

# Cross-Current Contribution : A Study on East Asian Influence on Modern Architecture in Europe

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## Abstract

This research started from the premise that East Asia – China, Korea and Japan – played a remarkable role in the development of modern architecture. In this study, attention is paid to the lack of a synthetic research about the influence of East Asia on European modernism as a counterpart to its influence on American modernism. Thus, the intention of this paper is to construct an integrated discourse on the East Asian contribution to European modern architecture. By analyzing recently published/presented articles on the related subjects, this study suggests how European modernists encountered the East, what attracted them to the East, and how they applied East Asian aesthetics in their designs. While a number of architects adopted East Asian formal elements directly, at times superficially, others extracted the underlying principles. As a whole, this analysis offers insights at several levels. First, it provides a balance to the view of the East Asian influence on modern architecture by providing an investigation into its influence on European modernism as a counterpart to its influence on American modernism. Second, the multi-faceted nature of modern architecture is further illuminated in this study. Third, an important example of “positive-Orientalism” is provided, which contrasts with the rather negative image implied by E. Said’s ‘Orientalism’. In conclusion, this paper provides a critical assessment of the fundamental motive of European modernists’ adoption of East Asian aesthetics.

*Keywords : Modern Architecture, Europe, East Asia, Influence, Orientalism*

## 1. INTRODUCTION

The European encounter with the art of the Far East, and in particular with that of Japan, gave rise to a whole new range of subject matter, new techniques and new artistic devices. (S. Wichmann, 1981, p. 10)

Architectural exchange between East and West is an interesting theme that has attracted various researchers. The premise of this theme is based on the two-way transfer of culture, not just from West to East, but also from East to West. In other words, the Eastern culture contributed to the formation and development of modern architecture. It seems necessary to first clarify that the East in this paper refers to the East Asia of China, Korea and Japan. Among non-Western cultures, East Asia – in Eurocentric terms known as the Far East – is a very unique cultural area in terms of this East-West exchange. East Asia is the most remote area from Europe that was conventionally regarded as the center of culture. It is also a relatively newly re-discovered region compared with the other ‘Others’ such as North Africa, West Asia and India. Due to the remoteness, far eastern countries were relatively unknown to Europeans for a long time. These countries could therefore provide a fresh source of inspiration for Europeans when their ports were officially opened to Westerners during the mid 19<sup>th</sup> century.

Over the last half century, important studies have been carried out on the East Asian contribution to Western modern architecture. Clay Lancaster’s pioneering works of the 1940s and 50s were possibly the most salient and consistent. They were published as a series of articles in *The Art Bulletin*: ‘Oriental Forms in American Architecture 1800-1870’ (1947), ‘Oriental Contributions to Art Nouveau’ (1952), and ‘Japanese Building in the United States before 1900’ (1953), which were incorporated into one volume

book, *The Japanese Influence in America* (1963). Other researchers have investigated the relationship between the East and American architects, notably Frank Lloyd Wright. Kevin Nute’s *Frank Lloyd Wright and Japan* (2000) is the best recent outcome of this line of studies. However, we need to note here that these studies are concerned mainly with American modernism, and that discussion on the influences on European architecture is limited to the Chinoiserie garden and interior in the 18<sup>th</sup> century and to the Japonisme-related Arts & Crafts and Art Nouveau period in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. Such research was reflected in Chisaburoh Yamada’s edition of *Dialogue in Art: Japan and the West* (1976)<sup>1</sup> and in Siegfried Wichmann’s *Japonisme* (1981). Until very recently, there have been very few such substantial studies carried out on how East Asia influenced European modernists. Possibly, the East Asian impact on European modern architecture was considered to be less important than its impact on America, as Lancaster (1953) observed: “although European painting and the minor arts were greatly affected by those of the Far East, the influence on European architecture was not as great as on American.” This is plausibly because “modern Western architecture was linked with faith in European civilization” of “the romantic faith in speed and the roar of machines”, as stated by Yamada basing on the standpoint of N. Pevsner.<sup>2</sup> We also remember that the futurist writing ‘Messaggio sull’architettura moderna’ (1914) urges modern architects not to crib “photographs of China, Persia and Japan”.<sup>3</sup>

Regardless, we probably still need to examine how East Asia was recognized by European modern architects. It was in the European continent where the so-called ‘Modern Movement’ and ‘International Style’ were formed and developed. In reality, many European modernists referred to East Asian aesthetics in various contexts. Such exam-

ples prompt the question of whether East Asian sources were essential to them or were used only in passing. This type of query initiated the present research. Lately, a number of substantial studies concerning this theme have been publicized in several ways. Based on the analysis of these studies and other sources, the aim of this paper is to construct an integrated discourse on the role of East Asia in European modern architecture. In a sense, this attempt may appear to be somewhat untenable because of the extreme difficulty in gaining a clear outlook of the transfer, development, or disappearance of ideas, and the mutated resurgences of ideas in the complex context of so many different European locales. Also, there is the possibility of oversimplification. Nevertheless, in this paper, it is argued that we need at least a hypothetical map of this geography.

## 2. CROSS-CURRENT CONTRIBUTION: LITERATURE REVIEW

Probably, the first intriguing study carried out of this subject is Chuan Wen Sun's PhD dissertation *Der Einfluss des chinesischen Konzeptes auf die moderne Architektur* (The Influence of Chinese Concept on the Modern Architecture; 1982), where he traced the presence of a Chinese essence in modern architecture. After delving into Chinese philosophy and *Wesen* or 'beingness' in the first section of his dissertation, Sun attempted to show how this Chinese essence was reflected in European picturesque gardens, Rococo-Chinoiserie, organic buildings of Wright and Hugo Häring, Mies van der Rohe's design, and even in the Japanese Metabolists' works. This lineage roughly related to a naturalist idea and an organic tendency in architecture which made it possible for him to link the Eastern to the modern. Here, we are interested in the European modernists Häring and Mies. Rather regrettably, however, Sun did not sufficiently investigate each architect, despite his commendable attempt to embrace the broad spectrum of the supposed Chinese influence on modern architecture. For example, the basis for his argument that Mies was inspired by China is rather flimsy. Mies's admiration of Wright, his relationship with Häring, his collection of books on Confucianism and Laotse, and the rather forced acknowledgement of Chinese inspiration<sup>4</sup> are quite supportive of his argument, but are not decisive. He appears to be somewhat vague in distinguishing an actual influence from only a probable interpretation. Heavily relying on Sun, Werner Blaser published *West Meets East: Mies van der Rohe* (1996),<sup>5</sup> but this work does not provide a great deal beyond the brilliant illustrations.

