WHAT IS “INFRASTRUCTURE?”

After the Great East Japan Earthquake of March 11, 2013, the question of the “infrastructure crisis” became widely discussed. Certainly, the earthquake destroyed the infrastructure of the affected areas. However, unlike the Great Hanshin Awaji Earthquake of 1995, it also brought an even greater crisis. The earthquake and tsunami caused a meltdown at Fukushima No.1 nuclear power plant, leading to widespread exposure to radioactivity. This danger continues to the present day. The leakage and spread of radioactivity cannot be contained: it penetrates the infrastructure and is already becoming part of everyday life. At the same time, many laborers are hired under very obscure employment terms to “decontaminate” the site. There is no way to measure the amount of damage they sustain to their health. However, even these “decontamination” operations conducted at the cost of such great sacrifice do little except to mask the infrastructure crisis.

Despite everything, the reckless misuse of the network of nuclear power plants does not cease. Ignoring the fact that the whole of South Kyushu is prone to volcanic activity, the Sendai nuclear reactor there has already been restarted. At the same time, Prime Minister Abe claimed that the threat of radioactive contamination is “under control” and made Tokyo the site of the 2020 Olympic Games. Consequently, enormous funds are being fed into the project and brand-new infrastructure is being erected in an already too densely built-up metropolis. Behind the scenes, homeless people and tenants of public housing areas are threatened with forceful eviction. There are also plans to excavate the Southern Alps mountain range to have the Linear Chuo Shinkansen Line open in time for Olympics. Of course, the lives of the people in the earthquake-stricken areas and the danger of radioactive contamination have been lightly dismissed. In these circumstances, we need to ask ourselves what infrastructure is and for whose sake it is built.

The current paper aims to raise awareness of these problems and offers a new perspective on infrastructure. Two primary perspectives are put forward. First, the paper focuses on the economic and political properties of infrastructure from a theoretical viewpoint, in accordance with David Harvey’s theory of spaces. Second, the paper presents the historical geography of Kamagasaki, known as a “yoseba” (job market for day laborers), based on the author’s own fieldwork and research. It demonstrates how day laborers, who are at the very bottom of the job market ladder, become victims of infrastructure. Finally, the paper discusses the possibility of a true “people’s infrastructure,” led by the practical implications of the riots that have occurred periodically in Kamagasaki since 1961.
capitalism. The built environment possesses the dual characteristics of fixity and fluidity. Alternatively, as Harvey states, “The spatio-temporality of capitalism is therefore in perpetual flux” (Harvey 2009: 157). Capitalism repeats the cycle of buying and selling across space and time, exchanging currency and commodities, attaching surplus value to them, and endlessly pursuing an increase in that value. This gives rise to a very important concept — “the annihilation of space by time.” If commodities cannot reach the market, their value cannot be realized, and the longer it takes to transport them, the greater the loss of value. In this sense, space is nothing but a harmful obstacle in the way of time. Capitalism attempts to clear away that obstacle by various means. Paradoxically, it is exactly this point that brings into sharp relief the spatial problems of capitalism.

The phrase “annihilation of space by time” does not mean that the spatial dimension becomes irrelevant. It poses, rather, the question of how and by what means space can be used, organized, created, and dominated to fit the rather strict temporal requirements of the circulation of capital (Harvey 1985: 37).

Thus, in order to ensure a continuous increase in value, capital organizes and produces space. In other words, it creates a very diverse built environment, including factories, ports, railways, highways, etc. Capital, whose essence is its fluidity, cannot help but create a fixed environment in order to sustain this continuous circulation. Hence, the introduction of infrastructure makes the circle of exploitation of labor by capital even more complicated and difficult to grasp. Urban space in particular is a very complex infrastructure, very finely organized so that the circulation of capital is uninterrupted.

