

Japanese Module Interpreted

De-quotations of Re-quotations on Katsura Villa

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Abstract

The Katsura Imperial Villa in Kyoto was a significant source of inspiration for the early modernists, which makes it an important precedent even for contemporary architects. Nonetheless, the meanings and interpretations of its modular and spatial ordering have varied greatly. Bruno Taut, who is considered the 'discoverer' of Katsura Villa, stated in Nippon Seen through European Eyes (1934) that "standard measures are strictly applied." Similarly, in Katsura: Tradition and Creation in Japanese Architecture (1960) Walter Gropius claimed that in the modular coordination "the rooms were laid out on a multiple of a standard mat, the tatami." The latter view has been repeated over again in so many publications that it is often seen as a 'fact'. Yet, in The Japanese House: A Tradition for Contemporary Architecture (1964) Heinrich Engel pointed out that "it is important to note that the tatami has never, not even fictitiously, functioned as a module of any kind." In spite of this, however, numerous analyses of Japanese architecture still regard the tatami mat as a standardised module of Japanese residential architecture, whereas little attention has been paid to the primary modular methods based on column distance, or ken, also ma which is another reading of the same ideogram, nor to other discrepancies. In turn, referring to Teiji Itoh's study on Japanese kiwari modular method, Kenzo Tange maintained in the 1960 book on Katsura that contrary to some interpretations "the distribution of the pillars shows no evidence of subservience to the formalistic rules of kiwari." Arata Isozaki agreed to a great extent, but offered postmodern analyses based on complexity of expression in which various methods are combined. As he also discussed the role of literary allusions and quotations in the design, this paper examines these interpretations of the Katsura Villa.

A Mechanism of Quotation

Due to the widely differing views on the spatial ordering of traditional Japanese architecture in general, and modularity of the Katsura Rikyū Detached Palace in Kyoto, in particular (referred to in this paper as Katsura Villa), we focus on quotations referring to these varying interpretations. There are numerous definitions of an architectural module, Latin *modulus* for ‘little measure,’ which in this paper is broadly understood as a standardized or variable unit that determines other dimensions of a building. Many modular concepts have been applied to Japanese buildings, such as the *ken* (‘column distance’) and the size of a *tatami* mat, which are the primary methods in Japanese houses, as well as the *kiwari* (‘wood dividing’) module, which is predominantly that of Buddhist temple structures, including the *shoin-zukuri* type abbots’ living quarters. As the Katsura Villa is an imperial retreat, its *shoin* buildings are obviously far from typical Japanese houses – although it was the basis for the perception of Japanese architecture in the ‘West’. The Villa cannot be interpreted from a singular perspective either, since in it we find several methods. This is at least partly because it was built in three main stages, starting with the Old Shoin (Ko-shoin) around 1615, followed by the Central Shoin (Chū-shoin), and completed with the New Palace (Shin-goten) by 1663.¹

Since Taut published his remarks on Japanese architecture in the 1930s, Katsura Villa has been regarded as the quintessential Japanese building and garden compound. Countless other studies have been published since. The views of the Villa, however, have changed quite considerably over the years. Many new facts have also been revealed since Taut first visited Katsura Villa in May 1933, when escaping from Nazi Germany brought him residency in Japan for over three years.² We now know that the Villa and its teahouses were not actually designed by the renowned tea master Kobori Enshū (1579-1647), a view commonly held in the early 20th century, even though Taut mentioned that “some scholars question his [Kobori Enshū’s] co-operation, despite the fact that tradition connects his name with it.”² Isozaki argued that “his obsessional belief that Katsura had been ‘designed’ by Enshū [...] needs to be read in light of political brief confronting pre-war Japanese modernism.”³ Isozaki further explained that this is a question of ‘Enshū taste’, or *Enshū-gonomi*, not the actual authorship of a design:

Taut’s misinterpretation may be traced to the Japanese verb *konomaseru* and its derivative *konomi*. The former used to include the meaning ‘to make or to design,’ while the latter was equivalent to: ‘made by or designed by.’ Yet this was only approximate, since the locution means ‘in the taste of’ or ‘in the style of.’ Taut must have taken the term literally as indicative of authorship at a time in Japan when the new concept of architecture was already becoming acclimated.⁴

