

Research on the Contemporary Japanese Architectural Creation and its Special Aesthetical Taste of Nationality

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Abstract: Contemporary Japanese architecture has achieved great success and has been widely accepted by the whole architectural field. What is the driving force for the contemporary Japanese architectural creation is worth of thinking carefully about. In this study, some famous Japanese architects, including Toyo Ito, Tadao Ando, Arata Isozaki, Kengo Kuma, Kazuyo Sejima and Ryue Nishizawa and their architectural studiess are analyzed and studied from the angle of nationality. These architects keep up with the step of the world architecture and always pursuit the aesthetical taste of nationality. They proposed some special architectural theories that profoundly reflect the nationality of Japanese and make great influence on the architectural forms, architectural space and architectural aesthetics of Contemporary Japanese architecture. In the architectural form, they pursuit the simplicity, pureness, lightness and finesses; in the architectural space and behavior, they pursuit the shadow of the ma space and nature existence; in the architectural aesthetics, they pursuit the beauty of animism, dreariness and substance sadness. Through conjoint analysis of the architectural examples and the theory of nationality, this study proposed that the contemporary Japanese architectural creation is directly derived from the profound traditional culture and firm nationality and nationality is the cornerstone of the Japanese architecture and always promotes the progress of the Japanese architecture.

Keywords: Architectural creation, contemporary japanese architecture, nationality

INTRODUCTION

Contemporary Japanese architecture that has a strong characteristic of the aesthetical taste of nationality has achieved great success and has been widely accepted by the whole architectural field. From the Meiji Restoration to the end of the twentieth century, Japanese architects keep up with the step of the world architecture and always pursuit the aesthetical taste of nationality for generations. At the beginning of this century, few architects are interest in the decoration of architecture or the historical building style in the Japanese architectural field. The pure imitation style is also hardly touched, but the aesthetical taste of nationality is widespread.

Architectural nationality is derived from the traditional cultural nationality and it also has the basic value trends to maintain and develop the national culture. In the face of the impact of foreign culture, nationality can efficiently resolve the conflict through purposeful choice and then renew the traditional culture by changing the national culture to new forms. Therefore, nationality has the characteristics of tradition and typicality. From the human cultural history, nationalism often appear when national culture faces survival crisis against strong foreign heterogeneous

cultures and it is the instinct of a stress response, rather than rational thinking. So, it shows a nonconscious thought tendency. In the architecture, it is unworkable that an architectural form is regarded as the eternal. With the development of the age, people have new views on the way of life and aesthetic taste and then create new national forms that are derived from the traditional thinking. Therefore the nationality has the characteristics of continuity and development.

Contemporary Japanese architectural nationality is a new concept that is put forward from the angle of Japanese nationality and its constraint to Japanese architecture. It is closely related to natural factors, structure factors, social factors and psychological factors in Japanese architecture and enables Japanese architecture to always return to the instinctive and nonconscious behavior of its original national culture when facing the shock of strong foreign cultures. It does not exclude the rational part of foreign cultures; on the contrary, it brings many into its own use, while the special thing is that it always returns to its original culture after integrating the rational part of foreign cultures and forms new matters with characteristics of "original Japanese culture". Owing to the identification, attachment, belongingness of its nation and culture, the nationality of Japan has a strong grassroots basis.

Researching on Japanese architecture and national culture, it can be seen that the success of contemporary Japanese architecture is closely associated with the nationality of Japanese. The nationality of Japanese architecture can be found in many aspects, such as its architectural forms, architectural space, architectural aesthetics and so on.

NATIONALITY IN CONTEMPORARY JAPANESE ARCHITECTURE FORM

Everything has its two sides, so does nationality. It owns both active and positive functions. During humans' construction activities, nationality owns direct guiding significance on the original and extrinsic forms of architecture.

Simplicity and pureness of architectural configuration: In the history of Japanese architectural development, for a long time the buildings have been designed in the forms of rectangle, square, rotundity, etc. Basic geometric figures, which is related to Japanese people's emotion to the nature and inheritance of Buddhism, for they think pure geometric shapes can unscramble the constituting principle of the universe. Take the Five-ringed Tower in Sukhavati Temple as an example, it is named "Five-ringed" Tower because the "Five-rings" represent the Five Elements of the universe, to manifest which, the shapes of cube, sphere, pyramid, crescent, ellipse were piled up from the bottom to the top to form a tower and was named "Five-ringed Tower", as shown in Fig. 1. This idea is in the deep creation emotion of every Japanese architect (Arata, 2010).

