



RESEARCH PAPER

Japanese Sense of Place and Time: A Descriptive Study

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ABSTRACT

The difference between Japanese and Western art and architecture has been in continuous discussion for a long time. There had been an array of literature from both sides, often focusing on single sided representation. This study aims to present an important aspect of Japanese art and architecture for a better understanding of both extremes. This descriptive study is focused on the extensive exploration of available literature and analysis of cultural artifacts that embody the concept of Ma to produce a clear, concise, and rigorous descriptive synthesis for the benefit of architecture students and young professionals. Although the majority of the data used in this literature-based article was secondary, an attempt was made to diagrammatically summarize the entire discussion. The study advises to avoid making blatant simplification in architecture in terms of spatial layout, formal compositions, and technology interventions since they may lead to misapprehensions and cultural oddity.

KEYWORDS Art of Ma, Eastern Architecture, Ken, Sense of time, Sense Place

Introduction

Ma is a multifaceted phenomenon which is widely used almost in all spheres of life in Japan, from religion to architecture, fine art, music, drama, and garden design. It explains the absence of something or the break in between, which is a deviation from a perspective that emphasizes the tangible. There are many aspects and layer to the concept of Ma, it is not only restricted to space but is applied to time as well. In Japan, time and space were considered as one single phenomenon, unlike Western World which believed that time and space are distinct from each other (Isozaki, & Ōshima, 2009). Ma defines time and space through the concept of interval. This concept is fundamental to understanding of all areas of life, from art to architecture, fine arts, theater, music, to garden design, all of these may be termed as "the art of ma." This indistinguishable perception of space and time can be seen as an essential foundation for development of the differences expressed in Japanese and Western artistic expression (Isozaki, & Ōshima, 2009). The word "ma" basically refers to "between" two (or more) spatial or temporal objects or events. Ma is not only used to denote measurement, but it also represents terms like gap, space between, the time between, opening, and so on (Pilgrim, 1986). This spatiotemporal principle of ma highlights all traditional Japanese art forms. However, ma goes beyond being a way of seeing, it is a way of life like other Japanese aesthetic principles. According to Japanese architect Arata Isozaki, it is a "fluid term that can encompass many aspects of Japanese life." (Pilgrim, 1986). For example, a room will be considered ma, as well as a pause in music, the interval between notes, or the distance between walls (Isozaki, & Ōshima, 2009).

The study will give a thorough grasp of the meaning of Ma in Japanese culture as well as how it affects all facets of Japanese life. A comprehensive knowledge of the idea will be provided through the study's multidisciplinary approach, which will assist in identifying similar themes and patterns associated to Ma in many situations. Scholars and academics who study Japanese culture, aesthetics, architecture, music, art, and literature will be interested in the study's findings.

Literature Review

Ma is a key idea in Japanese culture and aesthetics and has been the focus of several scholarly investigations. Examining Ma's numerous meanings and interpretations in various branches of Japanese art and culture is the goal of this examination of the literature. Ma is considered an important aspect in Japanese arts. As the famous Japanese architect Kisho Kurokawa, says that "Ma is the spatial concept that defines the void between objects and the space that surrounds them." (Kurokawa, 2007). Designers from Japan frequently use Ma to depict a feeling of balance, harmony, and simplicity. The Katsura Imperial Villa in Kyoto, includes a number of spaces where the borders dividing inside and outside are obscure, is a typical example of the use of Ma in spatial design. Ma is also considered equally important in traditional music of Japan, as Tadao Sawai, a famous Japanese koto player says, "Ma-ten is the space between notes or phrases, where the music breathes and the listener can reflect on what has just been heard." (Sawai, 2006). Japanese tea ceremony music, which evoke a sense of harmony and calmness, put a special emphasis on the concept of Ma. The concept of Ma could also be found in Japanese calligraphy. Calligraphers commonly employ voids to give their work a sense of balance and harmony. The term Ma can also be used to emphasize certain words or phrases in order to call attention to them. Shiho Sakanishi, a Japanese calligrapher, states that "Ma is a space that connects the characters, and it is the space that gives the characters meaning." (Sakanishi, 2003). The idea of ma is commonly used in Japanese literature to arouse feelings of suspense or worry, For instance, the gap/pause between the first and second lines of a haiku poem lets the reader to reflect on the poem's meaning. In Japanese literature, the word "Ma" may also conjure up a sense of mystery or suspense. According to Hiroshi Nakamura, a literary critic from Japan, "Ma is the space that exists between the words, and it is the space that gives the words their meaning." (Nakamura, 2005).

