

Transnational Connections for Architectural Design between Germany and Japan on the Eve of World War II

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The Second Asian Conference of Design History and Theory
—Design Education beyond Boundaries—
ACDHT 2017 TOKYO 1-2 September 2017
Tsuda University

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Abstract

Due to the image of efficiency and strength of modern Western architecture during the 20s and 30s, several Japanese architects adopted European rationalist architecture as a solution for their buildings, becoming the main promoters of what is known as the International Style in Japan. To comprehend modern architecture, they took several trips to Europe—mainly to German speaking countries—where they made connections with important figures like W. Gropius and L. Hilberseimer. Thus, their buildings are the result of European influences on Japanese architecture during the interwar period.

This paper will analyse the cultural, social and political conditions both in Germany and Japan in order to understand the underlying principles that made it possible for Japanese architects to approach new modernist theories and designs proposed in the West. The paper has the further aim of developing how this approach led to the introduction of modernism in Japan before the war ended, with the exchange of intellectual ideas between the two countries.

Keywords: Bauhaus, CLAM, Teishinshō, Transnational, Interwar

Introduction

Japanese architecture was under debate between a national style—instigated by the Emperor and military powers—and a growing wave to revive and update traditional aesthetics.

However, due to the influence of the intellectual art circles in Germany, a new modern idea of architectural design also emerged in Japan. Bunriha Kenchiku Kai (Secessionist Architects Group) tried to show the public an expressionist type of architectural design, following in the footsteps of Bruno Taut and his colleagues in Berlin during the late 10s. The members of the association were from upper class families, so they could travel to Germany and see Bauhaus for themselves. Some of them even had the chance to interact directly with W. Gropius.

In addition to intellectual principles, there was a natural phenomenon that changed the way architecture was taught and designed in Japan. The Great Kantō Earthquake completely transformed the scene, as new structures capable of withstanding fire and seismic movements were needed. The institutions in charge of rebuilding Tokyo demanded new paradigms that could cover not only new social needs, but introduce new construction materials as well. The sources for these new architectonic models were taken from European cities and, thus, new post offices, hospitals and infrastructures began to grow in Japan, replicating the rationalist styles developed by the European masters.

Breeding grounds for a revolution in Japanese architecture in early Showa

Before any architectural revolution starts, there are factors already in motion that are leading toward the desired reconstruction. Political, cultural and social agents are inevitably related. As a consequence, when one of these factors is altered, the others also begin to evolve, in a process of feeding one another until the reigning models collapse and a new city model emerges. The pursuit and domestication of rationalism¹⁾ comprise the main theme of Japanese architecture during the late twenties and thirties. It is worth pointing out that this situation was absolutely the same as what was happening in other industrialised countries.

Nationalism and Japanese taste

In the beginning of the 20th century, the artistic revival of traditional tastes—or modernisation of *sukiya*—became the central point in university circles in response to the Westernised education taught by these institutions during the second half of the 19th century. Ernest Fellenosa, an American historian and supporter of Japanese national artistic heritage, was crucial to this trend, as he was appointed as the new director of the Tokyo Fine Arts Academy and Imperial Museum in 1888²⁾. Right after a trip to Europe and the USA to learn from other educational methods, upon his return Fellenosa found that Japanese art had become too modern for his

1) ————— Rationalism as referring to the architectural ideas and forms proposed in Central Europe, mainly developed during the Bauhaus period by its director Walter Gropius.

2) ————— The Editors of Encyclopaedia Britannica. *Ernest F. Fenollosa. American Orientalist and Art Critic*. Retrieved from <https://global.britannica.com/biography/Ernest-F-Fenollosa>.

tastes. Hand in hand with Kakuzo Okakura³⁾, they developed a new education programme that would be the foundation for art education at Tokyo Imperial University for the first 20-30 years of the 20th century⁴⁾.

During this time period, a new emperor took control in 1914—the Taisho Period from 1914 to 1926 named after said Emperor Taisho—who tried to develop the Imperial Crown style, or *teikan yoshiki*, to reflect increased military power, in an exercise similar to what would be seen in Germany and Italy before WWII. The cultural and military image of the Empire was one of *teikan yoshiki*; not only within Japanese borders, but also in the increasing number of conquered territories⁵⁾. Frank Lloyd Wright's Imperial Hotel, completed days before the earthquake, influenced the style so greatly that many elements used by the American architect were implemented in imperial constructions. The culmination of this style was the erection of the National Diet Building in 1936, and represented the final consolidation of Japan's military government. At that time, it became the country's second largest building and sessions of the House of Representatives and the House of Councillors are still held there today.