In this paper, it is maintained that the most appropriate studies worthy of a close examination here are as follows. Recently published/presented, not only do these articles provide contemporary insight, but they are also well within the thematic scope.

- Yuko Furukawa and Hiroshi Adachi (2000), 'Information of Japanese architecture in the Western World since recent 19<sup>th</sup> century'

- Manfred Speidel (2005), 'The Presence of Japanese Architecture in German Magazines and Books 1900-1950'
- Hyon-Sob Kim (2006), 'A Study on the Influence of Japanese Tokonoma on Aalto's Art Display Concept in Villa Mairea, 1937-39'<sup>6</sup>
- Anna Basham (2007), 'At the crossroads of Modernism and Japonisme: Wells Coates and the British Modern Movement'
- Peter Blundell Jones (2008), 'The lure of the Orient: Scharoun and Häring's East-West connections'
- Hyon-Sob Kim (2008), 'Tetsuro Yoshida (1894-1956) and the Architectural Interchange between East and West'

Similarly to this present study, Furukawa and Adachi's study (2000) begins with the ground that Japan influenced European modern architecture but the research on it was not satisfactory. Furukawa and Adachi believed that publications were the best vehicle with which to convey information about Japanese architecture to foreign shores. They therefore surveyed books on architecture in western languages that had been published before World War II. While without doubt, the short descriptions on their chosen books – E. Morse (1886), F. Baltzer (1903 & 1907), R. Cram (1905), T. Yoshida (1935), H. Kishida (1935), J. Harada (1935) and B. Taut (1937) – provide good introductions, the publication list of 31 books and 17 articles arguably is of most value. Providing this key information has ensured that subsequent researchers can easily contribute to this thematic area. On the basis of this pilot study, the Adachi group in Kobe successively presented a series of increasingly intensive theses on this subject.<sup>7</sup> Speidel's paper (2005) could be regarded as a response from a German perspective to Furukawa and Adachi's studies. He disclosed further publications that were not included in the list by the Japanese researchers, and also added journal articles to the category. This paper begins with the question, "What could a German architect know about Japanese architecture when he, like Bruno Taut in 1933, decided to travel to Japan?", and attempts to provide a narrative of the publications – centering on Taut's perception of Japan – rather than merely listing and categorizing them. In the first half of the 20<sup>th</sup> century, the year of 1923 marks "a turning point" for Taut (ultimately for European modernists) because his publication *Die neue Wohnung* (1923) illustrates the common values of the modern rational and the traditional Japanese in architecture. And, according to Speidel, Tetsuro Yoshida's *Das japanische Wohnhaus* (1935) provides the most significant watershed for European architects.

While the first two studies listed above focus on publications, the subsequent three works are case-studies on specific architects' treatment of East Asian aesthetics. It is well known that the flower room in Aalto's Villa Mairea (1937-39) vividly demonstrates Japanese features.<sup>8</sup> However, Kim (2006) argues that this is a formal issue, more peripheral than essential to the basic design concept. His article discusses how the so-far unknown Japanese concept

of *tokonoma* was the key motive in the interior design of the Villa Mairea for flexible art display and storage, which eventually became the driving force for the whole plan. This argument is supported by the referral Aalto made to the aforementioned Yoshida's book for the design of the Villa Mairea, and by his own description of the Japanese art-display custom. Through this exemplary connection, Kim even tried to "see diverse trails in modern architecture: a fusion of the East and the West, a fusion of the traditional and the modern, to say nothing of a fusion of art and life". Basham's (2007) treatise illustrated Wells Coates's (1895-1958) life-long interest in Japan, and investigated the Japanese resonance present in his writings and designs of the early 1930s. Coates extracted five points for modern architecture from the traditional Japanese house: frame construction; blurring the boundary of inside and outside; the sliding screen; built-in furniture; and the concept of *tokonoma*, which he later applied in his designs. Basham argued, however, that the inspiration from Japan was not limited to Coates's own work but was more widespread, because he was one of the most influential modern architects in Britain.<sup>9</sup> His colleagues, R. McGrath, S. Chermayeff and C. Tunnard, also showed an interest in or an adoption of Japanese themes in their works. In this paper, Basham successfully revealed the largely ignored aspect of the British Modern Movement and its intersection with Japonisme. On the other hand, Blundell Jones's article (2007) evolved out of Häring's 'Discussions about Chinese Architecture', the minutes of six meetings of Häring, Scharoun, Chen Kuan Lee and John Scott in 1941-42. He presented a number of parallels between this record and the two German architects' writings and designs. Häring's essay, 'Conversation with Chen Kuan Lee about roof profiles' (1947),<sup>10</sup> is surely the most remarkable evidence of his appropriation of Chinese architecture contributing to his architectural attitude. He acknowledged the Chinese roof as similar to the German *Wesen*, but he accused the modernists of creating horizontal roofs – especially those by Mies – that were "squashing the poor inhabitant". For Scharoun, one obvious product of the meetings was his essay on Chinese city planning (1945), of which the concept was perhaps a catalyst for his Darmstadt School (1951) and other designs. This research is valuable particularly because it drew attention to the Chinese architect Lee's role as go-between