The built environment is also a lifeline for capitalism. By following capitalism’s logic to its conclusion, we cannot help but arrive at the danger of over-accumulation. However, there is a way to avoid that danger: the “second circle of capital.” By switching to it, the accumulated capital can be poured into the built environment, thus extending its life. Harvey calls the theory of this type of capital accumulation “spatial fix.” The word “fix” means “a dose of a drug, a narcotic,” as well as “to make something immobile, permanent.” As this twofold meaning suggests, the creation of the built environment by capital only postpones the danger of over-accumulation and is an indispensable route for creating a brand-new round of capital accumulation.

Infrastructure as a Political Apparatus
If we conform to Harvey’s theory as described above, it is clear that infrastructure is primarily a system that enables capital to self-perpetuate. There is no in-principle reason why capital should place the desires of and benefits to the laborers and the general population first when creating its built environment. The creation of infrastructure is completely dependent on the question of how much more environment can be created to support the further accumulation of capital. Therefore, capitalism will not oppose the construction of a piece of infrastructure which is not required by laborers or the general population, or which is even harmful to them, if it enables the accumulation of capital. In fact, the world of capitalism seems to be overflowing with infrastructure that threatens the lives of the people, prime examples of which are nuclear power plants and military installations.

However, laborers and citizens are by no means passive. The class antagonism between labor and capital over the creation of space is deeply engraved in the urban history of capitalism. As Andrew Merrifield points out, “capital is an inexorably circulatory process diffusive in space which also fixates itself as a thing in space and so begets a built
environment” (Merrifield 1993: 521). For example, a certain number of laborers must live together at a specific place so the workforce can be used efficiently. Therefore, the laborers build their lives there and form a community. Thereafter, subjected to robbery and exploitation, they may retaliate with riots. In this way, capitalism has effectively planted the seed of a menace to its own existence in the space it created. Preventing this seed from sprouting, growing, and multiplying becomes a task of utmost importance to capitalism.

That is precisely why the production of infrastructure is not solely an economic process, but also a political apparatus. Georges-Eugène Haussmann’s renovation of Paris in the 19th century is the earliest and best-known example of this. In the class struggle following the revolution of 1848, the urban space of Paris, which at that time consisted of tightly packed laborers’ quarters, was the stage for escalating street fighting. Haussmann pushed the fighting towards the periphery of the city by building large avenues straight through the laborers’ quarters. That was not just a military strategy in the class war, but also an economic strategy. “He transformed the scale at which the urban process was imagined. He thought of the city on a grander scale, annexed the suburbs, redesigned whole neighborhoods (...) rather than just bits and pieces of the urban fabric” (Harvey 2011: 168). This practice is not limited to Paris; it can be seen in many cities during the initial stages of capitalism. It is so usual, in fact, that Friedrich Engels nicknamed this particular process of urbanization “Haussmann” (Engels 1887, Part 2-III: 58), known in English as “Haussmannization.” The term reflects the fact that the production of space is a political apparatus.

What is “people’s infrastructure?”
Harvey’s theory described above confirms the idea that infrastructure is constructed to answer the needs of capital. Infrastructure is an apparatus for plunder and exploitation, often built on people’s sacrifices. Infrastructure is engraved with the traces of riots against oppression and political conflicts. However, Harvey does not accord much importance to this latter political point. His theory elaborately explains away the critical contradiction characteristic of capitalism and systematically paints a picture of the dynamism of the creative destruction of urban space. The more his theory is refined and systematized, the more passive the role of the people becomes.

Is it reasonable to consider capital as the main actor when it comes to the creation of space? The laborer is a vessel for the commodity of labor but, more importantly, he is a being of flesh, blood, and emotions. He wanders down the alley on his way home, sits down to a drink with his friends, and grumbles to them if he has had a bad day. He makes friends, and sometimes fights with them and parts ways. They all live in the same space. We can even say that they create it, shaping it through the relationships they create. Do they not create their own infrastructure?

Keeping these questions in mind, let us now try to trace the history of the place called “Kamagasaki.” This will throw light on how the day laborers of Kamagasaki have become victims of infrastructure, as well as illuminating its economic and political nature. However, that is not the primary focus of this paper. The battles fought in Kamagasaki give us clues about what it is that we should really call “people’s infrastructure.”

