

The Development of Asian Architecture

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The vast and heterogeneous range of architectural traditions on the Asian continent represents the traditions of many groups of people over multiple millennia from small, dispersed tribes, to centralized kingdoms or empires. Therefore, an exploration of Asian architecture means an examination of the practices and rituals of an extraordinarily diverse population. The birthplace of many of the world's major faiths, including Buddhism, Hinduism, and Daoism, Asia is home to a broad scope of religious building types. Buddhism's monumental stupas and mandalas provide the faithful with earthly analogs of celestial order, while Hindu temples gather and enclose all the cosmic elements in a single architectural form. Similarly, vernacular housing types run a gamut of materials and forms dependent on local customs, materials, and urban agglomerations. In Mongolia and other regions of Central Asia, nomadic tribes live in *yurts* formed from wood or bamboo frames and covered in cloth or hide; these structures can now also be found in major cities such as Ulaanbaatar. Parts of Russia still contain examples of the log cabin known as the *izba*, developed to suit agrarian life on individual farmsteads, with its tightly constructed timber walls intended to be secure from inhospitable weather conditions. In Indonesia, the natural materials of timber, bamboo, and thatch that make up the *rumah adat* are gathered by individuals and groups and assembled into dwellings as part of a communal ritual. Ideas about what constitutes Asia itself have shifted over time in relation to differing power structures, including colonial occupations and post-colonial negotiations of identity. In the past few centuries, the Asian continent has experienced the architectural changes that come with modernization. Rapid urbanization, the use of industrial materials and techniques, and the creation of high-speed transit networks have resulted in the formation of the largest cities in history, known as megacities—the architectural expression of which is just beginning to codify.

In all cases, the persistence of architectural ideas has depended on their relationship to regimes of political power. The Hindu temple of Angkor Wat (Figure 8.1-7) in Siem Reap, Cambodia is representative of the way in which state power often expressed itself through sacred architecture in medieval Asia.



Figure 8.1-7

Khmer kingship depended on divine and earthly authority, and kings often built vast temple complexes to express their political might and to affirm their right to the protection of the gods. Built for Suryavarman II in the mid-twelfth century, the temple combines two conventional temple types: the Dravida temple, characterized by tall, single, interior chambers, and the Nagara temple, primarily comprising low, horizontal pavilions. This synthetic type—the Vesara temple—thus possesses both beehive-shaped towers and open galleries gathered around courtyards. As at other temples, the towers were representations of Mount Meru, the dwelling of the Hindu gods. At the time of its construction, Angkor Wat (meaning simply “temple city”) was built to serve a growing urban population of about one million inhabitants who lived in a gridded city laid out nearby. Though roads from the city grid extended to the temple precinct, many citizens would not have used it in any frequent way, nor would its towers have been visible from points within the city, thanks to the surrounding jungle. Instead, it would likely have existed as an image in the minds of the local people, an important symbol of the king’s sacred and secular authority. Access through the second enclosure wall and to the spaces inside it would have been restricted to royalty. Along the walls facing this enclosure appeared elaborate, low-relief carvings depicting the many manifestations of Vishnu, the god to whom the temple is dedicated and who divinely ordained Suryavarman II’s rule. Significantly, these representations were interspersed with illustrations of the life and family of the king, thus reinforcing the royal family’s right to the throne. Inside the central shrine stood a statue of Suryavarman II in the guise of Vishnu, blending identifiable attributes of each figure. In general, the temple consistently declares that the king manifests the power of the gods on Earth. Because many pre-modern Asian societies considered the political order to be a reflection of cosmic hierarchy, these two realms would not have seemed at odds with one another; instead, Angkor Wat would have served as evidence of their axial alignment, with the king’s rule—and his imperial ambitions—descending directly from the will of the gods.

At the time of its construction, the city near Angkor Wat was the largest city in Southeast Asia; generations of Khmer kings sought to consolidate and centralize their power by annexing nearby territories, often with violent military force. The order posited by Angkor Wat’s architecture was thus an architectural assertion of how life on Earth should be, rather than a reflection of how it actually was. The same use of architecture to organize and idealize human life is visible in Chinese architectural traditions. This very

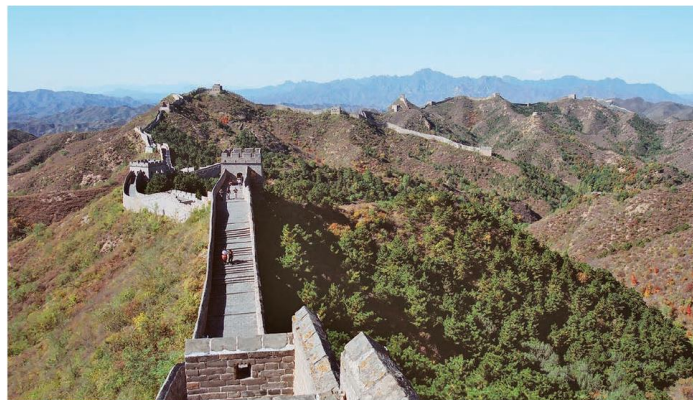


Figure 5.2-1

ancient civilization, with architectural traditions and a written language that are seven millennia old, depends on hierarchical arrangements that permeate every realm of existence. A belief in the centrality of cycles, traditions, and eternal return means that ancient Chinese architecture was constructed in perishable materials; structures built of mud and wood ensured that building was a continual process reflective of larger cosmic forces. Therefore, little ancient Chinese architecture remains, though the Great Wall (Figure 5.2-1) is a notable exception.