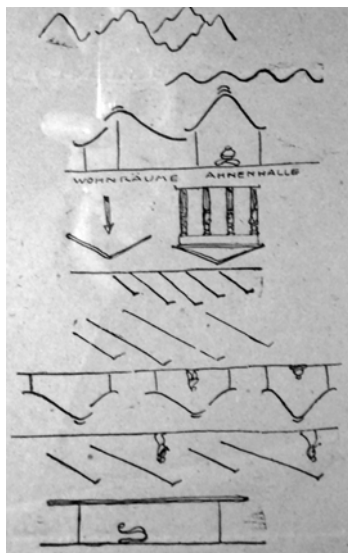


Figure 1. Häring's sketch of Chinese roof profile: Note the flat roof structure at the bottom that implies Mies's building. (Source: Peter Blundell Jones)

and for the excavation of Ernst Boerschmann's books such as *Chinesische Architektur* (1925) and Rudolf Kelling's *Das Chinesische Wohnhaus* (1935).<sup>11</sup>

The final article on Yoshida by Kim (2008) is unique since its main target is the Japanese architect rather than European modernists. Yet, by tracing his year-long travel in Europe (1931-32) and the impacts of the consequent publication of *Das japanische Wohnhaus*, he highlights the architect-writer's role as "a key mediator of architectural interchange between East and West". As Speidel already pointed out, Yoshida left an interesting testimony in the preface of the book that this interchange was initiated during his stay in Europe at the request of Häring and L. Hilberseimer. This statement aroused a long-lasting curiosity in Western researchers about the unveiled architect's travel and his relationship with the European architects. Along with the detailed study of *Das japanische Wohnhaus*, Kim's research illustrates why Yoshida traveled to the West; whom he met there; and what the impact was.<sup>12</sup> Also, he demonstrates Yoshida's design philosophy that identifies the traditional Japanese with the modern rational at a fundamental level, which eventually supported the architect's dream for "the cultural interchange of all peoples".

### 3. ROUTES, ATTRACTION AND APPLICATION

On the basis of the above studies and their accompanying references, we can create a collage depicting the typical East Asian influences on European modern architecture. This collage needs to be viewed through the following three aspects.

(1) The routes of European architects' encounters with East Asian aesthetics

In brief, European modernists were able to encounter the East through publications, people, and buildings, and also through Frank Lloyd Wright. First, the encounter through publications must have been the most significant vehicle, as suggested in Furukawa and Adachi's and Speidel's papers. The notable books on Japanese architecture are, for example, *Japanese Homes and Their Surroundings* (1886) by Morse, *The Book of Tea* (1906) by K. Okakura, *Das japanische Wohnhaus* (1935) by Yoshida, and *Houses and People of Japan* (1937) by Taut. Concerning Chinese architecture, Blundell Jones (2008) implied that Boerschmann (1873-1949) was a key author in the 1920s. As well as the two massive volumes of *Chinesische Architektur* (1925), he published several others such as *Chinese Architecture and Its Relation to Chinese Culture* (1912).<sup>13</sup> Another prolific writer was the Finnish-Swede art historian Osvald Sirén (1879-1966), the author of *The Walls and Gates of Peking* (1924), *The Imperial Palaces of Peking* (1926), *Gardens of China* (1949) and *China and the Gardens of Europe in the Eighteenth Century* (1950). Unfortunately, Western publications specializing in Korean architecture during the first half of the 20<sup>th</sup> century are rare, apart from the chapters on Korea included in O. Kümmel's

*Die Kunst Chinas, Japans und Koreas* (1929) and F. M. Trautz's *Japan, Korea und Formosa: Landschaft, Baukunst, Volksleben* (1930).<sup>14</sup>

Second, other important encounters occurred through go-betweens, East Asian architects in Europe and European architects in East Asia. T. Muramatsu wrote that about fifteen Japanese architects studied or worked in Europe between the 1920s and the early 1940s, such as K. Maekawa in Le Corbusier's atelier (1928-30) and B. Yamaguchi in Gropius's atelier (1928-33).<sup>15</sup> Nevertheless, it remains uncertain whether these Japanese architects provided their masters with critical information on Japanese architecture. As mentioned above, at least Yoshida's friendship with the German architects while he was traveling was crucial, resulting in the significant publication of 1935. On the contrary, it seems that not many Chinese architects came to Europe, while many of the first generation Chinese architects such as Sicheng Liang (1901-72) studied in America in the 1920s.<sup>16</sup> However, Blundell Jones's paper revealed the importance of Lee's role.<sup>17</sup> Among Korean modern architects, Jung-Up Kim (1922-88) worked in Le Corbusier's atelier but this was as late as the 1950s. On the other hand, Western architects who spent time in the East informed European architects of their first-hand knowledge. Examples include J. Conder's series of lectures on Japanese architecture in London (1870-80s); Taut's RIBA lecture (1935) that resulted in *Fundamentals of Japanese Architecture* (1936); and R. Neutra's articles about Japanese and Chinese architecture in *Die Form* (1931-2).<sup>18</sup> Also, European architects' contacts with East Asian people in their own country were often significant, such as the case of Aalto's friendship with Japanese diplomats during the 1930s and 40s.<sup>19</sup>

Third, some European architects encountered the East through real buildings built in Europe such as the pavilions for World's Fairs in European countries. K. Kirsch studied the Japanese pavilions used for these events in *Die Neue Wohnung und das Alte Japan* (1996). Another important building is the Japanese tea house 'Zui-Ki-Tei' (瑞暉亭; 1935) in Stockholm. It was popular among many people, including architect groups. H. Zimdahl published an article on it in the Swedish journal *Byggmästaren* (1938).<sup>20</sup> F.



