

# Time in the Shell

## Temporality as a Mode of Spatiality in Japanese Architecture

Japon mimarlığı  
zamansallık  
mekânsallık  
mekân atmosferi  
estetik

**Japanese architecture**  
**temporality**  
**spatiality**  
**spatial atmosphere**  
**aesthetics**

Japon kültüründe zaman farklı bir anlayışla algılanır ve yaşanır; bu da mekânın inşası için yeni olanaklar ve varoluş kipleri meydana getirir. Zaman, döngüsel/dairesel bir zamansallık yapısı izler ve geçiciliğiyle süreksizliği, tekrarıyla da geçiciliğin kalıcılığını sağlar. Hem geçmiş hem de gelecek, dilde olduğu gibi mekânsal tasarım kültüründe de iç içe geçmiştir. Dil ve yaşam felsefesi, zamansal bir mekânsallığın inşasına yönelik mimari ve estetik yaklaşımları yansıtır. Bu mekân-zamansal atmosferlerin olgu bilimsel üreticileri, *ma*, *mu* ve *kū* gibi anahtar kavramların yanı sıra, örneğin *mono no aware*, *shakkei*, *wabi-sabi* ve *hanasuki* gibi estetik kavrayışlar aracılığıyla yankılanır. Kusurlu ve süreksiz güzelliğe duyulan sevgi, geleneksel bağlamda Japon mekân atmosferinin genidir denebilir. Bu çerçevede, makale, Japon mekân tasarımının döngüsel zaman anlayışı ile bu anlayışa bağlı estetik kavrayışlarını yansıtan üç projeyi incelemektedir: Sugimoto Hiroshi tarafından tasarlanan *Yaz Gündönümü Işık Tapınağı 100 Metrelik Galeri* ile *Kış Gündönümü Işık Tapınağı Tüneli / Işık Kuyusu* ve Ando Tadao tarafından tasarlanan *Benesse Oval Evi*. Bu üç örnek, Japon kültürünün zaman ve mekânı nasıl anladığını ve ifade ettiğini mükemmel bir şekilde göstermektedir. Bu projelerden hareketle makale, aynı zamanda, zamansallığın, mekânda var olabilmesi için zamana bir kabuk örmeyi amaçlayan Japon kültüründeki en güçlü mekânsallık kiplerinden biri olduğunu savunmaktadır.

Time is perceived and lived within a different understanding in Japanese culture, which brings new possibilities and existential modes for the construction of space. Time follows a cyclical/circular structure of temporality and ensures impermanence with its transience and the permanence of transience with its repetition. Both past and future are intertwined within the culture of spatial design as well as within the language. The language and philosophy of living reflect the architectural and aesthetic approaches for building a temporal spatiality. The phenomenological generators of these spatiotemporal atmospheres echo through the key concepts such as *ma*, *mu*, and *kū*, as well as through the aesthetic conceptions of, for example, *mono no aware*, *shakkei*, *wabi-sabi*, and *hanasuki*. It may be claimed that the love of imperfect and impermanent beauty is the gene of the Japanese spatial atmosphere in the traditional context. In this framework, this paper examines three projects of Japanese spatial design that reflect the cyclical understanding of time and the aesthetic conceptions connected to it: the *Summer Solstice Light-Worship 100-Meter Gallery* and the *Winter Solstice Light-Worship Tunnel / Light Well* designed by Sugimoto Hiroshi, and the *Benesse House Oval* designed by Ando Tadao. These three examples perfectly demonstrate the unique way in which Japanese culture understands and expresses time and space. Based on these projects, the paper also argues that temporality is one of the most powerful modes of spatiality in Japanese culture, which aims to weave a shell for time to exist in space.

**Ek, Fatma Ipek<sup>1</sup>**

<sup>1</sup>Yaşar University, Department of Architecture, Izmir, Turkey.  
<https://orcid.org/0000-0002-6783-8284>  
ipek.ek@yasar.edu.tr

Citation: Ek, F.I. (2023). "Time in the Shell" UOU scientific journal #06, 58-69.

ISSN: 2697-1518. <https://doi.org/10.14198/UOU.2023.6.07>  
This document is under a Creative Commons Attribution 4.0 International license (CC BY 4.0)

Received: 30/08/2023  
Received in revised form: 18/11/2023  
Accepted: 22/11/2023



## 1. PROLOGUE

Space and time are intertwined structures and the products of culture, like architecture. They are social constructions (Harvey, 1990), and build each other as culture weaves them together. Thus, we can sense that the perception of space and time is divergent in different cultures (Fuhrman, Boroditsky, 2010). In other words, cultures' generative nature makes space and time relative and specific for societies, and each society produces a specific spatiotemporal understanding conveyed in its language (Traugott, 1978). For instance, in English we have the word *past* to refer to the events that have already happened, however, in Japanese, we may find the word *ato* (アト) which covers both past and future events (RomajiDesu, 2023). This kind of difference in expression and language also shows us the cultural and philosophical differences in the living customs, and thus, in the built environment. That is, prevailing thinking and customs peculiar to the cultures reflect the essence of the changes through their languages (Koselleck, 2004) as well as their architectures. As reflected in the Japanese language, we may find a very different understanding of time in this culture, as an alternative rendition that provides us with a *cyclical/circular* and *impermanent* structure. This perspective towards time can be found in Nishida Kitarō's (2012) philosophy, which claims that time is *circular*. That is, time refers to an observably cyclical process like the passing and turning of seasons; it comprises a circular path of a spiral scanning an invisible and intangible temporal volume. The linear flow of time (Heine, 1985) — that we generally find in Western cultures — turns into a volumetric spatiality whose loops generate *temporality* by overlapping over and over through a multi-layered structure in Japanese understanding.

In this culture, therefore, time is constant in its temporality/ impermanence. This approach was perfectly expressed by a Western philosopher, although in another context: Heidegger's (2002, 3) time is reminiscent of a Japanese vision, which denotes that "Time is not a

thing, thus nothing which is, and yet it *remains constant in its passing away* without being something temporal like the beings in time [emphasis added]." Similarly, in Japanese understanding, temporality can be observed via the beings in time, as in nature and its elements such as "water, air, and sun" that surrounds us, defining places, and endowing it its beauty (Sambuichi, 2017). Therefore, the natural elements correspond to both temporality and spatiality, and they set a symbiotic relationship between these notions in an aesthetic (thus, multisensory) way. Japanese spaces are the perfect reflections of this understanding: similar to that of time, space is constant in its spatiality, as well. Spatial designs react to daylight/shadows, and seasons, they are built to underline the beauty of nature modestly, without competing with it (Tanizaki, 2001). As long as we have daylight, and seasons as the direct measures of time, Japanese spatiality continues to exist, evolve, and be reflected in every spatial component.

The aim of this paper, in this regard, is to examine the dominant conception of space and spatiality in Japanese understanding by referring to their conceptions of time and temporality using three examples of spatial design comprising a bi-partite time-based spatial design idea in the projects of the Summer Solstice Light-Worship 100-Meter Gallery and the Winter Solstice Light-Worship Tunnel / Light Well designed by Sugimoto Hiroshi (Nebukawa, Odawara, Kanagawa, 2017), and the Benesse House Oval designed by Tadao Ando (Naoshima, 1994–1995). The reason for choosing these projects is that they represent different modes/cycles of time in their spatial atmospheres with different sensory possibilities. Accordingly, Sugimoto's design reflects a holistic *circannual* time comprehension by inviting visitors first to follow the *circadian* effects in spaces; and Ando's design has a scenario mirroring the partial *circadian* effects to perceive and imagine the whole in the *circannual* reflections. While the first two projects provide us with a mostly ocular-centric perception of space and time, Ando's project broadens the way of having spatial

experience and sensation through a multisensory perceptual context. To narrow the scope further, I examined these projects with spatiality and temporality conceptions in Japanese design understanding by referring to the frequently used aesthetic conceptions in the Japanese language and culture to define a phenomenological background for my reading.