KAMAGASAKI AS PRODUCED SPACE

Kamagasaki and Infrastructure
Osaka’s Kamagasaki is one of the three largest yoseba in Japan, together with Sanya in Tokyo and Kotobuki-chou in Yokohama. Yoseba is an area
with concentrated housing for day laborers. Such sites have numerous cheap hostels, called doya, that provide the day laborers with a place to live. The yoseba is also the lowest possible form of job market, where job brokers can collect laborers. Almost the whole population of Kamagasaki is comprised of single men who live (or rather survive) as day laborers.

What kind of work do the day laborers engage in? Let us consider the fluctuation of vacancies in Kamagasaki’s job market shown on Figure 1. There is a significant difference before and after the recession of the mid-1970s. Until then, day laborers were employed in various industries, with the construction business and port cargo transportation the foremost two industries, especially during the 1960s. As early as the 1960s therefore, day laborers were an indispensable workforce in various infrastructure-related industries, such as the two identified above. In contrast, practically all laborers specialized in construction after the recession of the mid-1970s.\(^1\) Especially in the latter half of the 1980s, when enormous capital was invested in urban development under the slogan of “urban renaissance,” available job openings for Kamagasaki laborers reached an all-time high. The situation took a dramatic turn after the 1980s however, and with the exception of the mid-1990s,\(^2\) job opening rates took a precipitous fall.

We can surmise from the above discussion that Kamagasaki’s job market has been greatly influenced by the trends in various industries related to infrastructure, such as the construction business and port cargo transportation. Day laborers are indispensable to those industries, and yet if a recession strikes, they are treated as a cheap workforce that can easily be fired. What precise processes created this low-class labor market?

**Production of Space**

The Kamagasaki area was struggling with poverty before the 1960s much as today, but families and children lived there. Since the 1970s, its population has steadily become solely single male laborers. Why did families and children disappear from the scene? Why did Kamagasaki become a space for single male laborers? The answers to these questions lie in a chain of events that unfolded in the 1960s.

Measures were taken in Kamagasaki after the first...
riot on 1 August, 1961. That day, a laborer was run over by a car on the street. Police came running, but when they saw the laborer, they took no action and left the scene. Laborers were outraged at this act of discrimination. Riots followed for five days.

The incident triggered a series of measures against Kamagasaki, and the local authorities were not the only ones involved in planning them. Kamagasaki was declared an “Airin” district in 1996. Thereafter the Japanese government itself issued policies concerning it. It is important to note that these policies had two aims. First, families, women, and children were moved to areas away from Kamagasaki, as it was seen as an extremely poor environment in which to raise children and support a family. Second, the area was institutionalized as a supplier of single male laborers. This latter point is of particular importance. It is very closely related to the interests of the Japanese government concerning the 1970 International Exposition in Japan.

The Japanese Ministry of Labor declared Kamagasaki a special policy district in 1996 and announced that, beginning in 1967, the Japanese government would launch a specific new policy. The embodiment of that policy was the Airin Labor and Welfare Center (Photo 1) built in 1970. The erection of this giant building decisively set the course of rebuilding Kamagasaki as “day laborer district.” The government deliberately remodeled Kamagasaki as supplier of a day labor workforce. What plan did the Japanese government have in mind when it implemented such a policy? At the 55th meeting of the House of Representatives Committee of Social and Labor Affairs held on 6 June, 1967, the then Minister of Labor Hayakawa Takashi stated:

However, it is evident that we, in all certainty, must rely largely on the work of the laborers of the Airin district for the preparation of the International Exposition. With regard to that, I want to say that I do not think of those people as a group of extremely disorganized laborers. I think they are extremely good laborers. So, even in the context of the recent events [the first and second riot], I do not consider the laborers of the Airin district to be extremely unruly. (...) This workforce has its organization and I would like to direct it so that it becomes a really splendid workforce (Secretariat of the House of Representatives 1967).

