USE IT OR LOSE IT:THE (IM)POSSIBILITY OF INTERPRETING TRADITIONAL JAPANESE SPATIAL FORMS WITHIN CONTEMPORARY ARCHITECTURAL PRACTICE

ABSTRACT

This paper explores the indigenous characteristics of Japanese architectural space and how this distinctiveness, on a wider spatial scale, can be transferred and reinterpreted within contemporary Japanese architectural practice. One of the identified spatial elements utilised for research is shinden-zukuri, a type of annexe style, which can be viewed as a group of multiple buildings that can be recognised as a single building. In this paper, the researched element is extrapolated, transferred and interpreted within contemporary architectural practice. The examination of said identity, the open spatial form, confirms its widespread utilisation and deep-rooted nature in the mental landscape of the Japanese people. The findings indicate that contemporary Japanese architecture and architectural practice is beginning to reach a fork in the road: whether it can retain its observed spatial identity and resist, or assimilate the current trends suppressing the previously identified spatial values. The overall findings indicate that the condition of contemporary Japanese architecture oscillates between openness and closedness and will require attuning to the changing circumstances if the perceived spatial values are to endure.

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1. INTRODUCTION

This paper focuses on traditional Japanese architectural forms in order to explore the indigenous identity of Japanese architectural space and how it is (re)interpreted within the contemporary architectural practice. Traditional Japanese architecture is known for its horizontal and vertical spatial composition with columns and beams, as well as the continuity between the interior and exterior, and its liberating visual qualities. However, these spatial characteristics are lost in contemporary Japan due to various factors. The social demand for the realisation and spread of environmentally friendly architecture has become more pressing than ever before, and the need to reduce carbon dioxide emissions has made it a top priority to reduce the air conditioning load, resulting in contemporary buildings being designed to become "closed boxes" that are airtight and insulated.

Although "open Japanese architecture", as typified by the traditional Japanese building form shoin-zukuri, is the most well-known characteristic of Japanese architecture, shoin-zukuri is not the only indigenous spatial form of Japanese architecture that can serve as its identity. This paper focuses on the existence of an architectural trend in contemporary Japan that is similar to the traditional Japanese architectural form of shinden-zukuri and describes design methods for establishing it as an architectural form in the modern age.

The research will present the concepts of traditional Japanese spatial forms of shoin-zukuri and shinden-zukuri, discussing their influence on contemporary architectural practice. An argument will be made that such spatial concepts and the previously identified qualities are being lost due to the requirements that largely ignore the context and value efficacy over the successful interpretation of indigenous architectural styles.

However, the emergence of practices that seek inspiration rooted in traditional spatial forms is becoming more prevalent. An analysis of contemporary interpretations will be presented, noting the genealogy of contemporary spatial form interpretations.

The provided research method examines the practices' strategies that fully implement the original spatial postulations, with particular attention focused on its utilisation within contemporary architectural practice.

Discussion on the inherent dichotomy within the Japanese spatial identity, with openness in both spatial form and spatial use, concludes that the condition of contemporary Japanese architecture oscillates between openness and closedness and will require attuning to the changing circumstances if the perceived spatial values are to endure.

2. SHOIN-ZUKURI AND SHINDEN ZUKURI THE TRADITIONAL FORM OF JAPANESE ARCHITECTURE

Until the birth of the shoin-zukuri architectural form, which is also used nowadays for contemporary Japanese residential development, Japanese interior architecture was defined by a single, one-room space. There were no walls to divide the space and the space was divided by placing freestanding panels such as byobu (folding screens). There were two main reasons for the one-room, wall-less interior space: the first is that Japanese architecture was based on a column-and-beam frame structure, not a wall structure. The other reason is that Japan's climate is classified as hot and humid, necessitating well-ventilated spaces. Since one building is one room, several buildings were connected by corridors in a mansion that required many rooms. This architectural form is called shinden-zukuri.1 (Fig. 1) Although no remains of the shinden-zukuri have survived, from picture scrolls and later buildings that seem to be descended from the shinden-zukuri form, its known characteristics are defined as the horizontal and vertical spatial composition of pillars and beams, as well as the continuity and visual openness between the floor, porch, and garden.2

In the Muromachi period (1333-1568), shinden-zukuri changed to a form of architecture known as shoin-zukuri. In shoin-zukuri architecture, a large space could be divided to create multiple rooms within a single building.



