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Japanese Inspirations in the Architecture of Alvar Aalto

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After the liberation from a standard Nordic classical approach to design, Alvar Aalto soon began to integrate various architectural elements with sources from different cultures. For instance, it's obvious to mention his designs of white modernist buildings like the Viipuri Library (1927-35), with a touch of Finnish tradition through the use of curved wooden surfaces and details, or later, the use of classical Italian and Greek architectural elements which were fragmented and distorted into new additive compositions. An example hereby is the amphitheatre used as negative space and the column flutings as outer and inner wall surfaces in his own studio (1954) at Munkkiniemi, Helsinki. During his entire professional life as an architect, Aalto had an intimate experience of these elements from different cultures through his extensive travels, the knowledge he gained from the various architectural cultures gave him a great possibility to introduce these in a contemporary context.

However, from 1934-35 Japanese architecture, and culture in general, became another of Aalto's professional interests, although he never visited Japan. His interest in Japanese architecture developed entirely from contact with persons and various sources, such as books and trips to a few countries, which in one way or the other provided influences from Japanese architecture. This inspiration became the foundation for works throughout the 1930s and 1940s, where elements from Japanese architecture seem evident, but integrated in a muted and less recognisable way. By the end of Aalto's career in the 1950s and 1960s, these inspirations had been completely merged with his design works, liberating them from any direct recognisable links to specific cultures.

Although it's commonly known that Aalto was inspired by Japanese architecture, which have been documented by Göran Schildt, Juhani Pallasma, and Hyon-Sob Kim, it can be difficult to identify the unique relationship between his architecture and sources of inspiration. However, there are cases where the relation is obvious such as the 'Japanese tokonoma' and tea room of Villa Mairea (1938-39). In other cases, Japanese influence was combined with other sources of inspiration, manifesting itself in the architecture of ambiguous references. Finally, one might find elements that contain the same methodological design principles at a more abstract level without direct inspirations. Hereby remains a comparative analysis between Aalto's architecture and a Japanese method or compositional

technique used as a theory that cannot be immediately verified solely as a theory. Thus, this analysis aims to move from the two extremes: the concrete and abstract comparison.

Inspiration: Conversations

One of the first impressions of Japan that Alvar Aalto had was probably through Japanese residing in Finland and friends and acquaintances who were in contact with Japan. It is known through descriptions by Göran Schildt that already in 1934, Aalto had contact with the first Japanese Ambassador of Finland, Hakotara Ichikawa and his wife Kayoko Ichikawa through G. J. Ramstedt, who was a linguist in Japanese and Finland's first Ambassador of Japan.¹ According to Kayoko Ichikawa's later descriptions, regular contact between the Ichikawa and Aalto families, as well as gift exchange, occurred in Finland from March 1933 to July 1937.² The Ichikawa family received vases from Aino Aalto. In return, the Ichikawa family gave books about Japan to the Aalto family and Alvar was given a Japanese Yukata [Kimono], which he reportedly wore at home and at his office at Riihitie in Munkkiniemi.³

From Kayoko Ichikawa's report on the relations with the Aaltos, it is apparent that their contacts primarily took place in the years before the fall of 1936-when the Aaltos moved into the house at Riihitie.⁴ From Ambassador Hakotara Ichikawa's reports in 1935 to the Ministry of Foreign Affairs in Japan, it's obvious that he considered the information regarding Japan in Finland highly limited at the time; in his reports, he explained his efforts to disseminate knowledge of Japanese culture in Finland. Timely, one must consider his contact with the Aalto family, along with Eliel Saarinen, who were considered to be the biggest designers and architects of Finland. A fact that the ambassador used strategically for personal recognition in his reports back to the Ministry of Foreign Affairs in Japan, telling about his efforts to promote Japanese culture to established Finnish cultural personalities, at a time when the Japanese politicians had highly nationalistic and expansive ambitions. In addition to G. J. Ramstedt and the Ichikawa family, Aalto regularly kept in touch with the members of the Japanese-Finnish Friendship Society.⁵ There was also a friendly connection to the Finnish Charge d'Affaires of Japan, Hugo Valvanne, who stayed in Japan from 1934 to 1937.