Built beginning in 221 BCE, it was a visible, formidable expression of Chinese identity, demarcating the limits of China itself and separating this unified territory from the surrounding terrain. Yet the passage of time and contact with other civilizations encouraged the Chinese to develop a more permanent and monumental architectural vocabulary. Though some buildings were built with stone, others made inventive use of wooden structure to develop an extremely consistent vocabulary of form. In general, traditional Chinese architecture is characterized by the use of the wooden structural frame, richly embellished with ornament; the buildings in this lineage also tend to be arranged in groups and set into informal gardens. Buildings and courtyards were laid out according to Confucian principles, with strong axes helping to align users with the “right path,” and symmetry intended to create balance in life as well as in architecture. Their surrounding gardens were intended to display both nature and architecture, so buildings were set next to mountains, water, rocks and stones, and flowers and plants. The natural irregularity of the organic forms in these gardens would complement the rigorous symmetry of buildings and courtyards, thus expressing a cherished Chinese aesthetic value: that of uniting unlike things. Of the architectural characteristics outlined above, the wooden structural system is the most significant, and defines traditional Chinese building to the present day. In this system, wooden members are precisely cut to interlock perfectly without the use of nails or mortar. This system accommodates the range of climactic conditions throughout China’s immense territory; it allows for degrees of expansion in humid weather and contraction in cold weather without losing structural integrity, and its flexibility makes it resistant to damage from earthquakes. The elegant forms made possible by this wooden structural system are consistently on view, from the traditional *siheyuan* house to the monumental Forbidden City (Figure 11.1-3b). In both cases, the interlocking *dougong* bracket provides both structural stability and a site for decoration, whether in the form of guardian figures or carefully crafted tiles. In addition, both vernacular homes and royal palaces share the same concept of the wall—the *cheng*—which signifies an enclosure or separation. The presence of any wall indicated the existence of a city inside, thus classifying and joining Chinese society into units radiating from the familial to the dynastic to the imperial.

In recent years, the influence of Asian architecture—and of Asian architects—has increased dramatically as the continent has grown only more crucial to the global economy and more significant in geopolitical affairs. As demographics on the continent shift, many Asian cities have seen massive upsurges in population and concomitant



Figure 11.1-3b

changes in urbanism. The continent is home to the world's most populous cities, including, among others, Tokyo (38 million), Shanghai (34 million), and Delhi (27 million). This explosive growth has caused rapid changes in these megacities; for example, in South Korea, the proportion of urban residents grew from 28% in 1960 to 80% in 2000, causing a corresponding building boom in the capital city of Seoul. The city suffered enormous damage during the Korean War from 1950 to 1953, leaving many areas damaged or flattened. However, the country's economic growth allowed for urban expansion and the reconstruction or repair of historical structures (a process of rebuilding that was mirrored, with high political stakes, in North Korea's capital of Pyongyang). Today, the city contains architecture of many periods, styles, and types. Various traditional palaces, temples, and city gates have been preserved, including Jogyesa Temple and Namdaemun Gate. Some remnants of Japanese colonialism, such as the eclectic Old Seoul Station and the severely classicizing City Hall, remain standing. Yet these older styles are juxtaposed with a striking surplus of buildings from the last four decades; the new City Hall, for example, towers over its ancestor in an amorphous wave of glass and steel. Completed in 2012 by the Korean firm iArc, the structure is exemplary of Seoul's decidedly contemporary urban character. Not surprisingly, as with many Asian cities, the proliferation of new architecture in Seoul has retrained attention on the architecture of the past. A handful of traditional Korean dwellings, like those in the relatively intact Bukchon Hanok Village, remain standing in some districts of the city. The *hanok*, or traditional Korean house, was a type that evolved over many centuries to suit the agricultural patterns of life on the Korean peninsula. Built from durable red pine and topped with a thatched roof (or ceramic tile, in later instances), each *hanok* stands on

blocks of stone. These stone floors were heated by a fire box in the substructure (a system known as the *ondol*) to provide radiant warmth during cold winters. The neighborhood of Bukchon is located at the heart of the royal quarter, between Gyeongbokgung Palace, Changdeokgung Palace, and Jongmyo Royal Shrine, and the origins of the urban fabric date to the beginning of the Choson Dynasty some six centuries ago. Unlike similar vernacular wood-frame dwellings in Europe, *hanok* are created to cooperate with their environmental conditions. Their designers considered rainfall, wind, and the flow of nearby rivers in the planning of each house, ideas which also dictated Korean urban planning. Furthermore, each *hanok* is divided according to Confucian principles, with different zones for women and men and formal shrines dedicated to ancestors. Though much of the city of Seoul comprised *hanok* villages until the middle of the twentieth century, many were destroyed during the Korean War and the subsequent building boom of the 1970s. As with Beijing's *hutongs*, an increased focus on architectural heritage means that the village has now become a popular touristic site. This relay between past and present, and the resulting tensions between tradition and contemporaneity, characterize many megacities across the Asian continent.

For Further Reading

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