## 2. DIALOGUE BETWEEN TEMPORALITY AND SPATIALITY IN JAPANESE AESTHETICS

### 2.1 Spatiality and Temporality as Intertwined Conceptions

"Architecture is a spatial art, as people always say. But architecture is also a temporal art. My experience of it is not limited to a single second" states Peter Zumthor (2006, 40). This may also be defined among the fundamental aims in Japanese architecture, which has a unique way of interpreting time and temporality by combining them with space and spatiality. Although, in his above words, Zumthor (2006) refers to the time/duration of experience of a person in a space, we may find spatial architectonics representing different kinds of temporal modes in Japanese culture: a space can represent a circadian time with daylight and shadows, and it may also point out a circannual cycle by showing the passage of time via changing seasons through spaces and materials reacting to this change. One of the important and traditional reactions of spatiality to temporality in Japanese architecture is the architectural ritual called *shikinen sengū* (式年遷宮), which corresponds to a kind of "purification and initiation ceremony" (Lazarin, 2008, 98). It corresponds to the crystallized reflection of the Japanese perception of life: according to this Shintō ritual,

wooden temples are dismantled and rebuilt every twenty years (Nitschke, 1993, 10). The *impermanence* that comes with cycles and precession is also a part of personal growth and renewal philosophically, as architectural mastery is passed on to new generations through the ritual of rebuilding the temples. The cycle/movement, in which existence turns into extinction and re-existence, makes the space constant in a narrative/scenario and *spatializes* it in its very temporal context.

Therefore, the cycle of different time modes is generally evident in the materials used, the construction techniques, rhythm of spaces, and thus, in the overall design of Japanese buildings. And its traces can also be followed through the aesthetic, cultural, philosophical, and religious concepts and definitions in the language and daily life (Richards, 2018). In the Japanese understanding, time is a dynamic notion, that moves with the things around, and changes things by aging them and adding new experiential layers. For example, the revolving skies are not only a measure of temporality but also spatiality. The Buddhist concept, *shunya* (空), refers to "emptiness" and "void" in spatial regard and also means "the lack of an immutable intrinsic nature within any phenomenon," while, at the same time, it corresponds to *kū* (空) meaning "sky" in Japanese (a verb ending that indicates the action of *breathing*), which works with both spatiality and temporality by referring to "nothingness" or "silence" (Lazarin, 2008; RomajiDesu, 2023). In other words, *shunya* means that nothing exists in and of itself, but only as a collection of parts or as a relationship to other things — as we may also find in the concepts of *aidagara* (間柄) or *ningen sonzai* (人間存在) meaning "interrelation" or "social body" as defined by the Japanese philosopher Watsuji Tetsurō (1996) (also see Berque 2019, 68). Hence, *shunya* or *kū* allows us to see through the illusion of self and attachment, as an essential Buddhist practice. Similarly, the concepts of *ma* (間) and *mu* (無) refer to a lack of content in time- and space-wisely considerations: *ma* means "space," "pause," and "interval" by corresponding to

temporal (durational) or spatial (locational) perceptions, and *mu* refers to "nothing," "emptiness," and "void" (Lazarin, 2014, 134, 137). They bring specific meaning to a space by defining its very void, which has the potential to create a tension for being filled.

In Japanese culture, *ma* is often seen as an essential element of beauty and harmony (Prusinski, 2012). If we delve into this concept further, we find that it refers to the emptiness between things in spatial regard, or the sense of anticipation or suspense that can be created by a pause in temporal regard. Considering the sense of impermanence, the silence for a specific duration also demonstrates the sequences of *ma* in real life or fictions, which is there for a reason. This design tendency can be found frequently used in films and animation movies — for example, *Spirited Away* (Sen to Chihiro no Kamikakushi 千と千尋の神隠し) as the award-winning 2001 animation by Miyazaki Hayao is prominent with its important "rest" or "silence" sequences; that is, *ma* felt within the atmosphere of Chihiro's train travel with the No-Face, over waters, which was designed to make the audience feel the *moods* of the characters *emotionally* (Edwards, 2023). Similarly, *ma* refers to the space or distance that allows things to *breathe* and to be appreciated fully by experiencers, and in this sense, it also means "placemaking" (Nitschke, 1966, 152). For example, in the tea ceremony, the empty space between the utensils and the arrangement of flowers is as important as the objects themselves. In Japanese gardens, the spaces between the trees, rocks, and water are carefully designed to create a sense of harmony and beauty. All of these design treatments demonstrate the practical side of *ma* in spatial terms.

However, *ma* is a symbiotic concept integrating space and time together. Thus, Isozaki Arata (2006, 94) formulates the presence of *ma* in the Japanese language as follows:

*jikan* (時間) = time (duration) = (Greek) *chronos* (時) + *ma* (間)  
*kūkan* (空間) = space (location) =

*void* (空) + *ma* (間)

*Ji* means "time, when..., [and] during" and *kū* is "void" as stated before, while *kan* or *ma* refers to "interval, period of time, among, between, [and] inter-" (RomajiDesu, 2023). Therefore, *ma* is also the scenario or narration of a space/place/location (or the temporality of spatiality) that entails an experience for a specific duration (Lazarin, 2014, 133). *Ma* works with *mu*, which is the absence of substance or the state of being without something, and created to be replaced by another substance (Lazarin, 1997; Lazarin, 2014, 134, 137). It is a Buddhist concept that emphasizes the transient nature of all things. For instance, *mu-jou* (無常) means "uncertainty, transiency, impermanence, [and] mutability" (RomajiDesu, 2023), namely, the *lack of permanence*, and hence, can directly be related to a temporal context. Being replaced takes time and this makes temporality a part of space, too. In Japanese philosophy and religion, *mu* or "nothingness" is often seen as a state of enlightenment or the realization that everything is connected and there is no such thing as separateness, which finds a philosophical ground in the "time-encrusted Japanese aestheticism" (Oe, 1995, viii; as cited in Cox, 2013, 197). Therefore, we may claim here that Japanese aesthetics is both an output of the relationships between space and time and an input creating the reasons for having these very relationships between the related notions. Consequently, this kind of aesthetics becomes the relationships themselves and provides a constant dialogue between time and space. Thus, both the conceptions of space/time and aesthetics can nest in the common context residing in the culture and language which guarantee the maintenance of this dialogue.

### 2.2 Aesthetic Conceptions as the relationships between Space and Time

The common context of the space and time conceptions is that they are all connected to the general tendencies of aesthetic appreciation in Japanese culture. Aesthetics in Japanese design is a field tied to both spatiality and temporality, or more particularly, is bound up with a space perception that is intertwined with time to exist. Temporality or impermanence, in this respect, is spatial at the same time. One of the most fundamental aesthetic concepts integrating space and time is *mono no aware* (物の哀れ). *Mono* refers to “things,” while *aware* means “the emotional response to the evanescence of things,” or finding beauty in the impermanence of life/things, in aesthetic terms (Lazarin, 2014, 135). Therefore, it is related to the recognition of the *transient* nature of life, which evokes the feeling of appreciation for the beauty of both living and inanimate things. The concept of *mono no aware* is associated with the aesthetic understanding called *wabi-sabi* (侘寂), which, again, celebrates the beauty of imperfection and impermanence (Lazarin, 2014, 135). In *wabi-sabi*, the imperfections of an object add beauty to it, and the passing of time is seen as a natural part of the life cycle. Like *wabi-sabi*, the concept of

*mono no aware* can also be found in Japanese literature and poetry. For example, the Japanese poet Bashō Matsuō’s “frog” haiku (俳句) is a very proper example of *mono no aware*: “An old pond / and a frog jumps in / the sound of water” (“*furuike ya* [古池や] / *kawazu tobikomu* [蛙飛びこむ] / *mizu no oto* [水の音]”) (translation belongs to Record, Abdulla, 2016, 175).

In this haiku, Bashō captures the beauty of the moment, as well as the sense of impermanence that is inherent in all things. It is accompanied by a paradoxical haiga (俳画) demonstrating this event in all possible modes of time (Fig. 1). Although the frog was not illustrated after or during the jumping act, we can find the representation of water waves as if it has already done it. The frog lives in the temporal mode of spatiality, which also parallels Ando’s saying that “Architecture is intimately involved with time. Standing amid time’s continual flow, architecture simultaneously experiences the receding past and the arriving future” (Ando, 1992, 110). In this respect, the frog in Bashō’s haiga “simultaneously experiences the receding past and the arriving future” (Ando, 1992, 110).