A second major influence for Aalto was probably through time spent with the leading Swedish architect Erik Gunnar Asplund and other prominent Swedish people at the time, like the tea master and photographer Ida Trotzig, the diplomat Folke Cronholm and the art collector Didrik Bildt, who were connected to the ethnographical museum in Stockholm, and through lectures, books and exhibitions were promoting Japanese culture. Nevertheless, there is no concrete evidence of Aalto's exchanges with them. Aalto was often in Stockholm in the mid-1930s, especially in 1934, where he participated as a member of the committee for professorial employment. In this regard, it is extremely likely that he visited Asplund's office since the two architects had a close personal relationship. In 1931, the Japanese architect Tetsuro Yoshida had met Asplund on his trip around Europe.⁶ The meeting made a big impression on Asplund, resulting in that a month later he included thoughts on the Japanese spatial concept in his lecture as a new professor at the Stockholm School of Architecture.

Maybe we in Western Europe are coming closer to the Japanese idea of the house, as a not too fixed, heavy, and permanent object. Maybe we will adopt, what has long been practised in Japan, changing our houses from one season to the next, from one inhabitant to the next, according to

*requirements. Remove the entire walls during summer for increased ventilation, just as the Japanese do.*⁷

Yoshida also remembered the meeting with Asplund at his office and his curiosity about the Japanese sliding window principle.⁸ Another great personality and connoisseur of Japanese culture at the time in Stockholm was Ida Trotzig, who, along with her husband, had lived for 30 years in Japan. Here, she studied Japanese tea cult and, in 1911 wrote a book on the subject.⁹ In 1921, she returned to Sweden and, with a small group of dedicated people, pursued the work of spreading Japanese culture around the nation through events, lectures and articles. Her most significant work from 1935 was to initiate the construction of the Japanese teahouse Zui-ki-tei as part of the ethnographic museum in Stockholm. If Aalto actually met Ida Trotzig is unknown, though her impact on the cultural life, interests and ethnographic aspects in Stockholm may very well have influenced Aalto's growing interest in Japan.

Inspiration: Literature

In addition to meetings with intellectuals, in the 1930s literature was a common medium for the dissemination of knowledge about architecture. Through his extensive network, Alvar Aalto had made contact with individuals who also donated literature on Japanese architecture and culture to him and his wife Aino. However, it is difficult to gauge what material Aalto was holding and when he got it, since there is no exact inventory of the architectural library from that time residing in the office. Moreover, one cannot determine how the literature had been studied at that time. It is hard to imagine that Aalto was any different from other architects in looking at pictures and drawings and rarely delving deeper into written material. It is very likely that Aalto was aware of Asplund's writings about the Japanese spatial concept, as previously described, but there are also other pieces of literature that might have influenced Aalto's interests in Japan.

The Japanese ambassador Hakotara Ichikawa gave a copy of the Japanese Culture pamphlet series 1-9, 1934-1936, from the Board of Tourist Industry/Japanese government railways, to Aalto.¹⁰ It was a brief series describing aspects of Japanese culture. The first pamphlet deals with 'the tea cult', while the 7th in the series was concerned with architecture. The copy in Aalto's office is of the 2nd edition from 1936, why the influence on his own house is absent. Later, the Japanese ambassador stated in his memoir of his life in Finland (Finland Zakki/ Essays on Finland) that Alvar Aalto primarily had books on the Japanese tea room, and alludes that their conversations were often focused on the topic, which could indicate that Alvar Aalto only had limited information through books about Japanese architecture in general around 1935.¹¹

When examining the current library holdings at the Alvar Aalto Archive, one could doubt that Aalto was in possession of the 1935 edition of *Das Japanische Wohnhaus* by Tetsuro Yoshida, as only the 2nd edition from 1954 exists in the archive, a key factor in explaining theories about how much of Aalto's architecture in the last part of the 1930s was actually inspired by Tetsuro Yoshida's book. According to Juhani Pallasmaa¹² and Kim,¹³ there is reasonable probability that there may be a direct inspiration from Tetsuro Yoshida's illustrations and the way Villa Mairea's tea room is designed and built, especially in the part that is based on the Japanese 'tokonoma'. Aalto also came into possession of Bruno Taut's English release of *Houses and People of Japan* from 1937, when it was given as a gift from the Finnish Charge d'Affaires of Japan, Hugo