Great Kantō Earthquake

On 1 September 1923, the Great Kantō Earthquake devastated Tokyo, and a widespread area of at least 60 km around the Japanese capital. The magnitude of destruction was almost beyond imagining. In Yokohama, 90 percent of all homes were damaged or destroyed, while 350,000 homes met the same fate in Tokyo, leaving 60 percent of the city's population homeless⁶⁾. In 1924, the Tokyo Metropolitan Government prepared a plan for the reconstruction of the city, providing an impetus to establish new building laws that would introduce new construction materials capable of resisting fire and seismic movements. The fact that the recently opened Imperial Hotel survived the earthquake relatively unscathed was a contributing factor in the institutions in charge of city reconstruction—like the newly created Dojunkai Housing Association of the Ministry of Communications—deciding to focus on building designs from the West that made use of new materials like reinforced concrete⁷⁾.

Shinkenbiku-sha and the first architecture periodicals

The oldest architectural journal *Kenbiku-zasshi* started to write about Western architecture in 1913. However, it was not until the mid-20s when architecture journals achieved notable

3) ————— Okakura is a renowned figure outside Japan thanks to his publication “The Book of Tea” in 1906, a long essay linking the role of tea to the aesthetic and cultural aspects of Japanese life. His book is also famous among architects, just like F. L. Wright's works were deeply influenced by it.

4) ————— Stewart, D. B. (2002) *Unbuilt Manchukuo: A Lost “Opportunity”*. The Making of Modern Japanese Architecture. From the Founders to Shinohara and Isozaki. Tokyo: Kadansha International, 111-113.

5) ————— Japan occupied part of China—Manchuria in 1930—and by that time, Seoul, now South Korea, was part of Japan.

6) ————— Denawa, M (2005) *Behind the Accounts of the Great Kanto Earthquake of 1923*. The Great Kanto Earthquake 1923. Materials from the Dana and Vera Reynolds Collection. Rhode Island: Brown University Library Center for Digital Scholarship. Retrieved from <http://library.brown.edu/cds/kanto/denawa.html>.

7) ————— Stewart, D. B (2002) *Group Housing and Other Social Aspects of Showa Architecture*. The Making of a Modern Japanese Architecture. From the Founders to Shinohara and Isozaki. Tokyo: Kadansha International, 146-151.

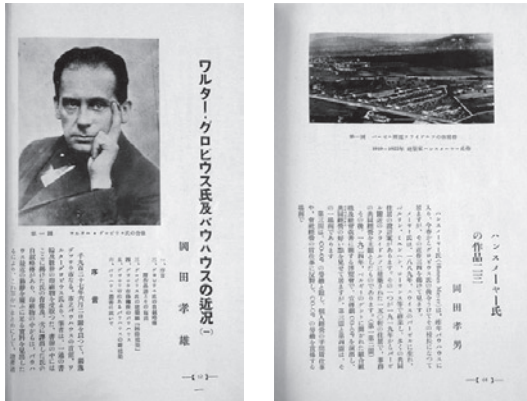


Fig.1 Hans Meyer gta Archive ETH Zurich. Left, *Shinkenchiku-Shin Kentiku*, vol.3 no.8 August 1927 / Right, *Shinkenchiku-Shin Kentiku*, vol. 4 no. 12 December 1928

relevance, with *Shinkenchiku*, or New Architecture, becoming the most important source for architects who wanted to analyse European designs.

On the one hand, these architectural periodicals encouraged young Japanese architects to come to Europe and learn directly from the source. Hans Meyer or Walter Gropius, two of the three directors that ran the Bauhaus until its dissolution in 1933, made their first appearance in this periodical in 1927 and 1928, nurturing the dream of an illuminating trip to Europe [Fig.1].

On the other, architecture periodicals also helped to introduce European avant-gardes ideals to the upper classes. Thanks to these journals, the richer were willing to embrace new architectonic styles for their private houses and factories, similar to what they saw in the printed pages of *Shinkenchiku* and *Kenchiku jidai*, in a classic example of an iconoclastic desire for newness.

Exchanges on the old continent to confront the established orders

The apparent political similitudes between Germany and Japan, with both nations' characters becoming increasingly defined by their military power, attracted the eyes of young Japanese architects. Of course, not everyone preferred the German vision of architecture and, like Kunio Maekawa⁸⁾ and Junzō Sakakura⁹⁾ preferred the French style. They both worked for Le Corbusier

8)———Kunio Maekawa came to France between 1928 and 1930 and was the very first Japanese to work with the master. While working in his atelier, he was able to attend the CIAM congress and he also had the opportunity to work with and befriend Charlotte Perriand, Jose Luis Sert, Albert Frey and Alfred Roth, whom he wrote to whenever he could. He also met Richard Neutra during Neutra's visit to Japan. On returning to Japan, he worked for Antonin Raymond from 1930 to 1935. He was able to manage this job with his own works, mainly competitions that would later draw the attention of young architects like Kenzo Tange, who worked for Maekawa in the late 30s.

