

COMPARISON OF TWO URBAN EXAMPLES OF BIODIVERSITY IN TOKYO AND OSAKA

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Introduction

Recently, some places have been created that provide both urban amenities and ecological open spaces. They provide vegetation and flowers not only in parks but also in commercial and office areas.

Some previous reports show examples of these urban green spaces. I will discuss two green spaces made recently. Otemachi Forest is in Tokyo, which is in eastern Japan, and Namba Parks is in Osaka, which is in western Japan.

Existing literature on these spaces include a report written by one of the designers of Namba Parks. Hayashi¹⁾ tells about the design concept and how people use this space. In another report, Ro²⁾ discusses the behavior of people in Namba Parks. An explanation and planning sketch for Otemachi Forest can be seen by the public on a website.³⁾ We have not, however, had a comparison of the background and details of these two green spaces.

I believe that understanding the differences and the reasons for changed concepts is valuable. Moreover, it is important to study these urban green spaces to aid in the design and building of new spaces in the future. I focused on comparing their concepts and the biological diversity of their tree planting as well as how people interact with them in these spaces.

The locations of Namba Parks and Otemachi Forest can be seen in Figure 1. The first is in Osaka City, which is the second largest city in Japan. The other is in Tokyo, which is the capital of Japan. Namba Parks in Osaka was completed in 2007. Otemachi Forest in Tokyo was just completed in 2014.

Method

For my methodology, I examined their design concepts, and asked the following questions. How do people use the open spaces? How do local people relate to them?

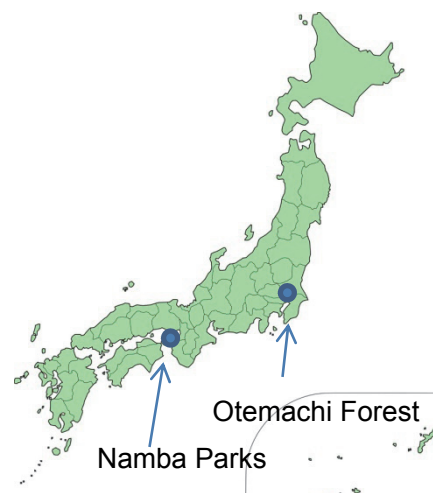


Fig. 1: Map of Japan with the two green spaces

How is the technical management? How do they treat biodiversity? I used documents, the Internet and interviews.

Results

Namba Parks uses rooftop tree planting in a commercial complex. The so-called “Parks Garden” was made with the concept that people could have connections with both the city and nature. Shops are united with trees and flowers so people can interact with nature and have rich experiences. For the purpose of promoting community design, they planned with the participation of citizens in a community committee. They also made farming spots for people to have fun growing vegetables. The amount of green open space is about 11,500 m² including 5,300 m² of vegetated area and 6,200 m² of paths and open spaces. They have more than 40,000 plants of about 2,500 species.

Looking at the following photos, people can be seen enjoying open spaces and walking with nice views of flowers and vegetation. They can also find some shade if they want to rest. The main purpose of the place is to provide a good combination of commercial areas and green open spaces for the guests. In the Grand Opening year, they had almost 30 million visitors.

The features of Otemachi Forest are quite different. This project has a natural-style forest and makes a clear distinction from conventional man-made open space. It offers “wild nature” as a public space. This is part of a new wave of forests being made in cities. In addition to reducing the heat island effect, it has a variety of other values. The area is about 3600 m² and is almost 1/3 of the whole development site.



Fig. 2: Entrance to Namba Parks



Fig. 3: Public open space



Fig. 4: Shade



Fig. 5: Flower bed



Fig. 6: Map of Namba Parks (<http://www.nambaparks.com/index.html>)



Figs. 7, 8: Otemachi Forest

They tried to cultivate and manage 1/3 of the forest in another place (Kimizu City in Chiba Prefecture) before the construction in Tokyo. It took three years to grow the forest and to replant it in Tokyo. Experimenting with the method to grow the forest, they finally moved it to this place, which is near Tokyo Station. This approach helped reduce the risk of dying plants and make a more mature forest in a short period. Characteristics of this forest are the concept of long-term transition, the mixture of evergreen and deciduous trees, different ages and contrasts between coarseness and fineness.

Discussion

People have changed their ideas about ecological places and biodiversity. A big turning point for ideas about biodiversity was COP 10, which was held in Nagoya, Japan. This was an epoch-making event for many professionals because they came to understand more serious ways to be ecological and be aware of biodiversity. Of course, this event was not the only reason. There are many enlightening and educational reports about urban design with biodiversity published by national and municipal governments and public housing organizations.⁴⁾ A French landscape architect also joined in planning Otemachi Forest. Gradually, this approach of creating “wild” forests rather than the usual greenery and flowers in commercial areas has become one of the mainstream approaches.

Conclusion

Namba Parks were made at the beginning of the 2000s as a place that increased the charm of commercial facilities. Users shop and enjoy the vegetation and floral art. In addition, the system through which the local community could participate has been important.

The Otemachi Forest in 2014 emphasizes natural ecosystems more, and reproduces vegetation faithfully. Scenery as it should be in nature was more important than amenities for people. This project, however, has made strong impressions on citizens.

Both spaces have received many awards from various organizations. What is also important, however, is that people have opportunities to be aware of wild green areas as well as enjoy flowers and vegetation even in very urban areas.

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