

# Chochikukyo: cultural property representing "Japanese Timber Country Modernism"

#### BY AKIRA MATSUKUMA

"Chochikukyo" (1928) is the fifth residence designed by and for the architect Koji Fujii (1888-1938). As a result of his research on environmental engineering at Kyoto University, "Chochikukyo" presents the ideal form of a universal "Japanese house" that suits the climate of Japan as well as the sensitivity and lifestyle of the Japanese people. In 1999, "Chochikukyo" was selected as one of the twenty best **docomomo** buildings to represent Japanese modernist architecture, and in 2017, it was designated as a National Important Cultural Property which was the first time for an architect's own house built in the Showa period (1926-1989).

## "Chochikukyo" 1928, a masterpiece of timber modernism

The fifth architect's residence "Chochikukyo," located in the town of Oyamazaki-cho, Kyoto Prefecture is the only existing building of his in the residential area of the Tanida district, where the architect Fujii purchased approximately 40,000 square meters (m²) of forest, developed the infrastructure such as roads, water supply, sewage systems, electricity, and built his third, fourth and fifth residences, and various other facilities. "Chochikukyo" consists of three buildings: the Main Building where he lived with his family, the Pavilion (Room of Quiet) which is a private space where Fujii enjoyed peace, reverence and tranquility, and the Teahouse where he welcomed guests.

Japan has a long history of timber buildings built from natural materials in response to the seasonal climate. Unlike styles with strong expressions and decorations in Western countries, those styles came from repeated works of study, and teahouse architecture, represented by Sukiya style buildings which can be said to be a typical example. However, when modernization started in Japan, which opened up to the world from around 1868, it was promoted at the same time as Westernization, and until the early Showa period, Western-style houses and semi-Western-style houses, which were directly imported into Japan, were built one after another regardless of the climate of Japan or sensitivity and lifestyle of the Japanese people.

At that time Fujii, coming from a scientific point-of-view, reviewed the architectural methods that had traditionally been adopted in Japanese homes to suit the climate of Japan. He pursued a "Japanese House" that matched the Japanese climate and Japanese sensibilities. He equipped it with Western chair-style lifestyles and home appliances that reduced household chores and, with "Chochikukyo", realized a cutting-edge model dwelling called the "Origin of the Environmentally Friendly Dwelling."

"Chochikukyo" Innovations and Realization by Fujii: Passive (making use of natural energy) innovations using a scientific approach.

Especially in Japan, the following were implemented as important summer measures:

- To provide air flow, one can open all the doors & shoji screens allowing the building to be one large room.
- In order to avoid the summer sunlight and to take in the winter sunlight, the eaves lengths were scientifically determined.
- Avoiding summer heat by inducing ventilation in the roof space.
- Outside air coming into the room was chilled by the use of the underground temperature (use of cool tube).
- A vent pipe connecting the underfloor and the ceiling space is provided, so air cooled under the floor passed through into the roof to lower the temperature and increase ventilation.

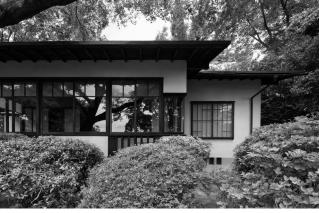
Integrating Western, Japanese, and Modern Design – Modernization of the "Japanese house" that the Japanese have built for a long time:

- The tatami mat floor is set 30 centimeters (cm) higher than the wooden floor to match the eye level of the person sitting on the chair with the person sitting directly on the tatami.
- Natural materials such as wood, Japanese paper, bamboo and clay walls traditionally used in Sukiya style architecture are used.
- The fusion of Art Deco and Modernism in Europe and the United States of America (USA) in its early days with the design of the Sukiya style in Japan.

Living room-centered, family-centered planning as the "prototype" of the House:



61 Koji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, completed in 1928, whole view. The "Chochikukyo" Main building wrapped in fresh green, a panoramic view from the south front yard. © Photo by Taizo Furukawa.



62 Koji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, completed in 1928, exterior view. Appearance of the southern side of the "Chochikukyo" Main buildina. There is no pillar in the corner. © Photo by Taizo Furukawa.

