

# PLANTS & GARDENS

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Garden in Autumn by Everett Ortner

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# THE TIE BETWEEN JAPANESE ARCHITECTURE AND GARDENS

Harriet A. Henderson

JAPANESE ARCHITECTURE and gardens are characterized by highly integrated indoor and outdoor spaces. This integration can be traced through the history of the development and design of Japanese buildings and gardens.

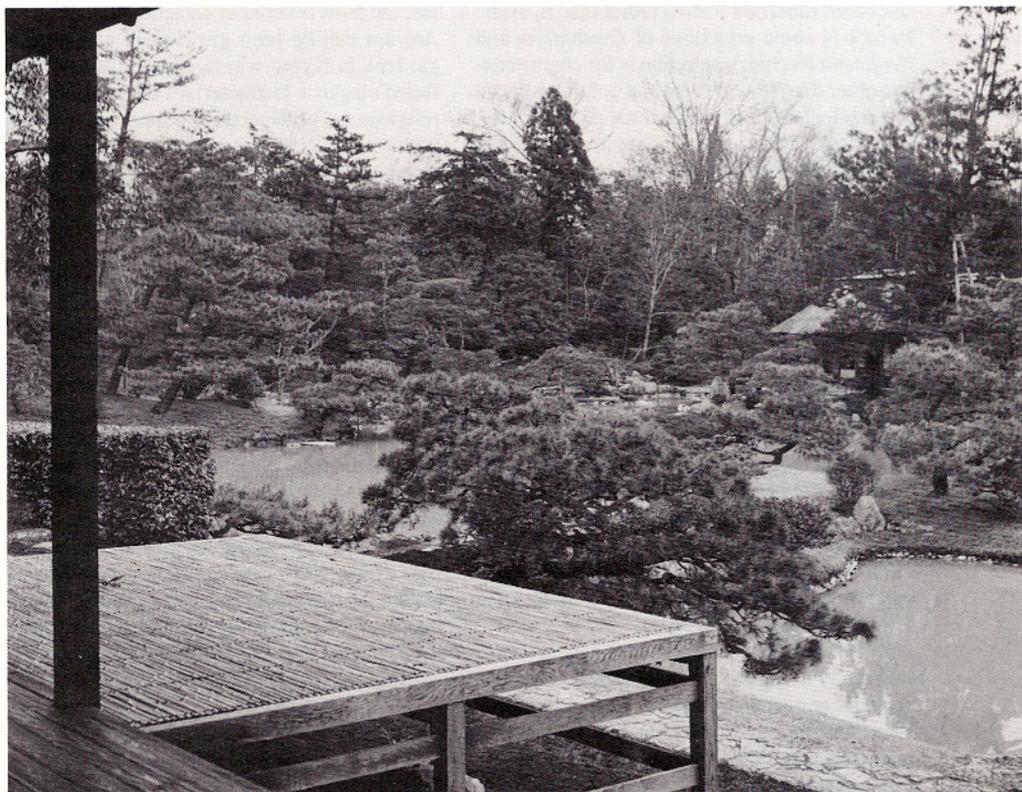
## Historical Development

Shinto and Buddhist religions greatly influenced the form of Japanese gardens and architecture. To summon the Shinto *kami*, gods believed to dwell in mountains, rivers and throughout the natural environment, a holy space was prepared.

Consisting of four wood columns marking a square on a plane of white sand, this sacred space influenced the development of Japanese dwellings and the dry landscape gardens known as *karesansui*.

The arrival of Buddhism in the 7th century brought Chinese architecture and city planning, with vermilion red buildings grouped symmetrically along north-south axes. Gradually, the Japanese assimilated and transformed these symmetrical arrangements to accommodate the natural mountainous topography. Buildings were

A raised wood veranda can be used as an extension of the living area or a part of the garden since it generally has no handrails. The natural wood used for its construction contrasts in texture to the interior.



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placed on diagonal axes, with the staggered structures creating spaces for gardens around each pavilion. As the vibrant Chinese colors were replaced with the natural Japanese wood surface on the structures, the formal Chinese courtyards gave way to more informal and asymmetrical Japanese gardens. Gardens in the 8th to 12th centuries typically represented a Buddhist paradise with a pond and flowering plants, and they were also enjoyed for boating and poetry readings.

During the 13th and 14th centuries, architectural innovations included *shoji* sliding doors (opaque paper panels within wood lattice frames) and *fusuma* (paper covered sliding panels, which were often painted). Rounded columns replaced the four square columns which established the corners of a room. Eventually, *tatami* (woven floor mats about 3 feet by 6 feet) were used as floor coverings, and the dimensions of the assembled *tatami* determined the overall shape of the room.

In the 15th and 16th centuries, Zen Buddhism reached the peak of its influence. With its emphasis on simplicity, Japanese architecture and gardens became increasingly subdued. In temples, rock and sand gardens with evergreen plants were preferred for contemplation and meditation. Designed to be viewed from the building in a kneeling or sitting position, some gardens expressed the stark beauty of Chinese landscape paintings, while others reflected the Zen asceticism through abstract compositions.

