Archi Design Talks: Space in Japanese Architecture

Date :May 26 (Wednesday), 2021, 16:00~18:00Venue :Online, using Microsoft TeamsLecturer :Prof. Shigeyuki OKAZAKI (Professor, Mukogawa Women's University)

The bluish violet Bosphorus divides the city of Istanbul, the capital of Turkey, between the Asian and European continents. Bahçeşehir University is one of Turkey's prestigious private universities with campuses in scenic spots on the European coast. Professor Okazaki gave a special lecture in the lecture series "Archi Design Talks" sponsored by Bahçeşehir University. The lecture was attended by faculty members and students from Bahçeşehir University and architects from outside the university. The lecture was entitled "Space in Japanese Architecture" and explained Japanese gods and views of nature, gardens, roofs, the Ryoanji-Temple, and the borrowed scenery in the gardens, using 3D simulation videos.

Japanese gods and views of nature

First, Prof. Okazaki explained the idea that God is in nature. The Japanese god lives in mountains, trees, rocks, and waterfalls. He gave an example. The Oomiwa-Shrine in Nara does not have a main shrine or enshrine Mt. Miwa as a god. In addition, we offer daily meals and prayers to the rocks on Mt. Miwa. A shimenawa was wrapped around a huge tree to make it a symbol of God. The waterfall drawn on the mandala of Nachi is marked with the god's body. Mt. Fuji and many mountains are painted as objects of worship in the mandala. Ise-Jingu, Izumo-Taisha, Hieizan-Enryakuji-Temple, and Kongobuji-Temple are sacred religious sites that represent Japan, and are located in the deep mountains.

Japanese Garden

Next, he explained the spatial composition of the stones in the Japanese garden. He explained the stone gardening method unique to Japan in the world's oldest garden book "Sakuteiki" written in the Heian period. The book explains that when arranging stones, it is best to first select and erect the main stone, then place the second stone according to the main stone, and then place the third stone according to the main stone. He also explained how to compare stones with humans and animals.

As an example, he introduced the garden on the factory grounds and the gardens of the East Studio and West Studio of the Department of Landscape Architecture.

The designing of the garden on the factory premises started by looking for stones in the stone yard in the mountains. He introduced the selection of standing stones and stones that resembled a ship floating in the sea, how they were stood on the site, and how the flowers and stonework bloomed one year after completion.

For the garden on the south side of the Landscape Architecture East Studio, Prof. Okazaki introduced how the sea was represented by crushed stones, bamboo was planted on a small hill on the embankment of the old riverbed to make it look like an island, and stones were assembled to make a dry landscape waterfall. There is a painting called "Niga Byakudou-zu" from the Kamakura period, that recommends entering the Buddhist gate. The white stone bridge depicted here is also quoted in the Katsura Imperial Villa Garden. The garden of the Landscape Architecture East Studio also quotes a bridge over the island.

Japanese Roof

The annual rainfall in Japan is 1700 mm, approximately twice the global average. In Japanese architecture, deep eaves were installed to prevent direct rain on the walls. "Hisashi," "noki," and "geya" in Japanese architecture are expressed by one word, "eave," in English. To enable deeper eaves, a structure called "hanegi" is hidden inside the eaves. This was introduced in the photos of Kiyomizu Temple and Honryuji Temple under construction. Bauhaus combines rectangles with different functions to achieve a structure in which beautiful solids are connected. On the other hand, in Katsura Imperial Villa, "Koshoin," "Chushoin," and "Shinshoin" are lined up in a gantry shape, forming the same beautiful plane as Bauhaus. However, designing an eaves roof on top of it requires very complex capabilities.

The Landscape Architecture East Studio inherits the method of constructing eaves and eaves in Japanese architecture. It creates a space that harmonizes with the design of the nearby "Koshien-Kaikan" and the Frank Lloyd Wright design that influenced it.

Ryoanji-Temple and the borrowed scenery in the gardens

Finally, Prof. Okazaki explained the concept of "Shakkei' at Ryoanji Rock Garden and Entsuji-Temple. He talked about the arrangement and meaning of the stones, using a simulation video of Ryoanji Rock Garden. The method of designing a garden with a part of the distant landscape as one of the spatial components is called "Shakkei". He introduced Entsuji Temple in Kyoto as an example of a garden with "Shakkei."

In the current garden of Ryoanji-Temple, the outside of the fence is surrounded by tall trees, so we cannot see the scenery outside at all. However, it has been recorded that Katsumoto Hosokawa, the owner of Ryoanji Temple, worshiped at Iwashimizu-Hachimangu Shrine on Otokoyama, which is located on the other side of the city of Kyoto, from the porch facing the garden every day.

Therefore, 3D data of the buildings and gardens of Ryoanji Temple and the hills surrounding the city of Kyoto were created. Prof. Okazaki discovered by simulation that Iwashimizu-Hachimangu could be seen beyond the wall from the temple and the porch of the temple. The stones in the garden are large near the porch and gradually become smaller as the distance from the porch increases. Beyond the garden, we saw a smaller Otokoyama through the flat city of Kyoto. It was speculated that the entire stonework and Otokoyama were likened to the scenery of an island floating in the ocean.

The west wall that surrounds the garden gradually increases in height as it approaches the veranda in the foreground, making the garden look even wider by emphasizing perspective.

About 100 people participated, including faculty members and students from Bahçeşehir University, students participating in this year's ICSA in Japan, and graduates of the program. After the lecture, there was a discussion on traditional Japanese spaces and contemporary architecture. During the question-and-answer session, many participants asked questions, and the lecture was a great success.



The garden on the factory grounds

The simulation of Ryoanji Garden