Based on the idea of placing family life as the center of gravity in the house, the space for greeting and serving guests is compactly arranged around the entrance, leaving a large living room for the family behind it. The living room has been created as a place where people gather, with the penetration of the continuous veranda, reading room, and dining room areas creating one rich family space that still has differentiated areas within it for each family-member.

Designing an entirely new lifestyle for the "Japanese House":

On the large site, in addition to using the abundant underground water as a source of drinking water, there is also a 25 meters (m) long and 6 m wide reinforced concrete pool, full-size tennis courts, and Fujii's kiln (where he made pottery named "Fujiyaki"). There is also a landscape around the house that makes use of the slope with streams, ponds and waterfalls. He also practiced the tea ceremony and flower arrangement, and designed everything from architecture to furniture, lighting, carpets, everyday utensils, and the binding of his books.

# Architect Fujii sought an ideal model for the "Japanese House"

Fujii, an architect who was active from the Taisho period (1912-1926) to the early Showa period (1927-1989), has attracted attention in recent years as a researcher and architect who pursued "The Ideal Dwelling for the Japanese" that truly suited the climate of Japan and the sensitivity of the Japanese.

He was born in 1888 as the second son of a wealthy family in present-day, Fukuyama City, Hiroshima, a year later than the world-renowned architect Le Corbusier (1887-1965). In 1913, he graduated from the Department of Engineering, Department of Architecture, Tokyo University, and joined the Design/Build construction company Takenaka Corporation in Kobe. Takenaka Corporation was founded in 1899 and was on the verge of making a leap into the modern construction industry. Fujii laid the foundation of a design organization that mainly dealt with the design of office buildings, including the Asahi Newspaper Building in

Osaka. He resigned after being employed for less than six years. After that, from 1919 to 1920, for about nine months, he visited the USA, the United Kingdom (UK), France, Belgium, Italy, Switzerland at his own expense, to inspect their dwellings and manufacturing and engineering facilities which were in the process of modernizing compared to office buildings in Japan at that time.

After returning to Japan, he was invited to teach at the Department of Architecture of Kyoto University, which was established in 1920, and he was one of the first to tackle current environmental engineering. He inspected the devastation caused by the Great Kanto Earthquake of 1923, and became more conscious of the climate and natural features of Japan. He published his representative book, Japanese House, in 1928. The book is famous as the first theoretical book on environmental engineering and it consisted of five chapters: "Japanese style housing," "Western style housing," "Climate," "Facilities," "Summer facilities and Hobbies." As a result of promoting the imitation of Europe and America blindly by the policy of Europeanization and modernization after the Meiji Restoration, the period was a time in which a mixture of Japanese and Western styles and Japanese traditions were mixed up, and furthermore, people faithfully imitated westernized houses, believing them to be culturally superior homes. Fujii, had doubts, "If you compare the history, the human nature, the customs, the local lifestyle and the climate of our country, it is known that they are all very different." He blamed architects and wrote in the introduction that "We must create a genuine Japanese cultural dwelling that is in harmony with our country's unique environment and that is suitable for living here."

"Chochikukyo" was the realization and completion of his housing research and practice through environmental engineering. In 1929 he documented this in *Chochikukyo Documentation* consisting of drawings, photographs, and explanations based on the research results. In 1930, he wrote the English version, *The Japanese Dwelling House*, which was a combination of his two previous books in Japanese. This spread the wonder of the "Japanese House" to the world. He continued to design approximately fifty residences, but the Nakata Residence in Kyoto named



Noji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, completed in 1928, living room and dining room. The living room is loosely connected to the Tatami floor called Kogari and the Dining-room. The tatami mat space in the living room is about 30 cm higher than the boards, so that the person sitting on the chair and the person sitting on the tatami can see each other. The clock built into the wall imitates the design of Scottish architect Macintosh. © Photo by Taizo Furukawa.



64 Koji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, completed in 1928, drawing-room. The Drawing-room with floors is not a tatami mat but a board between chairs. The furniture was designed and made by Fujii. The vase displayed between the floors is Fujiyaki designed and made by Fujii.
© Photo by Taizo Furukawa.



