

Machinoeki – A Community Movement to Revitalize Local Cities in Japan

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Japan is now facing an unprecedented challenge with its population declining overall but the share of elderly population rapidly increasing. Meanwhile, the city center is losing its prosperity due to the motorization and subsequent urban sprawl. In order to stop this decline and reverse the trend to revitalize the downtown area and provide mobility to elderly people, new approaches are to be called for. In this paper, the author introduces a relatively new concept called "Machinoeki" to restore communities and revitalize local cities.

In the early 1990's a social experiment was held to provide roadside services to automobile users in Japan. It was based on a unique Japanese concept to establish strong links between road users and local communities. This experiment was so successful that a new name was given to the roadside facility as "Michinoeki", which stands for 'Roadside Station' in Japanese. The national government established a policy to authorize and subsidize the construction of Michinoeki nationwide. Now after two decades of development, over one thousand Michinoekis have been built all over Japan. Furthermore, this concept and the name of "Michinoeki" itself were then adopted by the World Bank to provide similar facilities in developing countries.

Although Michinoeki is quite successful, it is primarily a facility for automobiles that use highways, and neither for pedestrians nor for non-auto users. About 15 years ago, another new social experiment was conducted in Japan. This time it was named as "Machinoeki", which means Community Station or Human Station. The concept is similar to Michinoeki but it is a station for people, whose main mode of transportation is walking, cycling or public transport. Already more than 1,600 Machinoekis have been established in many cities and towns throughout Japan and their numbers are growing. The resulting effects are the revitalization of city centers, community redevelopment in suburbia and the increase of interactions among different cities.

This paper is a compendium of presentations the author made in several national and international conferences including Walk21 in Zurich (2005), Melbourne (2006), New York (2009), Vancouver (2011) and Vienna (2015).

Keywords : Roadside station, human station, community revitalization, citizen participation

1 Introduction

Before the era of automobiles in the early 20th century, walking was the sole mode of transportation in Japan. People travelled on foot within and between cities and towns. The only exception was horseback riding but it was not a common means of transportation for the general public. Horses were mainly used for couriers and transporting goods. About four hundred years ago, five major arterial highways were built from Edo (the old name for Tokyo) to local cities and towns. The Edo central government established posting stations along these highways at an interval of about ten kilometers distance. These posting stations were primarily for courier services using horses in the beginning. Travelers on foot could rest, dine and obtain information on roads and surrounding areas at these stations. Lodging facilities and inns were built to cater for the needs of travelers. These posting stations quickly expanded to form cities. They were the focal points for economic activities and cities grew larger. Many present cities along the ancient highways have their origin far back in history. These cities are called “Shukuba” (lodging place) in Japanese.



Figure 1. Ancient wood block picture of a roadside station

The Meiji Restoration of Imperial Power in 1868 changed the scene of the country completely from the Edo Shogunate Government that lasted for over 260 years. The Meiji Government imported many new technologies from Europe. One of them was the railroad. The first railroad was built in 1872 and extended to over 7,000 km in 30 years. Now there are about 27,400 km of railroad and 10,400 stations in Japan. These stations have come to serve as the focal points of various activities within cities for almost a century. In the old days, when you said station, it usually meant railroad station. Other

important modes of transportation in a city in this period were streetcars and buses, which also had stations.

In the latter half of the twentieth century, automobiles predominantly became the major mode of transportation all over Japan. Motorization was accelerated with the construction of highways and expressways. In 1963 when the Meishin Expressway was built, there were 7 million vehicles in Japan. After half a century, we now have more than 80 million vehicles in a country which is the same size as the State of California. This means more than one vehicle for every two persons. As private automobiles increased, the public transport services declined. The lifestyles of people and urban structures have changed drastically. The majority of commuters drive private automobiles, except in large cities like Tokyo and Osaka, where public transportation systems are well established. This automobile dependency is especially true in local cities and rural areas where very limited public transport services are available. In the pre-war era in Japan, there were 67 cities that had streetcar systems but they remain now in only 17 cities. The total line length was once 1480 km but now it is only 238 km, one-seventh of what it was at the peak time. The situation with buses is not any better. The traffic congestion degrades bus service with longer travel times, less reliable schedules and high fares. This turns many passengers away from buses to private automobiles. The decline of public transport generates many “transportation poor” who cannot drive or who cannot own cars. This clearly represents a very serious social problem for a rapidly aging society like Japan.

