# omes of Stone, Homes of Wood



As I travel around the world, I am always impressed by how well homes everywhere are suited to their surroundings—by how each arises naturally out of its climate to create a reasonable residence in harmony with its climatic setting—and by how the home epitomizes the society and capsulizes its history.

Walking in Paris, one sees solid stone buildings gracefully lining both sides of the street. The soothing stone surfaces of the walls combine with the cobbling of the streets to harmonize with the passing traffic and create a beauty unique to Paris. Masonry construction utilizing stone and bricks is widespread throughout France, Italy, Spain and the rest of temperate Europe.

With its heavy walls separating outside from inside, this masonry construction is well suited to protecting inhabitants from the harsh climate, both in the hot but relatively arid summers and in the cold and more humid winters. In such architecture, were one to set large doors or broad windows in the walls, the overlying weight of the walls and upper floors would likely crash through the resulting structural weakness and bring down the building. As a result, the windows tend to be tall and narrow, and the expanses of wall mark clear delineations between inside and outside. On the inside is the interior space, and on the outside are the broad exterior expanses. As such, the exterior faces outward and is divorced from the interior life.

This is the basis for the beauty of Western architecture with its emphasis on form. In that sense, Paris is a very formalistic city, and one that is replete with buildings of uniform height with important points facing each other across the street in a very conscious pattern. Paris is truly a beautiful city—a city that has been built to be beautiful.

Standing in sharp contrast to Europe's masonry construction, Japan has a wooden post-and-beam construction that is well suited to its own climate—a climate



Masonry construction: solidity of stone

in which the summers are hot and humid and the winters cold and arid. While the abundant rainfall and the wealth of timber resources partially account for the prevalence of wooden construction in such regions, an even more important factor has been the desire to leave broad open spaces for easy ventilation during the humid summer months

## Shade and breezes

The idea of "verdant shade and refreshing breezes" is a virtual cliché in Japan as people seek shelter in the shade of the trees where cool breezes dispel the summer heat. This may be difficult to appreciate for someone who has not had to endure a muggy Japanese summer, but it has provided the conceptual framework for Japanese home architecture as the deep overhangs have replaced the leaves of trees and tatami the shade on ground. Here it is roof and floor that are the primary architectural elements. Walls are of lesser importance, and interior spaces are typically interconnected.

There is also a tradition of masonry construction in Japan, as represented by the artistic stonework of its imposing medieval castles, but this was never extended to the idea of building homes of stone.



The graceful effect of the stone buildings lining the Rue de Rivoli in Paris

Masonry construction is primarily for wall-centered architecture, as walls block the cooling breezes and this in turn makes the humid summer heat even more unbearable. This is not an architecture suited to the Japanese climate.

Just as the Western architectural aesthetic is characterized by masonry construction seeking to create secure interior spaces isolated and protected from the harsh conditions outside, the Japanese aesthetic is one in which the wooden post-and-beam construction seeks to keep the home at one with nature so that its inhabitants can enjoy the natural blessings of verdant shade and refreshing breezes-as elegantly described in Hojoki by the philosopher Kamo-no-Chomei (1155-1216) and in Tsurezuregusa (Essays in Idleness) by the essavist and priest Kenko Hoshi (1283-1350).

With this long Japanese tradition of wooden post-and-beam construction seeking to recreate cooling shade and facilitate refreshing breezes, it has been important that the house be open in a north-south direction and that the floor be raised off the ground to prevent understructure rot and keep the floor feeling clean. As a result, the floor-and not the walls-defined the home. If there are deep overhangs, one does not need thick walls to keep rain and other natural threats at bay. And if the interior spaces can be constituted with posts and plaster and an uninterrupted flow between exterior and interior facilitated so that there is no clear delineation between inside and outside, then you have the essence of the Japanese house. And in keeping with this desire for permeability, the architecture does not have the solidity or rigidity of stone walls.

Although Western architecture sets

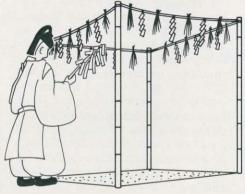
great store on masonry walls to distinguish between interior and exterior spaces, it does not pay that much attention to the floors-with the result that people wear shoes indoors and out. Clearly delineated by the walls, inside and outside are treated the same underfoot

In traditional Japanese wooden architecture, while continuity with nature is emphasized and there are no fortress-like walls, great heed is paid to a clean and comfortable floor as epitomized by the tatami flooring, and the priority assigned to interior space within the spatial order is such that people take their shoes off inside the house. This tradition persists even with today's Western-style homes.