Figure 2. 'Zui-Ki-Tei' (瑞暉亭; House of the Promising Light), Japanese teahouse built at the National Museum of Ethnography in Stockholm, 1935 (Source: Author)

Thompson suggested that Aalto might have visited this building (Pallasmaa, 1998); and R. Weston (2002) described its importance to J. Utzon and others: "The Zui Ki Tei was as important to Danish architects as the Ho-o-den temple and villa at the World's Columbian Exposition in Chicago in 1893 had been for Frank Lloyd Wright" (pp. 20-21). At times, Chi-

nese buildings in Europe became a source of inspiration, such as A. Kirkerup's Chinese pavilion in Copenhagen, which symbolized "an old, dignified tradition" to Nordic Classicists<sup>21</sup> though the appearance of Chinese buildings had been rather neglected in other cases.<sup>22</sup> In addition, the Korean pavilions at the World Expositions in Chicago (1893) and in Paris (1900) attracted various visitors, but seemingly they could not change the image of Korea as a 'hermit nation'.<sup>23</sup>



Figure 3. 'Ho-o-den', the Japanese Pavilion at the World's Columbian Exposition in Chicago, 1893: Wright's encounter with this building was significant for his career. (Source: Walton, W. (1893) *World's Columbian Exposition 1893*, Barrie, Philadelphia)

Fourth, European architects also explored East Asian motifs indirectly through Wright. In the introduction to *Frank Lloyd Wright: Ausgeführte Bauten* (1911), the English architect C. R. Ashbee discusses "traces of Japanese influence" in Wright's works.<sup>24</sup> In addition, the Dutch Berlage (1925), who admired and visited Wright in America, also



Figure 4. Korean pavilion at the Paris Universal Exposition in 1900 (Source: Chabano, E. (ed.) (2006) *France/Corée 1886-1905: Souvenirs de Séoul*, École française d'Extrême-Orient, Paris)



Figure 5. Frank Lloyd Wright, Warren Hickox House in Kankakee, Illinois, 1900 (Source: Yamada (ed.), 1976)

recognized Japanese influences on Wright.<sup>25</sup> Allusions to Wright, both in Robert van't Hoff's bungalow in Huis ter Heide (1914) and in Jan Wils's *De Dubbele Sleutel* in Woerden (1918), are reminiscent of Japanese architecture, however obscure the connection may be. In his lecture for RIBA, Wright (1939) identified Laotse's spatial concept as the key notion of his 'organic architecture', where "the reality of the building consisted not in the four walls and



Figure 6. Robert van't Hoff, bungalow in Huis ter Heide, 1914 (Source: Overy, P. (1991) *De Stijl*, Thames & Hudson, London)

the roof but inherited in the space within, the space to be lived in" (p. 3); and declared that "Japanese domestic architecture was truly organic architecture" (p. 11).<sup>26</sup> Also,

Wright (1943) describes his experience of Korean floor heating during his visit to Tokyo in 1914 and his adoption of the new heating method in his Usonian houses. Considering Wright's influence on Europe, it is possible that the Korean floor heating principle was imported to Europe. More evidence for this is yet to be found.

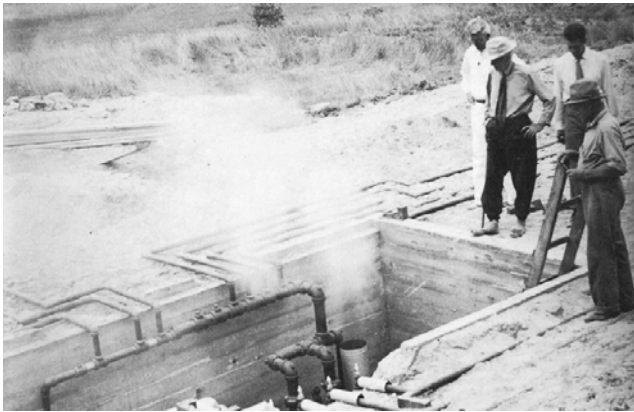


Figure 7. Influence of Korean floor heating on Frank Lloyd Wright: Wright testing heating pipes for Jacobs House I in Madison, Wisconsin, 1936-37 (Source: Jacobs, H. (1965) *Frank Lloyd Wright: America's Greatest Architect*, Harcourt, Brace & World, New York)

(2) The features of the East that attracted European architects and the basis of their interest

It is difficult to either pinpoint or generalize which features of East Asian aesthetics were attractive to Western modernists. Nonetheless, we can raise for discussion various attractive features of the East – especially of Japan – from the studies of specific European architects. The work of Coates can be used to clarify this matter, due to his five points of architecture derived from the traditional Japanese house. For example, 'frame construction' cannot be seen entirely as Japanese because the principle had already been refined through the work of Europeans such as A. Perret and Le Corbusier. Coates's principles though are concerned with major architectural issues of structure, space, and furnishing, which are naturally related to other architects' interests. As we noted that Wright had revealed Laotse's spatial concept, 'space' was becoming a key subject in modern architecture. G. Asplund's idea though was more similar to that of Coates than to that of Wright. He linked the Spenglerian "infinite space" to "the dissolution

of the room" in the Japanese house because the idea of infinite space is possible through the sliding door that can be totally removed. This was surely why many European architects, including Asplund, enquired about this aspect of Japanese architecture when Yoshida visited them in Europe (Kim, 2008).<sup>27</sup>

Related to the spatial idea, flexibility is also an important principle. Not only can the building boundary of the Japanese house be blurred, but the interior space can be divided and flexibly integrated. Moreover, the

Japanese room is multi-functional. The Japanese sleep, eat, and spend their leisure time in the same room.<sup>28</sup> To modern architects who dreamed of a democratic society, this flexible space and function provided a good precedent for ordinary people's houses that had limited space. While many modernists' designs adopted a similar flexibility, it is difficult to distinguish between the influence and the independent development. Mies's Barcelona Pavilion (1929) could be seen as reminiscent of East Asian architectural principles such as flexibility as well as of East Asian concepts of space and structure. Häring had mocked Mies, however, for his horizontal roof that contrasts with the Chinese roof profile.

Many other characteristics of Japanese architecture were attractive to modern architects in the West, such as simplicity, standardization, tranquility, naturalness, and skilful workmanship. Taut emphasized *Sauberkeit* or 'purity' as "the quality that Japanese art contributed to humankind but which should also be achieved in all world art" (Yoshida, 1942). Aalto praised the delicacy of Japanese culture,<sup>29</sup> and C. Perriand was impressed by the "harmonious standardization", "juxtaposition of opposites", and "temporality", etc of Japanese architecture.<sup>30</sup> Probably, these architects found "a tradition unspoilt by academic rules and clichés" (Gombrich, 1989, p. 418) of the West in East Asia, which helped them confirm a universal theory of architecture, though others were merely obsessed with things exotic.