As motorization accelerated urban sprawl, low density suburban areas started expanding with commercial activities, traditionally located in the city centers, moving out to these areas. Large shopping malls have mushroomed in the suburban areas where people gathered riding automobiles. Old neighborhood communities, where people used to gather around, have since disappeared from city centers. Instead, new suburban residential areas became bed towns where commuters go to shopping malls by car. Once prosperous downtown areas became blighted districts with little urban attractiveness and activities. The revitalization of the city center and restoration of urban communities are an urgent agenda in many local cities in Japan.

2 Michinoeki, the Roadside Station

The progress of motorization increased the number of long distance travelers who

are either drivers or passengers of automobiles. They need resting facilities that one can easily and comfortably stop by after a long drive. Traditionally, public authorities in charge of building highways did not pay much attention to providing these resting facilities, especially in the conventional roads and highways. The only exception was the toll expressways with access control. Since the distance between interchanges are rather long and it is not easy to get on and off the expressway, service areas and parking areas were provided at a certain interval. Expressway users are able to take a rest at such facilities.

Local communities along highways also wished to provide retail and dining services to automobile users who pass by their communities to expand business opportunities. Growing voices for resting facilities along the roads and highways from both road users and local communities resulted in the development of Michinoeki.

Michinoeki is the brain child of Mr. Eiji Tanaka, the head of the Regional Exchange Center, a non-profit organization located in Tokyo. In a symposium to discuss the issues about highways and community development held in 1991, an idea was presented. "Why not build a station along a highway similar to the one along a railway?" This idea led to a series of social experiments to provide roadside services to automobile users. The three places where these experiments were conducted are Yamaguchi prefecture which is Tanaka's home town, Gifu and Tochigi prefectures. In Tochigi, a vacant farm land along the bypass section of the National Route No. 4 near Kaminokawa was selected. A temporary parking lot with makeshift toilets and a public phone booth was prepared. Nearby farmers opened a roadside vegetable shop during the experiment period to sell their fresh produce to the travelers who dropped by to rest.

This experiment was so successful that a new name was given to the roadside facility "Michinoeki", which stands for roadside station. The national government established a policy to authorize and subsidize the construction of Michinoeki nationwide in 1993. It is based on a unique concept to establish strong links between road users and local communities so that local residents can enjoy business opportunities through many activities such as commercial, recreational, cultural, educational, health care and others. The interesting point is that it is a resurgence of the four hundred years old "Shukuba" of the Edo era. There are many similarities between "Shukuba" and the new Michinoeki.

A Michinoeki consists of three functions. A resting function, an information exchange function and a regional collaboration function. To start with, the resting function provides parking spaces, toilets and resting areas, which are open 24 hours a day, free of charge. Furthermore, the information exchange function provides highway travelers with such information as road traffic conditions, weather forecasts, accidents, maintenance and route information. Another type of information is about various local or communal activities. It includes information for tourists on sightseeing spots, restaurants, local products, the history, culture and so on. In addition to community information, residents sell local agricultural products and serve local dishes in restaurants they open. The last function is the collaboration of various districts within a region and inter-regional exchange through the network of Michinoeki.

Now after two decades of development, over one thousand Michinoekis have been built all over Japan. The success of Michinoeki is currently finding its way out of the country. The concept and name of “Michinoeki” was adopted by the World Bank to provide similar facilities in developing countries. The World Bank published detailed guidelines, and pilot studies were done in China and Kenya, followed by many projects in Asia and Africa. The primary objective of Michinoeki in developing countries is more a social and developmental one. Expected benefits include economic empowerment of communities, incubator function, social welfare activities, interchange of information, knowledge and commodities, and traffic safety.



