

ARCHITECTURE

A harmonious coexistence of tradition and innovation

The Development of Japanese Architecture

Historically, architecture in Japan was influenced by Chinese architecture, although the differences between the two are many. Whereas the exposed wood in Chinese buildings is painted, in Japanese buildings it traditionally has not been. Also, Chinese architecture was based on a lifestyle that included the use of chairs, while in Japan people customarily sat on the floor (a custom that began to change in the Meiji period [1868–1912]).

Architecture in Japan has also been influenced by the climate. Summers in most of Japan are long, hot, and humid, a fact that is clearly reflected in the way homes are built. The traditional house is raised somewhat so that the air can move around and beneath it. Wood was the material of choice because it is cool in summer, warm in winter, and more flexible when subjected to earthquakes.

In the Asuka period (593–710), Buddhism was introduced into Japan from China, and Buddhist temples were built in the continental manner. From this time on, Buddhist architecture had a profound influence on architecture in Japan. The Horyuji temple, originally built in 607 and rebuilt shortly after a 670 fire, includes the oldest wooden structures in the world. It is among the Buddhist monuments in the Horyuji area that were registered as a UNESCO World Heritage site in 1993.

In the Nara period (710–784), a capital city called Heijokyo was laid out in Nara in a manner similar to the Chinese capital, whereby streets were arranged in a checkerboard pattern. Many temples and



East pagoda of Yakushiji temple (Nara Pref.)
This pagoda was completed in AD 730.

palace buildings of this period were built in the Tang style of China.

In the Heian period (794–1185), Chinese elements were fully assimilated and a truly national style developed. The homes of the nobility in Heiankyo, now Kyoto, were built in the *shinden-zukuri* style, in which the main buildings and sleeping quarters stood in the center and were connected to other surrounding apartments by corridors.

Many castles were built in the sixteenth century, when feudal lords dominated

Izumo Shrine

Pictured is the main shrine building (*honden*) of this major shrine in Shimane Prefecture, which is built in the *taisha-zukuri* style. The current building was constructed in 1744; its design is said to reflect the residential style of the Kofun period (ca 300–710). (Photo courtesy of Izumo Shrine)



Japanese society. Though constructed for military defense, these castles were also used to enhance the local lord's prestige and as his residence. A few of them remain today, admired especially for their *tenshukaku* (donjon). The buildings used as living space inside the castle grounds, and also the living quarters at Buddhist temples, were frequently built in the domestic architecture style known as *shoin-zukuri*, which incorporated new features—including translucent and opaque paper-covered sliding panels (*shoji* and *fusuma*, respectively) and rush-covered straw mats (*tatami*)—that are still key elements of the traditional Japanese house. The most magnificent extant example of this style is the seventeenth-century Ninomaru Palace of Nijo Castle in Kyoto.

In the seventeenth century, the *shoin-zukuri* style was combined with features characteristic of *sukiya*, the teahouse in which the tea ceremony is performed, to create the *sukiya-zukuri* style of domestic architecture. Characterized by a delicate sensibility, slender wooden elements, and unornamented simplicity, this style's finest extant example is the Katsura Detached Palace (Kyoto), which is famous for its harmonious blending of buildings with the landscape garden.

Buddhist Architecture

When Buddhism came to Japan in the sixth century, places dedicated to the worship of Buddha were constructed, their architectural forms originating in China and Korea. In each temple compound, a number of buildings were erected to serve the needs of the monks or nuns who lived there and, as importantly, to provide facilities where worshippers could gather.

In the seventh century, a group of buildings comprised seven basic structures: the pagoda, main hall, lecture hall, bell tower, repository for sutras, dormitory, and dining hall.

Enclosing the entire temple compound was an earthen wall with gates on each side. It was common for a gate to have two stories.

The main hall contained the most prominent object of worship. The lecture hall, which in early temples was most often the largest structure, was used by monks as a place for study, instruction, and performing rituals.

Two types of towers predominated: one with bells that announced the times of religious observance each day and another in which canonical texts were stored (the sutra repository). Behind or to the side of the inner precinct stood refectories and dormitories.