Material and Methods

The concept of ma is intricate and important to Japanese culture and aesthetics. This concept of emptiness, stillness, and wholeness may be seen in different aspects of Japanese culture, such as architecture, music, art, and literature. The purpose of this study is to examine the concept of Ma in various contexts and how it influences Japanese culture. The study will use an interdisciplinary approach, reading literature and examining cultural relics from several fields. The context for the study will be established by a detailed investigation of the literature on the concept of Ma in Japanese culture. Just a few of the online sources that will be used for the literature study include JSTOR, Project MUSE, and Google Scholar. The search terms that were used. The search will be conducted using the keywords "Ma," "Japanese aesthetics," "Japanese architecture," "Japanese music," "Japanese calligraphy," and "Japanese literature." The study's theoretical underpinnings will be provided by the literature review, which will also aid in locating important Ma-related topics and ideas. The investigation will also examine cultural artefacts that represent the idea of Ma. Photographs of Japanese gardens, recordings of traditional Japanese music performances, works of calligraphy, and literary writings are only a few examples of these artefacts. The examination will concentrate on locating Ma's use in these artefacts and how

it affects the viewer's overall perception of beauty. Visual and textual analytic approaches will be used in the study, and case studies will be used to demonstrate the findings.

Thematic analysis will be used to examine the information gathered from the literature study and analysis of cultural artefacts. Key themes and patterns relating to Ma in various settings will be identified during the study, and the results will be combined into a cohesive framework. The findings will be presented as a narrative that explains the meaning of Ma in Japanese culture and how it affects many facets of Japanese society.

Results and Discussion

Ma in the traditional Japanese architecture

Hasira-Ma evolved as a basic structural unit of traditional Japanese wooden houses, and it represents the distance between the centers of two successive posts. In the figure given below, ma represents a line in space, a measure of length or distance. The MA connects (bridges) the two posts. (Here and there)

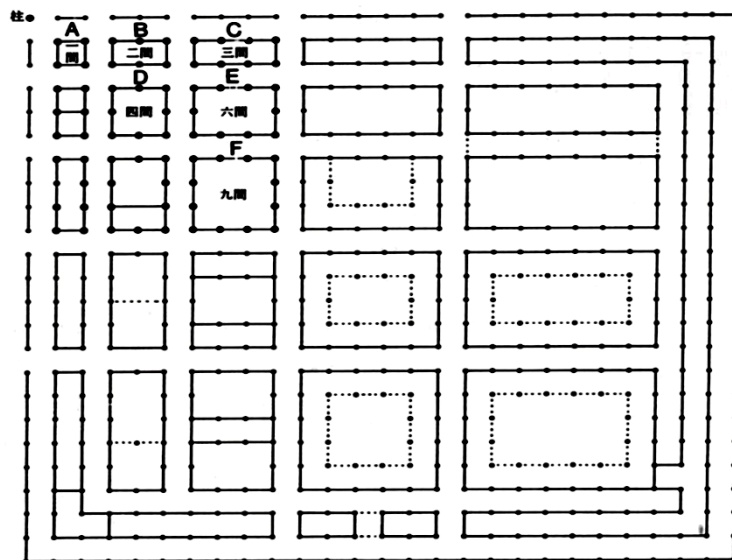


Fig 1: Conceptual diagram showing the ancient room names associated with ma in relation to the increasing number of columns that are always spaced a ken apart. A: 1 ma room, B: 2 ma room, C: 3 ma room, D: 4 ma room, E: 6 ma room, F: 9 ma room. (Source: kojiro junichro, *Nihon Kenchiku no kukan* [space in Japanese architecture]), shibundo, Tokyo, 1968.