Tadao Ando's architectural forms always use this kind of pure basic geometric figures, always using arc, such an elementary geometry, when rotundity is required and showing no interest in the free styles created with modern steels, as he said: "I only choose simple rotundity and square as my architectural shapes (Ando, 1987)". When mentioning "spirit over form", he said: "make correspondence with the infinity of spirit to the inanity of form," by integrating rich, complicated and changeable space to simple geometries. He thinks it's more likely to keep the pureness of architecture, cut all imaginations and make it own pure stereoscopic impression in pureness and contemporary construction materials can better highlight the significance of architecture when used with pure basic geometries because of their simplicity. Ando wrote: "my main purpose is to create architecture with both abstractness and concretization by giving pure geometries with mazy representations (Wang and Zhang, 1999)". Thus, we can see these two elements in all his studiess, such as Museum of Literature, Galleria Akka, Garden of Fine Art and Azuma House and so on. The famous architect has created diverse architectural forms inside



Fig. 1: Five-ringed tower of sukhavati temple

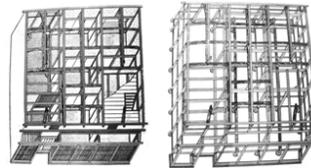


Fig. 2: "Zhouzu" and "Zaozuo"

the simple geometries. Such a pure geometry condensation on architecture not only meets Japanese architectural thinking, but also tallies with the tradition of the modern west, for this reason, the buildings meet the aesthetic standards of the modern west and meanwhile own Japanese characteristics.

Lightness and fineness of architectural structure: Compared to other countries' buildings in the same age, ancient Japanese architecture is more fine and consistent in structure. The ancient Japanese believed that buildings had souls and just as the ancient Chinese did, they put many ancient literature ideas in buildings and most of them were exquisite amatory poems. For instance, in "The Tale of Genji" the palace of the moon, the place for enjoying the moon was from the story of Yuegui (laurel) of ancient China. Under the guidance of such a fine exquisite emotion, Japanese architectural shapes tended to be fine and pretty. The architectural structure of ancient Japan was wood structure which was commonly adopted in the east, such a structure in Japan was divided into "zhouzu" and "zaozuo", the former one refers to pole, girder, mudsill, joist and so on structural units and the latter one means parvis, window, shed, bedroom, grid, etc. composing elements, as shown in Fig. 2. Those wood units are more fine and consistent than Chinese wood elements of the same period and are greatly different with western masonry buildings for being fine, light, pure and consistent and natural and delicate rather than being splendid and imposing (Itou, 2008).

In comparison with other nations' architects, Japanese architects are more careful in handling the surface of buildings and are better at replacing three-dimension entities with complication surfaces and making them become people' major impression of architecture. DIOR Omotesando and 21st Century Museum of Contemporary Art designed by architects



Fig. 3: DIOR omotesando

Kazuyo Sejima and Ryue Nishizawa both have shown this idea. In 21st Century Museum of Contemporary Art, the two architects chose 360-degree transparent and open glass curtain walls, making the shape extremely slight. While DIOR Omotesando used the form of veiling to express this idea. It is a seven-floor cuboid building, with glass as its outside walls attached with transparent propylene panels, which were processed to as its outside wall materials in folding shape so as to utilize the irradiation of lights and enable the visitors to see a building as if it is enwrapped by gauzes. The glass curtain walls on its surface were layered with wire lines, but they give peoples a feeling of homogeneity and smoothness under the influence of sunshine, environment and so on factors and makes the building look light and floating, transparent and flowing as a crystal cube, as shown in Fig. 3. Kazuyo Sejima and Ryue Nishizawa have annotated the fine structure of Japanese architecture.

NATIONALITY IN CONTEMPORARY ARCHITECTURE SPACE

Japanese space cognition owns stronger sensibility than the western people's, including temporality, umbrageousness, fuzziness, etc. features, which are also found in contemporary architectural space.

