
This is an electronic reprint of the original article.
This reprint may differ from the original in pagination and typographic detail.

Chiu, Chen Yu; Niskanen, Aino; Song, Ke

Humanizing modern architecture

Published in:
Journal of Asian Architecture and Building Engineering

DOI:
[10.3130/jaabe.16.1](https://doi.org/10.3130/jaabe.16.1)

Published: 01/01/2017

Document Version
Publisher's PDF, also known as Version of record

Please cite the original version:

Chiu, C. Y., Niskanen, A., & Song, K. (2017). Humanizing modern architecture: The role of Das Japanische Wohnhaus in Alvar Aalto's design for his own house and studio in Riihitie. *Journal of Asian Architecture and Building Engineering*, 16(1), 1-8. <https://doi.org/10.3130/jaabe.16.1>

This material is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.



Humanizing Modern Architecture: The Role of *Das Japanische Wohnhaus* in Alvar Aalto's Design for His Own House and Studio in Riihitie

Chen-Yu Chiu, Aino Niskanen & Ke Song

To cite this article: Chen-Yu Chiu, Aino Niskanen & Ke Song (2017) Humanizing Modern Architecture: The Role of *Das Japanische Wohnhaus* in Alvar Aalto's Design for His Own House and Studio in Riihitie, Journal of Asian Architecture and Building Engineering, 16:1, 1-8, DOI: [10.3130/jaabe.16.1](https://doi.org/10.3130/jaabe.16.1)

To link to this article: <https://doi.org/10.3130/jaabe.16.1>



© 2018 Architectural Institute of Japan



Published online: 24 Oct 2018.



Submit your article to this journal [↗](#)



Article views: 855



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

Humanizing Modern Architecture: The Role of *Das Japanische Wohnhaus* in Alvar Aalto's Design for His Own House and Studio in Riihitie

Chen-Yu Chiu^{*1}, Aino Niskanen² and Ke Song³

¹ Assistant Professor, Department of Architecture, Bilkent University, Turkey

² Professor, Department of Architecture, Aalto University, Finland

³ Ph.D. Candidate, Faculty of Architecture, Building and Planning, The University of Melbourne, Australia

Abstract

The role of traditional Japanese houses and gardens in Finnish architect Alvar Aalto's (1898-1976) career is often mentioned but without an in-depth study. This article analyzes and compares Aalto's design for his own house and studio in Riihitie (1935-6) and his reading of Japan, particularly through Tetsuro Yoshida's 1935 *Das Japanische Wohnhaus* (*The Japanese House*).

Keywords: Alvar Aalto; traditional Japanese houses and gardens; Tetsuro Yoshida; *Das Japanische Wohnhaus*

1. Introduction

[...] In our own era, when standardization is the principle of production, we must recognize that formalism is inhuman to the highest degree. The standard object should not be a final project; on the contrary, it should be manufactured in such a way that its form is perfected by human beings, with all the individual laws that govern them [...]. There is one civilization that has previously, also at the handicraft stage, shown great delicacy and understanding of the individual in this respect. I am thinking of certain aspects of Japanese culture, which with its limited raw materials and forms has implanted in the people a virtuosity in producing variety and, almost daily, new combinations [...].

The above text is extracted from Alvar Aalto's (1898-1976) 1935 lecture at the annual meeting of the Swedish Society of Industrial Design (Schildt 1998, p.93). The lecture presented Aalto's portrayal of Japanese culture as an ideal for justifying the outdated formalistic concepts of architectural design. To Aalto, modern architecture lacked 'the psychological reactions of their users' (Schildt 1998, p.89). Aalto's words and thoughts directly echoed his study on Japanese building culture by reading various books in the 1930s. Among them, *Das Japanische Wohnhaus* (*The Japanese House*, 1935) written by Tetsuro Yoshida¹ (1894-1956) was one of Aalto's favorites (Pallasmaa 2003, p.75).

Indeed, a few scholars have already pointed out the importance of Yoshida's book in Aalto's career.² Göran Schildt's *Alvar Aalto: The Decisive Years* (1986) and *Alvar Aalto: His Life* (2007) provided his insights into Aalto's enthusiasm for Japanese architecture and his reading of *Das Japanische Wohnhaus*. In 1989, Juhani Pallasmaa's interview with Paul Bernoulli, one of Aalto's former staff, re-confirmed the importance of Yoshida's *Das Japanische Wohnhaus* in Aalto's early career (Pallasmaa, 2003, p.75). Later, in Pallasmaa's 'Rationality and Domesticity' in *Alvar Aalto Architect – The Aalto House* (2003) and Kim Hyon-Sob's 'Tetsuro Yoshida (1894-1956) and Architectural Interchange Between East and West' (2008), both authors sketchily argued the Japan-inspired built forms and aesthetics seen in the conservatory of Villa Mairea (1939-40). Indeed, the precise role of *Das Japanische Wohnhaus* in Aalto's design seems to have been an important but unsolved question in previous scholarly works. This article argues that Aalto's own house and studio in Riihitie (1935-36) explicitly presents Aalto's learning from *Das Japanische Wohnhaus*. This book seems to have served as an important source of inspiration and affirmation for young Aalto to reject the formalistic approach to design and humanizing modern architecture with refined aesthetics and synthetic functionalism. Aalto's Riihitie project could be seen as the architect's translation of ideas and ideals of traditional Japanese houses and gardens into his personal idioms, built forms and architectural details.