Ma in Japanese is pronounced as Ken to signify the term as carpentry measuring unit. Ken has different values of about six to ten feet of range in different regions of Japan. All column sizes and timber dimensions were expressed in fractions or multiples of the ken by the 16th century. As an ordering device, the Ken is used three-dimensionally, i.e., both horizontally in planning and vertically in elevation" (Ching, 2023). The ratio of Ken is based on the dimension of the Japanese mat, named as a tatami mat, which is used as floor covering and is made from woven rushes. It is dimensioned to comfortably accommodate two persons seated or one person sleeping. The tatami mat module was adopted as a standard unit of measurement for a room. It was decided that the length of the tatami mat is equal to 1 Ken, determining the centers of the interval between columns

and its width is equal to 1/2 Ken providing the dimension of the Ken grid. The feature that makes Japanese space different from western space is that Western space is discrete while Japanese space is continuous.

Western architecture focus to dominate nature. For example, the significance of the Western architecture of the wall is to divide the exterior from the interior. On the contrary, Japanese space seeks to blend architecture and nature, to make them; one. By bringing nature into architecture, the Japanese envelope nature into buildings, making architecture and nature one common entity. The concept of wall as an element of discontinuity between outside and inside did not evolved in Japan, to a degree because of the difference in the basic construction materials of the two cultural spheres: The West is a culture of stone, whereas Japan is a civilization of wood. However, Japan made a conscious effort to blend the inside and the outside. (Kurokawa, 1994).

Traditional Japanese House

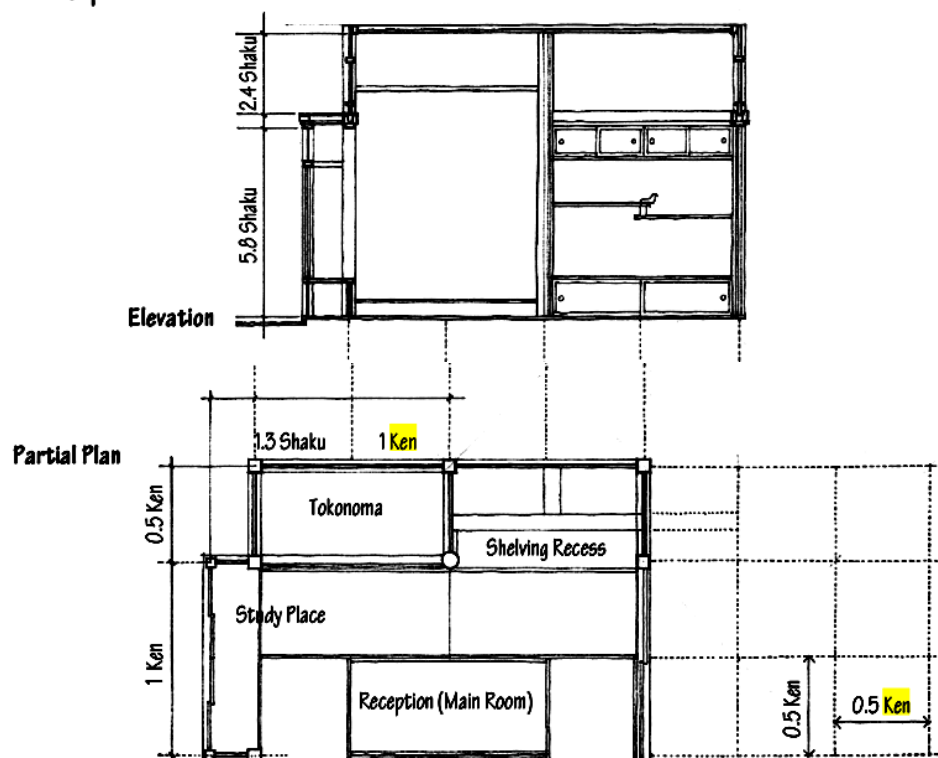


Fig 2: Traditional Japanese house showing ken and shaku measurements Source: Ching, 2023

An example of Ma can be illustrated by the Japanese engawa (verandah). Engawa runs around the perimeter of a house covered under extended eaves. Engawa has multiple purposes. Being a corridor, it connects the different spaces and provides shelter against the sun and rain. It also acts as a welcoming area for guests, amongst other functions. (Kurokawa, 1988). It is a transitional space between interior and exterior, and it does not exclusively belong to the interior or exterior. Seeking to maintain an in-between quality, a third realm merging exterior and interior. This is the gray essence of Ma that Kurokawa speaks of.