The buildings of the temple complex were generally arranged in a geometric pattern, with variations between sects. The main buildings at Zen temples were frequently placed in a line and connected by roofed corridors, and the temple complexes of Pure Land Buddhism often included gardens and ponds.

Shinto Architecture

Followers of Shinto believe that a *kami* (deity) exists in virtually every natural object or phenomenon, from active volcanoes and beautiful mountains to trees, rocks, and waterfalls. Shinto shrines are places where *kami* are enshrined, and also where people can worship.

Rather than follow a set arrangement, shrine buildings are situated according to the environment. From a precinct's distinctive *torii* gate, a path or roadway leads to the main shrine building, with the route marked by stone lanterns. To preserve the purity of the shrine precinct, water basins are provided so that worshippers can wash their hands and mouths. *Komainu*, pairs of lionlike figures placed in front of the gates or main halls of many shrines, serve as shrine guardians. Temporary main halls were constructed to

Himeji Castle

Located in the city of Himeji in Hyogo Prefecture, Himeji Castle is known as the "White Heron Castle" for its soaring white walls. (Photo courtesy of Getty Images)



house the *kami* on special occasions. This style of building is said to date from about 300 B.C. The main shrine building of the Sumiyoshi Shrine in Osaka is similar to this temporary building type and is thought to preserve the appearance of ancient religious buildings.

The other major style for the main hall draws its simple shape from the granaries and treasure storehouses of prehistoric Japan. The best example of this style is the Ise Shrine, in Mie Prefecture. Its inner shrine is consecrated to Amaterasu Omikami, the sun goddess. The outer shrine is dedicated to the grain goddess, Toyouke no Omikami.

Elements of residential architecture can be seen in the main building of the Izumo Shrine in Shimane Prefecture, as evidenced by columns set directly into the ground and elevated floors.

The nature of Shinto worship changed, following the introduction of Buddhism, and shrine buildings borrowed certain elements from Buddhist architecture. For example, many shrines were painted in the Chinese style: red columns and white walls.

It was a tradition to reconstruct shrine buildings regularly to purify the site and renew the materials (a practice still followed at the Ise Shrine every 20 years). For this reason, and also as a result of fire and other natural disasters, the oldest extant main shrine buildings date back only to the eleventh and twelfth centuries.

Design Concept

The interior of Japanese houses in the past was virtually open, without even screens to partition off individual spaces. Gradually, as

more thought was given to particular areas and their functions, such as eating, sleeping, or dressing, self-standing screens (*byobu*) came into use. *Shoji* and *fusuma*, which are still found in many homes, came afterward. Though they serve poorly as sound barriers, they do provide some privacy and can be removed to open up the entire space (except, of course, for the columns that support the house). *Shoji* also admit light.

The way in which Japanese view the interior and the exterior of the house is another key aspect of traditional design. Instead of seeing the inside and outside as two distinctly different environments, they are thought of as being continuous elements. This concept is embodied in the Japanese veranda (*engawa*), which acts as a kind of transition space from inside to outside the house. The *nure-en*, which is fixed to the side of the house and gets wet when it rains, is a variation of the *engawa*.

From an aesthetic standpoint, the traditional house is designed for people who are seated on the floor, not standing. Doors, windows, and alcoves are placed so that both artwork in the house and the garden outside can be viewed appropriately from a sitting position.

Despite the changes that modernization has brought to the style of houses, the traditional Japanese style has not vanished. Even in the Westernized houses, it is still usual to find a room whose floor is covered over with *tatami*, and it is still the custom for people to remove their shoes before entering the house.

Modern Architecture

Modern architectural techniques were introduced into Japan with the launch of the Meiji Restoration in 1867. The first buildings to result from this effort combined traditional Japanese methods of wooden construction with Western methods and designs. The



Kaichi Elementary School

Built in 1876, this school building in Matsumoto, Nagano Prefecture, is a well-preserved example of the hybrid style used in the early modern period of Japanese architecture. (Photo courtesy of Getty Images)

Kaichi Elementary School (1876) in the city of Matsumoto, Nagano Prefecture, is typical of the hybrid approach adopted for schools built across the country.