The concept of *mono no aware* is, therefore, a reminder that all things are *impermanent*, and that beauty can be found in the most unexpected places. It is a philosophy that can help us to appreciate the present moment and to find meaning in the midst of change. The traditional Japanese ritual of tea ceremony is designed to create a sense of harmony and beauty. The ceremony is characterized by its simplicity and focus on the transient nature of things that we may explain by *mono no aware*. Similarly, the art of flower arrangement, known as *ikebana* (生け花) (RomajiDesu, 2023), captures the beauty of nature and the impermanence of life, and thus, is also based on the concept of *mono no aware*. The Japanese gardens are another expression of this aesthetic concept, which are designed to create a sense of harmony and beauty, and often feature elements that represent the transient nature of life, such as flowing water and falling leaves.

In this cyclical harmony, one should sense the imperfect and impermanent beauty to have an aesthetic experience. *Wabi-sabi* as a Japanese aesthetic concept connected to *mono no aware* can

be translated as the “aesthetic sense in Japanese art emphasizing quiet simplicity and subdued refinement,” that is, the flawed or imperfect beauty (RomajiDesu, 2023). The word *wabi* is derived from the Japanese word for “poverty” or “simplicity,” while *sabi* is derived from “rust” or “weathering” (RomajiDesu, 2023). Together, these words convey the idea of finding beauty in imperfection and impermanence, thus becoming a worldview centred on the acceptance of transience and imperfection. It is prevalent in many forms of Japanese art, as well, including pottery, painting, sculpture, and *ikebana* as well as architecture (Koren, 1994). The aesthetic understanding of *wabi-sabi*, therefore, reminds of that everything is impermanent, and one may find beauty in the most unexpected places (Juniper, 2011). It is a philosophy inviting the appreciation of beauty in simplicity to build “a perfectly imperfect life” (Kempton, 2018), which can help us to appreciate the present moment and find meaning in changes and transformations as we see in Bashō’s frog existing spatially “amid time’s continual flow” (Ando, 1992, 110).

The concept of *hanasuki* (はな咲き) also refers to a powerful aesthetic context, and it can be followed in the works of Japanese architects. It leads us to the awareness that architecture is not a static object, but a *living thing* constantly changing and evolving in time. This architecture is *spatializing* over time as well as being a *spatialized* space. This view perfectly complies with Maurice Merleau-Ponty’s (2005) conception of the “spatializing space,” which refers to an almost surreal, illusionary, or fictional place that can be imagined, for example, by M. C. Escher. In such a place, we may have a special experience of the temporal mode of spatiality, as also described neatly by Merleau-Ponty (2005, 284):

“[In a spatializing space] I am concerned with geometrical space having interchangeable dimensions, homogeneous and isotropic, and here I can at least think of a pure change of place which would leave the moving body unchanged, and consequently a pure position distinct from the situation of the object in its concrete context.”

Merleau-Ponty’s “pure change of place” is a temporal conception. The space transforms itself through the dynamic fabric of time. That is, time wraps space and its components to their very essence by converting the spatial references to temporal ones in the design of places.

Therefore, Kurokawa Kisho (2023) replaced the aesthetic concept of *wabi-sabi* with *hanasuki* and claimed that the dominant aesthetic conception in Japanese architecture and space design depends on *hanasuki*. Thus, in Kurokawa’s (2023) description, “*wabi* implies both splendour and simplicity,” but still, as such, it does not adequately express the beauty/delicacy-oriented Japanese aesthetics of space. Nevertheless, *hanasuki* corresponds to a sophisticated appreciation of the spatial atmosphere arising from more than the sum of all components of space and experiences between subject(s) and objects. It is the harmonious symbiosis of the opposite qualities. Hence, Kurokawa suggests (2023) to substitute the term *wabi-sabi*, by asserting that it is vulgarized in current usage. He believed that architecture should be dynamically evolving and reflect the changing nature of society. He saw *hanasuki* as a way of capturing this dynamism and evolution, and used it to create buildings that are both beautiful and functional. Kurokawa’s (2023) concept of *hanasuki* is, therefore, based on the idea of *impermanence*. He believed that all things are constantly changing, and architecture should reflect this change by being adapted to it and without remaining a static object (Kurokawa, 2023). Hence, Kurokawa’s buildings are often characterized by their use of open spaces and flexible structures, which allow the buildings to change and adapt over time.

In Japanese aesthetics, therefore, temporality and spatiality are two important and symbiotic conceptions always kept in constant dialogue: both of them are fed by the aesthetic cultures (such as *mono no aware*, *wabi-sabi*, and *hanasuki*) and “key verbal concepts” (Moeran, 2011, 56) (for example, *kū*, *ma*, and *mu* as briefly considered in this paper), which are difficult to translate

(Cox, 2013, 37) but important to understanding the symbiotic time and space conceptions in Japanese spatial design tradition. The Japanese people have a strong sense of place, and often find beauty in the natural world (Watanabe, 1973); they also have a deep appreciation for the passage of time and often express this through their arts, architecture, and literature (Keene, 1969). Therefore, in the following section, this valuation of time will be analysed through examples of spatiotemporal atmospheres designed by prominent Japanese architects.

### 3. PARALOGUE OF THE SPATIOTEMPORAL ATMOSPHERES

“The moon and sun are eternal travellers. Even the years wander on. A lifetime adrift in a boat or in old age leading a tired horse into the years, every day is a journey, and the journey itself is home” (Bashō, 2012, n.p.). These words are from Bashō’s (2012) haibun (俳文; a type of Japanese prose that combines haiku) titled *Narrow Road to the Interior* (*Oku-no-hosomichi 奥の細道*), written in 1694, to narrate his journey toward the northern side of Japan on foot in the spring of 1689 (Shirane, 1998). However, the journey (and work) is mainly an impressionist one, extended with haikus about Bashō’s discovery of self in the light of atmospheric experiences in the natural, architectural, cultural, and historical sites he visited (Elborough, 2022). It is recognized as one of the classic works of Japanese literature and a reference guide to understanding Japanese aesthetics residing in the symbiotic dialogue between time and space. As seen in the above words of Bashō, the terms “every day” and “home” are aligned and combined together with the word “journey” (Bashō, 2012). This suggests that “the journey itself is home,” and that we can find peace in ourselves and in nature by living in the ever-changing nature of being on a road. The *impermanence* of time is located in an *imperfect* shell, in which we may find peace in ourselves and out of our sensory and cognitive

