

A Floor for a Person or Building

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It may be difficult to envisage concretely how people become exposed to architecture. Architecture is too big for our bodies to comprehend. But we easily and immediately imagine how we touch a floor. Since human beings cannot fly, we constantly make contact with floors and the ground with our feet every day. Our bodies touch asphalt roads, wooden flooring, or carpets directly or through shoes or clothing. The material determines the level of comfort we feel when touching a floor. Among the many elements that comprise architecture, flooring is perhaps the element most closely attuned to the human body.

Tatami mats in spaces that a person occupies

The Japanese tatami mat, is a flooring material deeply related to the human body. There is a Japanese expression that says, “Half a mat in the morning, and a mat at night” . It means that the space of someone who is sitting or lying down is equivalent to half a tatami or a tatami with the dimensions of 3 x 6 shaku (approx. 910 x 1,820 mm). By showing or describing the number of tatami mats (for example, six tatami mats or 4.5 tatami mats) laid out in a room, you can imagine the approximate size of a room by comparing it with your own body. Tatami mats are a unit of measurement for a room size through the human body.

Originally, tatami was not laid on an entire floor. People considered it to be shitsurai, a smaller piece of furniture placed only where people sat, like a floor cushion. Shitsurai sprang from the furnishings used in the ancient Shinden-zukuri style (the architecture representative of a nobleman’ s residence during the Heian period [794- 1185]) during ceremonies. It includes the tatami mat, bamboo blinds, curtained screens, and folding screens. Buildings in the Shinden-zukuri style adopted the architectural techniques used for making large temples and palaces. Because the interior was just like the hall of a large temple with only columns, people believed that they should divide a small residential space using these furnishings₂.

Significantly, the size of a tatami at that time was not as uniform it later became when standardized. In the aristocratic society of the period, the higher the rank of the person who sat on a tatami mat, the larger and thicker it was, and it was sometimes used in layers. Furthermore, the colors and patterns of the edges of a tatami changed to suit their social status₃.

“We need a little screen to block other people’ s eyes” . “I don’ t want to hurt my body by sitting directly on a hard wooden floor” . “We want to create a space suitable for the position of a person who uses it” . To meet such requests, small things, such as tatami mat and folding screens, make people fit into a larger space.

Building construction based on tatami mats

Over time, tatami mats began to cover the entire room. It was difficult to change the size and thickness of each tatami mat once they began covering rooms. However, the custom of expressing a person’ s status through a tatami mat remains. For example, in a tearoom, tatami mats have different names depending on where they are laid. A tatami in front of a tokonoma alcove, a seat of honor, is called Kinin-datami (a tatami for a noble person). A tatami for where guests sit is called Kyaku-datami (a tatami for a guest). A tatami for where a host makes tea is called Temae-datami (a tatami for making tea). A person sits on the mat that is suitable for their position, rather than changing the mat to accord with the user’ s status.

During the Edo period (1603-1867), the size of tatami mats became unified once tatamis began covering entire rooms. Tatamiwari, which determines the size of a room by the number of tatami mats, became a popular method of planning. For example, the length of the long side of a tatami mat is equivalent to the length of two fusuma doors (Japanese sliding doors) and five crosspieces on a ceiling. One determines the span of columns, the framework of architecture, in relation to the number of tatami mats and standard dimensions created. Many building parts were standardized according to the size of tatami mats. These standards and dimensions spread quickly. Standardization led to increased productivity through common technologies, which extremely spread from the buildings of the ruling classes to those under rule₄.

In this way, the tatami mat changed from one adapted to human bodies to something that the production system of architecture incorporated and became a foundation of society. Nevertheless, because a tatami is an extension of the scale that originated from the human body, the notion that

architecture itself has become embodied rather than that human bodies have to conform to architecture encapsulates tatami’ s odd journey.

The position of tatami is fixed after it is laid down. Tatami craftsmen call the light coming in from the short side of a tatami “vertical light” and the light from the long side “sidelight” . These names show how people feel changes depending on how they receive light in the dark. While the tatami mat became the starting point of architecture production, it continued to be the element that translated large architecture logically into ways people could visualize.

Architecture as a composite of familiar objects in contact with people

In contrast, today, the production system of tatamiwari has almost disappeared. Thus, even if tatami appeared in a Japanese-style room, it will not make you feel the totality of architecture. Tatami is a traditional Japanese icon and not merely flooring material for a using tatami, it would be better to go back to the ancient style, as some modern architects have done, and return it to the more flexible way that individuals once used, such as floor cushion.

However, if we not only consider the actual usage of tatami but also think of architecture as a “multidisciplinary complex” that attracts attention in this exhibition, we can see that the furnishings in the Shinden- zukuri style are a composite of things that correspond to various human behaviors. Notably, a part of the complex was incorporated into the production system of the whole building over time until modern times, and developed in every corner of society.

After all, architecture is too big for the human body to grasp. Human beings are quickly left behind when they confront the esoteric techniques and expressions within architecture. If we can regard architecture to be a complex of familiar things that are in contact with people, I think we will envision how architecture interacts with people without hesitation.



The room covered by tatami mats



Shitsurai in the ancient Shinden-zukuri style (via TNM Image Archives)

■ NOTES

1. Traditional Japanese flooring material. Tatami is made by attaching Tatami omote, a mat woven with rush, to Tatami doko, a plate-like compressed straw. The traditional standard sizes for a piece include 3.15 x 6.3 shaku (approx. 955 x 1,910 mm) for Kyoma, 3 x 6 shaku (approx. 910 x 1,820 mm) for Chukyoma, and 2.9 x 5.8 shaku (approx. 880 x 1,760 mm) for Inakama.
2. Kazuko KOIZUMI, Tetsuo TAMAI, Hideo KURODA, 1996. Emakimono no kenchiku wo yomu. Tokyo: University of Tokyo Press.
3. Kouichi YAMADA, Osamu SATO, 1985. Monogatari monono kenchikushi tatami no hanashi. Tokyo: Kashima Publishing.
4. Yasutada WATANABE. “Kogyoka eno michi <<NO1>> Kogyoka eno michi no naka de shokunin ha dou henka shite kitaka” . Kenchiku Shigaku 35.