Valvanne.¹⁴ Whether or not it even had an impact is hard to say. The most neglected book in the Aalto collection among researchers about his connection to Japanese architecture is, in my opinion, Antonin Raymond's *Architectural Detail* from 1938. The book was a personal gift from Raymond to Aalto during the New York visit in 1938,¹⁵ and is a review of architectural detail solutions concerning Raymond's own buildings, that combined Western and Japanese aesthetics to a great extent. The book's acquisition coincides with the sketching of Villa Mairea, and it is remarkable how many details of the building that were not resolved, soon were finished after his acquisition of the book and return to Finland.¹⁶

Inspiration: Study trips

Alvar Aalto travelled fiercely throughout his career, collecting many contacts and inspirations that, when it comes to the classic places and architecture, have almost been directly applied to his own architecture. Quite differently, Aalto's Japanese inspirations could not be used directly, as he never visited Japan. Particularly two sites had a significant impact on Aalto's direct and physical contact with the architecture of Japan and Japanese inspired buildings. Stockholm was previously described as a central place for Aalto in the 1930s: with the construction of the teahouse 'Zui-ki tei' by the ethnographic museum in 1935, it was possible to get a first-hand knowledge of Japanese architecture, which at the time was mainly depicted in books. It remains to be understood whether or not Aalto visited the teahouse, but it seems unlikely that he didn't, considering the cult status of the building by Scandinavian architects before, during and after World War II.¹⁷

Aino and Alvar Aalto visited the United States several times in the late 1930s. The visits were meant to introduce the furniture company Artek into the American scene, but it was also a personal extension of the Aalto family's architectural horizon. Here, Aalto had the opportunity to meet Antonin Raymond and Frank Lloyd Wright, who were prominent architects of the time and leading interpreters of Japanese architecture into the West. Aalto also visited American buildings, where there was a great connection between building and landscape, specifically focused on the American West Coast architecture that had drawn considerable inspiration from traditional Japanese architecture.¹⁸ Moreover, there was also room to visit the Japanese pavilion and garden at the Golden Gate Exposition in San Francisco in 1939, where Artek also exhibited. The connection between the pavilion and the landscape was of great interest to the Aalto family, evident in the pictures they took on that occasion.¹⁹ These visits to buildings based on Japanese principles and motives clearly must have added an extra layer to Aalto's consciousness and prepared his potential to integrate it into his contemporary architecture.

Integration

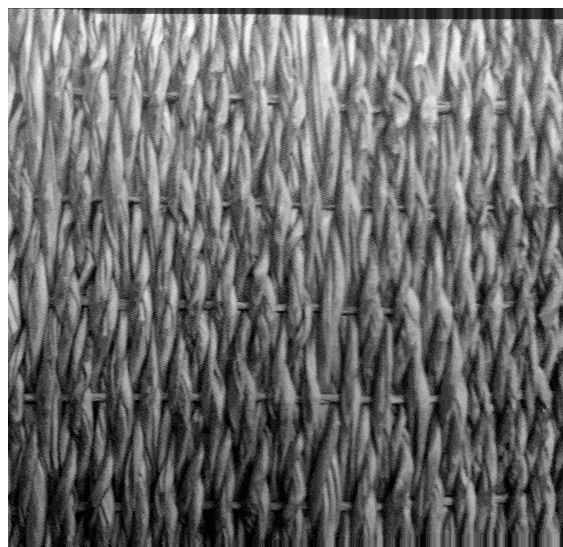
In 1931, after Gunnar Asplund's meeting with the Japanese architect Tetsuro Yoshida, the interest for Japanese details and the changing Japanese spatial concept was subsequently reflected in Asplund's speeches, articles and reviews. Asplund, therefore, in addition to having been the father figure of Scandinavian modernism, can also be given the honour of having introduced Japanese architecture in Scandinavia as a professional field of interest. However, from architectural examples, it is difficult to conclude that Japanese architecture had a radical impact on Asplund's own work. Rather, it was Alvar Aalto who was the first Scandinavian architect to adopt Japanese elements and the Japanese spatial conception through his built architecture. It seems that Asplund was a very important figure among other sources to initiate this process, although it's hard to

prove. Elements inspired by Japanese architecture emerge slowly in Aalto's architecture as individual parts or motives in taking up a more general idea, and through the 1930s and 1940s, a bigger influence in relation to the whole. It must be said that Japanese design inspiration never became too intrusive, direct or dominant.