Consequently, Yatsuka pointed out that words like *fu* and *yoh* or *yō* appeared only with Westernisation. Although usually translated as ‘style’, “none of these words precisely corresponds with the Western notion of style” according to Yatsuka. He emphasised that before the notion of style of artworks and buildings, they had “names and labels for the schools [...] associated with specific families.”⁵ In relation to the ‘style’ of Katsura Villa, Isozaki other translations of *Enshū-gonomi* as ‘the soul of Enshū’ or ‘of Enshū’ which “means that, by imagining and understanding what Enshū had in mind (his *design*), we can determine the form or style Enshū himself would have conceived.” Isozaki goes on to state that hence “it is perfectly correct to say that Enshū was not the author of Katsura Villa. But it is also correct to say that the *konomi* – the ‘system’ and methods that may be discerned – was indeed Enshū’s.” Relevant to the theme of this paper, he further elaborated that “*konomi* itself involves a mechanism of quotation”⁶ with regard to reproduction of cultural products.

Another interpretive paradigm on Katsura Villa that has changed over the years is its relationship to the other great tea master, Sen no Rikyū. He developed the rustic type of tea ceremony and architecture, referred to as *wabi*, in which simplicity and pastoral expression became the focus of *sukiya-zukuri* architecture. This includes *sōan* type tearooms, which were inspired by the thatched

farmhouses and poverty in the countryside (*sōan* literally means ‘thatched hut’).⁸ However, Isozaki pointed out that there is a distinctive difference between *Rikyū-gonomi* and *Enshū-gonomi*, suggesting that Katsura’s architectural expression was a result of a “shift from *wabi* (simplicity and poverty) to *kirei-sabi* (gorgeous simplicity).”⁷ What should be noted here is that, according to Isozaki, the Katsura Villa includes a certain contradiction with “orthodox *shoin* style versus unorthodox *sukiya* style.” Furthermore, the dynamism of diagonal compositions, such as the so-called flying geese layout of the *shoin* buildings at Katsura, show that “what Enshū and later tea masters sought to create, in contrast, was a nonhomogeneous, non-synthetic space where a plurality of forces pull at one another.”⁸

The plurality of meanings regarding Katsura Villa, is also evident in its modular ordering. In one of the most influential books on the subject, Walter Gropius stated that in the modular coordination “the rooms were laid out on a multiple of a standard mat, the *tatami* (about 3’x6’).”⁹ Engel, on the other hand, stated that “it is important to note that the *tatami* has never, not even fictitiously, functioned as a module of any kind in the Japanese house, as is most frequently assumed.”¹⁰ Yet, many Western studies on Japanese architecture still regard the *tatami* mat as the module of Japanese residential architecture. Itoh, in turn, gave more nuanced Japanese interpretations arguing that “there are two different systems of measurement, that of the pillar, and that of the straw mat, or *tatami*”¹¹ and in another instance pointed out that only the Kyoto area *tatami* (*kyo-ma-datami*) “became the standard of *sukiya* construction.”¹²

Since the 1980s we have witnessed postmodernist interpretations, emphasising contradictions and complexities of the Katsura Villa, which will be discussed below in relation to the modernist views. As stated by Isozaki: “Katsura remains profoundly embedded in complexity – in terms of cultural genealogy, architectural style, political influence and class-determined relationships [...] Such is Katsura’s innate ambiguity.”¹³ Hence, this paper analyses the many ways the Katsura Villa has been interpreted, including literary references, providing pluralistic readings of this building compound that has been such a fundamental source of inspiration for many architects world-wide. As space does not allow discussion on the teahouses, nor the garden design of Katsura, we continue the examination with the *shoin-zukuri* palace only.



Figure 1. Katsura Villa’s *shoin-zukuri* buildings from left to right: Shin-goten, Chū-shoin and Ko-shoin, in the diagonal zigzag “flying geese” layout. (Photo by the author.)

Modular vs. Proportional Meanings

Without delving into the Japanese modular methods at length, it is necessary to briefly clarify its main principles. Like so many features in Japanese culture, the elementary module of Japanese

architecture originates in the mainland Asia and was depicted by the Chinese ideogram *jian* (間). Among other connotations, the word means 'column distance' and laid the foundation of East Asian modular coordination with the span between posts as the basic unit. The Chinese ideogram *jian* has many Japanese readings, such as *aida*, *ai*, and *kan*, but most notably for this paper it refers to a structural unit as *ken* and to a spatial concept as *ma*. In addition to depicting linear meaning of 'column distance,' 'bay,' or 'opening,' and volumetric connotations as 'room' or 'space', the ideogram has meanings such as 'time' and 'interval', while this space-time concept depicts 'flow of time' (*jikan*) as well.¹⁶ Additionally, Nitschke has proposed the translation 'place' for *ma* in the context of 'sense of place' (*genius loci*) and pointed out that the latter "also incorporates a recognition of the activities which 'take place' in a particular space."¹⁴

