

Architecture as Environment

– Greenery, Water and Light –

By Hasegawa Itsuko

Photo 1

Photo: Shuji Yamada



Children playing in the Shonandai Cultural Center

LOOKING at maps and landscapes from about 150 years ago when Tokyo was called Edo, there was a waterfront in many areas with the seashore close by, and many rivers. There were white sand and green pines on the seashore and cherry blossom embankments on the riversides, and the water was transparent. The city was buried in green, and the profusion of greenery, which included the surrounding mountains, justified calling it a green city. It was a beautiful city where each house had a garden with seasonal flowers in full bloom. Perhaps because this era lasted for so long, Japanese people still feel comfortable when they are in a place with greenery, water and a sunny aspect. Since I first began designing housing, I have considered the various individual pieces together with their aggregate urban character. I have tried to introduce this Edo-style ecological sensitivity into the buildings that are part of the city, in an attempt to make them comfortable and good for both people and the environment. In the city itself, which is an aggregation of individual pieces, I have also promoted design to create another city of nature. Buildings that

bring together “the environment and action” should have a form closer to the action of their users and evoke the scope of latent action.

Over time, it has become common for things to be produced based on the logic of the producer, and production based on the logic of the user has become neglected. This can be seen not only in buildings, but also in fields that range from the city through to product design. Considering the viewpoint of users means we approach design from the reality seen in their physical activity, and I think this will enable us to create things that are more integrated with our lifestyles.

For a long time, modern design has been created with a strong concept that emphasizes the major system values of efficiency and productivity based on youth and freshness, strength and power. In contrast to this, people are now producing things that discover values friendly to the users, which could also be termed the “soft” concept that has been excluded from modern design.

The “development of an urban green island” and “buildings that are good for the environment and people”

– through the design of a number of public buildings beginning with the Shonandai Cultural Center in Fujisawa (Kanagawa Prefecture) in 1985 – have received great acclaim from the people who use them. Therefore, they have been proposed as public spaces that are well used.

As we can also argue that they are buildings that introduce an environment of greenery, water and light, I have made proposals for green open spaces through such means as constructing buildings underground in an attempt to create as many horizontal expanses of space in the city as possible and creating gardens on the roofs of car parks. In addition, I have proposed the creation of walking spaces to connect facilities, the spaces in which people meet directly. The buildings and open spaces that have been created like this are lively places where lots of playful children gather amidst greenery and water to frolic and move around. (Photo 1) I have continued to create public spaces with this consciousness of places that children can freely visit, because the movement of children and the gathering of people drawn in by the children enliven buildings.

The Shonandai Cultural Center was my first public building. In the past, the area was an agricultural region with a series of low-lying hills providing protection from the wind. I wanted to raise those hills once again as buildings. I also wanted to introduce the buildings as a secondary part of nature, creating an opportunity to produce a comfortable environment within the process of urbanization. The facility is a three-part complex with a children's museum, civic theater and cultural center. I wanted to make a place that was easy for a diverse range of people to visit, and a place which stimulated meetings and collaboration, so I created an open space connecting the three facilities.

In Japan, the outdoor setting is the archetype for traditional performance theater, as seen in *Noh* plays. There is also a custom of holding gatherings such as poetry competitions and flower viewing outdoors. I wanted to retain an open space that would serve this type of function. I put 70% of the floor area underground and created an open, multi-purpose event space at ground level. This is a two-layered structure with aerial gardens on the rooftop and a ground level square, creating a space that accommodates many informal activities. The gardens where some 300 varieties of plants can be viewed and the space through which a little stream flows are open 24 hours a day and put to diverse uses by people ranging from children through to the elderly. The attraction of this kind of space only comes to life through

its diversity of uses.

In city planning, places commonly have predetermined uses, but this open space does not have uses and events that are predetermined. To encourage the development of diverse activities and for the space to be used in enjoyable ways, it was also necessary to demonstrate concrete examples. During construction, I held workshops with the public on the planning and form of management indicating that the open space could accommodate an unrestricted range of activities. Rainwater has been used for the little stream in the open space. In addition, small-scale installations, including shades and awnings, have been set up, and the building can be termed a poetic machine that is presented according to the daily changes in the sun.

The Oshima Museum of Picture Books in Toyama Prefecture was called "A Ship on Three Hills." The first time I stood on the site, I thought of making hills there. I proposed the new terrain of hills to establish the site as a cultural center in Oshima, which is flat with an overall variation in elevation of only one meter. I thought that there was a need to stimulate diverse activities for a place where the power of fiction is at work. I used waste earth from construction in the town for the hills, and they are made in a style that is gradually stepped up. (Photo 2) The site was divided into three by farm roads, and the hills were built up without changing the sections. The hills get higher the further inward you go, and are also designed so that the slopes link to face on a perspective from the entrance to woods planted around the buildings on the opposite angle.