(3) The translation of East Asian aesthetics and application to modern architecture

Some architects applied the style or form of East Asian



Figure 8. Tetsuro Yoshida, Baba Villa at Nasu, 1927: Asplund presented this photo for his argument for Spenglerian "infinite space" in his inaugural lecture at Stockholm's Royal Institute of Technology in 1931. (Source: Yoshida, 1935)



Figure 9. Mies van der Rohe, Barcelona Pavilion, 1929 (Source: Carter, P. (1999) *Mies van der Rohe at Work*, Phaidon, London)



aesthetics directly in their designs while others extracted its principles. Its application can be recognized according to the following categories: direct adoption of elements; allusion of images; and extraction of principles. However, these categories overlap to a large extent. Here, it seems more appropriate to describe the application of East Asian aesthetics by focusing on one case, Aalto's Villa Mairea, because it illustrates all three ways of applying Japanese characteristics. Furthermore, it is impossible to discuss all designs related to East Asian aesthetics. However, other examples will be added briefly.

Regarding the first category, 'direct adoption of elements', critics have had little difficulty in distinguishing between foreign characteristics and familiar elements. Aalto referred to Yoshida for "the main entrance, the sliding door next to the main staircase and the glass door to the flower room" in the Mairea design (Pallasmaa, 1998). The flower room best illustrates Aalto's direct adoption of Japanese elements. Not only the sliding door, but also the window lattice, the paper lampshade, and a straw-mat on part of a wall alluding to *tatami* are elements that are directly related to Japanese design. And as Pallasmaa suggested, the hanging shelf in the room is Aalto's modern translation of the Japanese *tana*.<sup>31</sup> While the bamboo poles in one early sketch for the main staircase were not realized, they can also be interpreted as a direct adoption of an East Asian element.



Figure 10. Alvar Aalto, flower room of Villa Mairea in Noormarkku, 1937-39: This room illustrates Japanese characters through the sliding door, the window lattice, the paper lamp shade, etc. (Source: Author)

In terms of Coates's contribution, his interior conversion of 'No. 1 Kensington Palace Gardens' (1931) is a particularly good example that demonstrates how the modernist wanted to transform a Victorian lavish interior into a simple modest space derived from the Japanese house. Another interior of '34 Gordon Square' (1931) also illustrates his



Figure 11. Wells Coates, No. 1 Kensington Palace Gardens in London, before and after interior conversion in 1931 (Source: [www.wellscoates.org](http://www.wellscoates.org))

adoption of the Japanese sliding door.

In contrast with the first category, the second category, 'allusion of images' is more connotative than denotative. Critics identify the allusion to East Asian images according to their own interpretation. Pallasmaa (1998) pointed out that the composition of the pool and of the hillock in the Mairea courtyard echoes Yoshida's illustration (1935) of a Japanese garden. It is not clear if Aalto really considered the plate, but it is true that the artificial mound, the pool, and the stepping stones

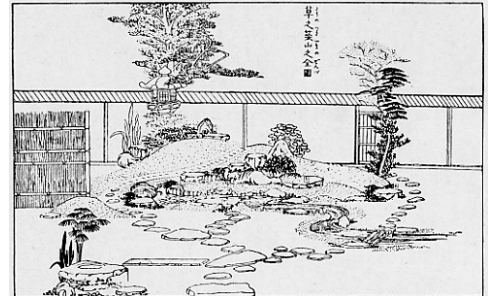


Figure 12. Yoshida's illustration of Japanese garden in *Das japanische Wohnhaus* (1935), p. 159.

behind these elements resemble the Japanese 'tsukiyama' garden. Weston (1992) has suggested that the sauna entrance assumes the character of a Japanese teahouse in its transition and subdivided doors. But this example is rather controversial, owing to the vagueness of the suggestion. The stepping stones on the gravel roof allude to the Japanese dry garden. Though the gravel was not raked and the stone-laying is clumsy, the roof assumes the Japanese image. This case could also therefore belong to the first category.



Figure 13. Gravel roof of Villa Mairea: Though clumsy, it alludes to the Japanese dry garden. (Source: Pallasmaa (ed.), 1998)

In addition to reproducing formal elements, Western architects attempted to extract a number of principles from the built forms of East Asian designs. Asplund's 'infinite space', Coates's five points, Taut's 'Sauberkeit', and Perriand's 'harmonious standardization' are such examples. Some of these principles were new to these architects, but others were a confirmation of the general theories they already held. Also, some of these principles are related to formal elements in the above two categories just as the principle of 'infinite space' is related to the sliding door. The Mairea design demonstrates this application. Aalto consulted the Yoshida's book (1935) in the design of the large sliding door to the living room. The architect and the clients left various 'intentional' photographs of the situation when the door was removed, suggesting that they were fascinated by the effect created when the inside-outside boundary was blurred. Another critical principle that was applied in this villa is the custom of displaying art in the *tokonoma* in the Japanese room for the art-collector client (Kim, 2006). Aalto invented a new device that could

function as both an art exhibition wall and an art storage cabinet, allowing the owner to display certain pictures for a time, then to change them easily depending on his or her preference. According to Basham (2007), the *tokonoma* appears to have also been a significant inspiration for many British modernists. Writers such as J. Betjeman and C. G. Holme showed a high regard for the *tokonoma* and Coates's '34 Gordon Square' adopted this element at the request of the client.



