-publicized groups. The group is led by the charismatic microbial ecologist, Dr. Fumihiko Yoshimura. In Kyoto, the ancient capital and the historical center of matsutake harvest and consumption, the decline of domestic matsutake has been a serious concern. In 2005, Dr. Yoshimura made an agreement with a landowner near a suburban bedroom community in Kyoto to use his land for satoyama revitalization experiments. He invited his friends to work on the forests, started a blog to report on their activities, and asked local media to publicize their undertakings. Soon, their unique activities caught media attention across the nation.

The Matsutake Crusaders are a loose network of citizens: there is no membership. The participation is open to anyone at any time as long as they enjoy the activities of revitalizing the forest for matsutake, respect and help each other, and maintain equality among participants. A variety of people have joined the activities, including mountain landowners and farmers who want to learn the technique of improving matsutake harvest, forest co-op representatives and prefectural and municipal agricultural officers who hope matsutake can save the community from extinction, and university and high school students who are interested in studying agriculture. But many of the regular participants are urban, retired seniors who used to be corporate workers, schoolteachers, or professionals.

Every week, about 30 people gather and engage in a variety of tasks. They cut trees, burn diseased trees, rake leaves, and transport all the forest litter out of the forests. The mass of cut trees, grass, and leaves is enormous. In order to consume the bio-

mass, the group has made large compost holes and turned the forest litter into fertilizer. They also started a small vegetable garden at their base camp to consume the fertilizer. The more they worked, the more fertilizer they collected. Soon, they expanded the vegetable field and planted tea trees, persimmons, and mandarin oranges. They also created rice paddies. In doing this they recreated not only the red pine forest, but also a miniature landscape of the whole satoyama ecology. Through their efforts to get rid of the biomass, the by-product of conditioning the forest for matsutake, the participants have sharpened their awareness of the vast variety of other living and nonliving beings who share the same space. The participants can also learn about and feel the joy of living with diverse beings in their local landscape (Satsuka 2011).

In this small revival of satoyama landscape, Dr. Yoshimura saw the potential for bringing back biodiversity to the monotonous landscape of the bedroom community. By revitalizing the satoyama forest, the Matsutake Crusaders were rewinding time. Dr. Yoshimura borrowed the charisma of matsutake and mobilized people to redo history. His aim was to return the forest to a condition similar to the mid-1950s. This reference to the mid-1950s is not only a reflection of his personal longing for innocent childhood: 1955 was the turning point in Japanese history. The Liberal Democratic Party took power after an intense political battle with socialists and the nation was integrated into the US Cold War policy in East Asia. Critics argue that after 1955, in exchange for a military coalition with the US, Japan was able to concentrate on economic development. Sociologist Shunya Yoshimi (2001) points out that this coalition led Japan to become a poster child for capitalist development in Asia. Industrialization also accelerated the degradation of agriculture and forestry, as well as the nation's dependency on imported foods.

The Crusaders' activities show us the potential for a "new commons" enacted by the voluntary recreational activities of urban citizens. They also suggest how being attentive to the charisma of this wild mushroom can help us to understand its emerging new sociality in the midst of the depressing situation caused by rapid industrialization, Cold War legacies, and expanding global capitalism.

The charisma of matsutake leads the participants to envision multispecies connectivity and the humble position of human beings. For the participants, this humbleness is a source of pleasure: the joy of feeling the connection with other beings on the earth, the

delight of sharing the generative force of each being, and the enjoyment of exploring new subjectivities through their bodily engagement with the land and forests.

This resonates with what Felix Guattari calls “ecosophy,” an ethico-political articulation of three ecological registers: the environment, social relations, and human subjectivity (Guattari 2008, 19–20). The practices of the Matsutake Crusaders and other grassroots movements that experiment with the elements of the new commons demonstrate that the revitalization of natural ecology is inseparable from social ecology, the constitution of society, and mental ecology, namely, the construction of people’s subjectivities by finding a niche in the complex web of life consisting of humans and other beings who share the landscape.

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