65 Koji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, completed in 1928, view from the living room to the veranda. View from the room inside the main room. The edge has a glass window that is continuous in three directions. The upper and lower parts are frosted glass and the center is transparent glass, cutting out the landscape like a frame. © Photo by Taizo Furukawa.

"Senyou-so" completed in 1937 was his last work. He died in 1938 at the age of 49. He lies in the graveyard of Nison-in Temple in Kyoto and he designed his own tombstone from his sickbed. He lived in "Chochikukyo" for a short span of only ten years.

### It was the first to be designated as a National Important Cultural Property (2017) as a "Showa era dwelling" built by an architect

"Chochikukyo", both the landscape and the three buildings, was designated in July 2017 by the Minister of Education, Culture, Sports, Science and Technology as a "National Important Cultural Property." It should be noted that it was awarded for a dwelling representing the Showa era house, built by an architect for his own residence, that had been completed in pursuit of an ideal house suitable for the climate and natural features of Japan and the way people lived. The idea of functionalism is fused with the Sukiya style technique and the ingenuity of improved facilities for the indoor environment is practiced. It is important in the history of housing and architecture as a pioneer of modern housing based on engineering principles.

The late Hiroyuki Suzuki (1945-2014), a leading researcher of Modern architectural history in Japan and the first representative of **docomomo** Japan, wrote in a magazine featuring "Chochikukyo" in 2000 that it was "an extremely important work as an example of Japan's approach to global architectural modernization."

Placing "Chochikukyo" (1928), in the genealogy of independent residential homes built in the suburbs, with the "Red House" (1859) in England, "Bebrens Residence" (1901) in Germany, the "Prairie house" group in America, "Villa Savoye" (1931) in France, may be favoritism. To do justice to the world's architectural history, "Chouchikukyo" is unknown. However, in the bistory of each modernization in each country, continuing to search for its own modern residence, Fujii's attempt in Japan was an original attempt sufficiently focused on the life of his own country. Fujii looked at the "Modern age" and "Japan" in an equal way, and it should not be considered as a small fiction like a private novel which crystallized his personal world. This is where the bold spirit of the modern quest for housing is overflowing. His aim was not to import or introduce Western residential architecture, but to explore modern life as seen. If Sukiya-like expressions were to appear, it was only because he set up a model of an independent house before modern times as the basis of Japanese houses. Rather than looking at Western architecture as a model of style or technique, there are not many architects who have looked at the movement of Western architecture in the way of model exploration. Fujii's position should be judged from this.1

The significance of the designation of "Chochikukyo" as a National Important Cultural Property lies in the fact that it provided an opportunity to review the prototype of "dwelling" for the Japanese people's living style at that moment, in that period of modernization and Westernization of Japan after the Meiji period (1868-1912). Many Japanese architects searched for an ideal form of housing for the new Japanese people in the 1920s, and as one of the masterpieces, this house, this "real-thing" was passed on to the next generation.

# Disaster restoration and maintenance work (2018 to 2022)

The Main Building and the Pavilion (Room of Quiet) were severely damaged by two natural disasters in 2018.

Since its completion in 1928, the "Chochikukyo" had been standing quietly without suffering any major damage from natural disasters. But in 2018, major natural disasters struck the building twice. The Northern Osaka Earthquake in June and Typhoon 21 in September.

At 7:58 AM on 18 June 2018, an earthquake measuring 6.1 on the Richter scale shook the area. In 1923 Fujii had gone to Tokyo from Kyoto to inspect, for three weeks, the devastation of the Great Kanto Earthquake and five years later he built the "Chochikukyo" from the lessons learned. In 2018 the house was hit by an earthquake for the first time. The glass of the corner sash of the veranda, which had never been broken before, was broken and the exterior earthplaster wall was partially destroyed. However, the damage was minimized as Fujii had selected land with solid ground for earthquake resistance, lightened the roof making it a one-story building, and reinforced it with built-in furniture at the corners of the building. Fortunately, there was no major damage to the structure of the building, and the general public's building tour, which had been suspended for two weeks, was resumed on 1 July 2018.