*Contact Author: Chen-Yu Chiu, Assistant Professor,

Department of Architecture, Bilkent University,

06800 Ankara, Turkey

Tel: +90-5316-146-326

E-mail: chen-yu.chiu@bilkent.edu.tr

(Received April 4, 2016 ; accepted November 18, 2016)

DOI <http://doi.org/10.3130/jaabe.16.1>

This article starts with a survey of interconnections between Japan and Finland, and Aalto's early perception of Japan for answering two questions: why did Aalto become interested in Japan; and how did he perceive traditional Japanese architecture? This is followed by answering why and how Yoshida interpreted Japanese building culture in his *Das Japanische Wohnhaus*. This article further constructs a series of analogies between Aalto's own house and studio and his perception of *Das Japanische Wohnhaus* to reveal its precise role in Aalto's design. These analogies are conducted according to four themes. The first is the Katsura Imperial Villa in which its orientation, layout and gardening design, arguably, are represented in Aalto's Riihitie project – a strong combination between architectural design and gardening. The second is the aesthetics of Japanese houses and gardens found in the built forms of Aalto's Riihitie project – a manifestation of primitivism through adopting natural and raw materials. The third is the planning principle of Japanese houses detected in the spatial composition of Aalto's Riihitie project – a synthetic functionalism with sensitive care inside out. The fourth is the interior of Japanese houses, and Aalto seemed to adopt their characteristics in his design for the built-in furniture and details with refined aestheticism. Together, these four themes closely illuminate how Yoshida represented Japanese building culture and further provide a detailed account of Aalto's housing design and its underlying intentions.

Although Aalto's early sketches and drawings for his own house and studio are missing, the surviving materials show a strong parallel between *Das Japanische Wohnhaus* and Aalto's Riihitie project.³ To further demonstrate the Japan-inspired characteristics in Aalto's own house and studio, this article compares the Riihitie project with his early work - Villa Tammekann (1932)⁴ - the house with a similar program and size but strongly embodied with the learnt functionalist manner, located at Tartu, Estonia. The differences between these two houses, and the analogies between *Das Japanische Wohnhaus* and Aalto's own house and studio, vividly present the growth of Aalto's architectural philosophy – humanizing modern architecture with tradition and Nature for both the physical and psychological needs of human beings.

2. Japan in Finland

Before Finland became an independent state from the Russian SFSR in 1917, the influences of Japanese art and its inspired movements - *Japonism* - could be easily detected in all fields of creative arts in the Nordic region in the late 19th century (Weisberg, Bonsdorff & Selkokari, 2016). This appreciation of all things Japanese began in Europe and America after feudal Japan was forced to establish a trading relationship in the mid-1850s under pressure from the US warship commanded by Commodore

Matthew Perry (1794-1858). The dissemination and popularization of Japanese art and objects in the Nordic region were further reinforced by the Paris Exposition of 1867. This initially resulted in independent artists, scholars and collectors in Finland sharing the lure of Japan. Among them, Finnish artist Akseli Gallen-Kallela (1865-1931) was emerging as an important early devotee of Japanese art, and his personal art collection provides needed evidence that the artist was caught up in Japanese illustrated books and albums (Weisberg 2016, p.73). As a Japan-born and Finland-based journalist, politician, writer and collector, Konni Zilliacus wrote *Japanesiska studier och skizze* (*Japanese studies and sketches*) in 1896 and brought a collection of Japanese objects to Finland for public displays at Helsinki (Koivunen 2016, p.87), and Aalto owned a copy of *Japanesiska studier och skizze*.⁵ The collection and funds bequeathed by Finnish collector Herman Frithiof Antell (1847-1893) served as the foundation for developing the collection and exhibition of Japanese art and objects in the National Museum and the Museum of Applied Arts at Helsinki in the early 1900s (Koivunen 2016, pp.87-91). The legacy of Antell significantly stimulated public interest in the art and culture of Japan in Finland before WWI.

After WWI, Japan was treated as one of the five Great Powers, along with Britain, France, Italy and the United States of America, all of which played a leading role in various decisions concerning the peace settlement (Momose 1973, p.5). Meanwhile, Finland was seeking recognition of her independence by international society. Following Britain and the United States' recognition of the independence of Finland, the Japanese Government soon established her formal relationship with Finland in 1921. This could also be seen as the result of Japan and Finland's previous disputes and conflicts with Russia: The Russo-Japanese War (1904–5) and the Finnish Civil War (1918) that was slightly supported by the USSR. The famous linguist and professor at the University of Helsinki, Gustaf John Ramstedt (1873–1950) became Finland's first envoy to Japan, as a Chargé d'affaires, from 1920 to 1929, during which he was a frequent guest lecturer at Tokyo Imperial University, where he influenced Japanese scholars, such as Kunio Yanagita (1875-1962), Izuru Shimura (1876-1967), Kyōsuke Kindaichi (1882-1971) and Shimpei Ogura (1882-1944). The translation of their works significantly developed the mutual understanding between Japan and Finland (Momose 1973). More importantly, Ramstedt, a friend of Aalto and his wife – Aino Aalto (1894-1949), introduced the first ambassador of Japan Hakotaro Ichikawa and his wife Kayoko Ichikawa to the Aalto family, possibly due to Aalto's status not only as one of the leading Finnish architects and designers but also as one of the founding members of the Finland–Japan Foundation established in 1935.⁶

Hakotaro and Kayoko stayed in Finland from March 1933 to July 1937 (Schildt 2007, pp.354-62). During their stay, they met the Aalto family several times. Three years after Hakotaro and his wife left their post in Finland, they published a book entitled *Finland Zakki (Essays on Finland)*, with contributions by both, providing a detailed account of their impressions of Mr. and Mrs. Aalto (Schildt 2007, pp.354-60):

[...] Of all the people I met in Finland, I particularly remember Alvar Aalto as a highly gifted man. He told me that he had read Marco Polo's memoirs in his youth and had conceived a liking for Japan. Later he had collected many books on our architecture, especially on tea rooms. In his hospitals, libraries, dwellings and restaurants he used pure wood, even bamboo, with an unerring feeling for style [...].