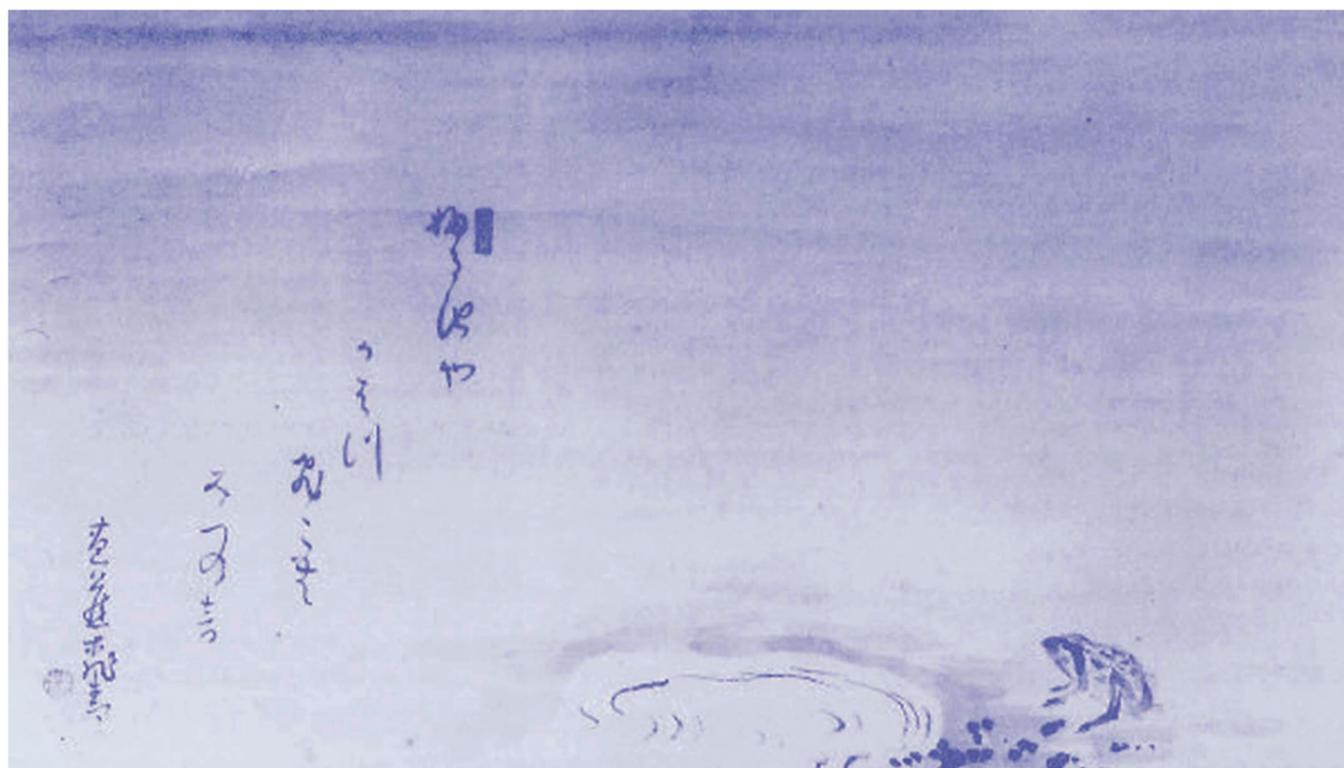


Fig. 1 - Bashō's 1686 haiga with his “Frog” haiku (Source: Arioba, 2017).

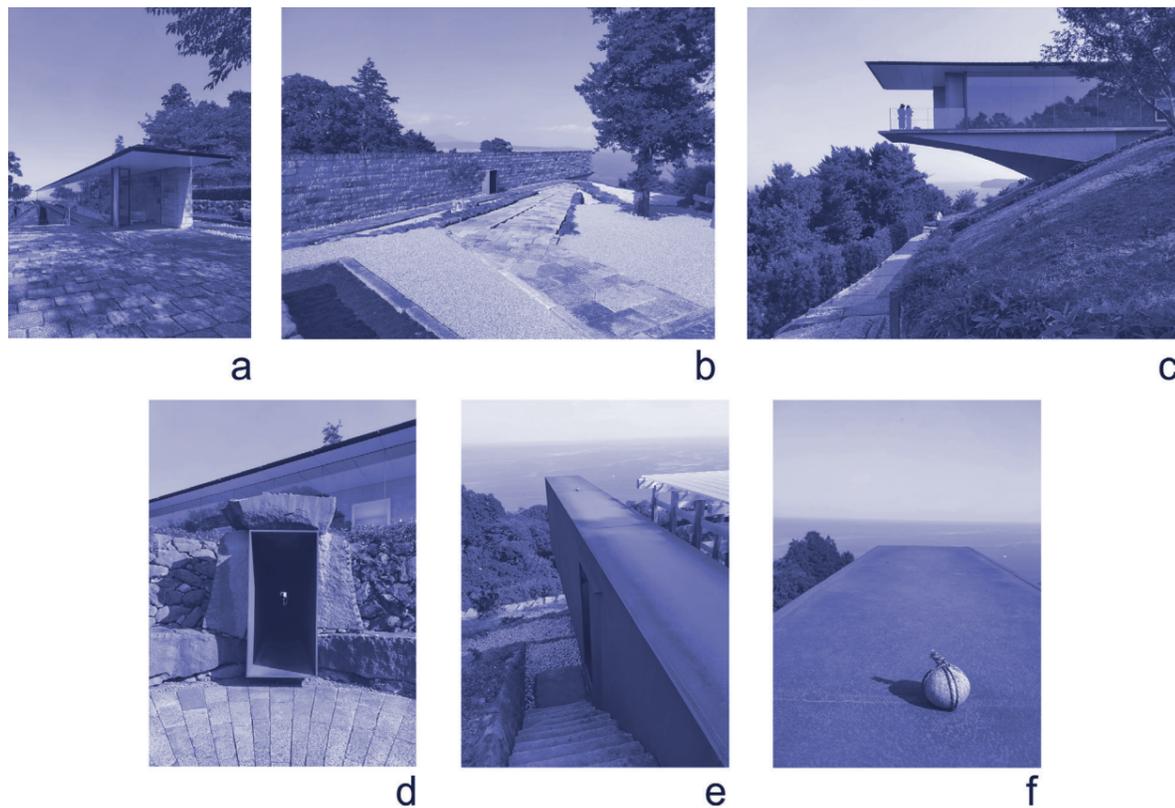


Fig. 2 - Sugimoto Hiroshi, Enoura Observatory, Kanagawa, Japan, 2017: a/b/c) outer views from the Summer Solstice Light-Worship 100-Meter Gallery; d/e/f) outer views from the Winter Solstice Light-Worship Tunnel / Light Well (Photograph credits: courtesy of Soga Haruka).

experiences of nature.

The sub-sections of the text that follow are reserved for the consecutive examinations of the projects titled Summer Solstice Light-Worship 100-Meter Gallery, and the Winter Solstice Light-Worship Tunnel / Light Well designed by Sugimoto in Enoura Observatory (Nebukawa, Odawara, Kanagawa, 2017), and Benesse House Oval (Naoshima, 1994–1995) designed by Ando, the examination considering the concepts that refer to the relationships between time and space in Japanese understanding of placemaking.

### 3.1 Time as a part of Space through the Cycle of Light in Sugimoto's Projects

The philosophy of (permanent) impermanence and (perfect) imperfections is the fundamental gene of the design of spatial atmospheres in the Japanese way of life. Temporal considerations are weaved inside the spatial ones so strongly that *time becomes the space*

*we live*. In such an understanding, we may come across different modes of time represented via these spaces as the enriching qualities of their atmospheric characters. The first distinguisher of these temporal modes is related to their covering a daily or annual flow, which refers to the relationship between parts and the whole. Therefore, time-based references may also be utilized in naming the projects. For example, the “Summer Solstice Light-Worship 100-Meter Gallery” and the “Winter Solstice Light-Worship Tunnel / Light Well” (Fig. 2), two bridge-like shells designed by Sugimoto in Enoura Observatory illustrates this kind of approach. Thus, the projects have been exposed to natural light over a period of annual time (Sugimoto, 2023). On the summer and winter solstices, the light reaches the farthest or shortest distance in the structures in order to set a mental dialogue between the visitors and time by light-based spatial changes.