Fig 3: The intermediary space of the Japanese Engawa

Shoji, a Japanese traditional translucent paper that is attached to a wooden frame, is used as windows or doors. The panel (Shoji) is also used as a divider or partition between two spaces. It allows light to penetrate the interior of the building. These panels are used to connect the interior with the exterior, on the other hand, there are panoramic windows in the western architecture. The window is the frame and nature is the frame of the painting. This viewpoint of nature as being "out there" is significantly unlike from the traditional Japanese home, where the house and garden are one. (Kurokawa, 1994).

Ma and the Japanese Garden Design

The very first thing that western eyes notice about the Japanese gardens is the "emptiness" of portions of the garden. This is upsetting to gardeners who are accustomed to filling every space in the garden with a riot of color, but it is a significant element in the design of Japanese gardens. This space, or ma, explains the surrounding elements and is also defined by the elements surrounding it. The Chinese characters for yin and yang represent the genuine essence of in and yo. Without nothing, something cannot be achieved.



Fig 4: The rock garden at Ryoanji, the 'Peaceful Dragon Temple' in Kyoto

This is difficult to understand, but it is a central principle of Japanese gardening. The expanses of accurately raked white sand in dry landscape gardens are each in their own way demonstrating ma. The area between two rocks or a couple of trees, for example. Ma coordinates movement from one point to another. The stepping stones leading to a tea house define the path one should follow. The interval between the stones-MA regulates the walker's rhythm. In larger gardens, designed for leisurely strolling (kaiyu-shiki gardens) the recommended route of passage is marked by numerous points where one

may stop to enjoy scenic vistas. HASHI means both edge and bridge. In ancient times, Hashi meant ladder. In Japanese, a bridge is called HASHI because it connects to the ends of the river. In designing a Garden, Hashi is often used as a structural element. Therefore, the purpose of the Hashi in the Japanese garden is not only to connect two ends of the river or ornamentation, but it has a symbolic significance of connecting two divided worlds as well. Ohashi remarked about the low walls that isolate the Ryoanji-stone garden from the natural world: "The defining function of the wall is not to give perspective to the garden, but to separate the natural outside world from the aesthetically designed inner world. It forms a 'between' the two worlds." (Kauffmann, 1997).

Ma in modern Japanese Architecture

The modern architecture of well-known Japanese architects always shows the traditional concepts of aesthetics and space consciousness. Ma is one of the traditional aspects which has been used by many. Figure 5 below shows Japan's first post-war art museum located at the top of Hijiyama. A circular space in the center of the building was intentionally left open, with a notch showing the direction in which the atomic bomb was dropped. The stones under the pillars have been bombed. To the left of the central circular space are the museum's permanent collections, and to the right are special exhibitions. The many gabled roofs form the unity of the village and the symbiosis of the parts and the whole.



Fig 5: Hiroshima City Museum of Contemporary Art

The Fukuoka Bank owns the spacious plaza beneath the substantial overhang, but the citizens can also access the plaza, which makes it a transitional space between a private space and a public space. This kind of intermediate space between private and public or between exterior and interior has its origin back in traditional Japanese architecture, "Engawa".

The citizens can benefit from the big tree of "Horuto" and up to 200 other trees, as well as the symbolic sculptures of contemporary Japan. The concept of the design of the structure; a plaza under the overhang monument, is similar to the concept of Grande Arche de la Défense designed by Sprecklesen. The project succeeded in achieving its purpose as that of the Paris Building. The overhang structure created by the ninth floor of this bank formed an intermediate space or en-space which serves the purpose of semi-public space or intermediary space between the office building and public space. The plaza acts like the Japanese traditional Engawa which plays the role of transitional space between inside and outside, unlike the western Plazas or squares. The building's overwhelming mass is neutralized by the gray tone, which also helps to merge the huge structure of the building into its surrounding.