Mrs. Aalto always speaks very calmly; her whole behavior is well balanced. She has very deep insight, and her gentle eyes observe everything quietly. As an interior designer she has a sensitive feeling for colour and material, yet her face never betrays the slightest disquiet. She dresses simply but freshly. She is always obliging, and almost seems like a young girl [...].

[...] One day Mrs. Aalto sent a particularly thoughtful gift to our residence, a glass vase of her own design [no doubt belonging to Aino Aalto's 'Bölgeblick' series, manufactured by Karhula Iittala since 1932], with carmine flowers arranged to represent the unity of earth, heaven and man. I had sent Mrs. Aalto books on the art of Japanese flower arrangements, and she had clearly arranged the flowers according to the rules in these books.

Although, in Finland today, it is difficult to find any record related to Mr. and Mrs. Aalto's interactions with Hakotaro and Kayoko, this relationship could have provided Aalto and Aino Aalto an important chance to know Japan, despite the fact that they never visited this country during their lifetime.

3. Aalto's Perception of Japan

Hakotaro and Kayoko sent the Aalto couple 華道三十六家選 [*Thirty-six works of Japanese flower arrangements*] (1934) and nine volumes on Japanese culture, art, architecture and gardening from the Tourist Library (1934), published by the Japanese Board of Tourist Industry, as personal gifts. Along with these books from Hakotaro and Kayoko, Aalto also acquired Konni Zilliacus's 1896 *Japanesiska studier och skizze, Japanese Fairy Tale: Momo Taro – The Story of Peach-boy*, Tetsuro Yoshida's 1935 *Das Japanische Wohnhaus* and Bruno Taut's 1937 *House and People of Japan*. Aalto also received Antonin Raymond's 1938 *Antonin Raymond: Architectural details* directly sent from the author and signed with the signatures of his Japanese colleagues in 1938. Also in the mid-1930s, Aalto studied the Japanese tea house *Zui-Ki-Tei* 瑞輝

庭 [*Home of the auspicious light*] built in the garden of the Ethnographic Museum [Etnografiskamuseet] in Stockholm first opened in October, 1935. This could deliver the most significant impact on Aalto, and Göran Schildt further argued that 'there is no reason to doubt that Aalto was well versed in the Japanese building traditions by the early 1930s' (Schildt 2007, p.360-1). In fact, Aalto wrote in a letter to the then Japanese ambassador to Helsinki in 1941 (Schildt 2007, p.360-1):

[...] There is a very special affinity between us modern architects and the well-balanced architecture of your country. I believe that it is a deeper understanding of the language of materials which unites us [...].

In the following year, writing to his old friend Otto Völckers in Munich, Aalto said (Schildt 2007, p.361):

[...] I am sending you a collection of photographs of our old Finnish buildings. The houses in the old Karelian area are especially close to my heart. They represent an almost extra-European architecture comparable with that of Japan [...].

According to Aalto's staff, Swiss architect Paul Bernoulli, supervising the construction of Villa Mairea, Aalto brought Yoshida's *Das Japanische Wohnhaus* to the office at Riihitie to be consulted in certain design details of the legendary house.⁷ Aalto's words and actions seemed to explain how he was interested in Japanese building culture in general and Yoshida's *Das Japanische Wohnhaus* in particular. Meanwhile, it seems that why and how Yoshida presented Japanese houses and gardens in *Das Japanische Wohnhaus* could further answer why Aalto was obsessed by this book more specifically.

4. Katsura Imperial Villa

To Yoshida, the Katsura Imperial Villa was an extraordinarily fine synthesis of Japanese domestic architecture that represented its long historical revolution. Katsura was built with the basic principle of *Shinden* (palatial) style residence and furnished with the *Shoin* (reading-bay) style interior with influences of the tea-cult (Yoshida 1935, p.16). Thus, the main building of Katsura was shaped with a staggered plan fronting a south-facing tea garden and a water pond (Fig.1.). This allowed Katsura to welcome the cool summer winds from the South, and block the cold winter winds from the North.⁸ All the principle rooms among the staggered boundary could be further exposed to the winter sun and faced the rising moon on summer nights. Although Yoshida did not give many words on Katsura, he included 20 illustrations of it in the second chapter – 'Historical development of Japanese residential building' (Yoshida 1935, pp.31-45). These illustrations helped Aalto perceive the built forms and surroundings of Katsura and further adopt its characteristics in his own house design. In Aalto's house, the first floor and the second floor (of the private wing) with a staggered southern boundary were arguably derived from Katsura (Figs.2. and 3.).

However, the staggered plan of Aalto's house should not be seen simply as the architect's imitation of Japanese built form. The plan was embodied with Aalto's practical concerns of housing design sensitively responding to the site locality. The staggered boundary of Aalto's first floor plan recalled the diagonal northern edge of its site and defined the outdoor space in the South with small intimate patches (Fig.4.). This made the house strongly integrated with its surroundings and largely exposed it to the sun from the South: this was necessary especially for a house built at high latitude. Moreover, the extruding studio wing with solid white-painted brick walls at the western corner blocked the displeasing summer sun during sunset, while the roofed terrace at the eastern corner allowed the family to enjoy the amiable summer sun during the day.