FIGURE 1: Shinden-zukuri³

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In shoin-zukuri buildings, sliding doors, rather than folding screens, were used to divide the space. In the Muromachi period, when shoin-zukuri architecture originated, woodworking techniques developed, and it became possible to carve straight grooves in the wood. Thin panels (hikido) could then be slid and fitted into these grooves. By arranging multiple hikido, it became possible to divide a space. Since hikido can be easily opened and closed, the space is not divided when opened and can be made into a single room space with adequate ventilation. The hikido can be viewed as a space divider suited to Japan's hot and humid climate.

The hikido is likewise used as a partition between indoors and outdoors. Opening the hikido eliminates the partition between indoors and outdoors and maximises ventilation. In this manner, an open Japanese architectural space in which the indoor and outdoor spaces are continuous (hereafter referred to as "open Japanese architecture") was introduced. 5 Kazuo Shinohara describes the expression of Japanese space as "an open structure and style of residence, with greenery blown out into the open air, the nature of the garden surrounding it."6 Few would disagree that this highlighted spatial characteristic is one of the identities of Japanese architectural spaces. With an influx of foreign presence, Frank Lloyd Wright is said to have had an influence on this unique Japanese spatial structure. According to Terunobu Fujimori, architectural historian and professor emeritus at the University of Tokyo, when Frank Lloyd Wright visited the Japanese Pavilion (Hooden) at the 1893 World's Fair in Chicago, he was struck by the planar composition of the building, which continuously flowed from room to room when the sliding doors were opened, and this posed an inspiration for his thoughts on European historicism.⁷

3. TRANSFORMATION WITHIN CONTEMPORARY JAPANESE ARCHITECTURE: A CLOSED BOX

In contemporary Japan, however, qualities of traditional spatial characteristics are being lost. It has been a long time since air conditioning was introduced, but nowadays, with global warming and the energy crisis becoming more pronounced, especially since the Great East Japan Earthquake (2011), subsequent social demands for the realisation and spread of environmentally friendly architecture have become even more significant. The need to reduce carbon dioxide emissions has made it an imperative to reduce the air conditioning load.^{8,9}

If measures are taken to stop the dependence on air conditioning in order to meet this proposition, the abovementioned identity will presumably be maintained, but this is not the case. The measure taken to meet the above proposition is to create an architectural space that maximises the efficiency of air conditioning. This means making the building space more airtight and increasing the insulation performance of the exterior walls (although there is room for debate as to whether this is a good idea, it is not the purpose of the presented research findings and will not be discussed in this paper). Thusly produced, a highly airtight and insulated building can be interpreted as a "closed box." The identity of open Japanese architecture is in danger of disappearance in the accommodation process.

This is a matter of grave concern. While highly airtight and insulated spaces are important from an energy perspective, the fact that architecture becomes a "closed box" poses many problems. After experiencing the ongoing effect of the COVID-19 pandemic, Kengo Kuma stated:

"I think the major trend in the world is not toward concentration but toward autonomous decentralisation. In fact, even before the pandemic, AI (artificial intelligence) has been developed as a technology to enable people to decentralise themselves against the trend toward concentration. But just as humans themselves were putting off making decisions, stuck in the inertia of the past, nature and disasters forced humanity to make a decision. (...) However, I think that now everyone is seriously searching for an alternative solution to the box-like model of urban concentration. In that sense, I feel that the pandemic provided a very good opportunity. (...) Is autonomous decentralisation possible in architecture? I feel that the model can be found in the architecture of the past. Traditional Japanese architecture is actually a very good model of autonomous decentralised architecture, characterised by the fact that it is not complete as a box, but allows people to live comfortably while maintaining a good relationship with nature. (...) In the 20th century, the factory model, in which people are crammed into a single space called a factory and made to work efficiently, was widely spread. The same concept was applied to intellectual labor in today's office buildings. These ideas should be rethought. Prior to this, there was more diversity in the way people worked, and the relationship between residence and labor was continuously connected. Japan has a culture of living and working in machiya houses, and there are still many people who admire this lifestyle."10

The question that ought to be posed remains: Is there no inheritable Japanese architectural identity? The answer is - yes, there is.