9)———Junzo Sakakura started working at Le Corbusier's atelier in 1931 after Maekawa's departure, replacing him at the office for almost seven years, until 1936. As Sakakura became more trusted in the office, he rose first to job architect and then to chief of the studio. Students would come to him for advice when Corbusier was not about. Similar to Maekawa, he had the opportunity to relate to Charlotte Perriand, Josep Luis Sert and other European architects working in the office. Right after he had returned to Japan, Sakakura received the commission for the Japanese Pavilion for the 1937 Paris Expo. He had to return to Paris again, although this time he decided to stay away from Le Corbusier's office.

in his atelier in Paris, as Jonathan M. Reynolds points out in his research on Maekawa¹⁰⁾.

In addition, the Bauhaus School was one of the leading art institutions in Europe, if not the very first, which obviously drew the attention of young architects not only in Japan, but all over the world.

German avant-gardes: mainstream societies

The concept of avant-garde refers primarily to artists, writers, composers and thinkers whose work opposes mainstream cultural values and often has a trenchant social or political edge. Many writers, critics and theorists made assertions about vanguard culture during the formative years of modernism, which led to the rise of transcendental architecture figures including Walter Gropius, Ludwig Hilberseimer and Bruno Taut. A similar situation occurred in the French speaking world with Le Corbusier at the helm. However, the difference between how both cultures conceived of architecture was palpable, where the German faction was more rationalist and focused on Dutch constructivist models, while the inspiration of the French side was drawn from Paris related avant-gardes.

Thanks to the ambition of Gropius and his colleagues, who wanted to redefine the understanding of art design, the Bauhaus was founded in Weimar in 1919. The idea of creating a 'total work of art' or *Gesamtkunstwerk*, in which all arts—including architecture—would eventually be brought together was the main focus of the school. The Bauhaus became one of the most influential currents in design and architectural education.

Bunriha Kenchiku Kai: replicating the Bauhaus

The Bunriha Kenchiku Kai (Secessionist Architecture Group) was founded by Kikuji Ishimoto, Mamoru Yamada and Sutemi Horiguchi, among others. The three aforementioned architects were among the few who had the opportunity to come to Europe after finishing their architecture studies. According to Professor Ken Tadashi Oshima, Ishimoto was the first Japanese architect to study with Gropius in 1922; Horiguchi came to Europe in 1924 for a two year period, visiting leading German architects and even departing to Greece, probably following the path marked by Le Corbusier's trip; and Yamada travelled to Germany in the late 20s to meet Gropius and attend CIAM II in Frankfurt¹¹⁾. During their trips, all of them were able to make connections with pre-eminent German architects. Even though WWII lessened their bonds, contacts between the Japanese architects and the masters were continuous in the beginnings of the 30s [Fig.2].

Upon returning, after their lessons in Weimar, Dessau and Berlin, the group tried to appropriate the lessons of the Bauhaus and replicate them in Japan. To do so, the group designed seven exhibitions between 1920 and 1928, which were held in several Tokyo department stores. Close to Expressionism in their beginnings, looking for a neo-national architecture expression, the group turned to a more rational or International Style of designs, in parallel to the path fol-

10) ——— Reynolds, J. M. (2001) *Maekawa kunio and the Emergence of Japanese Modernist Architecture*. Berkeley: University of California Press.

11) ——— Oshima, K. (2009) *International Architecture in Interwar Japan. Constructing Kokusai Kenchiku*. Seattle: University of Washington Press.

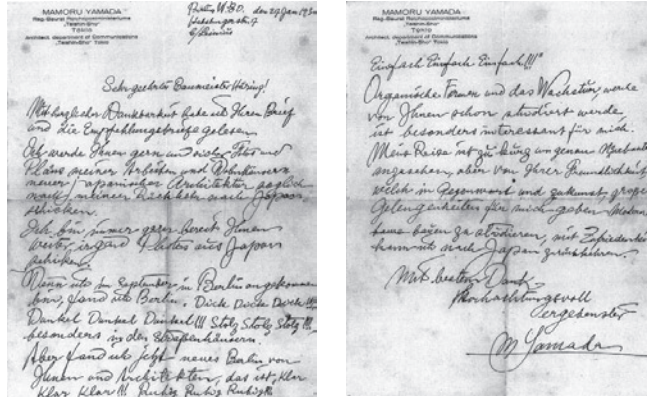


Fig.2 Hugo Häring Archive Akademie der Kunst. Mamoru Yamada to Hugo Häring, 27 January 1930

lowed by Der Ring¹², the architectural collective at which Bruno Taut, Hilberseimer and Gropius developed their architecture theories for their later buildings¹³.