Figure 2. The World Bank Guideline and Concept of Michinoeki

3 Michinoeki, the Human Station

Although Michinoekis achieved great success as shopping centers and leisure spots, and many municipal governments wish to build them, it is primarily a facility for automobile users but not for pedestrians nor for non-auto users because they are usually located outside of city centers.

Eiji Tanaka was not satisfied with Michinoeki because it did not become the

destination for social exchange that he had hoped for. He wondered why, and came up with one conclusion. He found that the best speed to promote the exchange between people is walking speed, and not the speed of automobiles.

About ten years after the inception of Michinoeki, a new social experiment was conducted by Eiji Tanaka. This time it was named “Machinoeki” , which means community or human station. “Eki” means station, and “Machi” means city, town or community, whereas “Michi” means road or highway. The concept of Machinoeki is similar to Michinoeki, but there are many differences between them. The largest difference can be found in the location and targets. Michinoeki is located along roads and highways and it is for automobile users. It is located between cities in the suburban areas. Usually, it requires construction of major buildings with a large parking lot. The common area such as parking lots, resting area and toilets are built with subsidies from the national government. The remaining part forms retail stores and restaurants or other facilities, which are generally funded by local governments and private enterprises.

Machinoeki on the other hand is a station for people, whose main mode of transport is walking, cycling or public transport. The advantage of Machinoeki is that it does not necessarily require the construction of new facilities. Any existing facility, be it a store, museum, hospital, school, or city hall, can become a Machinoeki. Train stations and Michinoeki along highways can also become a Machinoeki. The name Machinoeki is a generic name, and each individual Machinoeki can name itself freely to show its uniqueness. The location of Machinoeki is not limited within a city. There are sea station, mountain station, river station, health station, art station, and many more stations with interesting concepts and unique names.

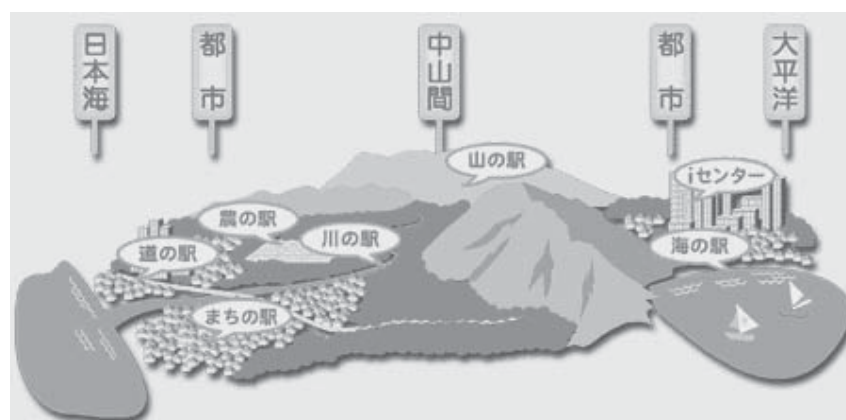


Figure 3. Various Locations of Machinoeki

4 Logo and Functions of Machinoeki

The Logo of Machinoeki symbolizes three persons in Chinese characters to form a group of people. The three persons stand for community activists, young people and people from outside. The character “i” in the middle stands for information as well as the pictogram of a person. As mentioned above, everyone can easily make a Machinoeki without a lot of financial resources. That is one of the main reasons why Machinoeki has continued to grow and spread throughout Japan.

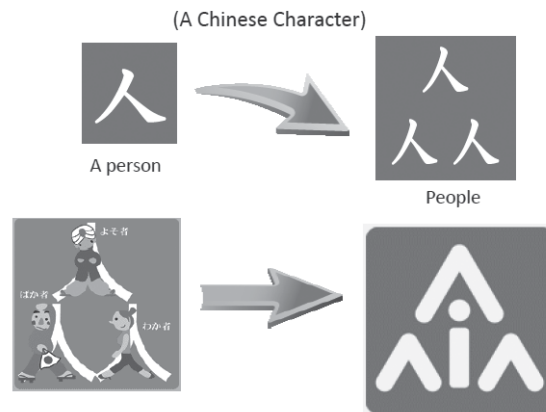


Figure 4. Logo of Machinoeki

There are four functions to be provided by a Machinoeki. They are: 1) resting function with rest rooms and toilets available free of charge, 2) information dissemination and guidance function given by a station master who helps visitors, 3) social exchange function between visitors and local residents, and 4) function for collaboration or cooperation among other Machinoekis, which are expected to help and complement each other in various occasions including in times of natural disaster like earthquake.