Integration: Detail

In his speech to the Swedish Craft Association in 1935, ²⁰ Aalto firmly stated that one can learn a lot from the Japanese attention to the use of material and details. When moving around in a space, Aalto evokes the sensation of Japanese architecture by adding details to combinations of materials. The highly publicised tea room in the Villa Mairea is also a composition of materials and individual elements in its materiality that express something Asian, but the tea shelf in the 'tokonoma', that might be a direct inspiration from Tetsuro Yoshida's book, ²¹ guiding the viewer to consider the space to be Japanese. Without the shelf, the spatial expression could seem to imitate English tea pavilions in the late 19th century with an imperial oriental touch.

Another detail that is often emphasised as something very Japanese is the connection of wooden poles for column bundles or more advanced joint elements. Hereby we have the evolution in the processing of the wood accents and sticks in the exhibition 'PUU' in Paris' World's Fair (1937), wooden elements and joints in the facade of the Terraced houses in Kauttua (1939), and to Villa Mairea's (1938-39) pole forest at the entrance and at the interior stairway, sketched in the beginning as a bamboo forest, and the refined wooden columns and bound joints in connection with the outer sauna. It is the apparent hand machining and joining of materials that is very similar to that found in traditional Japanese architecture, at the same time, it is also a way of designing that fits very well with traditional Finnish crafts.



Left: Aalto house Riihitie 1936, exterior. Photo by Author

Right: Aalto house Riihitie 1936, interior bast cladding. Photo by Author

Integration: Covering

A significant motif in Aalto's architecture is claddings of surfaces, including wooden linings either as continuous surfaces and gradients or slats that provide a plain, tactile surface, which often both separates and unifies spaces. In this respect, the first significant case of Aalto's method for the design of the exterior of a building was his own Home and office at Riihitie, Munkkiniemi, Helsinki (1936): one side of the building is covered with wood, while the other side is in white painted bricks. With this kind of cladding, it is possible to make a visual composition with opposites: dark-bright and hard-soft. At the same time, the wood, with its natural soft surface, reaches out towards the surrounding nature, and visually integrates with it. The resemblance to Japanese lattice wooden windows and walls is apparent, but at the same time, the surface refers back to a regional building style.

Inside the house/office, different wall claddings create a peculiar tactile atmosphere. Best known is the wall in the studio, with a bast cladding, which for many people seems to give a Japanese atmosphere, although the material is paradoxically imported from South America.

Integration: Compound shapes and ambivalence

Additive compound forms are a feature that Aalto often uses in his architecture, as well as the contradictions between the curved line and a straight line in either the section or the plan. It is a complementary thinking that resembles the Japanese way of using straight and curved structural members in buildings. It is uncertain whether Aalto has intentionally applied this Japanese complementary thinking, although the principles of using curved and straight lines in the layout of an individual building or building complex are fundamentally the same. Similarly, there are parallels between the way the Japanese teahouse often uses the clash between two incomparable building volumes. This was a compositional method, which could be studied in the principles of building a Japanese tea house, where the tea ceremony room/house had one architectural style and the tea master's room/house had another, and these two brought together in one compound composition created an ambiguous sense of form and space, which was shown in photographs in Tetsuro Yoshida's *Das Japanische Wohnhaus*. A similar way of mixing two forms into a compound can be traced in several of Aalto's architectural works. Most distinctive for this way of making a compound out of two different forms can be found in the meeting between the courtyard corridor and the town hall tower of the SÄYNÄTSALO Town Hall (1949-52). Instead of separating the horizontal movement from the vertical one, Aalto decided to let the two forms and movements meet and interact in an ambiguous clash, which is quite different from a more classical approach.



Left: Japanese tea house. From 'Das Japanische Wohnmhaus' by Tetsuro Yoshida 1935.
 Right: Säynätsalo town hall, selection. Photo by author.