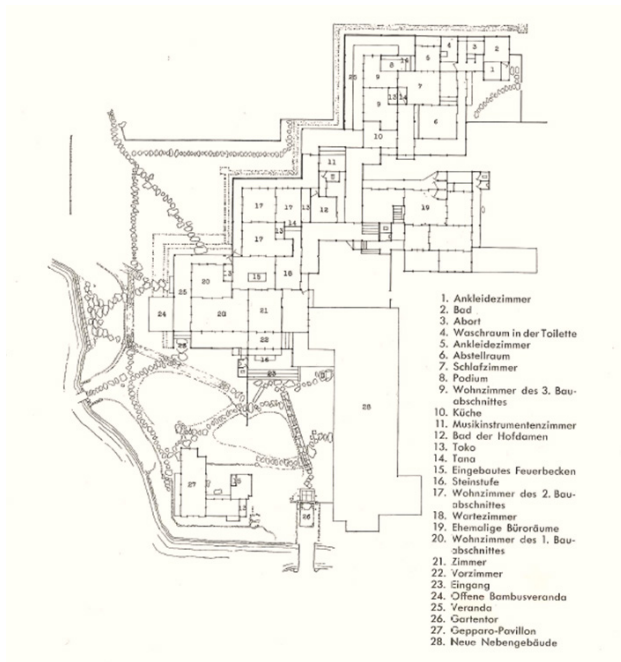


Fig.1. 'The Site Plan of Katsura Imperial Villa, Kyoto, 1589-1643'. Source: Yoshida, T 1935, *Das Japanische Wohnhaus*, Verlag Ernst Wasmuth, Berlin, p.31.

Katsura might have further inspired Aalto to apply small granite blocks as the boundary between the parterre and grass along with the staggered edge. In both cases, the stone pavement, as part of the drainage, seemed to soften the edge of the house and emphasize its intimacy with the site and landscape. The similar edge condition of Aalto's house and studio cannot be found either in his drawings of Villa Tammekann or its finalization: the grey painted plaster near the ground showing the house visually floating in the air and separated from the earth.

On the second floor of Aalto's house, the staggered southern edge of the private wing mirrored a similar layout on the first floor (Figs.2. and 3.). This feature was more vividly presented in Aalto's early design proposal which showed a single-floor studio within the studio wing. Although the studio wing was finalized

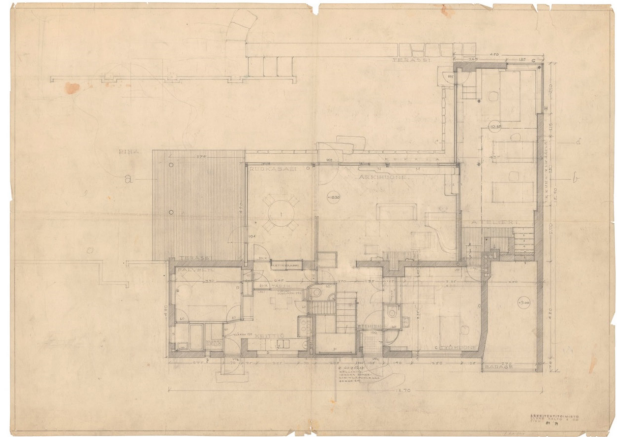


Fig.2. The Ground Floor Plan of Aalto's House and Studio. Source: Alvar Aalto Foundation, 84/71

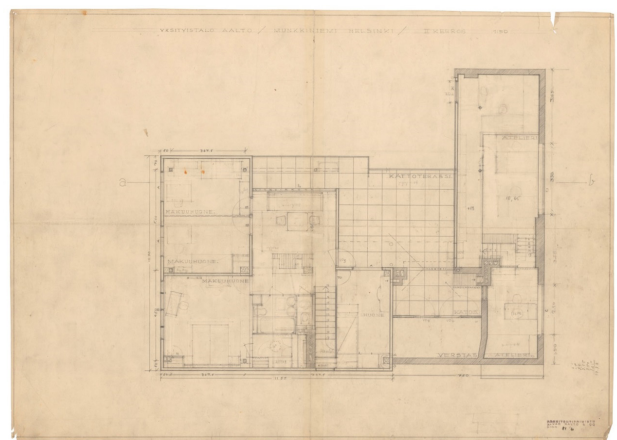


Fig.3. The Second Floor Plan of Aalto's House and Studio. Source: Alvar Aalto Foundation, 84/70

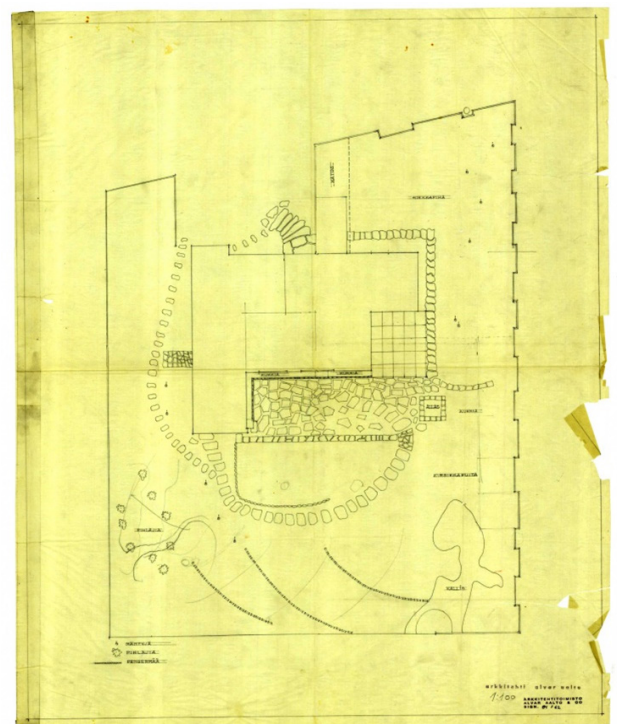


Fig.4. The Site Plan of Aalto's House and Studio. Source: Alvar Aalto Foundation, 84/62

with a double-floor height later to block the displeasing summer sun and to create a large semi-enclosed outdoor area, like Katsura, Aalto's roofed veranda on the second floor was south facing and creating a sensitive transition between outdoor area and indoor public domain. This was totally unlike the two small balconies of Villa Tammekann which were finalized with extruding cubist concrete slabs and without roof protection - the spaces were very limited and difficult for any recreational activities.