Figure 14. Villa Mairea living room with the sliding door removed, inside-outside boundary blurred (Source: Alvar Aalto Academy, Helsinki)



Figure 15. 'Tokonoma' with a hanging picture at a Japanese room, which inspired many European modern architects, such as, Aalto and Coates (Source: Yoshida, 1935)

#### 4. MEANING AND SUGGESTION

These three categories that demonstrate how East Asian aesthetics were incorporated into European modern architecture provide various aspects of consideration. Above all, the degree of contribution from each country varies. As expected, the Japanese role was most conspicuous, but the Korean contribution to the development of modern architecture was very tenuous, with the exception of Wright's floor heating. We may consider that China "paved the way before people's interest shifted to Japan" (Wichmann, 1981, p. 8) and, as a big brother of this Chinese character cultural area, tacitly supported the westwards stream. There could be an argument against including the three different countries under the name of East Asia because they have their own unique architectural characteristics. However, these countries share common philosophy-religions of Buddhism and Taoism through the long cultural and political interactions in history. Their common ideologies were similarly reflected in their architectural concepts, for example, *chagyeong* (借景, borrowing the land-

scape; *jiejing* in Chinese and *shakkei* in Japanese) and *pungsu* (風水, East Asian geomantic principle; *fengshui* in Chinese and *fusui* in Japanese). Obviously, the countries developed their built environments by referring to one another, while adapting the references to their climate and local context. In this sense, we may even argue that the Japanese contribution cannot be regarded exclusively. Studies on the architectural exchanges between the three countries, especially the Chinese and Korean influence on Japan,<sup>32</sup> support this argument.

Responding to the question raised in the introduction, this research provides a balanced view of the East Asian contribution to modern architecture in the West by exploring European modernism as the counterpart to American modernism. That is, it can be seen that East Asian aesthetics influenced not only modern architects of America but also those of Europe. Furthermore, it is difficult to determine whether the influence was more significant in America or in Europe. Here, we need to acknowledge the diverse ways in which the term 'influence' could be interpreted in this context; from mere 'allusion', to the rather strong 'inspiration', or to the 'confirmation' of a universal theory to which the architects already subscribed. Some architects' designs vaguely allude to East Asia, but other architects expressed East Asian concepts more actively. For example, Josef Frank's obsession with China and Japan was "his second confession of identity".<sup>33</sup> Arguably, the reason for the lack of studies concerning East Asian influences on European modernists is suitably answered by Kim (2008). In brief, Japanese architecture was perhaps nothing new to European modernists because the fashion had already swept Europe by 1900; it had been absorbed by European modernism through the Art Nouveau period; and Wright transferred his absorption of the East Asian concepts to Europe. It was therefore at that time "hardly possible to distinguish Japanese space from the modern one."

This revisionist history supports the idea of a multi-faceted modern architecture that exceeds the compass of narrow rationalism. The reduced version of modernism, that is, the invention of the International Style that neglected local cultures, has been much criticized by many historians, and the richness and diversity of modernism is being rediscovered. Modern architecture was, in fact, not purely based on the "faith in European civilization" but was also inspired by diverse cultural sources. This therefore provides an understanding, particularly for non-Westerners, that the formula 'modernization = Westernization' is considerably oversimplified, and that non-Westerners can also find the seed of modernity within their own culture. Actually, intellectuals of the three East Asian countries during the modernization period did their best to accept Western technology and way of living within their spirit, apparent in their terms: Chinese *Zhongti Xiyong* (中體西用), Korean *Dongdo Seogi* (東道西器) and Japanese *Wokon Yosai* (和魂洋才). This ideology resonated with Ernst Fenollosa's assertion (1898) of a fusion of Western *means* and Eastern *ends*.<sup>34</sup>

Finally, as suggested at the beginning, this issue is natu-

rally linked to the matter of Orientalism transcending the framework of architecture. As is well known, E. Said's *Orientalism* (1978) revealed the "Western style for dominating, restructuring, and having authority over the Orient" (p. 3). Despite the prominence of the study, however, Said did not cover some of the more positive aspects of Westerners' perceptions of the East. This was pointed out by Arthur Versluis (1993), who suggested the term "positive Orientalism", in contrast to Said's negative one: "Orientalism is not a single way of viewing Asia; it is many ways. [...] For convenience, we shall categorize these kinds of Orientalism, distinguishing between negative Orientalism, which disparages Asian religions, cultures, and peoples, and positive Orientalism, which regards Asian religions and cultures as valuable, as reflecting perennial truths" (p. 5). Though Versluis focused on the American transcendentalists' case, his definition of positive Orientalism is also applicable to European modern architects' reception of the East. In other words, European modern architects, who found some critical principles and "perennial truths" in the East Asian aesthetics and applied them to their design, could be regarded as a good example, showing the positive effect of "cross-fertilization" of culture.

## 5. CONCLUSION: CRITICAL ASSESSMENT

This research started from the premise that East Asia contributed to the development of modern architecture, rather than merely received ideas from the West. Attention is also paid to the lack of an existing integrated study concerning the influence of East Asia on European modernism as a counterpart to its influence on American modernism. The main argument of this paper is that the East Asian culture was an important inspiration to a number of European modern architects. By synthesizing recently published/presented articles on the related subject, this paper demonstrated the East Asian influence on modern architecture in Europe. In summary, European modern architects encountered East Asian aesthetics through publications, go-betweens, eastern buildings in Europe, and also indirectly through Wright's influence. Though it is difficult to pinpoint specific features of the East that were attractive to the Europeans, we can identify typical examples of East Asian elements in European modern architecture: Laotse's spatial concept; East Asian concepts of flexibility and frame construction; natural beauty; simplicity; standardization, etc. Some architects adopted the formal issues directly, at times very superficially, while others extracted the underlying principles. As a whole, this analysis revealed insights at several levels. First, it provides a balance to the view of the East Asian influence on modern architecture with the investigation into the East Asian influence on European modernism as a counterpart to its influence on American modernism. Second, the multi-faceted nature of modern architecture was further illuminated. Third, an important example of "positive-Orientalism" was provided, contrasting with the rather negative connotation implied in the conventional term of 'Orientalism'.

