



Ecology and the Commons in Yoshiro Tamanai

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Ecology and The Commons in Yoshiro Tamanoi

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Yoshiro Tamanoi (1918-1985) was one of the pioneers in approaching economics from an ecological perspective. He developed the concept of “economics in the wider sense”, later known as the “economics of the living system”. Drawing from various fields, such as the history of economic thought, Marxian and modern economic theories, entropy theory, regionalism, and gender theory, Tamanoi developed his own unique understanding of the commons. This paper examines what interest runs through “economics in the wider sense” and how this interest evolved into thinking about the commons.

(1) “Economics in the wider sense” as a “Critique of political economy”

Tamanoi’s “concept of economics in the wider sense” emerged as a response to the narrow perspective of conventional economics, which took for granted the inevitability of market capitalism and industrial civilization. Kiichiro Yagi describes Tamanoi’s economic thought as a kind of “critique of political economy”¹, emphasizing theoretical significance of historical and spatial diversity and of non-market factors (Yagi 1990: 341). That is to say, whereas traditional Marxist economics has focused on a thorough analysis of the capitalist system based on a critical recognition of its historical properties, Tamanoi questioned the capitalist system from its very foundations by highlighting how the system is intrinsically sustained by non-capitalist relations. Although Yagi does not go into detail, his attempt to reread Tamanoi’s economic thought as a kind of critique of political economy can be applied to the issue of “ecology and economy”, which was the theme of Tamanoi’s later works.

First, his idea of “economics of in the wider sense” was intended as a critique of conventional economics, which has regarded the linkage between production and consumption exclusively within the framework of the market economy, and has neglected the role of the ecosystem that underlies this linkage². As K. Polanyi observed, the capitalist market economy is a fiction that relies on the artificial commodification of human labour, land and money, which were not originally intended for buying and selling (2: 112). Tamanoi extensively examined this fictional nature of the capitalist market economy from an ecological standpoint. In doing so, he introduced entropy theory,

¹ This, needless to say, is the subtitle of *Das Kapital* and refers to Marx's foundational views on economics.

² Of course, Tamanoi highly appreciates the fact that only Marx saw the link between production and consumption on the basis of the material metabolism between man and nature. However, as discussed below, Tamanoi thinks that Marx’s way of depicting material metabolism had certain limitations, both in the sense that it was based on industrial labour and in that it focused only on the positive aspect of man's work on nature.

redefining human economic activity as “a continuous circulatory system involving energy conversion, material input and processing, final consumption and waste disposal” (2: 20). From this perspective, it was important to include these energy and material flows, invisible in the market system, in the framework of economics. Tamanoi placed particular emphasis on the waste disposal process among these sequences of activities. Traditional economics has predominantly focused on the positive production process, from raw materials to finished products, while neglecting the negative process involving the generation and treatment of waste heat and materials, which have significant societal implications such as pollution. Therefore, Tamanoi argued that what is more essential in material metabolism is the aspect of the disposal of waste products (including waste, waste heat and water) into the external environment, rather than the input of energy and materials from the external environment (2: 152). These considerations represent an endeavour to understand the foundations of human economic activity, within the scope of economics. This attempt is based on the recognition that the discipline “can claim some kind of systematics on the basis of ecosystems” (2: 40).

Second, “economics in the wider sense” also critiques the face-value acceptance of industrial civilization in conventional economics. Tamanoi characterizes industrial civilization as “the fictional realm of non-living system” (2: 153). This underlines his understanding that economic activity is first and foremost a material metabolic process between humans and the ecosystem belonging to larger “living system”, and that economic activity is also an activity for the maintenance and reproduction of human life. Production activities such as agriculture, forestry, pastoralism and fisheries have all been rooted in living system. However, the establishment and development of the capitalist market economy, especially the heavy chemical industrialisation from the mid-19th century onwards, was precisely the process of severing the inseparable link between such economic activities and “life”, separating the former from the latter, and pseudo-organising human society as a “non-living system”. The discipline of economics, established in tandem with capitalism, was also theorised on the premise of a non-living system, and regarded the transition from primary to secondary industry as “economic progress” (2: 152). Tamanoi draws attention to the point made by the agrarian socialist E. David about the essential difference between agricultural and industrial production, and argues from this perspective that, even Marx, who emphasised the concept of material metabolism, based his view of the relationship between man and nature on the assumption of industrial production. According to David, industrial production and organic production, like agriculture, differ in the way they operate. In industrial production, which he describes as the “processing of dead objects,” human will and labour are at the forefront. Organic production, on the other hand, is seen as the “operation of living things” in which “living nature” acts as the primary producer, while human will and labour play a secondary role. From this perspective, Tamanoi says that economics

must regain an awareness of living nature and place the “principle of life” at the starting point of its system (2: 136).