5. The Aesthetics of Japanese Houses and Gardens

Along with Yoshida's presentation of the main palace of Katsura, its tea garden and house were the two important themes (Yoshida 1935, p.12). Yoshida noted that, due to the influence of Zen Buddhism and the ideas of tea-cult, the tea houses of Katsura represented the primitive forms of vernacular buildings with an intention of emphasizing the pursued rusticity and humbleness of living. To Yoshida, this reflected the key characteristics of Japanese tea houses which played an important role in developing the aesthetics of Japanese houses and gardens (Yoshida 1935, p.141-4).

Aalto seemed to adopt the aesthetics of Japanese tea houses for altering the functionalist features of European modern architecture with three design intentions seen in his Riihitie project. To the first, Aalto would perceive Japanese tea houses as a synthesis of metaphysically uncompleted and intentionally un-unified whole. Its asymmetric layout, uneven shape and attachment of varied built forms could be represented by Aalto's house: an amalgamation of different structures, materials, treatments, claddings and coatings in one building, like the result of a long construction process of several generations 'rather than of an uncompromising aesthetic and deliberate design' (Pallasmaa 2003, p.80); the in-situ reinforced concrete for the foundations and basement walls, the loadbearing brick walls on the first floor, the lightweight wood structures with steel columns for the exterior walls of the recessed patios and roof terraces, the wood-framed exterior walls for the bedroom section, and so on. These were very different from the white-painted plaster on the façade of Villa Tammekann and its stylistic uniformity seen from outside.

Secondly, the perceived aesthetics of Japanese tea houses would encourage Aalto to interpret the vernacular built forms and to adopt native materials of Finland in his design. Aalto's unprocessed timber poles and the irregularity of their joins along with the southwestern and northwestern boundaries of the site could be seen as his break from the functionalist manner and its aesthetics based on the mass production of industrial products. On the second floor of Aalto's house, the eave substructure of the veranda constructed by white-painted timber trunks was reminiscent of the projecting eaves of traditional Finnish farmhouses. The unprocessed timber poles of balustrades on the balcony

further emphasized the tectonic primitivism of Aalto's house. This could be in contrast to his application of metal fences and balustrades for Villa Tammekann. These metal elements were intentionally painted with the same colours as the wooden door frames and window mullions in order to make them look like metal products – a formalism previously pursued by Aalto.

Thirdly, Aalto could perceive the details of the Japanese tea house as an architectonic combination between the traditional craftsmanship and natural forms – a fusion between human culture and Nature. This could evoke Aalto's psyche and further inspire him to plant vines in the inner court fronting the South. The vines growing on the edge of the building and climbing its elevations through the wooden sticks⁹ became the extra layer for protecting and enriching the house: in the summer, the vines grow and shade the window; and in the winter, the vines die and allow the sunlight to enter the rooms. This is very unlike Villa Tammekann in which Aalto seemed to have intentionally kept the main building volume totally clean, white and untouched by the vines which were only allowed to climb the steel frames of attached corridor and veranda.

6. Planning of Japanese Houses

In *Das Japanische Wohnhaus*, Yoshida exemplified the design of Japanese houses by presenting 16 different layouts (Yoshida 1935, pp.93-104) (Fig.5.). The house was usually planned with a long L-shaped south elevation fronting the garden. Its interior could be divided into two distinct zones: one was the served domain facing the South; and the other was the serving area facing the North. The former included the reception, living, reading and dining room. With sliding doors, these rooms were interconnected by a veranda aligned with the southern boundary of the house. While these doors were opened, the rooms could be used as a single large hall, in contrast to the clearly subdivided serving area by hinged doors. The serving area usually included the kitchen, bathroom, toilet and storeroom. These rooms were linked by an internal corridor usually leading to the entrance hall and the staircase to the upper floor.

A similar spatial composition could be found in Aalto's Riihitie project. Its south-facing studio, sitting and dining room were interconnected by a passage exactly aligned with the southern house boundary (Fig.2.). Although Aalto's originally proposed Japanese-like sliding door between his living room and studio was realized without lattice grids, the interconnection between these rooms and their flexibility were clearly in contrast to the rigidity and strong division of the north-facing serving area (Fig.6.). Aalto's serving area included a downstairs hall, secretaries' office, library, servant's room and kitchen, mainly linked by the internal corridor and hinged doors. Moreover, unlike

the angular and direct passageway in Villa Tammekann (Fig.7.), the slightly staggered internal corridor of Aalto's house and studio was carefully arranged to create more turns and sceneries of movement: exactly reflecting the studied corridors of Japanese houses (Figs.2. and 5.).

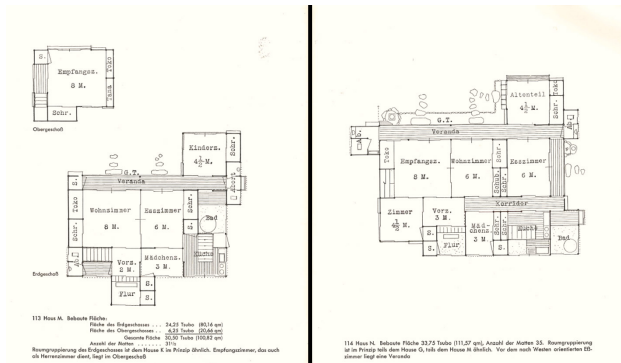


Fig.5. Illustrations Showing Two Examples of Japanese Houses with Similar Size (around 100 m²) and Planning Principles: a Long L-shaped South Elevation Fronting the Garden, and its Interior Divided into the Served Domain Facing the South and Serving Area Facing the North in *Das Japanische Wohnhaus*. Source: Yoshida, T. 1935, *Das Japanische Wohnhaus*, Verlag Ernst Wasmuth, Berlin, p.102 and 103

Someone would find a similar dualistic spatial setting inside Villa Tammekann. However, Tammekann did not have an extruding studio wing, instead, a veranda towards the South: an idea possibly received from Le Corbusier's Villa Stein.¹⁰ Moreover, the passage within the public domain was not aligned with the southern boundary of the Villa where the fireplace was placed and the solidity of walls was emphasized. In Aalto's own house, the passage was aligned with the southern edge of the house and further connected the outdoor and indoor areas with large windows. This also created a hierarchical transition of spaces seen from the open transit zone to semi-enclosed sitting area next to the fireplace (Fig.8.). This recalled the veranda and openness of Japanese houses for receiving the outdoor phenomena from inside: the large sliding doors of Japanese houses responded to the sitting position on the floor, while Aalto's large and low windows responded to the sitting position on a chair (Fig.9.).