However, we also need to more critically understand the Western architects' attitudes towards the East. What was the fundamental motive of their adoption of the East Asian ideas? Weren't there any architects who strategically drew from foreign aesthetics because they conveniently provided the image they were looking for to rationalize their design? Alternatively, others might have projected their Utopian dream onto the vaguely known world and adjusted their design to reflect the far eastern wonderland. Did they know the East at all? Klaus Berger (1980) even argued that Western painters obsessed with Japanese prints actually "often knew next to nothing about Japan and had no interest in Japanese culture or philosophy."<sup>35</sup> On the other hand, books and reports on the East were sometimes fairly ideal and far removed from reality. Taut had once criticized Yoshida's idealization of Japan in the influential *Das japanische Wohnhaus*.<sup>36</sup> If this is true, the value of this research might be somewhat diminished, and that will be the limitation of this paper. Nevertheless, the basic lesson that a culture evolves in interaction with other cultures cannot be undermined. One culture is provided with fresh ideas and catalyst by the influx of other cultures. This not only limited to the East-West exchange in modern architecture, but also extends to any cross-cultural exchanges in any period. However, this blurring of the boundary does not imply the invention of another type of inter-national or inter-cultural style. There may be a unity, but diversity should not be neglected. The layers of our architectural culture are thick and its strata sufficiently deep. Therefore, it is clearly important for us to be alert to a sense of superiority towards *the Others*, and instead to respect them and to try to learn from the differences. The *Weltanschauung*, or world view, varies according to cultures just as Laotse's "unnamable" tao significantly differs from early Wittgenstein's "silence".<sup>37</sup> It is this additional precept that we can use to learn from this research.

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## ENDNOTES

<sup>1</sup> Into this book, Yamada compiled various articles by different authors on Japan-West exchanges in art, applied art and architecture. Concerning Japanese contribution to the Western architecture before World War II, this book deals only with America. And it was Clay Lancaster who wrote this chapter. Yamada, C. (ed.) (1976) *Dialogue in Art: Japan and the West*, Kodansha, Tokyo, New York & San Francisco.

<sup>2</sup> "The Japanese contribution to the development of Western architecture prior to World War II was insignificant except in the United States. The modern movement in architecture in the early decades of the twentieth century was, to use an expression of Nikolaus Pevsner, born of 'the faith in science and technology, in social sciences and rational planning, and the romantic faith in speed and the roar of machines.' In other words, modern Western architecture was linked with faith in European civilization." Yamada, *op. cit.* p. 16.

<sup>3</sup> Cited in: Banham, R. (1960) *Theory and Design in the First Machine Age*, Architectural Press, London, p. 129.

<sup>4</sup> However, Lee's report of Mies's acknowledgement of Chinese inspiration seems to be his exaggerated rhetoric. Discussion between author and Sun about Lee in National Chengkung Univer-



sity, Taiwan in September, 2006; and with Peter Blundell Jones in Sheffield between 2006 and 2007.

<sup>5</sup> Blaser, W. (1996) *West Meets East: Mies van der Rohe*, Birkhäuser, Basel. In fact, Sun also referred to Blaser for Mies's collection of books on Chinese philosophy. Sun, *op. cit.* p. 119.

<sup>6</sup> Kim, H. S. (2006) 'A Study on the Influence of Japanese Tokonoma on Aalto's Art Display Concept in Villa Mairea, 1937-39', *Geonchuk-yeoksa-yeongu* (Journal of Architectural History), 15(3), 43-57. Revised versions of this article were published later in a different form: firstly in Finland (Finnish-English), *Tuntematon käyttövoima-The Unknown Wheel* (Pori Art Museum, 2007); and then in Japan (Japanese), 'Alvar Aalto's Mairea interior and Japanese tokonoma inspiration', *SADI NEWS*, 29 (2008).

<sup>7</sup> Six further papers were published by Kanazashi, Adachi and Nakae in 2002-04, beginning with 'A study on the way of understanding of Japanese Architecture in the Western World – On the book of Franz Baltzer's *Das japanische Haus: I*', *Nihonkenchikukakai-Kinkishibu-Kenkyuhokokushū*, 2002.

<sup>8</sup> See Pallasmaa, J. (ed.) (1998) *Villa Mairea 1938-39* and (2003) *The Aalto House 1935-36*, Alvar Aalto Academy, Helsinki, pp. 98-100.

<sup>9</sup> He was a founder member of the Twentieth Century Group, Unit One and Chairman of the MARS, the British branch of the CIAM.

<sup>10</sup> It was translated and published by Blundell Jones at the same issue of *Architectural Research Quarterly* (2008, 26-28).

<sup>11</sup> Boerschmann, E. (1925) *Chinesische Architektur*, 2 vols. Wasmuth, Berlin; and Kelling, R. (1935) *Das chinesische Wohnhaus*, Deutsche Gesellschaft für Natur- und Völkerkunde Ostasiens, Tokyo. These were provided for the meetings by Lee.

<sup>12</sup> Yoshida was sent out to the West by *Teishinsho* (Ministry of Communications) of the Japanese Government to investigate Western broadcasting facilities, but it seems that he was more interested in surveying the stream of modern architecture in Europe. During the almost one-year-long stay in Europe, he could meet a number of leading architects in each country, which became a chance for him not only to learn from them but also to inform them of the traditional Japanese architecture.

<sup>13</sup> Other books by Boerschmann include *Die Baukunst und religiöse Kultur der Chinesen* (1911-13); *Baukunst und Landschaft in China* (1926); and *Chinesische Baukeramik* (1927).

<sup>14</sup> However, Kümmel devoted only five pages to Korean art, with four figures (three Buddhist statues and one ceramic vessel), and Trautz's publication is merely a compilation of photographs.

<sup>15</sup> Muramatsu, T. (1976) 'Ventures into Western Architecture'. In: Yamada (ed.) *op. cit.* pp. 125-148.

<sup>16</sup> Many of them studied at the University of Pennsylvania on the Boxer Indemnity scholarships. Steinhardt, N. S. (2002) 'China: Designing the Future, Venerating the Past', *JSAH*, 61(4), 537-548; and Li, X. and Chong, K. H. (2003) 'Implications of Chinese architectural education in contemporary Chinese architecture', *The Journal of Architecture*, 8(3), 303-320.