Here, he states that even after the “events” of rioting, he still “does not consider the laborers of the Airin district to be extremely unruly.” He made this “assessment” only because “it is evident that we, in all certainty, must rely largely on the work of the laborers of the Airin district for the preparation of the international exposition.” In the mid-1960s, it was a task of utmost importance to preserve the workforce that would be employed in building the site of the International Exposition scheduled for Osaka in 1970. There had been debate about how to use Kamagasaki’s workforce most effectively, and it was decided that the area would be turned into a supplier of day laborers.

Needless to say, the 1970 World Expo was an enormous spectacle, intended to showcase Japan’s rapid economic growth. The whole city was remodeled and a great deal of infrastructure was built in preparation for it. This was made possible precisely
by workforce supply zones like Kamagasaki. This sequence of events vividly shows us that a city’s infrastructure is actually a built environment created through the exploitation of laborers.

**RIOTS AND THE “PEOPLE’S INFRASTRUCTURE”**

As a result of the policies described in the previous chapter, Kamagasaki was transformed into a haven of cheap labor. Within its boundaries, laborers were placed in an environment of oppression and discrimination and abandoned there. The local social security system was very weak. If a laborer lost his job and ran out of money to pay his doya, he was left with no choice but to sleep in the open, on the streets, or in the parks. The following passage describes the inhuman living conditions that laborers were forced to endure.

Kamagasaki is a town of day-laborers spanning 0.62 square kilometers. The population is approximately 20000 unmarried laborers. At the end of the year, when recession and cold weather combine, about 30 unidentified or unclaimed corpses are discovered in the streets. (…) Is there any other city in Japan where two to three hundred people must sleep on the streets? (Koyanagi 1993: 217).

There were more than 20 riots in Kamagasaki between the 1960s and the 1990s due to these oppressive and discriminatory circumstances. There have been outbreaks of work disputes and fighting during the cold months, particularly since the 1970s. However, protests have always been suppressed by the police force. The CCTV cameras installed in the streets are a symbol of that suppression. Day laborers are seen as potential criminals and thus in need of constant surveillance. Further, the media continues to paint a very negative picture of Kamagasaki, calling it a “frightening place,” an “antisocial place,” etc. In this way, the reality of the poverty and oppression under which the day laborers live is placed outside the boundaries of mainstream society and thus rendered invisible.

When we face this reality, it becomes apparent that the creation of infrastructure is not simply an economic process, but a stage for political maneuvers where the opposition between capital and labor is thrown into sharp relief. It is precisely within this struggle that we can begin to see the seeds of what “people’s infrastructure” should be. We should focus on those more than 20 riots that took place in Kamagasaki. They are organized group acts, explosively bringing out the active nature of the day laborers. The first riot on August 1, 1961 was the onset. In the following paragraphs, let us explore the truth behind those riots.

According to police records, the first riot can be summarized as follows (Osaka Prefectural Police Headquarters 1961). Starting from the evening of August 1, a crowd of approximately 3,000 threw stones and set fire to police boxes, stations, and patrol cars. From the evening of August 2, the crowd grew to approximately 4,000 people. They stationed themselves in front of the Nishinari police station and showered the police with a hail of stones. They sat on the road and prevented traffic from passing, set fire to taxis and privately owned cars, and cast stones and fire towards the police boxes. On the August 3, the crowd surrounding the Nishinari police station expanded to 5,000. They lit bonfires and settled in the vicinity. In response, Osaka Prefectural Police mobilized riot squads from other prefectures and sent in a force of 6,929 police. They lit bonfires and settled in the vicinity. In response, Osaka Prefectural Police mobilized riot squads from other prefectures and sent in a force of 6,929 police. Faced with such overwhelming fighting power, the laborers occupying the roads scattered and the riot was suppressed. By the evening of August 4, the riot had subsided completely.
We must make allowances for the fact that this account is written from the police perspective. However, some elements in the record, such as the stones and the fire, clearly show the nature of the revolt. The following account is by Terashima Tamao who put together his massive “Record of the Kamagasaki Riots” based on records and other data from the time.