On the other hand, Typhoon 21, which hit the region on 4 September 2018, was the strongest typhoon in 25 years and caused strong winds of more over 158 km/hr and heavy rain in various parts of western Japan including Kyoto and Osaka. Many shrines and temples in Kyoto were damaged by fallen trees. The building itself was not damaged much, but many branches of large Maple trees were broken and the greenery surrounding the dwelling, which is also part of "Chochikukyo", was severely damaged.

Fortunately, following these two natural disasters, many local staff members (after they had finished confirming the safety of their own homes immediately after the disaster) arrived at "Chochikukyo" on foot the same day, recording and communicating the damage through photographs, and cleaning up the broken glass. It is often said that efforts in times of peace are important for the success or failure of emergency responses, but unexpectedly, "Chochikukyo" utilized the daily efforts of local staff.

Because it had been designated as a national important cultural property the previous year (2017) three days after the earthquake in the area, officials in charge of cultural properties rushed to the site to investigate the damage. After being urgently budgeted by the government, in the spring of 2018, it became possible to repair the earth-plaster of the collapsed external wall and restore the damaged



66 Koji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, completed in 1928, roof tiles displaced by the northern Osaka earthquake 18 June 2018. Roof tiles displaced due to large shaking of the earthquake. Currently repaired after disaster recovery work.

roof tiles as disaster recovery work in 2019. The exterior walls and roof of the "Chochikukyo," which had been worn out for a long time, were beautifully restored to their original appearance.

Teahouse, Main Building, Pavilion (Room of Quiet) - Preservation repair work and disaster prevention facility improvement

The devastating fires at Paris' Nôtre Dame Cathedral, and Shuri Castle on Okinawa in 2019, both important cultural assets that symbolized their particular regions, shocked the world. Due to this a project to install large-scale fire extinguishing equipment, including water cannonguns, was launched in the summer of 2020 to protect the "Chochikukyo" timber modernist buildings from fire.

On the other hand, the Teahouse which had fallen into disuse soon after the war and had suffered considerable damage to its internal structure due to leaks and other reasons, was completely dismantled for preservation and repair. In 2019 the Main Building and Pavilion, which had been damaged by the earthquake and typhoon and whose external appearance had been repaired, had preservation work begun on their interiors. The preservation and repair work, with new disaster prevention facilities, is scheduled to be completed in the Spring of 2022, at which time the original 1928 appearance will have been restored.

### Rediscovery, preservation, public activities, owner conversion and cultural property designation (1996 onwards)

Rediscovering the forgotten attraction and value of "Chochikukyo":

In 1996, at the 20<sup>th</sup> Century Japanese Art Review II 1920's exhibition held at the Mie Prefectural Museum of Art, I personally cooperated in the exhibition of "Chochikukyo" which was the main exhibition item in the building section, and this was the beginning of my relationship with "Chochikukyo" and the Fujii family. Taking advantage of the fact that

"Chochikukyo" was vacant for a while in 1999, a voluntary survey was conducted in 2000 by the Architects of Takenaka Corporation, who had been established by Fujii. The survey result was published in 2001 *Chochikukyo Jissokuzu* (Survey of Chochikukyo). In 1999, "Chochikukyo" was selected as one of the first twenty of **docomomo** Japan's representative modernist architecture, and in 2000, this exhibition was held all over Japan to raise its social recognition. Thereafter, it was often covered in newspapers, magazines and TV programs. A special TV broadcast on New Year's Day in 2013, which the Emperor and Empress (at that time) viewed, led to the Imperial visit on 24 June of the same year.

Working Together with Local Communities:

The "Chochikukyo", even after the death of Fujii in 1938 continued to be owned by the family until the end of 2016, when Takenaka Corporation became the owner. After the family moved out in the 1950s, it was rented out for a long time, but it was not remodeled into a larger house, nor modification made to the bathroom or kitchen. In the spring of 2008, the tenant moved out and the house became vacant. I formed the "Chochikukyo Club" with the volunteers in



67 Koji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, completed in 1928, outer wall collapsed by the northern Osaka earthquake, 18 June 2018. A clay wall that cracked and collapsed due to a large shaking of the earthquake. Currently, it has been restored after the disaster recovery work.

the neighborhood, and personally leased "Chochikukyo" from the owner and opened it to the public. Back then, its existence and importance were not well known even in the architectural community. To cope with this situation, we created a website, and opened the building to the public through reserved visits. Since then, the number of visitors from all over Japan has gradually increased, and the number of visitors from Japan and overseas has now reached approximately 10,000 per year (in 2018).