Hence, in the projects, *ma* is atmospherically constructed in-between subjects (visitors) and daylight. In other words, the atmosphere of the space (*ma*) is generated by a “body” (visitor) and a

“nothing-like” or “non-corporeal” phenomenon (daylight) in the sense described by Gernot Böhme (2013, 27-29). The *body* senses the space through its qualities (such as the daylight effects) and understands that s/he is also one of those qualities *by being a part of a larger whole*. The traces of *ma* generated by a situation of phenomenological *part and whole relationship* can also be found in Nishida (2012, 41), again, who defined time as the “self-determination of the eternal *now*.” He believed that time is not a linear progression, but rather a series of interconnected moments generating in a *circle* (Nishida, 2012). Each moment is both unique and part of a larger whole as we may also find in Sugimoto's spatial designs inviting us to feel the circannual time as a whole while showing us the effects of light in the very moment that we stand in a circadian rhythm: by reminding us of the changing seasons, we realize our self-existence at the very moment. Nishida's philosophy of time complies well with Sugimoto's works since his philosophy is based on the concept of place, which is not simply a physical location, but rather a *state of being*. It is the point at

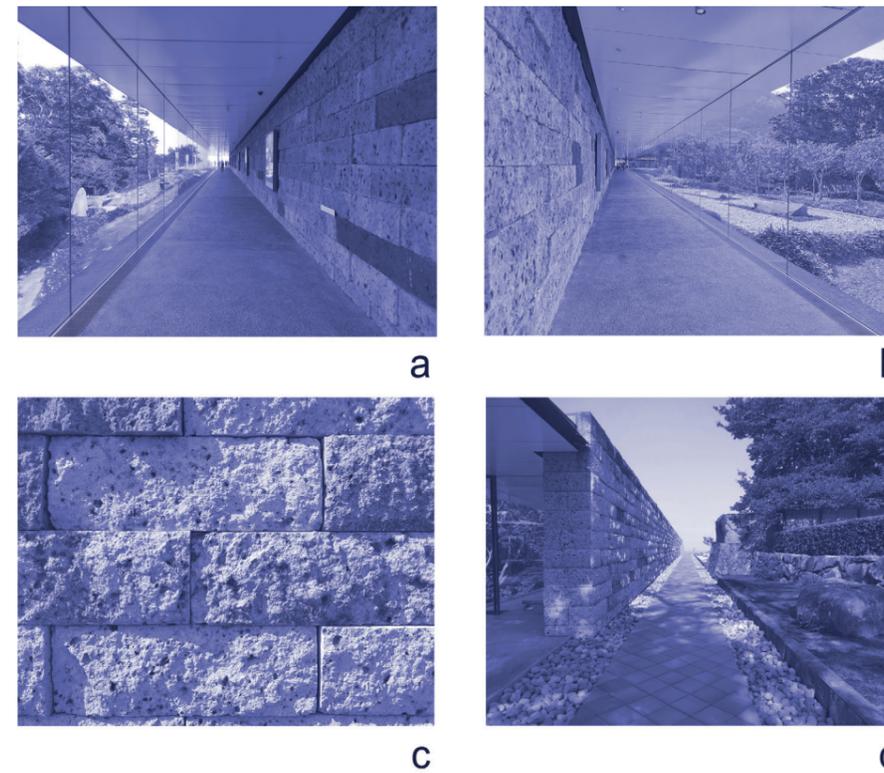


Fig. 3 - Sugimoto Hiroshi, Summer Solstice Light-Worship 100-Meter Gallery, Enoura Observatory, Kanagawa, Japan, 2017: a/b) inner views from the gallery; c) closer view of the Ōya stone structure; d) outer view from the gallery (Photograph credits: courtesy of Soga Haruka).

which subject and object meet, and where the past, present, and future are all unified in the circadian and circannual *circles*.

*Kū* (void) in Sugimoto's designs works as a shell *framing* the outer world reaching by daylight. This *framing* act is reminiscent of the philosophy of *shakkei* (借景) meaning the “borrowed scenery” (RomajiDesu, 2023). Though *shakkei* is a Japanese gardening technique that incorporates the surrounding natural landscape into the design of a garden, it is based on the idea that the garden is not an isolated space, but rather a part of the larger natural world as we may also find in both Nishida's philosophy and Sugimoto's designs. Similarly, the views of daylight that we observe in the Summer and Winter Solstice structures firstly define the spatial qualities of the places entailing a long and partially glass gallery for summer and an underground chamber with a lightwell for winter times, and then, lead us also to comprehend the temporal qualities by observing the changes in daylight cast in different distances in space. Changing daylights in their spatial extremities on solstice days are *borrowed as the*

*scenery* by the visitors to create and sense *ma*, while *mu* (transiency) may correspond to the perception of the whole annual time, or the personal past, which is destined to be transient.

If we examine the structures further, we firstly see that the longitudinal facades of the Summer Solstice Light-Worship 100-Meter Gallery were constructed out of Ōya stone (Ōya-ishi 大谷石) and glass (Fig. 3). Ōya stone is found exclusively in the town of Ōya, near Utsunomiya, Tochigi Prefecture, Japan. Therefore, also being a cultural heritage of Japan, Ōya stone plays an important role in reflecting time through the body of the structure: it is an igneous rock, created from lava and ash, and so, referring to a type of tufa with a porous surface open for oxidation (Fig. 3c) (Brownell, 2013). Only one facade is out of Ōya stone, however, while the other one is out of glass acting like a multi-directional *hashi* (橋; bridge) opening inside space to the outside scenery by passing through the green landscape (Figs. 3a and 3b) and arriving at a destination composed of the convergence of blue voids (*kū*) of sea and sky, that is, the components of the borrowed

scenery (*shakkei*). Through the glass surface, visitors can observe all kinds of light and colour effects of summertime, as the Ōya stone provides gradual shades blending with different colours of the rusty pores of time engraved on its surface (Fig. 3d). Future and past mingle during one's experience in this *hashi* structure spanning through space and time, constructing the very *ma* (scenario) with the help of *shakkei* (borrowed scenery). In this way, Ōya stone ceases to be a material and becomes a *substance* open to different possibilities of reflecting time; and the space built by it follows not a spatial program but a *spatial situation* inviting the visitors to sense the flux of time atmospherically—as İhsan Bilgin (2016) also noted for the architecture of Zumthor.

The Winter Solstice Light-Worship Tunnel / Light Well refers to the other *hashi* tunnel, another *spatial situation* 70 meters long (Fig. 4). The shell is buried this time, for which Sugimoto (2023) states that “My goal in making this complex was to reconnect people, visually and mentally, with the oldest of human memories.” While passing this rusted metal underground structure, again, one may feel the temporal cycle intertwined with the space. Thus, the *hashi* (bridge structure) has a *ma* (interval) making visitors stop at a coordinate point of the past times. At this stop, they find the Well capped and signed with a stone having chisel marks on its surface (Fig. 4c) implying that it comes from the medieval times (Sugimoto, 2023). There is an oculus like opening over the Well to provide a view from the turning *kū* (sky). The *kū* is vertically aligned (in section) with the pieces of optical glass covering the bottom of the Well, inviting visitors to observe the raindrops converging with the glass pieces on rainy days, or the sunlight diffused in the void (*ma*) and reflected by these pieces on sunny days. Therefore, the Well plays an important role in connecting visitors mentally to the daily and seasonal times that they occupy: it is Nishida's (2012, 41) “self-determination of the eternal *now*.” After this stop, visitors continue to walk in the *hashi* of time, and arrive at the *shakkei*, again, composed of the integrated blue