Of the two modular methods that were systemised during the Edo period (1600-1868), the *kyō-ma* method is based on standardised *tatami* and variable column distances, or the *ken*, whereas the other, the *inaka-ma* method, is based on a standardized *ken*, but includes variable *tatami* sizes. The former method emerged with the popularity of *tatami* mats, which resulted in a standardized *tatami* size of 6.3 by 3.15 *shaku*, determined by the most usual room width of 2 *ken* of 13 *shaku* and the depth of the wall with the structural frame of 0.4 by 0.4 *shaku* timber members (1 *shaku* is approximately 1 foot, or 30.5 cm). However, in rooms of different widths, the standardized *tatami* dimensions led into various distances between the posts and the dimensions of *shōji* and *fusuma* screens between them. In other words, this system was far from standardized due to the slightly varying column distances. The *inaka-ma* method did not have these disadvantages – at least not from the perspective of the modernists with a goal of standardizing prefabricated structural elements – because it was strictly based on the standardized centre-to-centre column distance of 6 *shaku* and its division into a half *ken*, or 3 *shaku*. Despite this, the standardized *ken*, which also meant standardized dimensions of the *shōji* and *fusuma* screens, did lead into various dimensions of *tatami* mats depending on the number of mats in a room.¹⁵ These disparities, on the other hand, are so minor that it is understandable why some modernist observers overlooked the distinction between different modular methods.

The modular methods based on the *ken* had, nevertheless, many advantages in terms of structural and spatial ordering. For instance, due to the interrelationship of horizontal and vertical measurements, the Japanese floor plans (*ezu-ita*, literally 'plan board' after the wooden boards on which they were drawn) rarely included any measurements. When the carpenters knew which system to use, the 'rules' of the system 'automatically' predetermined the measurements. One reason for the difficulty of interpreting these rules is that they were professional 'secrets' handed down orally from one generation to the next; in other words, they were associated with specific carpenter families to which Yatsuka refers above. Fortunately, some principles were written down in manuals, known among some other terms as *hidensho*, or 'secret hereditary writings', which has left us with general knowledge of them.¹⁶ According to Coaldrake:

These proportions, or *kiwari* ('wood dividing'), were applied automatically, and in many cases subconsciously, by the builder in accordance with custom. Systems of proportions differed according to period, region and individual workshop but [...] the primary module was the span of the post-and-lintel bay, the *ken*. [...] The *tatami* mat became a second important module of design in the sixteenth and seventeenth centuries.¹⁷

Engel elaborated the evolution as follows:

With this the *ken* terminated a rather complicated development: transmutation and differentiation from varying column distance to two different but exact measurements – to aesthetic module in the one case and to official length unit in the other; dissolution of the original meaning of the *ken* as actual column distance; and, finally, emergence of two

essentially different design methods, one of which even nullified the role of the *ken* as absolute measurement.¹⁸

Modernist vs. Postmodernist Meanings

As indicated above, none of the Japanese modular methods were standardized in the modernist sense of the word, which was not a problem, and perhaps not even a goal, in a building tradition relying on handcrafts. Nonetheless, Taut stated that “standard measures are strictly applied,”¹⁹ while Gropius contended that Japanese tradition provides “perfect solutions” for modern architecture: “complete flexibility of movable exterior and interior walls, changeability and multi-use of spaces, modular coordination of all the building parts, and prefabrication.”²⁰ Accordingly, the seemingly rational coordination of Japanese architecture was interpreted by the early modernists as an expression of the structural system which corresponded to the modernist idea of ‘honest architecture.’ In these analyses, Katsura’s buildings were seen as abstract, Mondrianesque compositions and were interpreted as series of exposed vertical and horizontal members which framed the rectangular, plastered wall planes and openings with the *fusuma* or *shōji* sliding screens; a framework in which the construction system, members and methods are genuinely expressed. Indeed, Taut stated revealingly that: “In Katsura I found in an ancient building the absolute proof of my theory, which I regarded as valid base for modern architecture.”²¹