Integration: The expansion of space and infinity

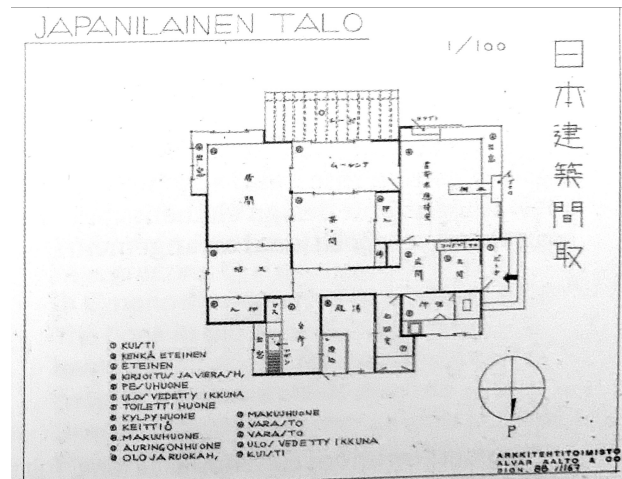
One of the elements that Asplund highlighted in his article following the conversations with Yoshida in 1931 was the functional variation or changeability using movable sash windows or doors (shoji/shoin). It is noteworthy that one of the first things one recognises as something Japanese when visiting Aalto's house and studio at Riihitie is the large sliding door that acts as a large moving piece of spatial furniture between the living room and the studio, connecting and separating the space dramatically. The materiality of lightwood on the door immediately gives an impression of something Scandinavian. It is precisely this cultural duality that provides the design with a fascinating tension. Similarly, tensions between Scandinavian and Japanese architecture are found in the stairwell between the house's lower and upper floor, where one will find the vertical open slats/bars separating the stair edge from the hallway.²² A spatial division that provides the space with an ambiguity where one cannot discern whether or not the stair is part of the hall or an element in and of itself.

The way of expanding space - as Asplund already had praised in 1931 to be a quality in traditional Japanese architecture - can be seen in the interior of Savoy Restaurant (1937) in Helsinki with open ribs connecting wall and ceiling: thus, the outer space of the corridor is 'borrowed' into the restaurant space. To emphasise this spatial flux, it was arranged some movable screens to divide the tables in the restaurant, like in Japanese traditional architecture. A similar way of borrowing spaces from the neighbouring rooms can be observed between the library and the living room in Villa Mairea.²³ The walls are designed like they could look like foldable screens with space between the 'screen' and the ceiling, which gives this feeling of spatial continuity. In Villa Mairea, it is quite obvious there has been a task to implement this feeling of infinity using visual transparency penetrating through spaces and construction/space dividers. An abstract sketch of a bamboo forest in Japan was first used as an inspirational source in the work, with the staircase in the living room. But also a plan drawing of a Japanese house is found in the Aalto Archives among the sketches for Villa Mairea. It is clear that this plan has been part in the discussion of the arrangement of

the house, so there would be a more fluent flow through the building. The Japanese plan drawing is of a house from around 1900, with a mixture of Japanese and Western spatial concepts. On the drawing, it is announced in Japanese: 'Japanese spatial principal'. It is quite surprising that on the same drawing, the translation into Finnish is 'Japanese house'.

Integration: The empty space and the freestanding element

A characteristic of many projects, buildings and complexes designed by Aalto is that they have been conceived around an empty space. This design principle of first creating the empty site and then defining the emptiness by framing it by the building is quite an anti European way of thinking space and form, but has a parallel to the architecture of Frank Lloyd Wright, and corresponds well to the Japanese concept of creating 'emptiness' (mu) out of positive form. An example of this design principle is again the Säynätsalo Town Hall, with its empty courtyard surrounded by what Göran Schildt called a Japanese monastery, with white walls and dark outer window columns.²⁴ Even a large complex as the Jyväskylä University is structured this way, with buildings along the periphery of the site and the sports ground occupying the complex as empty space in the centre. Another feature of Aalto's architecture is the sensitive connection between landscape and building, which also can be found in traditional Japanese architecture, where landscape contours play an important role. Aalto's little summer residence, the Experimental House (1952-53) in Muuratsalo, is often referred to as a Greek temple in the Finnish forest. It might as well be called a small Japanese monastery, which slowly reveals its form as one approaches the building, and the small and added volumes behind on exposed point constructions plays with the contours of the sloping landscape. From the inner court of the building, the white walls create a 'framed view' out to the beautiful landscape and 'borrow' the scenery into the courtyard.