Like Japanese houses, the staircase of Aalto's residential wing of his Riihitie project was the only connection between the first and second floors. This revealed that Aalto did not attempt to unite the floors through a two-story void — the typical modernist manner seen from Aalto's studio wing. This made the family hall and private bedrooms of the upper floor with very minimal connection to the lower floor. This created a sense of protection and secrecy (Pallasmaa 2003, p.79). This may further explain why the staircase and its void above Aalto's residential wing were much smaller than Villa Tammekann where the full height

glass window was attached to emphasize the spatial connection between the two floors and the outdoor areas. The learnt ideas from Japanese houses seemed to inspire Aalto's refusal to apply the clichéd formalism in his house design in order to initiate a much more sensitive functionalist approach.

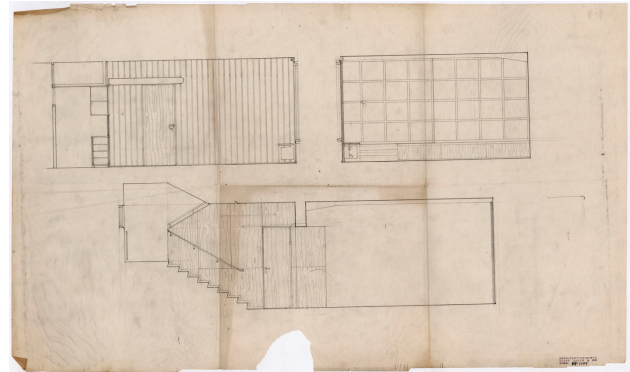


Fig.6. Aalto's Drawing of His Own House and Studio Showing the Built-in Wall-cupboards and Drawers, and the Sliding Door between Living Room and Studio. Source: Alvar Aalto Foundation, 84/1145

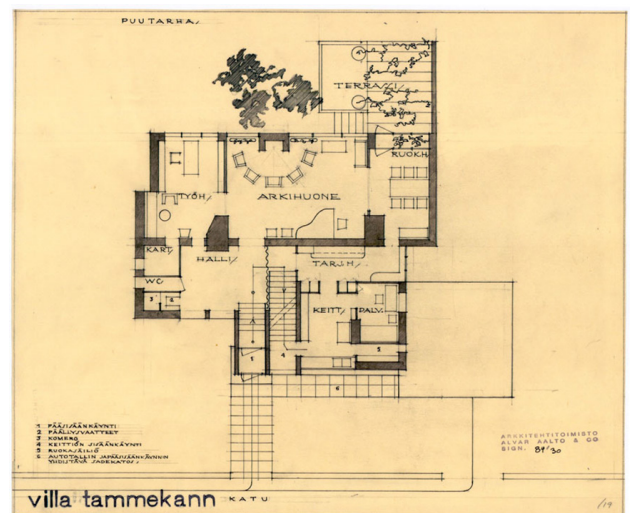


Fig.7. Aalto's Drawing of Villa Tammekann Showing its Ground Floor. Source: Alvar Aalto Foundation, 84/30

7. Interior of Japanese Houses

Through Yoshida's work, Aalto could know that *shoin* — a reading room inside a Japanese house — was originally built for the Zen Master as a living quarter at a Buddhist monastery (Yoshida 1935, pp.61-71). Later, it became a prototype for the reception room usually allocated at the southwest corner of Japanese houses with a large window (Fig.5.). With a similar position and layout, the extruding studio wing of Aalto's Riihitie project could be the architect's '*shoin*' (Fig.2.). Inside Aalto's '*shoin*', his drawing table and chair next to the corner window was reminiscent of the Zen Master's reading bay.

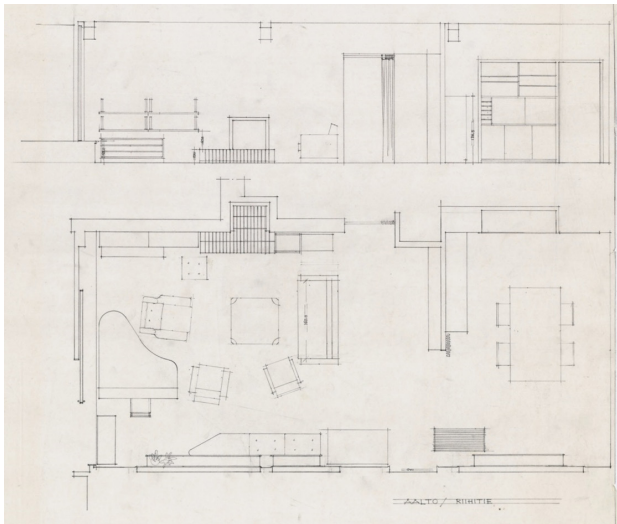


Fig.8. Aalto's Drawing of His Own House and Studio Showing a Hierarchical Transition of Spaces Seen from the Open Transit Zone to Semi-enclosed Sitting Area next to the Fireplace.
Source: Alvar Aalto Foundation, 84/1166