4. THE ATTEMPT TO INHERIT AND REINTERPRET THE IDENTITY OF THE JAPANESE ARCHITECTURE CONTEMPORARY SHINDEN-ZUKURI

Open Japanese architecture, as typified by shoin-zukuri, is the most well-known characteristic of Japanese architecture, but shoin-zukuri is not the only indigenous spatial form of Japanese architecture that can serve as a base identity. This paper focuses on shinden-zukuri as one of them.

As already mentioned, shinden-zukuri is a building (i.e., a group of multiple buildings) consisting of a single room space connected by a corridor and, in terms of general architectural form, it is a type of an annexe. Simply put, it can be viewed as a group of multiple buildings recognised as a single building. In this paper, this same type of contemporary architecture is defined as *contemporary shinden-zukuri*.

According to Terunobu Fujimori, the origins of contemporary shinden-zukuri (Fujimori writes that this is the idea of dispersing the various functions and rooms of a house within a single site and even toward the city) can be traced back to the architecture of Michizo Tachihara in the 1930s. Tachihara was a contemporary of Kenzo Tange, both of whom graduated from the Department of Architecture at the University of Tokyo (then Tokyo Imperial University) and both of whom won the Tatsuno Prize, the University's award for the best architectural design. Tange became one of Japan's leading architects in the following years. Tachihara, on the other hand, did not, as he died at the young age of 24 (1914-1939). In his discussion of Tachihara's architecture, Fujimori notes the following about the ideas of young Japanese architects since the 2000s:

"The living room, bedroom, and even a villa are dispersed and arranged on the same plot of land, and you go out the door and open the door again to enter another room. I think this is a phenomenon only in Japan, but in the image of some young people, the life of one family under one roof, which is already what the modern nation-state demanded, what the peaceful and democratic society of postwar Japan demanded, has already been dismantled."

Since it is not the main purpose of this paper to describe the history of contemporary shinden-zukuri, we will not describe the historical background in detail, but what is important to note is that the number of contemporary shinden-zukuri architecture has been increasing since the 2000s. The point is that this trend is an attempt to somehow inherit and reinterpret the identity of

Japanese architecture at a time when traditional open Japanese architecture is in decline. Even if individual buildings become closed boxes, contemporary shinden-zukuri (architecture as a group of buildings) is possible, and this trend can be seen as the inheritor of Japanese identity.

5. RESEARCH METHODS

In this paper, we first summarise the genealogy of the aforementioned modern shinden-zukuri and also categorise the aforementioned contemporary shinden-zukuri. Next, the design process and methods of the building (Dragon Court Village), designed by the design team, including the author, in accordance with the current trend of contemporary shinden-zukuri, are described in detail, and the design issues and measures are summarised. Then, by comparing Dragon Court Village with buildings designed in the same period and having similar architectural structures, the generality of the design method of contemporary shinden-zukuri was verified.

The exploratory case study was chosen as one of the representatives of the observed spatial characteristic because of its interpretation of traditional Japanese spatial characteristics, from inception to implementation. The familiarity of the author's standpoint also provides valuable insight into the contemporary Japanese architectural practice, as well as the outcomes of such lived spaces.¹²

The most observable facet of the exploratory case study, Dragon Court Village, lies in its ability to accommodate various activities, primarily small-scale, locally-run businesses. Dragon Court Village became a destination for those who did not fit into the standardised model of suburban residential rental housing, which made it almost impossible for them to find satisfactory housing.

6. GENEALOGY OF COMTEMPORARY SHINDEN-ZUKURI

The following section briefly discusses the genealogy leading to the contemporary shinden-zukuri trend since the 2000s. The earliest attempts at contemporary shinden-zukuri by living Japanese architects are Yamakawa Sanso (1977) and House in Okayama (1992) by Riken Yamamoto. Although Yamakawa Sanso's project comprises a single building, its architectural concept can be interpreted as a contemporary shinden-zukuri. Yamamoto is an architect who takes a critical attitude toward the Japanese family form i.e. the nuclear family, which emerged in the modern era and is known for his

work with Chizuko Ueno, a sociologist who advocates the "Kazoku wo koeru hako (box beyond the family)" a spatial discussion of the pros and cons of the modern family form. What Yamamoto did with the House in Okayama and Yamakawa Sanso was not to design the residence as a single unit (i.e., a box to hold the family, based on the institutional unit of the family), but to break the house down into smaller rooms and redefine it as a group of rooms that are assembled at a certain distance from each other. While attempts to redefine a house as a collection of small rooms had already been made in works such as "Koshitsu-gun-jukyo" by Takashi Kurosawa (1968), Koshitsu-gun-jukyo was simply a house in which the interior of a single building was divided into individual rooms. What Yamamoto did was to design a house as multiple buildings (i.e., rooms), rather than designing a house as a single building, which can be appropriately classified as a contemporary shinden-zukuri. House in the contemporary shinden-zukuri.