Left: Savoy Restaurant 1937. Ribs between wall and ceiling. Photo by Author
Right: Drawing of Japanese House plan. From Aalto Archive (nr 88/1167)

Liberation

In Aalto's works from the late 1950s and onwards, the different design methods were more integrated in the design: instead of an explosion of ideas and inspirations, which was characteristic of his earlier projects, it seems like the fragmented architectural features merge into an architecture with a higher unity among different design aspects used in the projects.

The inspirations from different cultures are unified in an original modern architecture with a great integrity and no direct recognisable links, which also include Japanese architecture.

The Cultural Centre in Wolfsburg (1958-62) is an example of how material, surface and form in the interior are unified in a way that fits especially for the building and does not refer to anything outside, or the Nordic House in Reykjavik (1962-68), where the wooden ribs on the façade and in the interior are used in a material, colour and scale combination with other elements of the building, obtaining a specific character. In both examples, the use of canvas in the town hall in Wolfsburg and the use of wooden ribs in the Nordic House in Reykjavik, would in Alvar Aalto's earlier architecture, have given a hint of something 'Japanese', but in these cases, that is architecture designed during the later years of his career, it fits naturally in as unified elements with the buildings.

The purpose of this analysis has been to investigate the inspiration that Alvar Aalto got from Japanese architecture from various sources. It is also an examination of how architectural elements can form comparative parallels between traditional Japanese architecture and the architecture designed by Aalto, and point out some basic principles through selected examples, but not an attempt to list or point out all the places one can detect Japanese inspiration into Aalto's architecture. Aalto's Japanese inspiration has not restricted to a few recognizable design elements but must be seen in a wider range, which also involves spatial and compositional arrangements.

Leif Høgfældt Hansen has currently a lifelong, full-time position as Associate Professor at Aarhus School of Architecture in Denmark, where he teaches architectural theory and history from a cultural point of view. During the 1990s, Leif worked at Harris ja Kjisik architectural office in Helsinki and stayed in Japan on a two-year Monbusho research grant at the Historical Department of Kyoto University,. He has lectured on Scandinavian architecture, including the architecture of Alvar Aalto, throughout America, Asia, and Europe. Is a member of the board of the Danish DOCOMOMO committee (2015)

1

Aalto through Japanese eyes, Göran Schildt, *Alvar Aalto: The decisive years* (New York: Rizzoli, 1986): 107-114

2

Hakotara Ichikawa, Kayoko Ichikawa, Finland Zakki [essays on Finland] (Tokyo, 1940).

3

Juhani Pallasmaa, 'Villa Mairea - Fusion of Utopia and Tradition', Yukio Futagawa ed., GA: *Alvar Aalto: Villa Mairea, Noormarkku, Finland, 1937-1939* (Tokyo: A.D.A. Edita, 1985).

4

Momose Hiroshi, *Japan relations with Finland 1919- as reflected by Japanese source material*, (Hokkaido University, 1973). Mr. Momose's description of Ichikawa's reports to Japan of available Finnish books and knowledge about Japan. Especially interesting is a plain-spoken report written in the middle of the 1930s by Charge d'Affaires Ichikawa, in which he described the Finns's images of

Japan. According to this report: 'The Finns have generally entertained good feelings towards Japan since the Russo-Japanese War. Frankly speaking, however, this mainly originates from old people and military men who are acquainted with the state of affairs at the time. Even those people have little knowledge about Japan itself: As books dealing with Japan available in the conventional Finnish bookstores, he could only give the Finnish translation of Kanzo Uchimura's *How I became a Christian*, some booklets by Finnish Lutheran missionaries working in Japan, an anachronistic work 'Japani' by written by E. Aro and the Finnish translation of an anti-Japanese novel by John Paris. Only recently, Ichikawa continues, have there been published a friendly introduction of Japan by Captain V. Brummer, and a guidebook of Japan by S. Salminen, wife of the former Finnish Vice-Consulate General in Shanghai. Among others, are the Finnish translations of Toyohiko Kagawa's *Shisen o Koete* (Crossing the Death-line) and *Hitotsubu no Mugi* (One Grain), which people here rather tend to see as a description of how the defects of Japanese society have been remedied under the influence of Christianity. Therefore, demands for those works can scarcely be taken as a manifestation of the Finnish people's respect for our country. Judging from the indifference of the general public toward the Finland-Japan Society, as well as the fact that the bookstore Akateeminen Kirjakauppa had recorded no sale of books related to Japan, '(friendly) attitude of the Finnish people must be based on factual knowledge, but Superficial and simply emotional impressions.' Finnish people lacked eagerness to study Japan, from JMFA, A. 6. O.O.6-10, Finland. Second Secretary Ichikawa, 5-12- 1935, No. 91, to Foreign Minister Hirota. See also. JMFA, A. 6.O. O. 1-11, Finland, Vol. 2, Second Secretary Ichikawa, 27-1-1935, No.7, to Foreign: Minister Hirota. Ichikawa also reports, however, that he succeeded to some extent, in his propaganda activity to give Finns more knowledge about Japan.