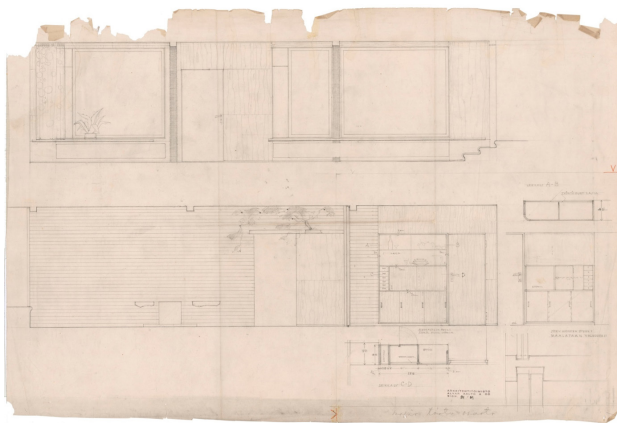


Fig.9. Aalto's Drawing of His Own House and Studio Showing the Built-in Wall-cupboards and Drawers in the Dining Area (Right) and a Japanese Inspired Bonsai Sitting Above the Sliding Door between the Living Room and Reception Room (Middle).
Source: Alvar Aalto Foundation, 84/81

To further present the interior of Japanese houses in detail, Yoshida introduced *tokonoma* (picture recess), *tokowaki* (recess with wall-shelves next to tokonoma) within a *shoin* (Yoshida 1935, pp.57-65) (Fig.10.). As a common setting in the reception room of Japanese houses, *tokonoma* and *tokowaki* served as an aesthetic principle for designing built-in cupboards, wardrobes and drawers with unpainted timber and shaped by a clear geometric composition with angular lines in Japanese houses (Yoshida 1935, pp.68-75) (Fig.11.). This would encourage Aalto to design the built-in furniture with inspired aesthetics inside his Riihitie project: a synthetic combination between building, landscape and interior design. One of the most important furniture pieces designed by Aalto could be the storage cabinet between the dining room and kitchen with drawers accessible from both

sides (Fig.9.). In fact, this important built-form analogy did not come singly. Aalto's early design for the large windows and sliding doors with lattice grids for the public domain of the residential wing could be seen as his representation of Japanese sliding doors (Fig.6.).

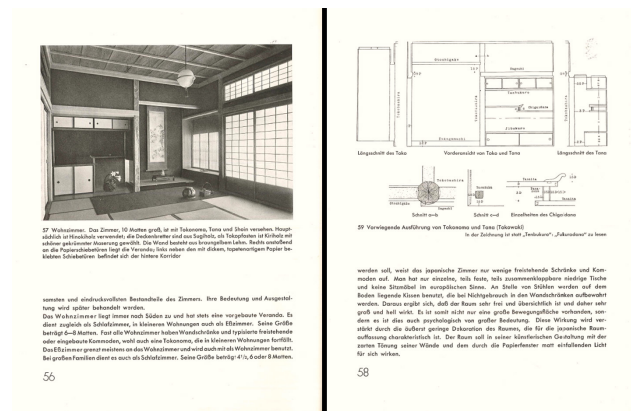


Fig.10. Illustrations Showing the Typical Living Room Equipped with *tokonoma* and *tokowaki* inside a Japanese House (Left) and the Details of *tokowaki* (Right). Source: Yoshida, T 1935, *Das Japanische Wohnhaus*, Verlag Ernst Wasmuth, Berlin, pp.56 and 58

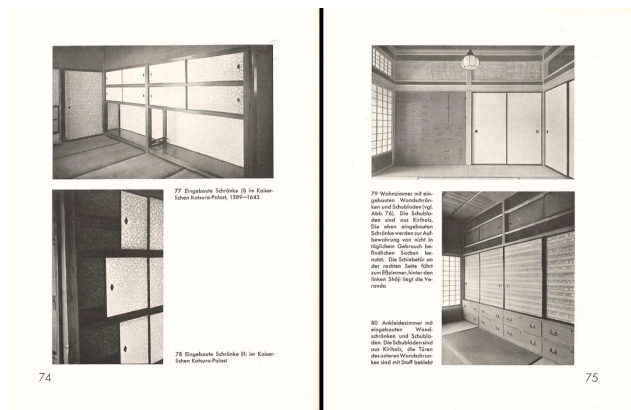


Fig.11. Illustrations Showing the Built-in Wardrobe Inside Imperial Katsura Palace (Left) and the Built-in Wardrobe and Drawers Inside the Living Room of a Japanese House (Right). Source: Tetsuro, Y 1935, *Das Japanische Wohnhaus*, Verlag Ernst Wasmuth, Berlin, pp.74 and 75

Aalto would find the corner column *tokobashira* of the *tokonoma* expressive: an element was intentionally made by an unprocessed or unpainted timber trunk (Yoshida 1935, pp.57-58) (Fig.10.). The rusticity of the *tokobashira* was presented as a counterpart to the refined wooden furnishing inside Japanese houses to evoke the primitivism detected from Japanese tea houses. This could be one of the reasons why Aalto proposed the timber boards for covering the interior walls of his own house (Fig.6.). The supposedly smooth surface and fine grain of these timber boards should have been juxtaposed with the rough wooden balustrade in the residential wing, as found in Aalto's early sketches and drawings. Although these ideas were not realized, a similar expressivity was presented

by the bast textile in the studio and the brown moleskin fabric in the dining room in the finalization of Aalto's Riihitie project.

Also seen from Aalto's early sketches and drawings, the fireplace of the hobby room with a free standing steel column at the second floor could be seen as the architect's representation of *tokobashira* (Fig.12.). Meanwhile, the architectonic formation of the *tokonoma* with an elevated platform, shelves and cupboards, and its function as a ritual recess, could be seen as the prototype of Aalto's design for the fireplace both in the studio and the family room, elaborated with brickwork and timber frame (Fig.12.). This could further explain why Aalto designed in total four fireplaces for his Riihitie project – a house only intended for accommodating five people, and his fireplaces, like *tokonoma*, served as built-in ritual altars surrounded by the sitting of staff or family members.