In the 1880s, reactionary opinion turned against the rush toward Westernization, even in architecture, and Asian models were advocated. After World War I, traditional Japanese architecture underwent a reassessment when architects like Frank Lloyd Wright (1867–1959) of the United States and Bruno Taut (1880–1938) of Germany came to work in Japan.

The years following World War II saw a continuation of efforts to reconcile traditional and modern architecture. Tange Kenzo, one of Japan's most famous and influential post-war architects, managed to fuse traditional Japanese architecture with scientific and technological advancements. In the 1950s and 1960s he designed several striking edifices, including the Yoyogi National Stadium for the 1964 Olympic Games in Tokyo.

The Tokyo Station building, first built in 1914 under the influence of Western architecture, has been going through numerous renovation. In 2012, it was completely restored to the original shape.

For Japan, which is frequently hit by earthquakes, development of earthquake-resistant construction has always been a major problem in architecture. The first skyscraper of Japan, the Kasumigaseki Building, was completed in 1968 using the latest earthquake-resistant technology. A large number of skyscrapers have been built since then, including those in Nishi-Shinjuku in Tokyo from the 1970s and the Landmark Tower (1993; 296 meters high) in Yokohama.

A redirecting of architectural priorities away from unmitigated commercialization was led by Isozaki Arata, who as a young man had worked under Tange. His work and writings had a great influence on the younger generation of architects. The 1970s also saw the appearance of architects who stressed an artistic approach to architecture, a departure from the previous emphasis on technical expertise.

Domestic architects' offices were kept busy during the high-riding decade of the 1980s, as were some major foreign architects who were invited to work in Japan. The collapse of the "bubble economy" of Japan in the early 1990s caused a slowdown in the architecture industry. Many Japanese architects, however, are still highly ranked in Japan and elsewhere, and a large number of foreign architects find business markets in Japan, a trend that has spread even to local areas. Among the outstanding works of the 1990s are the Tokyo International Forum (1997) by Rafael Vinoly and the Tokyo Metropolitan Government Offices (1991) by Tange Kenzo.

In the 1980s and 1990s, Japanese architects were recruited increasingly for overseas assignments. Among them were Isozaki, to do the Museum of Contemporary Art (1986) in Los Angeles; Tange, for Singapore's OUB Center (1986); Kurokawa Kisho, for the Pacific Tower (1992) in Paris; and Ando Tadao, for the Meditation Space (1995) at the UNESCO complex in Paris. Ando has been especially well received abroad. He has taken several international prizes such as the 1995 Pritzker Architecture Prize, given by the Hyatt Foundation, and the 1997 Royal Gold Medal for architecture, awarded by the Royal Institute of British Architects. In 2006 Ito Toyo was also awarded the Royal Gold Medal from the Royal Institute of British Architects. In addition, Sejima Kazuyo and Nishizawa Ryue jointly won the Pritzker Architecture Prize in 2010 in recognition of the outstanding work of their architectural firm SANAA, most notably the Ogasawara Museum (Ida, Nagano Prefecture, 1999) and the Kanazawa 21st Century Museum of Contemporary Art (Ishikawa Prefecture, 2004).



Tokyo Station's Marunouchi building
The dignity at the time of foundation was reproduced



The National Art Center, Tokyo

The innovatively designed National Art Center opened in Tokyo's Roppongi in 2007. The building, designed by architect Kurokawa Kisho, has the largest exhibition space in Japan. (Photo courtesy of Getty Images)



Tokyo Skytree
The world's tallest
broadcasting tower

In 2012, Tokyo Skytree, the world's tallest, 634 meters, free-standing broadcasting tower, went into commercial operation. It features an elegant silhouette from the top to the bottom, one which features "warp" and "camber" seen in traditional Japanese architecture. Already a new landmark here, Tokyo Skytree changes its views depending on where viewers are and how they look up at it.

Architect Kuma Kengo, who designed the Kabukiza Theater in 2013 and the new National Stadium for the 2020 Tokyo Olympics, is noted for using many eco-friendly natural materials, such as wood, paper, and soil. In 2016, he earned a global award for "Sustainable Architecture" from the Locus Foundation.



Kabukiza
The Kabukiza theater in Ginza, Tokyo.