5

Japanese-Finnish Friendship Society formed 1932 in Tokyo, today Finland-Japan Culture and Friendship Society

6

Kim Hyon-Sob, Tetsuro Yoshida (1894-1956) and architectural interchange between East and West, *Arch history*, vol. 8, (2008): 56.

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Var arkitektoniska Rumsuppfattning Byggmästaren (1931), translated in *Architectural Research Quarterly*, no. 4. (2000).

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Yoshida Tetsuro, *Kaigai-no-Tabi*, ed. By Satoru Mukai, Tokyo: Tsushin-Kenchiku - Kenkyusho (1980) translated by Kim Hyon-Sob for the article: Kim Hyon-Sob, Tetsuro Yoshida (1894-1956) and architectural interchange between East and West, *Arch history*, vol. 8, (2008): 56.

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Ida Trotzig, *Cha-no-yu -japanernas te-ceremoni* (Stockholm: Etnografiska museet 1985, first edition 1911).

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Japanese Culture pamphlet series 1934-36, Board of tourist industry/ Japanese government railways: Tea cult of Japan -Yasunosuke Fukukita 1, 1934: Japanese noh plays -Toyoichiro Nogami 2, 1934: Japanese cherry - Manabu Miyoshi 3, 1934; Japanese gardens - Matsunosuke tatsui 4. 1934; Hiroshige and Japanese land-scapes - Yone Noguchi 5. 1934: Japanese Drama - B.T.I. 6, 1935: Japanese architecture - Hideto Kishida - tourist library 7, 2ed. copyright 1936; What is Shinto - Genchi Kato 8, 1935: Castles in Japan -N. Oruid/ M. Toba 9, copyright 1935.

11

Göran Schildt, G. (1986) Alvar Aalto: The Decisive Years, op. cit.: 10.

12

Juhani Palasmaa, *Villa Mairea - Fu-Sion of Utopia and Tradition*, op. cit.

13 Kim, Hyon-Sob, '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, Korea], 15.3 (2006): 43-57.

14

Hugo Valvanne gave Bruno Taut's book *Houses and People of Japan* from 1937 to Aalto with a postcard with a Christmas greeting of the family dressed in kimono sitting on tatami mats.

15

The book in the Aalto library has following dedication: To Alvar AALTO; New York 1938 Antonin Raymond.

16

Researching the sketching process of Villa Mairea, it is obvious there is a striking coincidence between Aalto's return from America with 'Architectural detail' of 1938 and the rapid completion of sketches about similar solutions. The

book is not necessarily the only thing that has promoted such a process, but may well have been a decisive factor. The outline of Villa Mairea was studied at Alvar Aalto Archive in winter 2013 by the author.

17

Especially among Danish architects, Jørn Utzon included, the teahouse 'Zui-ki tei' had a decisive impact on their professional development.

18

'Aalto's private photo archive from trips around the United States show that Aalto had a great interest in buildings with materiality, such as Rockefeller's private house and buildings with a strong correlation between house and landscape, such as H. Hamilton Harriksen's similar Case Study house in Pasadena.

19

Aalto's private photo archive, Alvar Aalto Archive, Helsinki.

20

Alvar Aalto, Rationalism and Man, lecture at Swedish Craft Society, Stockholm, 9 May 1935.

21

Tetsuro Yoshida, *Das Japanische Wohnhaus* (1935).

22

The first sketches of the stairs were with plain handrails, but the design process changed it to vertical bars/slats.

No drawings indicate that the sliding door between the studio of the house and the living room has been thought of as anything but a sliding door.

23

Drawings from Alvar Aalto Archive, Helsinki. Given to the author in 2012.

24

'Aalto through Japanese Eyes', op. cit.: 107-114.