Yamakawa Sanso is a house in which the bedroom, bathroom, kitchen, and lavatory are all independently located and roofed over (Fig. 2), based on Yamamoto's idea that "only the utilitarian functions are needed, and it does not matter where they are located, whether they are connected or disconnected." (Fig. 2). To go from the bedroom to the latrine, one has to go outside. The space between the bedroom and the latrine is roofed, so it is not affected by the elements but is exposed to the outside air. ^{15, 16}



There is no roof in the House in Okayama, as there was in Yamakawa Sanso's, and the three buildings are dispersed throughout the site (Fig. 3). (Roofless contemporary shinden-zukuri. (Hereafter, contemporary shinden-zukuri - NR type) "The private rooms, kitchen, and bathrooms are arranged discretely around a courtyard. In front of each room there is a terrace covered by a huge eave that is larger in area than the room". The box of the house has been dismantled, and the outdoors, such as terraces and courtyards, have become the stage of life. As was the case with shinden-zukuri.

Contemporary shinden-zukuri was completed in an avant-garde yet simple form with the Moriyama House (2005) designed by Ryue Nishizawa. Moriyama House is a group of buildings in which a house is broken down into ten rooms, which are dispersed throughout the site (Fig. 4).



FIGURE 3: House in Okayama¹⁹

Although each room (building) is small (around 10-15sqm), the outdoor space between the buildings is also a living space, and the entire site, including the outdoor space, is designed as a "house". For example, a courtyard is created by placing four boxes apart, or a kitchen is made small and placed facing a sunny garden, creating a single environment within site by the arrangement and size of the rooms.²⁰

Examples of contemporary shinden-zukuri following Moriyama House include "House in Buzen" (WR-type, 2009) designed by Makoto Tanijiri, "Calling a plan a map" (NR-type, 2012) designed by Ondesign, and "Row of Houses"

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(NR-type, 2016) designed by studio velocity. "House in Buzen" is a detached house in a local city (Fig. 5). Here, an alley with a glass roof is created between the disparate buildings, creating a space that is at once a corridor and a street, a private and a public space, an interior and an exterior, and a space between furnishings.²² "Calling a plan a map" is an apartment complex standing in a suburban area rich in nature (Fig. 6). Here, a group of buildings, divided into small sections, are arranged on a vast site that is gently zoned according to the "theme of expected use." Each building is composed of diverse sizes, ranging from furniture-like structures that are too small for people to fit inside, to those that allow several people to gather inside the building²³ "Row of Houses" is a building that combines a residence and a beauty salon, standing in a residential area in a local city (Fig. 7). The house is divided into smaller wings for each function, making a total of 26 wings. The space between the beauty parlour





and the residential building is densely planted with trees to serve as a blindfold between the two buildings and is also used as a walking path for neighbours to pass through. ²⁴ In 2014, nine years after the completion of the Moriyama Residence, Nishizawa completed the "Terasaki House" - a house on a hill in the suburbs of Tokyo (Fig. 8). The surrounding area has abundant greenery, including a large park and farms. The site is located at the edge of a hill, with a large park nearby, offering an open view and a sense of spatial openness. To take advantage of this sense of openness, a large roof was erected to unite the rooms and courtyard into one, creating an open space in which the interior, courtyard, and exterior are continuous. ²⁵ This example can also be interpreted as an architectural form

(WR-type) in which a roof covers the outdoor space of the Moriyama House.

As mentioned above, contemporary shinden-zukuri has been one of the architectural trends in Japan since the 2000s and is forming the architectural identity of contemporary Japan. However, when comparing the NR-type and the WR-type, one notices that the WR-type has a spatiality similar to "open Japanese architecture." The contemporary shinden-zukuri WR-type can be



UP: FIGURE 5: House in Buzen²⁶

DOWN: FIGURE 6: Calling a plan a map²⁷



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regarded as a design technique for realising "open Japanese architecture" by making highly open spaces outdoors and eliminating the need for air conditioning in a time when architecture tends to become a "closed box" in order to minimise the air conditioning load. This paper finds a contemporary Japanese architectural identity in the contemporary shinden-zukuri WR-type, which seems to be a fusion of shinden-zukuri and shoin-zukuri and discusses its design in individual concrete terms.