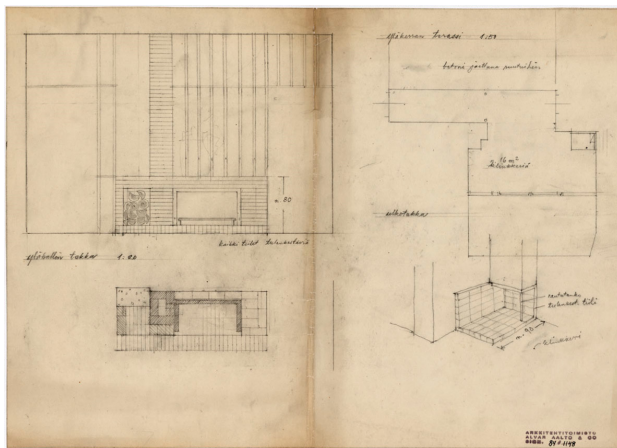


Fig.12. Aalto's Drawing of His Own House and Studio Showing the Fireplace in the Family Room on the Second Floor, Elaborated with Brickwork and Timber Frame (Left), and the Fireplace of the Hobby Room with a Free Standing Steel Column on the Second Floor (Right). Source: Alvar Aalto Foundation, 84/1148

8. Conclusion

Although Yoshida's *Das Japanische Wohnhaus* was only one of Aalto's books about Japan, it seems to play an important role in the architect's perception of Japanese houses and gardens. This could further influence Aalto's design for his own house and studio in Riihitie. Meanwhile, Aalto's writings in the 1930s and 1940s echoed Yoshida's book with many similar intentions. These intentions could serve as the ideological foundation for Aalto designing his Riihitie project - a groundbreaking experiment in his early career with many Japanese-inspired characteristics. These characteristics could closely reflect how Aalto adopted the climatic condition of the site, designed the garden, planned the building layout and furnished the house with articulated details and built-in furniture. Although many Japanese-inspired design ideas were never realized in Aalto's Riihitie project, its surviving sketches and drawings closely recorded the architect's

understanding of Japanese houses and gardens, and his translation of their features into his own architectonic idioms, built forms and details.

The significant differences between Aalto's Riihitie project and Villa Tammekann could re-confirm his learning from Japan and emphasize the changes of his design concepts and aesthetics. This could also represent the growth of Aalto's architectural philosophy: revising the house design by adopting and submitting to tradition and natural environments – an echo of Yoshida's appeal. The tradition and Nature Aalto found in Japanese houses and gardens could be the inspiration and confirmation for his extended concepts of rationalism and functionalism: humanizing the modern architecture with both the physical and psychological needs of human beings. Indeed, Yoshida's *Das Japanische Wohnhaus* did not let Aalto simply imitate the perceived Japanese built-forms, and he aimed to create his own tradition with Nature in Finland.

References

- 1) Momose, H. (1973) Japan's relations with Finland, 1919-1944, as reflect by Japanese Source Materials. *Slavic Studies*, 17, pp.1-39.
- 2) Kim, H. (2008) Tetsuro Yoshida (1894-1956) and architectural interchange between East and West. *Architectural research quarterly*, volume 12, No. 1, pp.43-57.
- 3) Pallasmaa, J. (2003) Alvar Aalto Architect, Volume 6, The Aalto House 1935-36. Helsinki: Alvar Aalto Foundation.
- 4) Schildt, G. (1998) Alvar Aalto in his own words. New York: Rizzoli.
- 5) Schildt, G. (2007) Alvar Aalto, His Life. Jyväskylä: Alvar Aalto Museum.
- 6) Yoshida, T. (1935) *Das Japanische Wohnhaus*. Berlin: Wasmuth.
- 7) Weisberg, G., Bonsdorff, A. and Selkokari, H. (2016) *Japanomania in the Nordic Countries, 1875-1918*. Helsinki: Ateneum Art Museum.

Notes

- 1 About Japanese architect Tetsuro Yoshida (1894-1956), see KIM Hyon-Sob's 'Tetsuro Yoshida (1894-1956) and architectural interchange between East and West', *Architectural research quarterly*, volume 12, No. 1, 2008, pp.43-57.
- 2 Juhani Pallasmaa pointed out the importance of this book in Aalto's career in 'Japanese influences and allusions' in *Alvar Aalto: Villa Mairea*, page 133, note 38. The author found varied editions of Yoshida's *Das Japanische Wohnhaus* surviving in Aalto's studio today.
- 3 The earliest sketches and drawings of Aalto's house could be dated back to September 1935, and there is no earlier sketch and drawing showing the initial ideas of Aalto's design surviving today.
- 4 This private house is built for August Tammekann, an Estonian professor of geography.
- 5 The book is surviving in the collection of Aalto Museum.
- 6 Interview with Juhani Pallasmaa at Helsinki, 2015.
- 7 Paul Bernoulli in conversation with Juhani Pallasmaa, 21 May, 1989, and interview with Juhani Pallasmaa at Helsinki, 2015.
- 8 In *Das Japanische Wohnhaus*, Yoshida not only introduced Japanese house but also clearly informed the climate of Japan for presenting the rationality, practicality and modernity of her traditional houses, see page 147 and 149.
- 9 The original elements are imported bamboo sticks, and there was no bamboo in Finland in the 1930s.
- 10 Aalto visited Le Corbusier's Villa Stein in the late 1920s before his design for Villa Tammekann, and its surviving sketches and drawings suggest the influence of Le Corbusier in Aalto's villa design.