Thanks to Machinoeki, visitors can walk any town or city without getting lost and can easily find a place to rest and use toilets. In addition, Machinoeki can create social exchange and collaboration or cooperation in a community. Machinoeki is a very useful facility requiring minimal associated costs, if any. Thus, unlike other facilities such as Michinoeki that requires significant investment and cannot be built too closely to the neighboring one to avoid competition and over-saturation, many Machinoekis can coexist in close proximity of one another within a city.



Figure 5. How to Make a Machinoeki

The basic requirement to start a Machinoeki includes having a common logo signage, free rest rooms, resident guides and local information. It is important to have a person who welcomes visitors with hospitality and gives information and guidance. He or she is called Ekicho (Station Master in Japanese).

5 Typology of Machinoeki

The first Machinoeki was opened in 2000, the same year as the start of Walk21 conference in London. At first, public facilities became Machinoeki, but gradually private facilities such as shops and restaurants increased, and now there are about 1,600 Machinoekis in 39 prefectures out of 47 in Japan.

As the number of Machinoeki increases, there are all different kinds of Machinoekis established in various locations and by all sorts of people. Machinoeki can be classified from a few different viewpoints, such as by characteristics or objectives and by organization or management styles.

Let us start with the characteristics or objectives of Machinoekis.

The first category is a general purpose Machinoeki, which originated from community redevelopment. Its principal purpose is to provide information about a community. Examples are tourist information centers, community centers or city halls. Many private sector facilities such as stores and restaurants also fall into this category.

The second category is theme-oriented Machinoeki, such as museums, art galleries, music salons, factories or company showrooms. Machinoeki adds the information dissemination space and social exchange space to their original themes or functions.

The third category is special purpose facility such as hospitals, nursing homes, schools or post offices. Their primary function is unique and specific, and Machinoeki enables

synergistic effects to their original functions. For example, Utsunomiya Kyowa University is the first university to become a Machinoeki. The City Life Campus located in the center of Utsunomiya City specializes in the study of city life activities. It is expected that this Machinoeki will serve as the focal point to enhance the exchange between college students and the local community. In addition, students can learn about community planning and various social developments through activities of the real world experiences.

The organization or management style of Machinoekis can be classified into several types. For example, a Machinoeki can be completely managed privately, semi-publicly such as through the Chamber of Commerce, entirely publicly for example at city halls, and finally they can be managed privately but with public assistance. In the case of the last management style, a local government would publicly recruit candidates who wish to open a Machinoeki and authorizes registration after careful examination. This is a new type of a public-private partnership and has proven, so far, to be effective in promoting public acceptance of Machinoeki. A good example is the case of Kanuma City in Tochigi prefecture. The success of Kanuma is attributed to the method of recruitment. The city hall publicly solicited applications for Machinoeki among citizens. The city evaluated the potential candidates and gave licenses to those registered. For these Machinoekis that were established in this manner, there are higher expectations for them to perform as expected. Many new styles of managing Machinoekis are still being piloted and hence an exhaustive classification list of managing Machinoeki is under development.

6 Restoration of the Public Spirit

As was described in the previous section, Machinoeki is a friendly facility for people who pass by the area, offering basic functions as resting place, free toilet, and information of the city and community. What kind of an affect then can the Machinoeki have on the station manager who operates it?