UP: FIGURE 7: Row of Houses²⁸

DOWN: FIGURE 8: Terasaki House²⁹



7. LEARNING THROUGH PRACTICE - DRAGON COURT VILLAGE

In this section, we discuss one specific building designed in accordance with the contemporary shinden-zukuri trend described above. "Dragon Court Village" is a wooden housing complex completed in 2013 by the architecture office "Eureka" (Fig. 9). The ground level, accessible directly from the street, is a contemporary shinden-zukuri, with a series of L-shaped massing that also serves as roofs on the upper floor. While most of the contemporary shinden-zukuri buildings listed in the previous chapters were one-story buildings, this one is a two-story building, with the main living space on the upper floor.

It consists of a group of small rooms dispersed on the ground level, with an L-shaped massing on top of them. This project was conceived in reference to Yamakawa Sanso and Moriyama House. What differentiates Dragon Court Village from these houses is that it has an "orthodox" living space (in the Western sense) on the upper floor. Since Dragon Court Village is an apartment building, it needed to be able to accommodate "orthodox" living. Therefore, the need was met by making the upper floor an orthodox living space. The problem that arose due to this decision was that the small rooms on the ground level were not relevant to the lives of the building's inhabitants, which is not surprising since the upper floor was designed to be a complete living space.



FIGURE 9: Dragon Court Village³²

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A similar residential building is "Yokohama Apartments" (2009), designed by Ondesign (Fig. 10). The four triangular wall pillars raise the apartments to the upper floor, and the ground floor is a semi-outdoor common space called a "plaza". The stairs to the private rooms are located around each of the four wall pillars and, since all the rooms except for the bedrooms and bathrooms are located on the ground floor, there are many natural opportunities for residents to interact with each other. Although the private area is small here, the area usable by residents is considerably larger because of the shared plaza and, unlike ordinary housing complexes, the shared area is larger than the private area, an inversion of the usual situation.³³

The small rooms on the ground level of Yokohama Apartments are used for storage. They are spaces that people only enter for loading and unloading and have little to do with the living spaces on the upper floors. While the total floor area of Dragon Court Village is 508 square meters, the total floor area of Yokohama Apartments is only 152 square meters, so there is no major problem in Yokohama Apartments even if the small rooms on the ground level have nothing to do with the lives of the apartment residents. In other words, the small rooms in Yokohama Apartments are too small to be called rooms and are more like "thick walls," so their use cannot be a major issue.

Because Dragon Court Village is larger in scale than Yokohama Apartments, not all ground-level space could be used for inaccessible uses such as storage. It had to be designed with a set of uses that could be used by the apartment



residents.³⁵ In other words, it was necessary to come up with an answer to two design conditions that could be described as incompatible: a space that is unrelated to the living space on the upper floor, but that can be used by the residents of the apartment building.

The design team of the Dragon Court Village responded by accepting the two conditions as they were. Because it was thought that a space that accepted the two conditions as they were would be the same type of space as, for example, a house with a store (a residential form with a store on the ground level and living space on the upper floor), and would be a feasible form. The design team named the group of small rooms scattered around the ground level "annexes," and designed them as spaces that can be freely used by the apartment residents as stores, SOHOs, etc.

However, there were concerns: in the contemporary age, houses that are "purely" for living are considered the mainstream, and it is rare to see a form of housing with a store with a space for use unrelated to "living" anymore. Some old houses were initially built as store houses and still exist without being rebuilt, but they are either vacant or used only as stores. Today, living while doing business is no longer a common lifestyle. In addition, Dragon Court Village is a rental apartment complex built in a suburban residential area and there was concern about the number of people using the "Annex."

For those who do not use the Annex, the rent would be wasted and would mean paying unnecessarily high rents. Rental housing is a business for the client, and if the "Annex with Rental Housing" did not meet the needs of contemporary Japan and its region, it risked failing as a business.

