

Overcoming Modern Urban Civilization: Infrastructure and Everyday Life after the Great East Japan Earthquake

Atsuo TERADA

The earthquake in Japan on March 11th caused extensive damage to the physical infrastructure, which enables our society's survival. Although the earthquake damage was limited locally, its impact reached into a wide area of east Japan, including the Tokyo metropolitan area, which was affected by both the tsunami and the Fukushima Daiichi nuclear disaster.

At that time, some said that Japanese society and Japan's modern urban civilization would change drastically because of the enormous damage caused by the earthquake. I was one of those people, and remain strongly confident that what I felt at that time is correct.

According to Japanese seismologists, seismic activity in Japan has entered into a period of activation. Japan's national land foundation consists of several plates, and Japanese people will inevitably need to accept such instability of the earth. Facing this reality, Japanese modern urban civilization, which is based on the earth's stability, will be forced to change significantly.

Civil engineering plays an important role in the development of the infrastructure underpinning urban civilization. These engineers went to earthquake-affected areas soon after the disaster and identified the scale of the damage and sought plans to reconstruct the affected areas. Thus, they faced an infrastructural paradigm shift derived from the 3-11 earthquake.

From the engineering professionals who traveled to affected areas, I received various insights into

the challenges of the reconstruction of devastated communities. Their suggestions are summarized into the following two points.

First, establishing a sense of gathering through various spatial resources plays an important role in the reconstruction of the local community. Following the results of research for resident needs in affected areas, Osaki and his colleagues tried to provide a place for "gathering" as well as basic needs like food and household goods. They aimed to create a sense of gathering for reviving residents' everyday life in the affected area, and prepared a bar as public space in cooperation with the residents.

Second, Fukui's research of affected areas shows unintended consequences of civil engineering knowledge about the habitat area. Progress of urbanization destroyed the substratum logic of a folk society — do not live along the gulf coast — and formed suburbs that were at the forefront of the tsunami. This fact requires reconsideration of the logic of folk societies that was put away in the urbanization process and of the engineering knowledge about disaster prevention.

Certainly, I expected the end of Japan's modern urban civilization on March 11th. Contrary to my expectation, after a few months, everyday life, which seemed to collapse after the earthquake, rapidly recovered with restoration of the infrastructure underpinning urban civilization. At the same time, my empathy for the people in the affected areas and my memories of those days faded during the recovery

process.

Wherever there are various differences in the experiences after the earthquake, people living in east Japan must have experienced these inner changes. These changes do not mean the lack of sympathy and solidarity for people in the affected areas. In fact, this phenomenon represents the inseparable relationship of people's emotions, memories, everyday life, and infrastructural systems.

Perhaps people are not aware of the relationship between everyday life and infrastructural systems because they are completely swallowed by the constancy of everyday life produced by modern urban civilization. Ongoing recovery of everyday life, therefore, is a chance to realize these social processes. I think it is important to analyze the complex mechanisms of Japan's modern urban civilization and discuss the concept of new urban civilization, in addition to exploring a way to advance the reconstruction of the affected areas.

When considering these issues, as inspired by the civil engineers' suggestions, I can point out four new directions to explore: (I) research of the autonomy of the infrastructural systems and their power over society to be the material base of urban civilization; (II) research of the resilience of infrastructure systems and the circuits of cultural production that make people accept infrastructure systems as part of everyday life; (III) research of the forms of spatial autonomy created from spatial aggregation of people, and the spatial resources (e.g., public spaces) required for basic needs of people; (IV) research of a folk society's logic found in the rhythms of the natural environment to weave substratum spatial scales. These four directions are not mutually exclusive, but rather are closely intertwined.

After many twists and turns, the limits of Japan's urban civilization will be overcome by involving various actors through diverse social places and circuits. It will take a long time for such a paradigm shift to become clear to everyone.

Civil engineers' suggestions include key findings about the relationship between the infrastructure and social system in Japan. I think that sociologists should piece these fragmented images together like a jigsaw puzzle and determine how Japanese society has been transformed after the 3-11 earthquake.