The main difference between the Japanese Secessionist Group and the European masters was the Japanese group's lack of concern about economics or social conditions, even though they both shared an opposition to prevailing artistic tendencies. Coming from relatively wealthy families, which let them attend Tokyo Imperial University, Bunriha Kenchiku Kai distanced itself from everything not directly concerned with the spatial or merely architecture discourse. However, the establishment of Bunriha greatly influenced the development of Modernism in Japan. By exploring new developments in European architecture and promoting these ideas within Japan's architectural community, the group became a valuable model and was used as a paradigm by other social institutions whose aim was to promote modernist architecture in Tokyo¹⁴.

Ministry of Communications: vehicle for transnational models

Apart from the modern path privately developed by the aforesaid architects, some institutions in charge of rebuilding Tokyo, such as the Teishinshō (Ministry of Communications), which was founded in 1919, sought to pursue rationality and progressiveness in its works for the post, telegram and telephone services. Teishinshō-related buildings were imagined to be the vehicles for a new architecture. It was here where the dream of a modern Japanese architecture was most

12) ——— Der Ring was an architectural collective founded in 1926 in Berlin, initially formed by ten members: Barning, Behrendt, Gropius, Häring, Hilberseimer, Mendelshon, Mies van der Rohe, Poelzig, Max and Bruno Taut. The group sought a new architectural culture, in opposition to the prevailing *Biedermeier* or Romantic architectural concept demanded by the well-off bourgeois society. Retrieved from: Sombrić, C. (2004) *L'habitation Minimum*. In Madrid, Vivienda y Urbanismo: 1900-1960. Madrid: Akal, 191.

13) ——— Carreri, E. (1997) *Ishimoto Kikuji e l'avventura del Giappone moderno*. ARQ-Architettura Quaderni issue 16. Milan: Mondadori Electa, 20-49.

14) ——— Lepik, A & Rosa, I. (2006) *Architecture: The Berlin-Tokyo connection from the late 19th century until the late 1920s*. Tokyo – Berlin / Berlin – Tokyo Exhibition Catalogue. Tokyo: Mori Art Museum, 118-119.

completely realised by combining functionalism and post and beam construction. These designs were taken from the German industry replicated in Japan in the search for a new Tokyo city¹⁵⁾.

Trying to achieve modern architecture for their infrastructures, the institution financed the trips of their chief architects, like Tetsurō Yoshida, to research Western facilities¹⁶⁾. 16 As Hyon-Sob Kim explains, Yoshida seemed to be more interested in surveying the stream of modern architecture in Europe than just analysing broadcasting facilities¹⁷⁾. During the almost one-year-long stay in Europe, he met a number of the foremost architects in each country he visited, where Berlin was his base. It was a chance for him not only to learn from European masters but also to inform them about traditional Japanese architecture. Ludwig Hilberseimer and Hans Scharoun were interested in learning about the tectonic properties of Japanese architecture, and due to their many talks on this topic, they became friends with Yoshida, a friendship that lasted until Yoshida's death in 1956 from multiple brain tumours [Fig.3]. The financial efforts of the Ministry to send its architects to Europe translated into a series of buildings that could be called the most modern in Japan. Airports, electrical facilities and post offices echoed rational and modern design. Tokyo's Central Post Office was designed by Yoshida in 1931, and during Taut's visit to Japan in 1936, he called it 'the most modern building in the world'¹⁸⁾. Another example is Yamada's Electrical Laboratory, built in 1932, which was the only Japanese building to appear in MoMA's "International Architecture" catalogue¹⁹⁾ in 1932. They attest to Teishinshō's