## Harmony with nature

What Japanese spatial concepts and considerations account for this neglect of walls? First is the Japanese sense of oneness with nature. Rather than standing in conflict with nature and seeking to shut out nature with stout walls, the Japanese have sought to live in harmony with nature by fusing nature within their lives. At times, the walls can even be invisible and merely symbolic. For example, Shinto priests may designate sacred space by erecting four bamboo poles for the corners, stringing a shimenawa (a rope braided of straw and used on ceremonial occasions) among them, spreading white sand over the ground within the enclosure and then consecrating the area.

To cite one more example, restaurants fronting on the Kamo and Kibune Rivers in Kyoto sometimes build temporary



Symbolic walls in a Shinto ritual

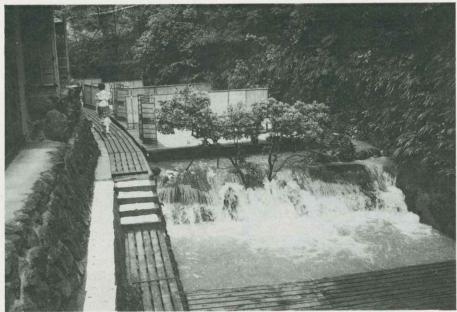
platforms out over the river where guests may dine in summer, giving them the chance to spend a summer's evening wining and dining to the music of the river rippling by underneath. The walls are only insubstantial reed partitions that the cool mountain breezes blow through easily When summer ends, these platforms are taken up and the river reverts to its original state. As indicated by the fact that this practice has been maintained for many years, the Japanese feel the floor defines a space more than the walls do. And in keeping with this perspective, the floor is built new every year with clean, fresh wood.

In Japan's floor-oriented architecture, the floor defines the space even in the absence of walls, and Japanese perceive space as a conscious concept. The area is set off as a formalistic space in the consciousness. Also evident here is the Buddhist philosophy that all spaces—physical and temporal—are but transient delineations on the eternally changing continuum, and that space exists only in a relativistic dimension.

### Floor culture

It is impossible to ignore the importance of this floor-oriented architecture in discussing Japanese culture. Not only deportment and the dictates of good manners but also *zazen* (religious meditation), the tea ceremony, Japanese dance and the other elements of Japanese culture are closely related to the floor; and this floor architecture is basic to the Japanese spirit.

Comparing Europe's masonry construction and Japan's wooden post-and-beam construction as reflected in the townscapes, the European townscape is clearly superior. In considering the construction of the townscape, the boundary delineating the building's interior and exterior is extremely important. In the European town, the exterior walls are decidedly substantial and continuous, creating a beauty of their own. By contrast, a floor-oriented architecture such as Japan's, with its lack of emphasis on the wall, makes it very difficult to create a coherent townscape. The townscape



Platforms for summe, diners over the Kibune River in Kvoto

demands not so much the floor's spatial delineation of area as the wall's linear delineation of boundaries.

Buildings made of brick or stone have an imposing frontality and substantialness about them that creates a visual exterior able to withstand close scrutiny. Yet because the opportunities to look outside from the inside are architecturally limited, even a garden will be designed not as an integral part of the house but as a separate and distinct area.

In the traditional Japanese wooden house, it was common to look outside from inside, and this was a major consideration in determining the architecture and the layout of the grounds. Spacious areas were left between posts and beams, an effort was made to integrate the inside and outside spaces, and the emphasis was



The Bosen-no-ma room at Daitokuji temple in Kyoto

placed on the exterior garden and other such spaces as they would be seen from inside the primary space of the house's interior. As the other side of this coin, the exteriors of such buildings do not have arresting walls and do not present the imposing figure that European buildings do.

The Bosen-no-ma room in the Kohoan at Kyoto's Daitokuji temple is one of the best examples of this wooden post-and-beam construction. The *shoji* panel in the upper part of the opening facing the garden blocks the line of sight and concentrates it on the stone water basin and the stone lantern in the foreground and the nearby garden. It is architecture designed to make the most of the view from inside the room.