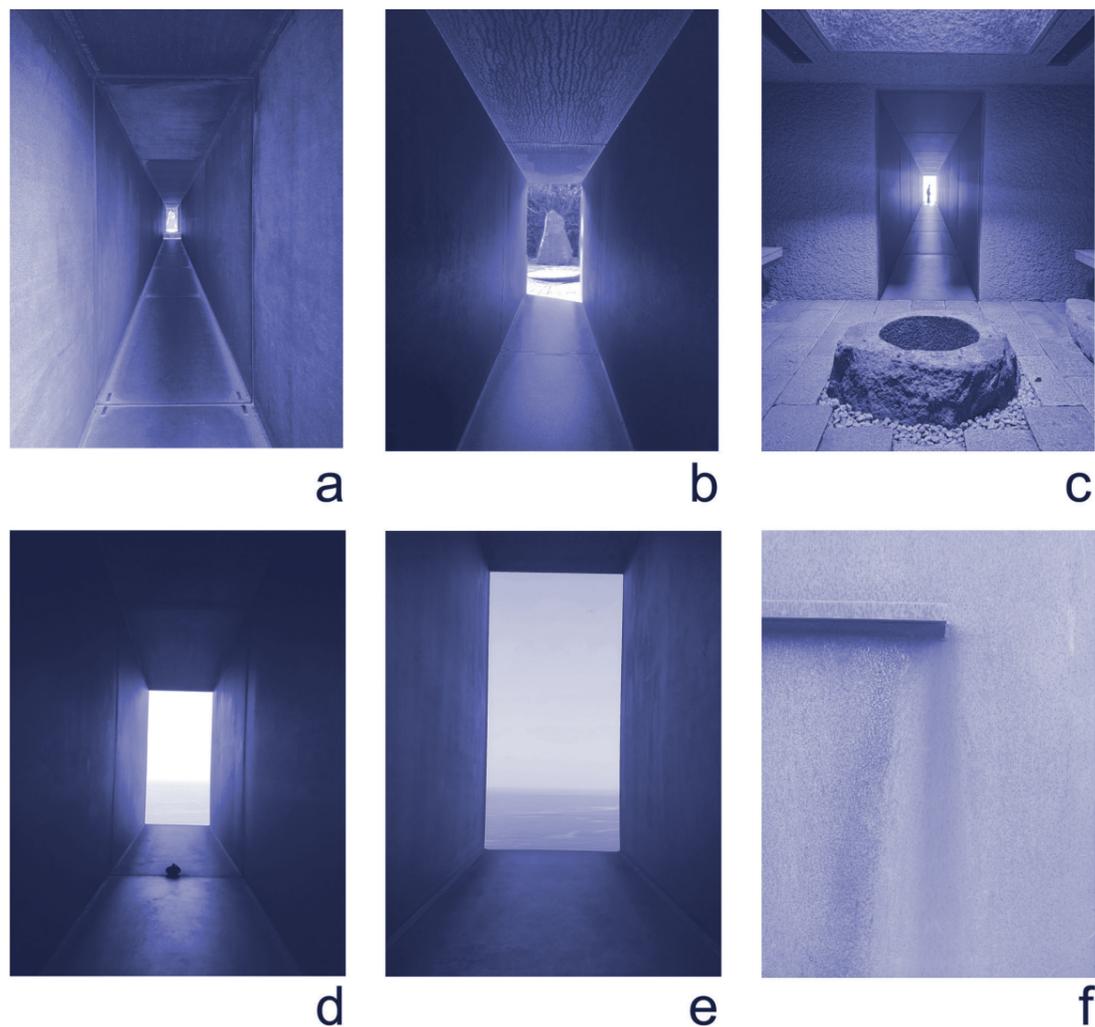


Fig. 4 - Sugimoto Hiroshi, Winter Solstice Light-Worship Tunnel / Light Well, Enoura Observatory, Kanagawa, Japan, 2017: a/b) inner view from the gallery; c) view from the Well capped and signed with a stone having chisel marks on its surface; d/e) inner views from the gallery towards the seascape; f) detail from the outer façade over the side opening to block rainwater (Photograph credits: courtesy of Soga Haruka).

voids (kū) of sea and sky (Figs. 4d and 4e).

Visitors step into the Summer Solstice and Winter Solstice shells to sense the passage of time and feel the effects of light in spatial definition. These spaces primarily appeal to the sense of sight. However, this sight is not only focused, but dominantly “peripheral and unconscious” as Juhani Pallasmaa asserted about “the immediate judgment of the character of space”: “This complex assessment also includes the dimension of time as experiencing implies duration and the experience fuses perception, memory and imagination” (Pallasmaa, 2014, 231) that we may also ascribe to the Summer and Winter Solstice projects. Thus, the solstices are already the marks of seasonal changes in time, which is also the sign of transformations

in nature. The shells and the Well frames the seasonal transformations in nature by the way of changing daylight. Therefore, although the projects primarily address the sense of sight, the atmospheric qualities may lead visitors to a synesthetic perception shifting between sight and hapticity. This is due to the changing colours, temperature, tactile and visual textures by the daylight effects, which depend on the weather and seasonal conditions. The projects live in both the circadian and circannual cycles of time and climate, and the spaces *spatialize* differently on each day by the changes in light and shade effects. Thus, *hanasuki* (or *wabi-sabi*) is provided by a *sophisticated simplicity*, established by the unique experiences of viewing the flowing time through the daylight effects as a measure of space and time; but more than that, as a way of understanding

one’s self-existence in the immensity of space and infinity of time (in the sense of Nishida).

### 3.2 Space as a part of Time through the Cycle of Seasons in Ando’s Projects

In Ando’s project, Benesse House Oval, we may, again, feel a circadian and circannual atmospheric effect making us remember that we are the spatial parts of a larger temporal whole, similar to Sugimoto’s projects (Fig. 5). It may be one of the simplistic concepts to locate a pond in the heart of a building to *integrate* the passing time into the space by *mirroring* the temporal changes in kū (sky) and the surrounding environment. The building seems to

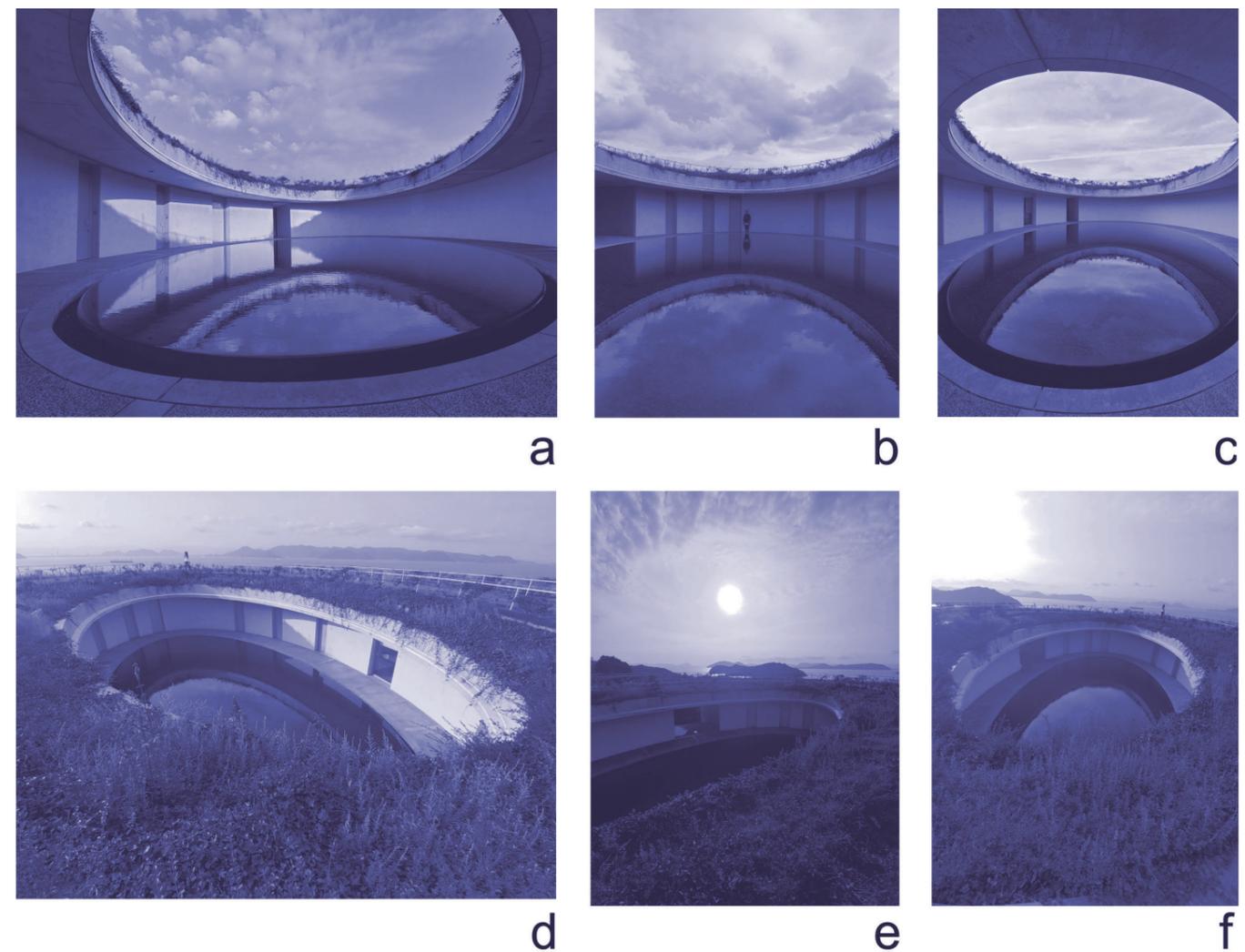


Fig. 5 - Ando Tadao, Benesse House Oval, Naoshima, Japan, 1994-1995: a/b/c) inner views from the Oval structure; d/e/f) outer views from the Oval structure (Photograph credits: courtesy of Pauline Kwok).