Although Taut is considered the ‘discoverer’ of Katsura Villa due to his *Houses and People of Japan*, published in 1937, his earlier short pamphlet *Fundamentals of Japanese Architecture*, published in 1936, might have been more influential in terms of allocating his interpretations of Katsura. It is a record of his talk delivered on October 30, 1936, to a group of Japanese scholars in the lecture series organized by Kokusai Bunka Shinkokai (The Society of International Cultural Relations).²² In this talk, Taut contemplated the impact of tradition on modernism by contrasting what he considered true Japanese architecture, seen in Ise Shrines and Katsura Villa, and “non-Japanese degeneration”, apparent especially in the heavily ornamented structures of the shogunal mausoleums in Nikko. Taut associated the growing totalitarianism and historicism in Europe in the 1930s with that of the Tokugawa shogunate in Edo Japan, referring to the Nikko structures as “bad art, executed at the order of the dictator” and summarised his argument by stating that “Japan’s architectural arts could not rise higher than Katsura, nor sink lower than Nikko.”²³

In contrast to Gropius’ interpretations of the spatial coordination in traditional Japanese architecture in reference to standardised *tatami* as the module, in the same 1960 book on Katsura, Tange looked at the column distances. He maintained that the *kiwari* measurements, which were commonly used in aristocratic residences since the Muromachi period (1335-1573), were not applied to the Katsura Villa. Instead he stated that “the distribution of the pillars show no evidence of subservience to the formalistic rules of *kiwari*.” Tange also noted that “the columns measure only about four *sun* by four *sun*” (0.4 by 0.4 *shaku*), which is the size of timber members in the structural frame of commoners’ houses discussed above in the context of *kyo-ma* and *inaka-ma* systems, but much less than in the typical *shoin* buildings of the early Edo period (1600-1868). In this context, Tange referred to Itoh’s study, according to which *shoin-zukuri* is based on the *kiwari* system with centre-to-centre span between the posts, whereas in *sukiya-zukuri* the module is the open space between columns.²⁴ Isozaki, too, mentioned that unlike the *shoin-zukuri*, based on the *kiwari* proportional system, Katsura is partly a representative of *sukiya-zukuri* “characterized by the basic module of length between the posts in the clear”, though combined with “center-to-center system”²⁵ in the older parts of the palace, meaning that the Villa is a combination of all the aforementioned modular methods. This is to say that Katsura Villa is neither a *shoin*, nor a *sukiya* type building as such. It implies, rather, that it is ‘both-and’ in postmodernist terminology.

In modernist discourse, Tange said of the prehistoric periods of Japanese history, the Jōmon and the Yayoi eras: “Since the Katsura Palace was not built in accordance with the *kiwari* method, it cannot be

regarded as a purely aristocratic building” and argued that at the time “when Katsura Palace was built [...] the two traditions” led to dynamic union of the “vital energy of the lower classes” of Jōmon and “the cultural formalism of the upper class” of Yayoi. Therefore, he believed “that the energy of the common people will in the future act as a strong force directing Japanese tradition into new creative channels.”²⁶ According to Isozaki, Tange “downplays an aristocratic Katsura and discovers instead an image of Katsura that belongs to the masses.”²⁷ In other words, Tange seemed to imply that the Katsura Detached Imperial Palace somehow – and quite paradoxically – positioned itself as a precedent for a new ‘democratic architecture’, as opposed to the imperial *teikan* style of the early 20th century.



Figure 2. Interior of the Shōiken teahouse which inspired Taut and others by its “modernism”. (Photo by the author.)

The modernist views of Taut, Gropius, and Tange have been re-published numerous times, and once again in *Katsura Imperial Villa* (2005), added with newer analyses, comprising one by Isozaki, who stated that “Katsura as a discourse became an almost mythographical entity”.²⁸ Isozaki has reiterated many issues, first discussed in *Katsura Villa: Space and Form*, published in 1983, where he sheds light into the political and social context of the early 20th century Japan. He also suggests that in interpreting Katsura’s meanings one must take into account the pre-WWII Japanese situation in which there was a ‘clash of styles’ between the nationalistic *teikan-yō*, which was historicism promoting “Japanese taste”, contrasting it with modernism, supported by a group of young progressive architects. The latter, among them architects who invited Taut to Japan, “sought to mobilize International Style modernism in resistance to the nationalist tendency” and “believed that modernism in architecture might replace the elevational eclecticism of the *teikan* style.”²⁹ However, Isozaki pointed out that due to their desire to analyse the Villa solely in terms of abstract space and form, the authors excluded many features of Katsura, those that did not meet the modernist agenda, such as the many ornamental motifs and imperial style roofs (*teikan yoshiki*). As one example, he mentioned that in “the 1960 collection of photographs of the Katsura palace, the roofs of the *shoin* complex were intentionally omitted.”³⁰ Kurokawa, too, pointed out this modernist tendency of overlooking the many decorative, less purist features of Katsura.³¹