Turning our thoughts upward to the ceiling, we notice that Japanese ceilings are much lower than the ceilings in Western homes. While this may be in part because Japanese are on average shorter than most Euro-American peoples, there seem to be more fundamental, culture-based reasons for this difference.

In the traditional Japanese wooden house, the floor is raised to avoid the ground's damp, and people take their shoes off inside the house to mingle informally. As such, the entire house might be compared to a bedstead. It has often been pointed out that Japanese are generally

not inclined to invite guests into their homes, but this too relates to the personal feelings that they have about their homes not as extensions of the exterior space but as expressions of themselves

Within the Japanese home, everyday life is primarily spent sitting on the floor. with the result that the line of vision is at least 30cm lower than it would be were people to sit in chairs in the Western style. For sitting in the Japanese style, it is enough to bring out the zabuton cushions, and for sleeping the futon bedding is spread. In either case, there is greater flexibility and mobility than with chairs and beds, and both are very absorbent and insulative. This functionality is indispensable in the Japanese wooden construction with its openness to the outside. It seems to me that this style of living has also influenced the architecture to make the ceilings lower. And the design is such that the people sitting on these raised floors naturally look out and down at the garden.

# Line of sight

By contrast, the line of sight for someone seated within the heavy stone masonry walls of Western architecture would likely stray upward, and this is another difference in Japanese and Western aesthetics.

I have visited Greece frequently, every time thrilled at the beauty of the Parthenon standing majestically on the hill of the Acropolis overlooking the Aegean. These hills are marble, and, given the means of transport that were available at the time, it is only natural that the ancient Greeks should have chosen to build the Parthenon of marble. Thus it stands atop the hill of the Acropolis in graceful proportion and made of the same stone as its base, with not a tree in sight. All is stone. and there is not the least ambiguity about this scene. The bright sunlight creates sharp shadows among the glare, all of the protrusions are starkly highlighted, and there is no blurring between existence and nonexistence. During many visits to this area, time after time I have been struck by the way the bright sunlight makes the proportions aesthetically more

important than the surface texture of the building material itself. Up close, the Parthenon is common marble, but seen from afar on a clear day its frontality, symmetry and rectangular construction make it a textbook representation of the fount of Western architectural aesthetism. This is beauty at a distance

What of the traditional Japanese wooden architecture? This is small and unprepossessing, and surrounded by trees so that it is difficult to see the whole at once. Yet as you approach, you notice the grain. of the wood, the surface texture, the intricate joints and other indications of the great care lavished on its construction. This is an artless and encompassing beauty designed to appeal to someone inside, and definitely not an aesthetic intended for viewing from afar. It is the kind of beauty that one approaches and peers at closely, partaking of the delicate scent of the wood and the tatami, and finally vielding to the tactile sensations. It is an up-close beauty.

Even today, when so much of Japanese life has been modernized (for which read Westernized), the influence of the Hojoki and Tsurezuregusa lingers on in the Japanese home. The high humidity in summer that characterizes the Japanese climate cushions the relationships among people as among things, blurs the outlines, and renders harsh frontality, symmetry and angularity moot. Rather, it is conducive to Japan's very ambiguous and unsymmetrical beauty.

As noted above, the Japanese home enables its inhabitants to weather the hot humid summer by being open to the outside and providing excellent ventilation. What of the winters? Living in wooden post-and-beam constructions with flimsy walls and hard-to-heat interiors, the people drank warming sake, dressed warmly, soaked in hot baths and nestled in thick futon bedding to keep in the body heat. Each individual drew heat from both outside and inside the body and then worked to ensure that there was only minimal heat loss.

Of course, things are different with modern Japanese housing, especially housing in the big cities. Western housing styles have generally been accepted, the walls are thick with insulation, the windows are small, and many homes have central heating and air conditioning. Nevertheless, people still commonly take their shoes off when entering the house and still commonly sit on the floor. Paradoxical as this may seem, it is only natural when one considers that housing architectures and living styles have been evolved over the centuries to match the climate and other unchanging conditions.

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The Katsura Detached Palace in Kyoto, a masterpiece of Japanese architecture