As a result, Dragon Court Village became a viable business. Dragon Court Village became a destination for those who did not fit into the standardised model of suburban residential rental housing, which made it almost impossible for them to find satisfactory housing.

8. LATEST EXAMPLES OF CONTEMPORARY SHINZEN-ZUKURI

Through the practice at Dragon Court Village, we were able to discover the effectiveness of the design technique of creating a group of small rooms as non-residential space at the ground level and residential space on the upper floor in order to establish the contemporary shinden-zukuri WR-type as a house. Of course, one case study has yet to clarify under what conditions it would be effective. It will not work effectively in all conditions. However, it is clear that Dragon Court Village is not a unique case in contemporary Japan, as there have been many examples in the past decade of homes incorporating non-residential space, comparable to the Dragon Court Village. The following are examples of such projects: "Apartments with a Small Restaurant" (2014) designed by Naka Architects' Studio, "House / Café in Kyodo" (2016) designed by Naruse-Inokuma Architects, "Dragon Court Village" (2016) designed by Tsubame Architects, and "The House/Café in Kyodo" (2016) designed by Naka Architects' Studio. (2016), and "Bonus Track" (2020) designed by Tsubame Architects.

"Apartments with a Small Restaurant" is a building that focuses on a "small economy" in an urban residential area, with a living environment open to the surrounding community and its users (Fig. 11). It consists of five SOHO units, a shared office in a semi-basement, and a dining room on the first floor, and is a complex of multiple uses related to the small economy. It is a mix of work and residence, loosely connected to the city.³⁶ "House/Café in Kyodo" is a 50-year-old detached wooden house in an urban residential area that was dismantled to its skeleton, leaving as much of the existing structural frame as possible, and renovated as a storefront residence with a cafe on the first floor and a residence on the second floor (Fig. 12). The residential area and the café area are connected in plan by a table space in the back and the area is designed to be handled in a variable manner by opening and closing the fittings.³⁷ "Bonus Track" is a dual-use residential and commercial building located in a corner of "Shimokita Railroad Street" on a former railroad site created by the undergrounding of urban railroad tracks (Fig. 13). 10 units of dual-use housing are designed as SOHO, with eaves and exterior walls that can be selected later by the residents. Concrete jump-outs were planned along the openings and foundations of the building to serve as counters and benches.³⁸



LEFT UP: FIGURE 11: Apartments with a Small Restaurant 39

LEFT DOWN: FIGURE 12: House / Café in Kyodo⁴⁰

RIGHT UP: FIGURE 13: Bonus Track⁴¹





9. DISCUSSION: BETWEEN OPENNESS AND CLOSEDNESS

When we call the state of having different uses (e.g., a house with nonresidential space) rather than a single-use contained in architecture as a closed box an open space use, then what we have said so far in this paper can be rephrased as "open space use is necessary to establish openness as a spatial form". Both are the identity of Japanese architecture and are complementary and a pair. Fluid urban spaces in which a wide variety of uses are blended, rather than single-use spaces, exist in various cities, especially in Asia, and the indigenous urban space in Japan is one of the representative examples, which, together with the open spatial form, forms a spatial identity. This identity is widespread and deeply ingrained in the Japanese people. The "Otoko-ha-Tsuraiyo" series of Japanese films (48 films in all, 1969-1995) by film director Yoji Yamada is recognised by the Guinness Book of World Records as the longest film series (number of films) in the world and is popular on a national level. The main character's (Tora-san's) house is located in downtown Tokyo (Shibamata, Katsushika-ku) and is depicted as a space with openness in form and use. The ground level of the house, with the exception of a tatami-matted space, is an earthen floor (storefront) that is freely accessible to customers and neighbours. (Fig. 14) The bedrooms are on the upper floor, which is accessed by a staircase facing the earthen floor.



FIGURE 14: Tora-san's house in Otoko-ha-Tsuraiyo42

In this space, not only Tora-san's family, but also the neighbours and visitors from far away, become one in a human comedy drama. The reason for the popularity of the series, which spanned 26 years and 48 films in all, is that the landscape that Yoji Yamada depicts in this film series (the scenery of daily life, including Tora-san and other people) is the original landscape of the Japanese people. It was not a "traditional" landscape of the distant past. It was a "normal" landscape that existed unmistakably in contemporary Japan, but with a slightly nostalgic feeling. In other words, it is the identity of Japan.