Shadow of architectural space: Tanizaki, one of major writers of modern Japanese literature, wrote in his essay *In Praise of Shadows*: "Our ancestors reluctantly lived in shadowy houses, but they have found beauty from the shadows gradually,... Actually, the beautiful degree of a Japanese house is totally determined by its shadow degree." Such a traditional cognition of shadow and chaos of space of the Japanese people is obviously shown in its contemporary architectural field. For example, Arata Isozaki's "ma" space and Fumihiko Maki's "oku" space theories have both mentioned this viewpoint.

As a student of and being affected by Kenzo Tange, Arata Isozaki has strong interest in traditional Japanese architectural space and has committed himself in the exploration. He uses Japanese traditional mean of black and shadowy space to achieve the distance sense between humans and buildings and make observers incompletely know about them so as to fully exert their



Fig. 4: Exhibition of "Ma-Time and Space of Japan."



Fig. 5: Shanghai Zendai Himalayan art center

imagination. A building can have many possibilities resulting from different persons' different feelings on space out of their personal experience, knowledge and memory. Everyone knows "ma" as a feeling and experience, but no one can express and explain it in language or theories, which just is Arata Isozaki's "ma" space theory.

In 1978, Japanese Culture Special Feature Exhibition was held in Paris Decorative Art Gallery, in which Arata Isozaki's "ma" space theory was realized. It is an absolute time of homogeneous moment that can flow straightly from the starting point to the ending point and extends to a focal places in X, Y and Z directions, it is calculated completely according to the calculation standards of modern science. In the exhibition, he combined traditional Japanese recognition on space with contemporary architectural aims and created the show of "Ma-Time and Space of Japan", as shown in Fig. 4.

Shanghai Zendai Himalayan Art Center, the new study of Arata Isozaki completed in 2006 is the central manifestation of his architectural thought. It is a complex composed by many cubes, including art center, artists' creative studio, guestrooms, public space and commercial facility. As a whole, it adopts the layout of traditional nine-courtyard of China to realize space penetration. Its core is the art center in the centrality and the multifunctional theatre that can hold over 2000 persons and a garden in the air is designed to make the over ground and underground squares form a cubic public space. As for the center of the building, the architect uses the method of optimization of evolutionism structure, of which the condition formed by the enveloping space is the "ma" space theory, as shown in Fig. 5. The design can be fast accepted by Chinese, because it complies with the space cognition of people from East Asian countries. The cubic as the



Fig. 6: Transitional space of Nijocastle



Fig. 7: The silvery cottage

guestrooms is on the platform of over thirty meter height, the artistic pictographs on the bottom out wall are embedded into the grids, such a design expresses the tradition in an abstract way and makes the space with sense of shadow. The art center is divided into two extremely different parts: the glittering and translucent cubic and natural and organic anomalous part. Furthermore, their space conditions are different too, one is a public commercial space and the other is a closed office space, the place blending the two parts is Arata Isozaki's "ma" space theory, because the comparison space with vividly different features is its expression.

Nature of architectural environment: Japanese nationality regards environment as "nature", which is compared with the construction civilization of the modern west. It was advanced by Japanese politician Masao Maruyama in his study "A Study on Japan's Political Thought" and later applied in national architectural styles by Japanese architect Ryuichi Hamaguchi, who thinks that "nature" is what, is formed naturally according to the environment or the subjective cognition of people on trends of things. This is Japanese people's intrinsic value on life and stresses humans' emotional action power on the environment and people's subjective behavior possibility given by it. Traditionally, Japanese like to image an architectural space as an artistic conception (such as a tearoom); in such an artistic conception people will have a kind of behavior (realization of life), which comes from the artistic conception, certainly vice versa. The higher the level is, the broader and profounder humans' spatial behavior is.