Following the Zen philosophy, founders of the tea ceremony modeled the tearoom after the rustic thatched roof farmhouse to create an atmosphere of seclusion from the rigid patterns of daily life. The path to the tearoom was designed to evoke the feeling of a journey to a mountain retreat. Out of this tradition, with its emphasis on the pathway and movement, developed the stroll garden in which pavilions, usually located around a pond, were linked by paths.

Throughout Japanese history, the design of the architecture and gardens has been influenced by the climate and the abundance of natural resources. To ease the humidity of the summers and the threat of earthquakes, the houses are elevated 1½ to 2½ feet above the ground on wood columns, with flexible partitions. The sliding screens are adjusted to create large or small open spaces according to the season and to frame views of the garden. Large overhanging roofs of clay tile, wood shingles or thatch provide re-

lief from the sun and rain.

The enclosure of the house and garden by a wall or fence, the area under the eaves and the sliding partitions of buildings are three important features which illustrate how traditional Japanese buildings and gardens are integrated.

To create a private domestic space separated from the densely populated outside world, each lot is surrounded by an enclosing wall, fence or hedge that is above eye level. The house and garden are linked by the surrounding enclosure. The materials used reflect the natural resources readily available and set a tone of formality or informality. Stone walls and tile topped clay walls tend to be formal and architectural, while wood, bamboo, and reed fences vary from geometric to asymmetrical patterns. Hedges are often used in combination with open weave bamboo fences as a subtle transition from the garden to the enclosing edge. Berms also screen unwanted views while providing a change of topography within the garden.

The Japanese also enclose the garden to frame desired views with walls, fences, and plants. Focusing on a neighboring tree, nearby hill, or landscape feature gives the illusion of a larger garden by "borrowing scenery," or *shakkei*.

Another example of enclosure which links the building to the garden is the sleeve fence—a direct extension of the building. Made of bamboo and dried reeds, this fence has dimensions which are generally five to six feet high and three feet wide. The sleeve fence leads the viewer's eye from the building out into the garden, and it makes a transition in materials from the planned wood of the structure to the plants in the garden.

In the area under the eaves, the second important feature, the line of the roof overhang is repeated on the ground in stone, as a 12 to 18 inch wide gravel band edged with cut stone or rock. This run-off area for drainage is as decorative a part of the garden as it is a functional part of the house. Ornamental bronze or iron rain chains hung from the overhang corners act as vertical accents and allow rain water, dancing down the chains, to become a decorative garden element. As these gravel and stone bands follow the rectilinear building lines, a contrasting stepping stone path with an irregular pattern leads from the garden to the edge of the house. The stepping stone at the building entrance is used for placing shoes before entering the house, and it is larger and higher than the other stepping stones.

Traditionally, the wood columns of the house, and the posts supporting the overhang rest on stone bases to protect the wood from moisture. A natural rock or cut stone column base is often used today as a decorative transition from the architecture to the garden.

A raised wood veranda, typically under the overhang, can be used as an extension of the living area, or as part of the garden since it generally has no handrails. The bamboo and natural wood materials used for the veranda contrast in texture to the *tatami* and *shoji* of the interior, while harmonizing with the exterior rocks, plants, fences and stone walls.

When the space under the eaves is kept at ground level, it assumes even more of the character of the garden. A change of surface to

cut stone or gravel often occurs in this intermediate area to indicate the transition from the exterior to the interior. In some cases there is a complete integration of house and garden with plants brought into the vestibule area as part of a flush planter or in containers. There, the steps inside signal the beginning of the interior spaces and the location to place shoes.

Screening devices, such as rattan blinds known as *sudare*, are often hung from the eaves to shield the veranda from sunlight or unpleasant views. They provide ways for the inhabitants to see or experience nature, while still protecting them from the elements.

In both the veranda and vestibule areas, moveable wooden shutters, glass panels, and *shoji* screens further blend the interior and exterior

The Katsura Villa Garden, Kyoto (property of the Imperial Household) demonstrates the integration of Japanese architecture and gardens. The transition from house to garden is from refined materials to rough hewn natural ones with asymmetrical patterns.



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spaces. All of these sliding partitions extend from floor to ceiling, and when opened provide uninterrupted expanses for viewing the garden. The outer heavy wood shutters provide protection, privacy, and insulation at night, but they can be opened and stored in the wall during the day. Glass doors with wood frames provide views of the garden, while shielding the interior during inclement weather. The *shoji* can be drawn back to open an entire room to a garden panorama, with the interior wood hewn columns echoing the tree trunks in the garden. With equal ease, *shoji* can also be partially closed to frame a specific garden feature. When completely closed, the *shoji* transmit soft, filtered light, and the pattern of branch and leaf shadows cast on the sliding doors still reveals the presence of the

exterior landscape.

The integrated design of Japanese architecture and gardens offers many interesting ideas on how to fuse houses and gardens. The transition from the house to the garden is made by moving from refined materials with architectural designs, to rough hewn and natural materials with asymmetrical patterns. Innovative ways of enclosing indoor and outdoor spaces are shown with an array of fences, walls, and partitions. An intermediate space of a veranda or vestibule extends the garden into the house, and the house into the garden. The flexible partitions, which delineate the space and views from room to room, and from room to garden, allows an openness and unity between the interior and exterior. ❁

The enclosure of the house and garden by a fence creates private domestic space separated from the densely populated outside world. The house and garden are linked by the enclosure.