be designed to highlight nature and time instead of adding something new in the spatiotemporal context. Thus, Ando (1992) also states about his architecture that “If you give people nothingness, they can ponder what can be achieved from that nothingness”, this by implying *mu* (nothingness) placed in the core of his design ideas. The Benesse House Oval is a museum building inviting the visitors to experience *mu* in the form of the transient reflections of kū (sky). The scenery is borrowed (*shakkei*) with the help of this reflection provided by the pond locating at the lowered central void (kū) of the building and (trans)forming it into kūkan with *ma*. As we also observe in the project, the interaction with nature and time through spatial design (*placemaking* or *ma*) can be achieved fundamentally by *shakkei*, as again,

denoted by Ando (2021):

*“[...] buildings have importance as vessels that allow us to interact with nature. In other words, architecture’s function is to let us experience a somatic resonance with the rhythmic breathing and transitions of nature.”*

*Manifestations of this quality can be found throughout the canon of architectural heritage. One such precedent exists in the shakkei, or ‘borrowed sceneries’, of traditional Japanese gardens and structures.”*

When you reach to the central Oval you find the reflection of sky (kū) and landscape, within the context of *shakkei*, as the “nonthing-like or non-corporeal generator” of atmosphere in the sense described by Böhme (2013, 27), which is the indispensable feature of the locus since it creates the *genius loci*. That is, the *genius* of

the locus in the Oval is transient in its very nature, as again, stated in this poem by Ando (1998, 12; translated from Turkish into English by the author):

*“Genius loci never rests. It always changes its location. It is in other places.*

*So, its mode of action informs a place, gives it character. It transforms and renews a place.*

*Genius loci is a plurality, existing simultaneously in different layers.*

*It flows in the bosom of earth, air and water; just as history flows in your bosom.*

*These currents meet and mingle incessantly. [...]*

*It is not a return to the land or to history that will free the genius loci today.*

*Rather, it is our awakening of land and history.*

*As I equip architecture and geometry*

with renewed vigour, I am running them towards this goal again. [...]

I use architecture to restart the variable motion of genius loci and release it.

Filled with this movement, the vicious conflict between the universal and the regional, the historical and the contemporary, disappears."

If one comes closer and bend over the reflective pond in the project, surely one will also find the image of oneself in the transiency, by feeling mono no aware. After seeing the transiency of oneself in time as reflected in the Oval *mirror*, one may lead to the adjacent walk away from the lowered central void (kūkan) hiding the rest of the scenery, in order to view the whole, and one encounters the immense blue void (kū) of converging sea and sky. Then one may comprehend that one's transiency is a part of a larger but impermanent whole engraved in the cycles of time. Therefore, ma in Ando's design may be very well understood by following the final paragraph of the essay titled "The Thousand Gardens, Shape of Time: Japan" written by Italo Calvino (2013, 172):

"A temple near Osaka had a wonderful view over the sea. Rikyu had two hedges planted which totally hid the landscape, and near them he had a small stone pond built. Only when a visitor bent over the pond to take water in the hollow of his hands would his gaze meet the oblique gap between the two hedges, and then the vista of the boundless sea would open up before him. Rikyu's idea was probably this: bending down over the pond and seeing his own image shrunk in that narrow stretch of water, the man would consider his own smallness; then, as soon as he raised his face to drink from his hand, he would be dazzled by the immensity of the sea and would become aware that he was part of an infinite universe. [...] To the person who asked him about why he had built the hedge, Rikyu would simply quote the lines of the poet Sogi: Here, just some water / There amidst the trees / The sea! (Umi sukoschi / Niwa ni izumi no / Ko no ma ka na)."

Hanasuki (or wabi-sabi) is provided by the sophisticated simplicity in

Ando's design. This opposition (between sophistication and simplicity) in our emotional and mental conceptions and reactions should be defined in the aesthetic context of Japanese architecture. Although the words, "simplicity is the ultimate sophistication," are ascribed to a Renaissance master, Leonardo da Vinci, we can find the aesthetic traces of this expression directly in the traditional understanding of space design in Japanese culture: the aesthetic conceptions of mono no aware, shakkei, wabi-sabi, and hanasuki preserve the ancestral genes of Japanese architecture; that is, both Sugimoto's and Ando's works derive from the same ancestral genes and reflect similar features in their common temporal ground of spatiality. The simplistic and smart design touches in the projects described above are reminiscent of the spatiotemporal reality inviting us to understand the sophisticated relationships between parts and wholes as well as their circular/cyclical transiency acting as their paralogue.

## 4. EPILOGUE

The cycles of days and nights, weeks, months, and seasons (or natural light in general) are not only the temporal determiners but also the spatial definers that construct the atmospheric paralogue in Japanese architecture. Time becomes the fundamental generator of the spatial atmosphere in this approach. It sets the rules in spatial regard and makes spaces exist in the flux of impermanence. Thus, spaces anchor themselves in language and nest in culture in order to attain a kind of permanence that never changes in the context of constant change. Impermanence becomes permanent, and the spatiality becomes a cultural reflection oscillating in the temporality of existence. Therefore, the Japanese understanding of temporality and spatiality can be seen as a way of embracing impermanence and change, which, in turn, creates the aesthetic shell for time to mark its progress circularly in the spatial void of existence.

From this perspective, the aim of this paper was to explore the

unique way by which Japanese culture and architecture conceive temporality and spatiality as the two intertwined concepts that create the rhythm of ways of living and building in a constant dialogue. The cyclical or circular conception of time in this culture is reflected in the Japanese language, which has a number of key concepts and aesthetic conceptions that refer to the impermanence and transiency of time that connect this thought to the spatiality. Thus, the concepts of ma and mu, for example, are often used in the Japanese understanding of spatial design to create a sense of harmony and beauty supported by the symbiotic relationships between the dualities of time and space. Moreover, the Japanese language and culture are full of words and concepts that refer also to the natural world, and Japanese architecture and spatiality often incorporate natural materials and elements. The aesthetic conceptions referring to turning skies, borrowed landscapes, transiency in nature, and sophisticated simplicity are the traces to follow the features of the *shell* of time in this culture.

Hence the architectural cases chosen for the phenomenological examination of this philosophy reflect the key concepts and aesthetic conceptions of temporality intertwined with spatiality. Time attains a multi-sensory, and even a para-sensory mode in these projects by shaping a narrative character for the spatial experiences of the atmospheres. The architects, Sugimoto and Ando, use different techniques to create a sense of temporality and spatiality in the examined projects, which also share a common goal of creating spaces that are both beautiful and harmonious in their relationships with nature (space/scape) and time. This aesthetic symbiosis or hanasuki finds a room in a gaze toward nature and its perfect imperfectness opens to temporal changes. Therefore, the Japanese understanding of temporality and spatiality can also be seen as a way of connecting to and living in nature. While the Western perspective of time progressing on a linear path needs a wake up call to turn back to

nature in order to integrate with it, this has never been the case for the Japanese understanding of living to which *nature itself is home* (as Bashō's *journey*)—which changes and turns with the temporal cycles of it.

The Japanese understanding of time and space can offer us a new way of thinking about the aesthetic conceptions that we find and/or apply in our architecture. In a world that is increasingly dominated by the linear ways of progression and the material, the Japanese perspective can offer us a reminder of the importance of conceiving and living in the cyclical renewals and the non-material in terms of the construction of the genius loci incorporating the genius temporum. The Japanese understandings of temporality and spatiality can be valuable resources for architects and designers to relook at their own architectural cultures to find the design genii in the shells of history or traditions. In this way, contemporary architecture can be freed from the burden of providing *aesthetics* to buildings only by using smart materials and following complex spatial programs and can discover how to utilize *substances* and create *spatial situations* that invite their inhabitants to have temporal experiences in spatial narratives.