Fig 6: Head office of Fukuoka Bank, by [Kisho Kurokawa](#) (1934-2007)

Shanghai Zendai Himalayan Art Center designed by Arata Isozaki is the perfect manifestation of the Architect's vision. The building is completed in 2006, and it is composed of several cubes including an Artists' design studio, an art center public space, and commercial facilities and guestrooms. As a whole, it has adopted the layout of traditional multiple courtyards of China to achieve space permeation. (Linlin & Songfu, 2013).



Fig 7: Shanghai Zendai Himalayan Art Center designed by Arata Isozaki

The art center is the central core of the complex. It is a multifunctional theater that can accommodate over 2000 people. The garden on the roof of the center portion of the building is designed to form a cubic public space with underground squares. Isozaki used the optimization method for the evolution of structure for the center part of the building, and the condition formed by the enveloping space is the MA space theory. A cubic structure is placed on a platform of over thirty meters in height which serves the activity of the hotel. The artistic design on the bottom wall is inserted into the grids, which creates a sense of shadow. Such a design is the expression of tradition abstractly. The art center is separated into two enormously diverse parts, one is the glittering and translucent cube while the other is a natural and organic irregular part. Apart from the forms of the different parts of the building, the spaces also have contrast in their activities. One of the spaces is a public commercial space while the other is a closed office space, this blending of spaces

into two contrasting parts is the Arata Isozaki's "ma" space theory, because the comparison space with intensely different features is its manifestation. (Linlin & Songfu, 2013).

The concept of Ma in urban planning

To achieve the visual connection between the vacant and median spaces of the buildings, the concept of Ma in Architecture can be implemented. For example, adding trellises and lattice screens to the sides of the passages visually connect them. (Abdolmaleki, & Daneshfar, 2011). The same experience can be achieved on a bigger scale, for instance, in cities. In this case, an individual in the buildings, looking out through the windows, have a visual experience of the endless space. (Levitt, 2005, & Fumihiko, 1993). Japanese streets were not merely a means of transportation. They were far more involved with the pattern of daily life and became means of communication. The Eastern cities, unlike western streets, lack plazas, but their streets perform the function of a plaza and this is the special feature of Eastern cities, their streets are complex and multifunctional: A Street is both public and private space, as well as urban and residential areas. Also, The Street has a multivalence that reacts to a wide range of places and periods yet has no clear beginning or ending. (Kurokawa, 1994). The lattices of the traditional Japanese townhouses named machiya a reasonable level of openness was permitted, but citizens' privacy was nevertheless protected. The street had neither a public nor a private area, but an intermediate zone that served the same function as the engawa (verandah) between the house and the garden (Kurokawa, 1994).

Conclusion

MA is multifaceted Japanese phenomenon which affect almost every aspect of life in Japan and the eastern world. Two related conclusions seem to offer themselves. First, the idea that humans only exist in relation to places. Mankind was viewed as but one part of a larger totality that also included the environment and wildlife. The conclusion is that everything is measured in relation to the bigger total rather than by individuals. Buddhist thought supports this. The behavior of Japanese people makes the second argument more clear. Everyone has to have a social "place," as identity is formed through social connections rather than individual traits. In summary, Japanese sense of polarity and the yin-yang interplay of opposites is well served by the subjective idea of ma. There are the polarities of sound and quiet, activity and inaction, movement and rest (the performing arts), individual and society, object and space (such as a home and its garden), and form and non-form (such as calligraphy and painting). The idea of ma expresses the continuity of space and time in the objective environment. The continuity of events and experiences, of outward reality and interior mood, is defined by Ma in the subjective domain. Ma is a multidimensional idea that is essential to Japanese culture and aesthetics, to sum up. It is not simply a geographical location; it may also be a temporal and abstract idea that appears in a variety of Japanese artistic, literary, musical, and even everyday expressions. Ma is about using as few elements as possible to achieve a sense of harmony, balance, and simplicity. Ma is a uniquely Japanese notion that has influenced the architecture, music, calligraphy, and literature of the nation.

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