In addition to the reserved tour, an event called "Mederu-kai (fan club)" has been firmly established as an annual event in Spring and Autumn to allow many to visit the site to experience being surrounded by fresh green leaves and Autumn leaves. Furthermore, exhibitions have been held, such as in the Spring of 2009 by the modern lacquer artist Natsuki Kurimoto, and in the spring of 2013 by the modern artist Tatsuo Kawaguchi. The site has been used as a place where you can enjoy the conversation between the space of "Chochikukyo" and the Modern Art. All members of the "Chochikukyo Club" except myself, live around Oyamazaki-cho, a town within walking distance. As a matter of fact, this is the most important thing, and no matter how famous intellectuals value it, it is difficult to leave a building that is rooted in the community to the next generation unless the local people continue to be attached to it from the bottom of their hearts.

Shift from individual to corporate ownership and designation as a national important cultural property:

It was difficult to keep paying maintenance and management costs, as well as inheritance and property taxes. Therefore, it was decided to shift the ownership of the land and buildings from an individual to the Takenaka Corporation, and to build a sustainable conservation and utilization system in which daily maintenance and public activities are conducted by a non-profit organization, the "Chochikukyo Club," which is mainly composed of nearby residents. It is significant that the Takenaka Corporation, which has "Dreams into Reality for a Sustainable Future" as its group message, acquired "Chochikukyo" at the end of 2016. By connecting with the people of the town of Oyamazaki-cho through "Chochikukyo", as a corporate owner rather than an individual, it has become possible to create an intergenerational future for "Chochikukyo" together with the community.

Soon after obtaining the property, Takenaka Corporation applied to designate it as a National Important Cultural Property, and in July 2017, with the advice and assistance of the government, it was decided that "Chochikukyo" would remain as a national property forever. In 2019, Takenaka Corporation, a 120-year old planning, architectural, engineering and construction company, that has Fujii's DNA at its core, owns an important cultural property, "Chochikukyo", and is going to work with the local town of Oyamazaki to preserve and open it to the public. Through these activities, we will accumulate the know-how, knowledge, and

technology necessary to preserve and continue to use historic buildings, return them to society, and promote the transmission of architectural culture.

# From "20 Century Heritage Sites of Japan" to "World Cultural Heritage"

"Chochikukyo" is in the town of Oyamazaki-cho which has a rich history, culture and natural environment.

Oyamazaki-cho, a town of about 15,000 residents in the Kyoto Prefecture, has on its north side, the site of the famous Battle of Yamazaki in which Mitsuhide Akechci, who killed his lord Nobunaga, fought with Hideyoshi Toyotomi to take over the country in the Sengoku period (1467-1590). On its south side is the prefectural border with Osaka Prefecture, characterized by a magnificent view of the Yodo-gawa River where the three rivers of Katsura, Uji and Kizu, that flow from Kyoto, join to form the Yodo-gawa River. This small town, with mountains and rivers close by, has long been a key transportation point connecting Osaka, the commercial capital, and Kyoto (the former Imperial capital). In addition, Oyamazaki-cho contains many historical and architectural treasures, such as Myokian "Taian" which is the only existing teahouse of Sen-No-Rikyu who started the tea ceremony, and is a national treasure, Hoshaku-ji Temple (Three-storied pagoda) which is an important cultural property said to have been built by Toyotomi, and "Oyamazaki Villa" which was built as his own house by Shotaro Kaga, an entrepreneur in Osaka, and "Asahi Beer Oyamazaki Villa Museum of Art" which was renovated and extended by architect Tadao Ando (1941-).