In addition to the aforementioned publications, the rather recent *Katsura: picturing modernism in Japanese architecture/ photographs by Ishimoto Yasuhiro* (2010), is particularly interesting because it portrays the same images used by Gropius and Tange. In this most recent book with Ishimoto’s photographs, the author quoted him as saying that “Tange had his own agenda for the 1960 publication” due to which he “cropped [my photographs] right and left.”³² This publication is an elucidating source on Tange’s role in the tightly cropped images portraying Katsura as abstract, black-and-white compositions of orthogonal lines and planes, rather than a building with gabled-and-hipped

roofs and ornamental details, since it features Ishimoto's original photographs and Tange's comments on tracing paper with cropping instructions. This is just one example of how the structural and modular order was understood in a modernist interpretation as a rational expression of 'honest' architecture.

There are different views of the 'style' of the Katsura Villa as well. Most notably, is Isozaki's postmodernist reading of the Villa as a representative of Enshū's 'Way of Tea', in contrast to the orthodox Rikyū School. He stated that: "As in Enshū tea ceremony, kitsch will also find its place."³³ This is to say that instead of the purism of the *Rikyū-gonomi*, focusing on the authenticity of 'real thing' (*honmono*), such as honest expression of the structural system, the *Enshū-gonomi* embraces the vigour of expression, the kitsch (*ikamono*).³⁴ Regarding the latter, the many meanings of spatial coordination – or lack of a single system – of Katsura's *shoin-zukuri* palace buildings described above can be seen as indications of the mechanism of quotation in which cultural products embrace reproduction in a somewhat similar way than in the ironic historicism of international postmodern architecture, or in the many eclectic revival styles of Western architectural tradition. Isozaki's framework of interpretations, conversely, has been criticised, among others by Coaldrake because "it subsumes traditional Japanese architecture in a Western matrix of spatial analysis devised only in this century."³⁵

The many literary allusions, especially those to *The Tale of Genji* after which much of the Villa was modelled, also represent the relative 'freedom' of the Edo period court arts, kept alive and developed in the imperial retreats of Kyoto, as opposed to the rigid Tokugawa culture centred in Edo (today's Tokyo) and Nikko. The activities that took 'place' in Katsura Villa, referring to Nitschke's interpretation of *ma* above, further underline the significance of user interaction with the design in terms of its meaning: As recitation of poetry in Japanese court culture was part of enjoying a garden from the buildings, pavilions, teahouses, boats on the pond, or moon viewing platforms, Isozaki claimed that the design "made the whole space a complex tissue of quotations."³⁶ Again, and relevant to the topic of this conference, literary references and quotations reflected the meanings in the design of Katsura Villa. For instance, the moon viewing platform of the Old Shoin and the separate Geppa-rō pavilion, meaning 'Moon Wave Turret', refer to a *waka* poem in *The Tale of Genji*, which speaks of the moon as a metaphor of something or someone desired, yet unobtainable – reminiscent of the fleeting meanings of Katsura Villa: "The water is stilled among the frozen rocks. A clear moon moves into the western sky."³⁷



Figure 3. Shōiken teahouse seen from the Geppa-rō 'Moon Wave Turret'. (Photo by the author.)