## BIBLIOGRAPHY

ANDO, Tadao. *Beyond Horizons in Architecture*. In: Exhibition Catalogue. New York: The Museum of Modern Art, 1992, p. 110.

ANDO, Tadao. Genius Loci. In: Pamir, H. (ed.). *ANY Seçmeler*. Ankara: Mimarlar Derneği, 1998, pp.12-14.

ANDO, Tadao. Tadao Ando: "Confronting nature". In: *Domus Guest Editor*, 2021 [accessed: June 3, 2023]. Available at: <https://www.domusweb.it/en/speciali/guest-editor/tadao-ando/2021/04/03/tadao-ando-confronting-nature.html>

ARIOBA, Oruç, ed. and trans. *Başo: Kelebek Düşleri*. Istanbul: Metis, 2017.

BASHŌ, Matsuo. *Narrow Road to the Interior*. Trans. Sam Hamill. Boulder: Shambhala, 2012. Available at: <https://terebeess.hu/english/haiku/hami.pdf>

BERQUE, Augustin. *Poetics of the Earth: Natural History and Human History*. Routledge Explorations in Environmental Studies. New York: Routledge, 2019, p. 68.

BILGIN, İhsan. *Mimarın soluğu: Peter Zumthor mimarlığı üzerine denemeler*. Metis, 2016.

BÖHME, Gernot. Atmosphere as Mindful Physical Presence in Space. In: *OASE Journal*

for Architecture. 2013, volume 91, issue 21, pp.21-32.

BROWNELL, Blaine. *Material strategies: innovative applications in architecture*. New York: Princeton Architectural P, 2013.

CALVINO, Italo. The Thousand Gardens, Shape of Time: Japan. In: *Collection of Sand*. Boston, New York: Mariner Books, Houghton Mifflin Harcourt, 2013, pp.169-172.

COX, Rupert. *The Zen arts: An anthropological study of the culture of aesthetic form in Japan*. New York: Routledge, 2013.

EDWARDS, Shanee. Hayao Miyazaki Says 'Ma' is an Essential Storytelling Tool. In: *ScreenCraft* [accessed: July 26, 2023]. Available at: <https://screencraft.org/blog/hayao-miyazaki-says-ma-is-an-essential-storytelling-tool/>

ELBOROUGH, Travis. *The Writer's Journey: In the Footsteps of the Literary Greats*. London: Journeys of Note, 2022.

FUHRMAN, Orly, Lera BORODITSKY. Cross-cultural differences in mental representations of time: Evidence from an implicit nonlinguistic task. In: *Cognitive science*. 2010, volume 34, issue 8, pp.1430-1451.

HARVEY, David. Between space and time: reflections on the geographical imagination. In: *Annals of the association of American geographers*. 1990, volume 80, issue 3, pp.418-434.

HEIDEGGER, Martin. *On time and being*. Chicago and London: U of Chicago P, 2002.

HEINE, Steven. *Existential and Ontological Dimensions of Time in Heidegger and Dogen: Dialogues in South Asian Languages*. New York: State U of New York P, 1985.

ISOZAKI, Arata. Ma (Interstice) and Rubble. In: *Japan-ness in Architecture*. Cambridge, Mass.: MIT, 2006, pp.81-100.

JUNIPER, Andrew. *Wabi sabi: The Japanese art of impermanence*. Tokyo: Tuttle, 2011.

KEENE, Donald. Japanese aesthetics. In: *Philosophy East and West*. 1969, volume 19, issue 3, pp.293-306.

KEMPTON, Beth. *Wabi Sabi: Japanese wisdom for a perfectly imperfect life*. London: Hachette UK, 2018.

KOSELLECK, Reinhart. *Futures past: on the semantics of historical time*. New York: Columbia UP, 2004.

KOREN, Leonard. *Wabi-sabi for artists, designers, poets & philosophers*. Berkeley: Stone Bridge P, 1994.

KUROKAWA, Kisho. Hanasuki: The Aesthetic of Symbiosis. The Philosophy of Symbiosis [accessed: August 01, 2023]. Available at: <https://www.kisho.co.jp/page/302.html>

LAZARIN, Michael, ed. *Time and Nothingness*. Kyoto: Ryukoku U, 1997.

LAZARIN, Michael. Temporal architecture: poetic dwelling in Japanese buildings. In: *Footprint* 2008, issue 3, pp.97-112.

LAZARIN, Michael. Phenomenology of Japanese Architecture: En (Edge, Connection, Destiny). In: *Studia Phaenomenologica*. 2014, issue XIV, pp.133-159.

MERLEAU-PONTY, Maurice. *Phenomenology of Perception*. New York: Routledge, 2005.

MOERAN, Brian. *Language and popular culture in Japan*. New York: Routledge, 2011.

NISHIDA, Kitarō. *Place and dialectic: Two essays by Nishida Kitaro*. New York: Oxford UP, 2012.

NITSCHKE, Gunter. 'Ma': The Japanese Sense of 'Place' in Old and New Architecture and Planning. In: *Architectural Design*. 1966, issue March, pp.117-130.

OE, Kenzaburo. Japan, the dubious, and myself. In: *Japan in traditional and postmodern perspectives*. New York: State U of New York P, 1995, pp.313-327.

PALLASMAA, Juhani. Space, Place and Atmosphere. Emotion and peripheral perception in architectural experience. In: *Lebenswelt: Aesthetics and Philosophy of Experience*. 2014, volume 4, issue 1, pp.230-245.

SAMBUICHI, Hiroshi. Architecture Begins with "Water, Air and Sun", 2017 [accessed: June 07, 2023]. Available at: [https://www.archdaily.com/873169/hiroshi-sambuichi-architecture-begins-with-water-air-and-sun?ad\\_campaign=normal-tag](https://www.archdaily.com/873169/hiroshi-sambuichi-architecture-begins-with-water-air-and-sun?ad_campaign=normal-tag)

SHIRANE, Haruo. *Traces of dreams: Landscape, cultural memory, and the poetry of Basho*. Stanford: Stanford UP, 1998.

PRUSINKSI, Lauren. Wabi-sabi, mono no aware, and ma: Tracing traditional Japanese aesthetics through Japanese history. In: *Studies on Asia*. 2012, volume 4, issue 2, pp.25-49.

RECORD, Alison Kirby, Adnan K. ABDULLA. On the difficulties of translating haiku into English. In: *Translation and Literature*. 2016, volume 25, issue 2, pp.171-188.

ROMAJIDESU. English Japanese Dictionary and Translator [accessed: August 01, 2023]. Available at: <http://www.romajidesu.com/>

RICHARDS, Simon. "The Moving Image of Eternity" *Idealism, Incompleteness, and the Ise Jingū*. In: *Philosophy East and West*. 2018, volume 68, issue 3, pp.802-825.

SUGIMOTO, Hiroshi. Enoura Observatory. Summer Solstice Light-Worship 100-Meter Gallery. Winter Solstice Light-Worship Tunnel / Light Well [accessed: August 01, 2023]. Available at: <https://www.sugimotohiroshi.com/winter-solstice-lightworship-tunnel>

TANIZAKI, Jun'ichirō. *In praise of shadows*. London: Vintage Books, 2001.

TRAUGOTT, Elizabeth Closs. On the expression of spatiotemporal relations in language. In: Greenberg, J. H. (ed.). *Universals of human language: Word structure, Vol. 3*. Stanford: Stanford UP, 1978, pp.369-400.

WATANABE, Masao. The conception of nature in Japanese culture. In: *Science*. 1973, issue 183, pp.279-282.

WATSUJI, Tetsurō. *Watsuji Tetsurō's Rinrigaku: Ethics in Japan*. New York: State U of New York P., 1996.

ZUMTHOR, Peter. *Atmospheres – Architectural Environments – Surrounding Objects*. Basel, Boston, Berlin: Birkhäuser, 2006.