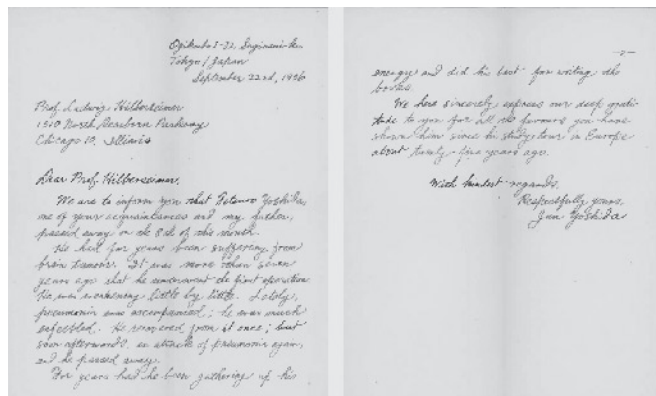


Fig.3 Ludwig Hilberseimer Archive, the Art Institute of Chicago. Jun Yoshida to Ludwig Hilberseimer, 22 September 1956

- 15) ———— Hyon-Sob, K (2008). *Tetsuro Yoshida (1894-1956) and architectural interchange between East and West*. Architectural Research Quarterly v. 12 issue 1. Cambridge: online edition, 43-57.
- 16) ———— Hyon-Sob, K. (2009) *Cross-Current Contribution: A Study on East Asian Influence on Modern Architecture in Europe*. Architectural Research v. 11 issue 2. London: online edition, 9-18.
- 17) ———— Ibid.
- 18) ———— Taut, B. (1936) *Fundamentals of Japanese Architecture*. Tokyo: Kokusai Bunka Shinkoai (The Society for International Cultural Relations), 33.
- 19) ———— Term coined by Philip Johnson and Henry-Russell Hitchcock in the 1932 MoMA exhibition "Modern Architecture: International Exhibition".

commitment to modern architecture. These buildings, and others financed by this ministry in the 30s, are a culmination and a demonstration of the influence of modern German architecture in Japan in the interwar period.

CIAM IV: a missed opportunity

As we have seen, the personal connections were very strong between the young Japanese architects and the leading European architects in the late 20s.

In 1928, the Congrès Internationaux d'Architecture Modern (CIAM) or International Congresses of Modern Architecture was founded. Its aim was to spread the principles of the Modern movement, focusing on all the main domains of architecture. Maekawa, due to the connections he made while working at Le Corbusier's atelier, was named as a member of the Japanese delegation of the CIAM even though the group no longer existed by then²⁰⁾. In 1933, Ishimoto, who still maintained contact with Gropius, was nominated as the first delegate. However, neither architect ever established strong connections with the CIAM delegates, Swiss Sigfried Giedion or Dutch Cornelis Van Eesteren.

Despite the latter's attempts to contact the Japanese delegation through Yoshida²¹⁾, his efforts were fruitless since the young Japanese architect was still in Berlin in 1932. No response came from Tokyo delegates before the beginning of CIAM 4 in October 1933, whose main theme was 'the functional city'. Several cities from around the world were mapped and analysed comparatively. Unfortunately, Tokyo was not one of them.

Japan's participation at the congress would have entailed the country's definitive embrace of the most critical European modernism, so that not only the architectonic forms would have been replicated, but the social concepts behind these new paradigms would also have been adopted. Unfortunately, that is not how history unfolded, and Japan's definitive entry on the scene as an architecturally modern country would have to wait until WWII was over and CIAM 8 in 1951²²⁾.

Author Biography

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Enrique Rojo studied architecture at the University of Navarra ETSAUN in Spain, graduating in 2011. During his student period, he was able to collaborate with his third year studio professors at *alcolea+tarrago*, working for them in 2010-2011. Subsequently, he moved to the United Kingdom where he obtained his Postgraduate Master's at the Sheffield School of Architecture SSoA after the submission and approval of his dissertation *Roof as Duality of Meaning* in 2012. Thanks to a Leonardo Scholarship he moved to Switzerland, where he worked for almost 3 years at the *Raumbureau* office from 2013-2015.

20) ————Mauerer, B; Perez, M; Weiss, D. & 3 more (2014) *The Unrealized Analyses*. Atlas of the Functional City: CIAM IV and Comparative Urban Analysis. Zurich: gta Verlag, 431.

21) ————Giedion, S (1932) *Letter to Yoshida 03.03.1932*. gta Zurich: CIAM / S. Giedion Archive

22) ————Mauerer, B; Perez, M; Weiss, D. & 3 more (2014) *The Unrealized Analyses*. Atlas of the Functional City: CIAM IV and Comparative Urban Analysis. Zurich: gta Verlag, 432.

He currently combines his professional career as cofounder of *atelier rojo vergara* with academic research, being a PhD candidate at the aforementioned ETSAUN with his thesis *There and back of modern ideals: European references in Japanese architecture 1923-39*. To develop the project, he completed a research stay at the Institute for the History and Theory of Architecture gta ETH Zurich under the supervision of the institution's director, Professor Vittorio Magnano Lampugnani.