Endnotes

- ¹ Arata Isozaki, Sabu Kohso (trans.), David B. Stewart (ed.), *Japan-ness in Architecture* (Cambridge, MA, USA, London, UK, The MIT Press, 2011; first edition 2006), 247.
- ² Bruno Taut, *Houses and People of Japan* (Tokyo: Sanseido, 1937).
- ² Taut, *Houses and People of Japan*, 298.
- ³ Isozaki, *Japan-ness*, 257.
- ⁴ Isozaki, *Japan-ness*, 293.
- ⁵ Hajime Yatsuka, 'The Genealogy of Architectural Style in Modern Japan: An Introduction', *The Cornell Journal of Architecture*, 7 (2003), 63-69.
- ⁶ Isozaki, *Japan-ness*, 294-295, 305.
- ⁸ E.g., Marja Sarvimäki, *Structures, Symbols and Meanings: Chinese and Korean Influence on Japanese Architecture* (dissertation thesis), Helsinki University of Technology, Department of Architecture, Research Series 2000/18, 179-181.
- ⁷ Isozaki, *Japan-ness*, 300.
- ⁸ Isozaki, *Japan-ness*, 303.
- ⁹ Walter Gropius, 'Architecture in Japan', in Walter Gropius, Kenzo Tange and Yasuhiro Ishimoto, *Katsura: Tradition and Creation in Japanese Architecture* (New Haven: Yale University Press, 1960), 1-11.
- ¹⁰ Heinrich Engel, *The Japanese House: A Tradition for Contemporary Architecture* (Rutland/ Tokyo: Charles E. Tuttle, 1964), 40; and Heino Engel, *Measure and Construction of the Japanese House* (Rutland/ Tokyo: Charles E. Tuttle, 1985), 34.
- ¹¹ Teiji Itoh, 'The Pillar and the Mat' in *The Roots of Japanese Architecture: A Photographic Quest by Yukio Futagawa* (New York: Harper & Row), 109-142.
- ¹² Teiji Itoh, *The Elegant Japanese House: Traditional Sukiya Architecture* (New York/ Tokyo: Weatherhill).
- ¹³ Isozaki, *Japan-ness*, 271-272.
- ¹⁶ Sarvimäki, *Structures*, 168.
- ¹⁴ Günter Nitschke, *From Shinto to Ando: Studies in Architectural Anthropology in Japan* (London: Academy Editions, 1993), 49-61.
- ¹⁵ Engel, *Measure and Construction*, 18-23.
- ¹⁶ William H. Coaldrake, *The Way of the Carpenter: Tools and Japanese Architecture* (New York/ Tokyo: Weatherhill, 1990).
- ¹⁷ Coaldrake, *The Way of the Carpenter*, 24-25.
- ¹⁸ Engel, *The Japanese House*, 26.
- ¹⁹ Bruno Taut, quoted in Manfred Speidel, 'Japanese Traditional Architecture in the Face of Its Modernisation: Bruno Taut in Japan', <https://www.scribd.com/document/275861149/Japanese-Traditional-Architecture-in-the-Face-of-Its-Modernisation>.
- ²⁰ Gropius, 'Architecture in Japan', 2.
- ²¹ Taut, *Houses and People of Japan*, 291.
- ²² 'Foreword', in Bruno Taut, *Fundamentals of Japanese Architecture* (Tokyo: Kokusai Bunka Shinkokai, 1936), 4-5.
- ²³ Taut, *Fundamentals*, 18, 20.
- ²⁴ Kenzo Tange, 'Tradition and creation in Japanese architecture', in Virginia Ponciroli (ed.), *Katsura Imperial Villa* (London: Phaidon Press, 2015; first published 2005), 359-384.
- ²⁵ Arata Isozaki and Yasuhiro Ishimoto (photos), with notes by Isao Kumakura and Osamu Sato, John D. Lamb (trans.), *Katsura Villa: Space and Form* (New York: Rizzoli, 1983).
- ²⁶ Kenzo Tange, 'Tradition and Creation in Japanese Architecture', in Walter Gropius, Kenzo Tange and Yasuhiro Ishimoto, *Katsura: Tradition and Creation in Japanese Architecture* (New Haven: Yale University Press, 1960), 14-36.
- ²⁷ Isozaki, *Japan-ness*, 265.
- ²⁸ Isozaki, *Japan-ness*, 249-251.
- ²⁹ Isozaki, *Japan-ness*, 10-11.
- ³⁰ Isozaki, *Katsura Villa*, 9-10.
- ³¹ Kisho Kurokawa, *Intercultural Architecture: The Philosophy of Symbiosis* (Washington D.C.: The American Institute of Architects Press, 1991), 27.
- ³² Yasufumi Nakamori, *Katsura: picturing modernism in Japanese architecture/ photographs by Ishimoto Yasuhiro* (New Haven: Yale University Press, 2010), 7, 36.
- ³³ Isozaki, *Katsura Villa*, 12.

³⁴ Arata Isozaki, 'The diagonal strategy: Katsura as envisioned by "Enshu's taste"', in *Katsura Imperial Villa* (London and New York: Phaidon, 2011), 9-41.

³⁵ William H. Coaldrake, *Architecture and Authority in Japan* (London and New York: Routledge, 1996), 253; quoted in Sandra Kaji-O'Grady, 'Authentic Japanese architecture after Bruno Taut: the problem of eclecticism', *Fabrications*, Vol 11, No 2, September 2001, 6.

³⁶ Isozaki, *Japan-ness*, 286-290.

³⁷ Murasaki Shikibu, *The Tale of Genji* (Tokyo: Charles E. Tuttle, 1976), 359.