We interviewed some owners of retail stores who operates Machinoeki, as we say “Ekicho” (Station master), and almost all of them said, “I used to care only about my store, but since I started Machinoeki and entertained customers or guided visitors in my town, Machinoeki changed my way of thinking about visitors, and about the future of my town.” This shows that the station masters opened their eyes to “the public

spirit”, or in other words, the sense of public duty has come into the people’s minds in the private sectors.

The creation of Machinoeki is also strengthening ties between people. More and more station masters are starting to connect with other station masters. Before, their regional interaction had been limited to a single shopping street of a city block, or among the charity organization like Rotary or Lions Clubs. However, anyone can start a Machinoeki regardless of age, sex, occupation or area, and it became possible to make acquaintances with all kind of people through the network of Machinoeki. For example, a Japanese noodle restaurant owner who opened a Machinoeki in his restaurant visited all other Machinoeki in the stamp rally which is held as the opening event to commemorate the start of one hundred Machinoeki in Kanuma and he started to communicate with other peers. A lady station master who manages a souvenir shop used to plan many events, but could not realize them in the fear of failure. However, with the advice and encouragements from other station masters, she realized her dream of having a mini concert in her store, and successfully sells original foods. She said, “I am very excited and satisfied with my business development thanks to Machinoeki.”

A couple who opened a coffee shop in the former Ohira town in Tochigi prefecture are the first station masters in the prefecture. In August 2004, they took a group of young Japanese drummers to Fukuoka prefecture and held a drum concert at a Machinoeki there. They had been welcomed and had an opportunity to have a very warm exchange. The experience at this time enhanced their desire to contribute to society. Their wishes were realized in the campaign activities to assist disaster victims in the Chuetsu Earthquake in October 2004. This resulted in the nationwide campaign to help earthquake victims through the network of all Machinoekis in Japan. The Machinoeki activities are surely changing the attitudes of station masters, and widening their perspective. They aren't just thinking about themselves or the success of their own business, but rather what they can do for the community. And as people are connected, even small day-to-day efforts like opening one’s store premise to the public so that they can cater for customers or always making sure to keep the toilet clean for visitors, will make a difference in making their community more walkable, more enjoyable and a more comfortable place to spend time in.

7 Machinoeki Network

In addition to sense of public spirit changing on a personal individual level, various initiatives are also being carried out on a broader level. A Machinoeki can be a sole, independent existence in a region, which was the case in the early stages. However, more and more Machinoeki are interconnected through a network in recent years so that they can share various information and expect a synergistic effect to further lift the community. There are many Machinoeki networks which are connected loosely or systematically coordinated under an umbrella organization. The following figure illustrates the relationship of Machinoeki networks. Many stations can coexist in a city and they are interconnected around a key station, which will form a wider regional or national network.

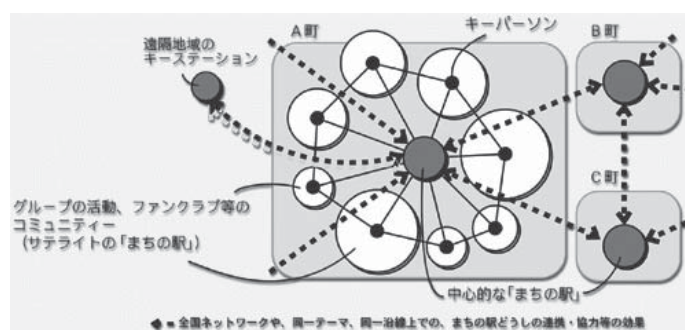


Figure 6. Networking of Machinoeki

In Amagi-Asakura area in Fukuoka prefecture, more than fifty Machinoekis are interlinked by the local tourist association network. They are among the oldest Machinoeki and have published a map that introduces Machinoekis in the area. As a result, a brewery called “The Beer Station” showed the ability to pull in a large number of visitors with spillover effects on the other Machinoeki in the same region. At that time, thanks to Amagi-Asakura area, Fukuoka prefecture had the largest number of Machinoeki in Japan.