The crystal clear truth of how much energy Japanese industries suck out of Kamagasaki’s laborers for hardly any pay needs no further proof. This energy is not dormant, it is active, but it is deftly and ruthlessly extracted and spent only for the enrichment of others. The riots are angry screams, saying “Enough! No more!” Exactly because they are screams, they may be fitful and they may be unintelligible, but who among us can suppress their own screams? (Terashima Tamao, unpublished manuscript, see note 4)

Infrastructure sucks the energy of the Kamagasaki laborers dry. Through their riots, day laborers scream “no more” and seek to short-circuit the system that takes away their energy, namely the labor market. Therefore, they directed their energy into the riots. If we assume Terashima’s point of view in the paragraph above, stopping the traffic by throwing stones is an expression of the short-circuiting of this energy, and the flames and bonfires are an expression of this very energy, poured into rioting.

Just as Terashima states, to the day laborers the city is simultaneously a creation of their own hands, and an infrastructure used solely for the enrichment of others. Therefore by their group acts, termed riots, by short-circuiting the functioning of the city, they reclaimed their own creation with their own hands, even if only for a short time. It is even more important that the time and space opened up by the riots became a foundation for the creation of what should truly be called people’s infrastructure. In the early 1970s, many young people from the students’ movement flooded to Kamagasaki, looking for a chance to take action. The riots served as a beacon, drawing them in. In a very short period, the political culture in Kamagasaki blossomed. In 1970, for the first time in Kamagasaki, a winter charity and relief campaign was organized. A small village of tents rose in a park in order to save and support the lives of the day laborers left without jobs. In another park, the first summer festival took place in 1972. The festival’s slogan, “Here rule we who cannot be ruled,” demonstrates that the summer festival became a stronghold of the collective spirit of the laborers.

What I would like us to call “people’s infrastructure” is a self-organized group space exactly like this, created by those who were shunned in order to survive. There is one more important point that should be mentioned. That summer festival and the winter charity and relief campaign are a reality made possible by the direct act of seizing infrastructure. In other words, “people’s infrastructure” is something born out of opposing head-on the existing built environment (as the riots did), seizing it, and cracking it.

CONCLUSION

The following two conclusions emerge from the analysis of infrastructure presented in this paper.

First, we must understand that the infrastructure of capital and the people’s infrastructure are two completely different concepts. Just as Harvey notes, infrastructure is an automated apparatus for oppression and exploitation. Infrastructure is built, above all, to prolong the life of capitalism. That is the position from which we should understand the hosting of the Olympic Games, the restarting of the nuclear power plants, the construction of the Linear...
Shinkansen Line, etc. At present, infrastructure is built by sacrificing the lives of the population for the sake of extending the life of capitalism. Truly, daily life in urban areas is surrounded by capitalism’s infrastructure and has become its “second nature,” so it is increasingly difficult to tell capitalism’s infrastructure and the people’s infrastructure apart. However, we should think of the two as completely separate entities, at least on a conceptual level.

The second conclusion is that the people’s infrastructure is not somehow outside of capitalism’s infrastructure. It is inserting itself within the existing built environment, and exists by converting it for its own. If we look carefully enough, even in the tightly monitored present-day urban space, the potential elements and materials of the people’s infrastructure may be scattered. However in order to spot them, we must remember one thing. People’s infrastructure is born within the space we create ourselves when we reject our own passive existence. This is the lesson Kamagasaki has been repeatedly trying to teach us through its historical geography.

Notes
1 The sudden drop in the importance of port cargo transportation is attributable to the mechanization of the labor process, which started with containerization in the 1970s and made manual labor obsolete.
2 The recovery of employment rates in the mid-1990s was due to the construction of Kansai International Airport and reconstruction works after the Great Hanshin Awaji Earthquake.
3 The second riot started after trouble between laborers and canteens.
4 “Record of the Kamagasaki Riots” is a massive manuscript left behind by Terashima Tamao and written in the 1970s.

References
Engels, Friedrich, 1887, Zur Wohnungsfrage.