<sup>17</sup> Lee was born in Shanghai but studied architecture under Hans Poelzig and served as an assistant to Scharoun and Boerschmann, and later worked in Taiwan. Eventually, he acted as a link between the German organic stream and Chinese philosophy.

<sup>18</sup> Neutra, R. (1931) 'Gegenwärtige Bauarbeit in Japan', *Die Form*, 6(1), 22-28; 'Japanische Wohnung, Ableitung, Schwierigkeiten', *Die Form*, 6(3), 92-97; 'Neue Architektur in Japan', *Die Form*, 6(9), 333-340; and (1932) 'The Reconstruction of Chinese Cities', *Die Form*, 7(5).

<sup>19</sup> Schildt, G. (1986) *Alvar Aalto: The Decisive Years*, Rizzoli, New York, pp. 197-114.

<sup>20</sup> Helge, Z. (1938) 'ZUI-KI-TEI', *Byggmästaren*, 9, 82-94.

<sup>21</sup> Jørgensen, L. B. (1982) 'Classicism and the Functional Tradition in Denmark'. In: Pallasmaa (ed.) *Nordic Classicism*, Mu-

seum of Finnish Architecture, Helsinki, pp. 50-53.

<sup>22</sup> "Chinese taste is inferior to the Antique and generally unfit for most European purposes. Nevertheless, a knowledge of this singular style, apart from arousing curiosity, does have practical advantages [...] where a great variety of scenes are required, or in the inferior parts of immense palaces." Chambers, W. (1757) *Designs of Chinese Buildings*. Cited in: Bozdoğan, S. (1988) 'Journey to the East: Ways of Looking at the Orient and the Question of Representation', *Journal of Architectural Education*, 41(4), 38-45.

<sup>23</sup> Concerning the historical background of Korea's participation in the events, see Kane, D. (2002) 'Korea in the White City: Korean Participation in the World's Columbian Exhibition of 1893', *Transactions of the Royal Asiatic Society-Korea Branch*, 77, 1-57; (2004) 'Display at Empire's End: Korea's Participation in the 1900 Paris Universal Exposition', *Sungkyun Journal of East Asian Studies*, 4, 41-66.

<sup>24</sup> Ashbee, C. R. (1911) 'Frank Lloyd Wright'. In: *Frank Lloyd Wright: Ausgeführte Bauten*, Wasmuth, Berlin. It was republished in English as *Frank Lloyd Wright: Early Visions* (New York: Gramercy Book, 1995).

<sup>25</sup> Berlage, H. P. (1925) 'Frank Lloyd Wright'. In: Wright, F. L. et al. (1992) *Frank Lloyd Wright: The Complete 1925 "Wendingen" Series*, Dover, New York, pp. 79-85.

<sup>26</sup> Wright (1939) *An Organic Architecture*, Lund Humphries, London, p. 3 & 11.

<sup>27</sup> Of course, it cannot be said that the concept was initiated by the influx of the Japanese idea. The principle of "blurring the boundary of inside and outside" was becoming increasingly sophisticated in European modernism. The transparency of glass had already caused excitement among European modernists, notably Paul Scheerbarth (1914) and Taut, and as Hilde Heynen argued (1999), 'interpenetration' was the underlying notion of Sigfried Giedion's historiography.

<sup>28</sup> This character is shared by the Korean room.

<sup>29</sup> Aalto, A. (1935) 'Rationalism and Man'. In: Schildt, G. (ed.) (1997) *Alvar Aalto: In His Own Words*, Otava, Helsinki, pp. 89-93.

<sup>30</sup> Chevroulet, I. V. (2007) 'Japan 1940-41: Imprint and resonance in Charlotte Perriand's designs' (paper presented at the session of "East Asian Influence on Modern Architecture in Europe" in the 60<sup>th</sup> Annual Meeting of SAH, Pittsburgh PA).

<sup>31</sup> The source was also used as inspiration for Perriand's shelf design (1950s), as Chevroulet has shown (2007).

<sup>32</sup> One example is Sarvimäki, M. (2000) *Structure, Symbols and Meanings: Chinese and Korean Influence on Japanese Architecture*, Research series of Department of Architecture, Helsinki University of Technology.

<sup>33</sup> Lindgren, K. (1996) 'Architektur als Symbol: Theory and Polemic'. In: Stritzler-Levine, N. (ed.) *Josef Frank: Architect and Designer*, Yale University Press, New Haven, pp. 96-101.

<sup>34</sup> "While the strength of the Western has tended to lie in a knowledge of means, the strength of the Eastern has tended to lie in a knowledge of ends. If this be true, it is necessary to regard the fusion of East and West as indeed a sacred issue for which time has waited. Each was doomed to failure in its isolation." Fenollosa, E. (1898) 'The Coming Fusion of East and West', *Harper's*, December. Cited in: Yu, B. (1983) *The Great Circle: American Writers and the Orient*, Wayne State University Press, Detroit, p. 106.

<sup>35</sup> Berger, K. (1980) *Japonismus in der westlichen Malerei, 1860-1920*, Prestel-Verlag, Munich. Cited in: Adams, H. (1983) 'New Books on Japonisme: Review Article', *The Art Bulletin*, 65(3), 495-502.

<sup>36</sup> Mukai, S. (1981) *Kenchikuka-Yoshida-Tetsuro-to-Sonosuhen* (Architect Tetsuro Yoshida and His Surroundings),

Sōmoshobō, Tokyo, p. 175.

<sup>37</sup> Arguably, the representative Eastern conception of Lao-tse's unnamable 'tao/dao' ("The tao that can be told is not the eternal Tao. The name that can be named is not the eternal Name. The unnamable is the eternally real." – *Tao Te Ching/ Daodejing*, 6<sup>th</sup> c. BC) makes a striking contrast with the logical positivism of the early Wittgenstein's philosophy ("What we cannot speak about we must pass over in silence." – *Tractatus Logico-Philosophicus*, 1921).

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