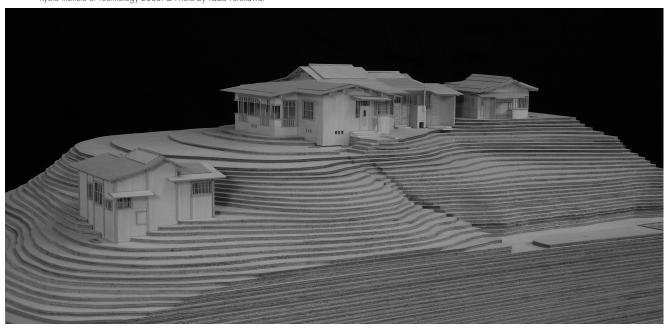
"Chochikukyo" selected as "Twenty 20 Century Heritage Sites of Japan":

Most of Japan's World Cultural Heritage Sites (Buildings) are old buildings such as temples and shrines, such as "Kinkaku-ji Temple" in Kyoto and "Horyu-ji Temple" in Nara, castles such as "Himeji Castle," old private houses such as "Hida Takayama Gassho-zukuri" and traditional townscapes, but there are only two modern constructions, the "Atomic Bomb Dome" in Hiroshima and the "National Museum of Western Art" in Tokyo (the only work of architecture left in Japan by Le Corbusier). Furthermore, both were designed by foreign architects. On the other hand, in recent years, foreign buildings built in the 1920s, the 1930s, and even newer ones built in the 1970s have been selected for World Heritage registration.

Fujii published a book in English, *The Japanese Dwelling-house* in 1930. Ninety years later, "Chochikukyo" is again on the verge of spreading its message to the world as Japan's representative of 20<sup>th</sup> century world heritage. As one of the great gestures to show this, in December 2017, the Japanese International Council on Monuments and Sites (ICOMOS) National Committee announced "Twenty 20 Century Heritage Sites of Japan" including "Chochikukyo."

"Chochikukyo" was selected since it meet two of the six evaluation criteria (Outstanding and universal value) for

Koji Fujii, "Chochikukyo", Oyamazaki-cho, Kyoto, Japan, wooden model (scale 1/50). From the left: "Teahouse," "Main building," "The pavilion". Production: Kyoto Institute of Technology 2008. Photo by Taizo Furukawa.



World Cultural Heritage. (i) It is a masterpiece representing the creative talent of mankind, and (ii) It is related to the development of architecture, technology, monumental art, city planning, and landscape design, and shows the important exchange of human values over a period of time or in a cultural region of the world. It is a masterpiece that utilizes tradition and incorporates the idea of modern environmental engineering and is one of the "Twenty 20 Century Heritage Sites of Japan." It is the only private single family house among the list of twenty items. ICOMOS Japan showed how important "Chochikukyo" is in the "Japanese House."

Saying left by Fujii "a country's representative architecture is the residential architecture":

The trend of Modernism that began around 1920 in various parts of the world can be said to be the root of modern architecture that we see today. Considering the future of architecture that continues to be created every day, "Chochikukyo" is extremely important as evidence of the existence of modern and contemporary architecture that has been built over the past one hundred years. I think it is significant to open "Chochikukyo" as a museum and utilize it as a memory of a particular period in time on the topic of the "dwelling," since a house is the most familiar architecture for the general public in many parts of the world.

The concept of "Chochikukyo", which Fujii tried to convey through the "Japanese House", can be said to be an original attempt to modernize dwellings adapted to the climate of Japan and to the sensitivity of the Japanese, unlike the direct imports from Western countries, the blending of Japanese and Western styles, and the International Style advocated by Le Corbusier who lived in the same period. Fujii's idea of the "Japanese House" also reminds us of the importance of the

traditional Japanese way of life, including the tea ceremony and flower arrangement created by Japan's four rich seasons. Based on his wish, "Chochikukyo" will continue to convey to the world the appeal of the "Japanese House" as a world-class residential heritage representing Japan in the 20<sup>th</sup> century together with the town Oyamazaki-cho, where history and culture have accumulated.

#### Notes

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Born in 1957. After graduating from Hokkaido University in 1980, joined Takenaka Corporation. In addition to design work, he is engaged in preservation and utilization of modern architecture and numerous architectural exhibitions. His main publications are Chochikukyo, The ideal home for the Japanese, 22 Years of Audience Chochikukyo, Chyochikukyo actual measurement collection. Received the 2018 Architectural Institute of Japan Award achievement award and the Japan ICOMOS Award for a series of activities about Chochikukyo.