About the soul of traditional Japanese architectural space, Ryuichi Hamaguchi pointed out in his essay that the concept of Japanese architecture tends to space and behavior. In traditional Japanese architecture, how is

the idea nature exist in space and behavior expressed? The ancient Japanese believed that architectural space was given by the natural environment, there was no clear limit between space and environment and they need exchange and communication. In Nijo Castle in Kyoto, the walls of traditional buildings do not belong to bearing structure and are open, there is a transitional space between the inside and outside, as shown in Fig. 6. It plays an important role in adjusting nature, including soaking up the sunshine, adjusting monsoons and avoiding rains (Kenji, 2011). When all shoji screens are open, sunshine, wind and outside landscape enter the room, humans and the natural environment are full of emotions, while the building itself disappear, as shown in Fig. 7. The identification of such a transitional space is made according to humans' behavior-when humans and the nature are interactive, it is the extend of the inside floor; when the screens are closed, it is outside gallery. Furthermore, the inside space of traditional Japanese buildings has no separation gallery, folding screens and shoji screens are used to separate the space into moving spaces, the space forms can be changed in accordance with human behavior. In conclusion, traditional Japanese buildings are based on human space.

In 1986, architect Toyo Ito's own house "The Silvery Cottage" was built in Tokyo, which is the modern explanation of Japan's traditional spatial concept. The building's spatial structure is partial two-floor. On the first floor, the center is an atrium, its right is washroom and study, its south is bedroom, its north is dining room and living room, whose right is tearoom, the north most part is a store room. The baby room is on the second floor. The whole building centers around the atrium, which is the fuzzy space of the building and nature and through which people can get to any room of the building. It seems simple, but is actually rich. Walking in it, you can feel the openness of the space. "The Silvery Cottage" differs from normal houses, because it is the exhibition of the traditional open, temporary and floating space of Japan. The architect deliberately weakened the attribute of space and makes it flow inside and outside; he also uses transparent or hollowed double acting doors as its separations to create "the false" and "the true" of the inside and outside of the building. From its design, we can see Toyo Ito's architectural creations show the national spatial concept of Japanese, especially in humans' grasp of spatial behavior and flowing, he pursues the realm of traditional Japanese space.

NATIONALITY IN CONTEMPORARY JAPANESE ARCHITECTURE AESTHETICS

Japanese national ideal owns the special philosophical views of easterners and "the discourse of Buddhism" is its supreme realm. Japan also develops



Fig. 8: Dull landscape in Ryoanji



Fig. 9: Kiro-san observatory



Fig. 10: Japan pavilion designed by Tadao Ando

Zen thought, which believes that “impermanence” is the highest ideal level of existence in the universe and it corresponds to the real world’s physical forms. The basis of existence is “nothing”, while “nothing” is not the end of spiritual revivification. “In the thinking of exceeding ‘nothing’, spirit gains the highest intoxication, which is over ‘nothing’ and guide spirit to absolute existence. Absolute existence means the things exist outside the relevant world (Shuji, 2011). Japan’s Zen thought shows common people all things and the truth and is reflected in all aspects of Japanese society, especially in Japanese people’s unique aesthetics on arts, including architectural aesthetics. The ideal of Japan is their pursuit of nature.

Dreariness and substance sadness of architectural aesthetics: The thought of “impermanence” is shown in every field of Japanese society, especially in its traditional buildings and courtyards, which express Zen in the form of “impermanence”, of which the best example is Japan’s dull landscape. “No pool, no running water, only some stones standing, this is ‘dull landscape’”, this definition is from “Gardening”. Such a kind of courtyard is different from others, it has no water and tree and only stones, sands and mosses are used to create dynamic effects and a visionary world of concrete things. It uses “emptiness” to represent “nothing”, enter immensity from finity, abandon self to reach the realm of anatta.

Another representative example of dull landscape is Ryoanji in Kyoto, which was built in the 15th century. It is an oblong courtyard of 330 m² with 15 pieces stones in different shapes and sizes and there are also a limitless sea made of white sands and a thick forest made of mosses in a symbolic way, as shown in Fig. 8. In it, you can image a big natural world.