(2) The Economy and Ecology

As we have seen, Tamanoi does not treat the economy and ecology equally, but insists on the need to “put ecology before the economy” (3: 201). This is based on Tamanoi’s perspective that economic activity and economic theory must be restructured on the basis of a “living system”. However, he is cautious about naturalism and determinism, pointing out that “we must refrain from cloaking the explanation of social systems perfunctorily by analogy with the principles of ecology” (2: 23). In fact, K.E. Boulding, the founder of entropy economics, extended the view of nature’s superiority over man by explaining even social phenomena such as nationalism, war and revolution in terms of the laws of entropy and mentioned the possibility of “improving the genetic qualities” of man as a species based on the principles of evolution (Boulding 1967). In Tamanoi’s view, however, Boulding is insensitive to the dangers and violence of applying the principles of nature directly to human society. While stressing the need to situate social systems, including economic activities, within an ecosystem, Tamanoi also emphasises that “human beings live *independently* within the environment” (2: 10, Emphasis added). It is important for him to develop this “independence” in a different way from the construction of a “non-living fictional world” centred on markets and industry.

Tamanoi finds an alternative form of human independence vis-à-vis the natural environment in what he refers to as “regionalism”. “Regionalism means that the inhabitants of a certain region have a sense of unity with their local community against the background of its climatic individuality, and pursue their own political and administrative autonomy and cultural identity” (2: 26). A region (community) is not only a natural space with its own unique climate and landscape, but also a cultural space where people live, govern and accumulate history on the basis of its own climatic peculiarities.

(3) The Commons

Tamanoi’s basic lines of argument for “economics in the wider sense” and regionalism that we have identified so far had already been presented in 1974 in “Towards an Economics of Material Metabolism in the wider Sense”. Four years later, in 1978, Tamanoi retired from the University of Tokyo and transferred to Okinawa as a professor of Okinawa International University. While there were several other options for his post-retirement employment at universities in the Tokyo area, Tamanoi dared to choose Okinawa, “the spatial end of central government power”, to advance his research on regionalism (3: 285, Tamanoi 1978: 352). After his arrival, Tamanoi actively left his study and went out into the field to test the validity of the theories he had developed.

The end result of this fieldwork was a series of case studies of the commons in Okinawan communities. The following is an overview of the two cases that caught Tamanoi's attention.

▼ *Inoh*³

“*Inoh*” is an Okinawan dialect word meaning a closed, quiet space between the reef and the sea. Local people have used this space to harvest seaweed for food and fertiliser for agriculture. For the villages along the sea, this space was a place of common use, and it is highly likely that customary laws and taxation systems based on such laws historically existed in each village for the common use of this space, just as the right of access to common land (*Iriai*) exists in mainland Japan.

The people who use this space are half farmers and half fishermen and dependent on marine produce for their livelihoods. This means that their activities cannot be classified according to the modern industrial classification of agriculture or fishing. *Inoh* also served as a living space that was more important to women than to the so-called “*umintyu*” (man of the sea). In this sense, Tamanoi emphasised how this space represents the Okinawan sea as a commons, not as a resource” (3: 235). The concept of “right of access to the beach (*Irihamaken*)”, which emerged in the anti-pollution and anti-refinery movements in mainland Japan to establish the right of residents to freely use the beach, can find its rich basis in “*Inoh*”, according to Tamanoi.

▼ Cooperative Store⁴

The “cooperative store (*Kyodoten*)” is a unique intermediary organisation in Okinawa that serves as a window for the delivery of local produce and the purchase of essential goods for local residents. In principle, each person is entitled to one share, and the conditions for joining the store are that the person must be from the area and has settled in the community. Profits from the cooperative store are returned directly to the village property, which are used to jointly purchase buses and farm trucks, for example, and to build irrigation facilities and water supply systems. The community also supports the livelihoods of local residents in a variety of ways, including providing school loans for children, opening its own medical clinic and deposit office, and building a community centre.

Okinawa's unique cooperative store system began in 1906, when a local family with great ambition invested their private funds to establish a cooperative store in the Oku community. The Oku cooperative store was abolished during the Taisho period (1912-1926) due to poor management, but was reinstated the following year and disappeared again during World War II, but was revived once more strongly after the war. For a time, the Oku cooperative shop also circulated a local currency called “*kippu*”. Since the 1920s, the cooperative store system has spread throughout Okinawa, developing in different

³ The reference documents for this theme were as follows. 3: 231-238

⁴ The reference documents for this theme were as follows. Tamanoi 1979: 241-244, 252.

ways according to local traditions, customs and location.

Although the store is a type of cooperative organisation, Tamanoi emphasised that, unlike agricultural cooperatives, non-farmers could also join, and that it was different from a most other cooperative societies in being limited to the “local area”, and not subsidized by the government. He also points out that the creation of the cooperative store was “a response by the local community to defend itself against the intrusion of the market economy from outside” (Tamanoi 1979: 241).

In conclusion, based on his fieldwork, Tamanoi offered the following insight regarding the concept of the commons: “we must not confuse ‘the commons’ with mere ‘resources’. Phrases like ‘water resources’ are, in fact, quite imprecise. Some also refer to ‘human resources’ in a similar manner. (...) I would also find it problematic conflating living humans with objects” (2: 212). Even today, as E. Ostrom discusses the commons using the concept of “Common Pool Resources” (Ostrom 2015), the idea that the commons is the identical to resources is widely shared. However, from the angle of the “economics in the wider sense”, the commons are not simply “resources” or “goods”, but are living spaces that enable the reproduction of life in opposition to the market economy and the state. Underneath this recognition was the critical perspective on economics that Tamanoi, who started out as an economic historian, inherited from Polanyi, Marx and Kozo Uno, namely the fundamental impossibility of treating human labour, land and nature as mere “commodities”.

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