However, Tochigi prefecture now positions itself at the top of the ranking in Japan in terms of the number of Machinoeki with nearly two hundred Machinoekis in five cities (Kanuma, Sano, Tochigi, Oyama and Utsunomiya) and one town (Nasu). The largest in number is Kanuma city with about one hundred Machinoeki opened since 2009.

Utsunomiya city used to have only three Machinoeki including the City Campus of the Utsunomiya Kyowa University, but in 2015 it added ten new Machinoekis and the number is increasing. The person responsible for this sharp increase in Utsunomiya as well as in other cities in Tochigi prefecture is Ms. Keiko Yoshida, the head of the

Machinoeki Network Tochigi, a private voluntary organization operated by herself. Without her eager and hard efforts, Tochigi prefecture cannot enjoy the top ranking in the number of Machinoeki in Japan. She has been actively exploring potential candidates to become Machinoeki and managed to successfully establish new locations. Beside Tochigi prefecture, there are many Machinoeki networks in Japan as shown in the following map.



Figure 7. Machinoeki Network Map

In order to exchange the information nationwide and to explore how policies are being formalized toward the future direction of Machinoeki, the "Machinoeki Liaison Council" was formed in 2000 with mayors, citizen groups and academics. In addition, the "Machinoeki National Forum" has been held in many places around Japan. The 6th Forum was held in Utsunomiya University in 2004, and the 12th Forum was held in Kanuma in 2009. The 18th Forum was held in Toyama in September, 2015, with more than 150 participants including mayors, politicians, government officials and many NPOs and private citizens from all over Japan.

8 Conclusion : Revitalization of Communities with Machinoeki

In contrast to the past trends of population growth and economic development, which led to Japan once becoming the second-largest economic power, the era of the so-called "shrinking society" has begun. Low birth rate and aging population have been the growing trend for some time now in Japan. The decrease in population and higher elderly population rates are more prominent in rural areas than in metropolitan districts. This phenomenon is called "the Japan Syndrome" according to

The Economist magazine (Nov. 18, 2010). In addition, the Great East Japan Earthquake on March 11, 2011 with highest Tsunami in Japanese history and the still ongoing Fukushima Nuclear Power Station disaster rubbed salt into the still fresh wounds. With the recent major earthquake striking Kumamoto and Oita area in Kyushu Island in April, 2016, Japan faces a very difficult challenge to restore the country and revitalize the local cities.

A shocking report titled Disappearing Regional Cities published in May, 2014 by Hiroya Masuda and his study group forecasted almost half of the cities and towns in Japan (896 municipalities) face the possibility of disappearance due to the population decrease by 2040. The current government launched a new policy to cope with the fear of disappearing cities which is called Regional Revitalization. Whether this new “top-down” policy will be successful to curb or slow down the population decrease in regional cities is yet to be seen.

In Japan, before the Meiji Restoration in 1868, the concept of “the public” belonged to the local communities. For example, the neighbors together built a road in those days. As Japanese society is modernized, however, the concept of “the public” gradually shifted to the public sectors, meaning the government. This common understanding that the government does everything prevailed widely from city planning to social welfare. However, the social needs are more sophisticated and diversified, and many local governments face financial difficulties due to the decreasing tax revenue in recent years. As a result, the government is not able to do everything on their own any more.

The latest national government urban redevelopment orientation is to promote a compact city policy, in which the once sprawled urban area as the result of motorization is to be shifted toward more compact urban form with human-oriented modes such as walking, cycling and public transportation. Given this situation, the urban policy should actively utilize the ability of the private sectors including citizens and NPOs, and the private sectors will become major players for revitalizing the city center. That is why much attention is paid to the Machinoeki as a “bottom-up” initiative and a new mechanism to enhance human interaction in urban living. As a Machinoeki can be a focal point for pedestrian, cyclist and public transport users, it can play a vital role to reestablish community awareness among both residents and visitors, and revitalize the city. A city needs a strong driving force to reestablish the

sense of community and strive for a socially sustainable environment. It is hoped that through the activities of the Machinoeki movement, soon, little by little, the dying central shopping streets will come back to life again with people and eventually the city will restore the good old days and lead the way to a more sustainable future.

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