Although Tadao Ando's architecture remains the most widely known contemporary Japanese architecture in the world, Ando's buildings were closed boxes to urban space, as was the case with "House in Sumiyoshi" (1976). (Fig. 15) In the late 1960s and 1970s, Japanese architects designed boxes closed to the city. The outstanding achievements of contemporary Japanese residential architecture, such as "House of White" designed by Kazuo Shinohara in 1966 (Fig. 16) and "House in Nakanohoncho" designed by Toyo Ito in 1976 (Fig. 17), were all closed boxes. Ito describes this period as "a reaction to the big urban projects of the 60's led by the Metabolists, and in the 70's, after the oil crisis, there was a tendency to go inward. It was a time when the desire to create an inner utopia, no matter how small, was very strong.".⁴³

A quarter of a century later, contemporary Japanese architects are now trying to open the house to the city and to the surrounding environment. On the other hand, as mentioned at the beginning of this article, there is a strong trend toward making architecture a closed box from an energy perspective to reduce the air conditioning load. It goes without saying that this is a global and universal architectural typology. Japanese architecture is now at the crossroads of whether or not it can retain its Japanese identity.





UP: FIGURE 15: House in Sumiyoshi⁴⁴ DOWN: FIGURE 16: House of White⁴⁵





FIGURE 17: House in Nakanohoncho⁴⁶

10. CONCLUSION

This paper explored the indigenous identity of Japanese architectural space and how this identity can be transferred and reinterpreted within contemporary Japanese architectural practice. One of the spatial elements utilised for the study is the shinden-zukuri, a type of annexe style that can be viewed as a group of multiple buildings perceived as a single building. This paper interprets this element by transferring it into contemporary architectural practice. It also uses the unique Japanese urban space as a representative example to generate a spatial identity in conjunction with an open spatial form. This identity is widely and deeply inscribed in the spatial mentality of the Japanese. We have discovered the effectiveness of the design technique of creating a group of small rooms as non-residential space on the ground level and residential space on the upper floor in establishing the contemporary shinden-zukuri WR-type as a house, mainly through the practice in Dragon Court Village. Although we have not yet clarified in a single case study the conditions under which this method is effective, we continue to verify it by practising the design method for establishing the modern Sindenzukuri WR-type under various conditions. The condition of contemporary Japanese architecture oscillates between openness and closedness. Examining open architectural spaces such as contemporary shinden-zukuri is an important issue in terms of whether it is possible to maintain a Japanese identity without being dominated by a global, universal, closed box architectural typology.

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ISKORISTI ILI IZGUBI: (NE)MOGUĆNOST INTERPRETACIJE TRADICIONALNIH JAPANSKIH PROSTORNIH FORMI U SAVREMENOJ ARHITEKTONSKOJ PRAKSI

Satoshi Sano, Naoki Saito

Ovaj rad istražuje autohtone karakteristike japanskog arhitektonskog prostora i kako se ta posebnost, na široj prostornoj skali, može prevesti i reinterpretirati u okviru savremene japanske arhitektonske prakse. Jedan od prepoznatih prostornih elemenata koji se koristi za istraživanje jeste shinden-zukuri, tip aneksa, koji se može posmatrati kao grupa više zgrada koje se tumače kao jedna zgrada. U ovom radu, istraženi element se ekstrapolira, prenosi i interpretira u okviru savremene arhitektonske prakse. Ispitivanje pomenutog identiteta, otvorene prostorne forme, potvrđuje njegovu široko rasprostranjenu upotrebu i duboko ukorenjenu prirodu u mentalnom pejzažu japanskog naroda. Rezultati istraživanja ukazuju na to da između savremene japanske arhitekture i arhitektonske prakse počinje da dolazi do račvanja: da li može da zadrži svoj uočeni prostorni identitet i da se odupre, ili da asimiluje trenutne trendove potiskujući prethodno identifikovane prostorne vrednosti. Krajnji rezultati istraživanja ukazuju na to da stanje savremene japanske arhitekture oscilira između otvorenosti i zatvorenosti i da će zahtevati prilagođavanje promenljivim okolnostima ako se percipirane prostorne vrednosti žele održati.

KLJUČNE REČI: JAPAN, PROSTORNI IDENTITET, TRADICIONALNA ARHITEKTURA, SAVREMENA ARHITEKTURA