Under the influence of the thought of “impermanence”, contemporary Japanese architectural works always give people a feeling of “illusion” and “meditation” (Ido, 1991). Furthermore, they have put forward some architectural theories in Japanese thinking, such as Kengo Kuma’s “decomposition”. He once mentioned that the creative thought was from Japan’s courtyard culture. One of the good manifestations of his “decomposition” thought is Kiro-San Observatory designed by him in 1994, in which he adopted a new method of reversing to express the “quietness” of the architecture, which is located on a hilltop of an island of the enclosed sea, is constituted by platforms set off by green boskages and connected by a narrow slit. The visitors cannot see the architecture under the mountain. He thinks that an observatory should be built for visitors to view landscape, while in reality most of them are located highly and become architecture to be seen, thus are often simply standing in the natural environment. In his design, to “dissolve” the observatory, he broke the architecture and buried it into the ground on the hilltop, thus set an out-of-order building in a turbid environment, which disappears through diffusion with the disordered context around. This is particle architecture advocated by him later, that is to say a building needs to be broken down and the broken particle will gain higher freedom through recombination, as shown in Fig. 9.

“Natural beauty” of architectural aesthetic ideal: “Natural beauty is the foundation and main body of Japanese awareness of beauty.” Japan owns rich natural resources, they has been enjoying the beauty of the nature from the beginning, with deep love and special emotion to it. Their cognition of beauty has originated from the nature, thus natural beauty becomes the ante type of all kinds of beauty in Japanese culture. They do not observe but feel the nature with emotions and imagination and raise them to virtue and sentiments. In architecture field, their cognition of natural beauty was from Japan’s proterozoic.

In 1992 World Exposition held in Sevilla, the Japan Pavilion designed by Japanese architect Tadao Ando showed us the traditional Japanese thought of natural beauty as a typical study by combining traditional wood architectural space with modern timber framing craft, as shown in Fig. 10. The building adopts wood structure with 4-floor on the ground, a lot of wood walls, stakes and beams are used and a system of glued wood beams is used as its bearing. The visitors

enters the building through a bridge-shaped arch with special traditional charm that leads to the 11m-height viewing platform, the entrance of the pavilion is a large open multilayer space, a huge porch. In this building, the designer strongly expresses his desire of harmony between humans and natural environment. The whole wood building has no painting coat, all materials are used to show their original appearances, the Teflon cover can directly introduce the sunshine to save energy, furthermore, the soft lights and the wood architecture set each other off, which reminds people traditional Japanese resident space. The front and back of the architecture are cambered walls made of wood battens, giving prominence to the natural materials and meanwhile showing the shape beauty of modern architecture. The whole building not only strongly expresses traditional Japanese thought of natural beauty, but also stresses the ecological concept of modern architecture; with it the designer has showed the whole world the charm of traditional Japanese aesthetics in the form of transformation.

Contemporary Japanese architectural aesthetics is the ecological aesthetics combining traditional natural aesthetics with western aesthetics (Wu, 1997). As Tadao Ando says: "nature is not the original nature, but the ordered nature generalized from nature or the disordered nature arranged by humans-artificial nature!" The nature referred by Ando is not the greening nature in a general sense, but the artificial nature or architectural nature. He considers that greening is just a mean to beautify the reality and it is a rude way to simply take gardening and the season change of the plants in the gardens as the symbol. The nature with abstract light, water and wind is shown when materials and architecture based on geometry are imported together. Onishi Yoshinori also points out that the experience of beauty contains two basic parts: "natural part" and "artistic part". The essential structure of art exists in the relation integrating the two parts. These are the voices of contemporary Japanese architectural aesthetics field; from them it can be found natural ecology is the root of contemporary Japanese architectural aesthetics.

CONCLUSION

The success of contemporary Japanese architecture is the result of the hard study of the Japanese architects for generations and also is directly derived from

national spirit of Japanese. In the evolution process of the traditional architecture, the architectural form with the aesthetical taste of Japanese is never ruled out when it is impacted by the advanced culture. At the last century, the modernist swept across the whole world, the aesthetical taste is used to interpret the eastern architectural culture in Japan and its driving force is derived from the nationality of Japanese. The aesthetical taste of nationality is universal in contemporary Japanese architecture and it is also the representative characteristics of nationality. Through conjoint analysis of the architectural examples and the theory of nationality, this study proposed that the creative thinking of Japanese architecture owns the profound traditional culture and firm nationality and it is a various nonlinear system, making a transition to ideological constraint from simple imitation. Although contemporary architecture has characteristics of polytropism, nationality of Japanese always affects its development and the aesthetical taste of nationality is the spiritual foundation of the development of Japanese architecture.

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