Slopes and bridges as devices to link places are always important in my designs. Examples of this include the aerial space in the Shonandai Cultural Center, the Namekawa Apartments in Ibaraki Prefecture, the Niigata City Performing Arts Center and the "communication necklace" introduced in the Nagano City's Imai New Town. They have bridges connecting the many aerial gardens with the existing buildings in the landscape gardens. These works, in particular the Oshima Museum of Picture Books, incorporate the sequential development that is the characteristic of the picture book, and I have tried to create continuities of experience in space.

The three rising hills are a place where people come together to create events, a space for experiencing the five senses in the open air that fosters a multiplicity of images and an open area for getting close to nature. In the path of the wind, there are arches and *suikinkutsu* (a traditional Japanese water feature constructed by burying an earthenware vessel in the ground onto which water is

Photo 2

Photo: Itsuko Hasegawa Atelier



The Oshima Museum of Picture Books

Photo 3

Photo: Itsuko Hasegawa Atelier



The library in the Oshima Museum of Picture Books

dropped to produce a sound), concealed water sprinklers, an outdoor free stage and a group of mirror tables. Grottos with fossils and shells embedded in the walls that are reminiscent of the beautiful river embankments of the past are encountered on the hills. Devices to stimulate human activity have been embedded, and places connected to the production of picture books have been prepared inside and out. The internal space is in the form of a layer of spaces in line with the slope within a large void, and the library, workshop, performance hall, exhibition room, CG room, and stage are connected. (Photo 3)

I approached the job of the Niigata City Performing Arts Center (Photos 4 and 5) and the grounds around it by studying the history of the formation of the city of Niigata. I found that Niigata was formed when scattered groups of connected island-like sandhill chains were built up. After turning into a low-lying swampy area, there were hosts of floating islands suspended in the river, and the landscape of lagoons and floating islands remained. In modern times, artificial waterways were made to flow, and a city of water was brought into being. This was also the process of separation between the waterside and the city. Looking at pictures that survive in libraries, the floating islands were respectively performance stages and also gardens.

Based on this analysis, the archipelago system connecting floating gardens like an island-studded ocean installation developed as a landscape design. In conditions where I was unable to create buildings below ground due to land reclamation, I noticed that the main line of flow for the new center would be on the same second floor level as the existing facility. I set aerial gardens and new lobbies afloat on the same level and connected everything with bridges. These bridges are extended stages, functioning as a device to dramatize human movement, and everywhere on the site is a performance space. As a result, the existing facilities, river embankment, Hakusan Park and the footbridges, which were previously weakly connected, form a continuum. A rhythmical circular tour network stretches from the town to the park, from the park to the hall, and from the hall to the waterside and extends to the surrounding environment. Obtaining approval from three administrative organs, I made these connections by putting a city road underground and building bridges over the prefectural road as far as the Ministry of Land, Infrastructure and Transport embankment on the riverside.

As a result of taking the center as the biggest island and promoting the planting of trees on the roof, it looks as if a large hill has risen when viewed from the opposite bank. Of course, the view from the rooftop is an open space that affords an unbroken view of Niigata from the

Photo 4



Photo: Itsuko Hasegawa Atelier

The Niigata City Performing Arts Center

Shinano River to the Sea of Japan.

The islands created by using aerial gardens and rooftop buildings are stages and gardens respectively. They create an awareness of movement among people and function as devices to dramatize human movement. In urban society, this type of level expanse will play a role as a place that sets the scene for new activity. I believe that this kind of place is important for new lifestyles.

In contrast to dedicated indoor halls for concerts, operas and Noh plays requested by the client, the aerial gardens serve as traditional arts theaters. I made my design so that everywhere on the site would be a space for performance. The concert hall, theater, Noh theater, various rehearsal rooms and the lobby are on a plate with a circumference of 330m that floats six meters below the ground level.

With the concert hall and the theater as the major core, the surrounding area is enclosed by transparent glass. The curtains for the glass are a double skin using the dot point glazing (DPG) system, and two layers of shade screens that function through a link with the sun's light and the temperature are incorporated between them. They maintain an energy efficient temperature and light using a façade that changes moment by moment. Once an hour, a computer cost check is carried out, and the percentage of opening is adjusted, moving the shades up and down. It is just like the opening of an animal's sweat glands or the molting of its fur, making the system similar to an

Photo 5

Photo: Mitsumasa Fujisuka



The Niigata City Performing Arts Center

enormous living organism. By preventing the creation of a heat island using greenery, water and earth and obtaining energy savings using the double skin and the equipment, the income from the building can be used for independent projects. This allows original works to be created and sent around the nation. **JS**

(This is the last article in this series)

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