

Cambodian Architectural Heritages & Chronology

Cambodia is known throughout the world for the splendor of its physical culture, as represented by the magnificent monuments of the Angkorian era. For the past decades these monuments have been the focus of a major multinational conservation effort.

The pre-Angkorian era

From the early years of the first millennium CE, the territory of what is now Cambodia formed an integral part of the proto-Khmer kingdom of Funan, the capital of which was located at Óc Eo in modern An Giang Province of southern Việt Nam. The first Shivaite state in South East Asia, Funan is known to have been a major maritime power which at its height embraced much of modern Cambodia, southern Việt Nam and parts of the Malay Peninsula.

By the 6th century Funan was in decline; between 550 and 680 it became integrated with one of its former vassal-states, resulting initially in the formation of two interlinked kingdoms – Water or Lower Chenla, centered at **Angkor Borei**, and Land or Upper Chenla, which incorporated a large area stretching from modern Kompong Thom Province of Cambodia into what is now Champassak Province of Laos. Thereafter these two kingdoms began to develop into a unified Khmer state.

Temple ruins dating from the pre-Angkorian era have been found in many parts of southern Cambodia, especially in the region between the Mekong and Tonle Sap rivers. Of particular note are the ruins of **Sambor Prei Kuk** (Kompong Thom Province), which was built in the early 7th century by King Isanavarman I of Chenla.

While most temples from this early period have long since disappeared, foundation stones, lintels and other decorative carvings found in the area indicate that the square- and octagonal-shaped sanctuaries constructed at that time shared many design features with early Indian temples. Numerous magnificent stone statues from the period, depicting mostly Hindu deities, have survived and are now on display in the **National Museum in Phnom Penh**.

The Angkorian era

Jayavarman II (802-850), first of the Angkorian devaraja or god-kings, established his capital approximately 30 kilometres from Angkor at **Phnom Kulen**, building on its summit a temple to house the sacred linga-yoni (phallic representation) of the god Shiva, in which the king's soul was held to reside and through which he was believed to communicate with heaven.

It was Indravarman I (877-889) who drew up plans for a new city at Angkor, complete with its own complex irrigation system designed to grow enough rice to feed a growing population. His reign was marked by the construction of the first great works of Khmer architecture – **Preah Ko** (879) at Roluos and the **Bakong** (881) at Angkor.

The earliest of the temple-mountains constructed by the Angkorian kings, the Bakong comprised a sanctuary built on top of an artificial hill to house the sacred linga-yoni. Its pyramidal-shaped roof represented a sacred microcosm of the world below the summit of Mount Meru, home of the gods. Thereafter each Khmer king strove to outdo his predecessor in the height, size, and splendour of his temple mountain, as evidenced by the progression from the complexes at **Phnom Bakheng** (893) and **Pre Rup** (961) to those at **Ta Keo** (1000-1025), and the **Baphuon** (1060). Temple mountain architecture reached new heights during the reign of Suryavarman II (1113-1150) with the construction of the 81-hectare **Angkor Wat**, Cambodia's most famous sanctuary and probably the largest religious monument ever built.

After Suryavarman's death the Khmer kingdom suffered its first major invasion at the hands of the Cham, shattering people's confidence in the protective powers of their Hindu deities. This setback was reversed by Jayavarman VII (1181-1218), who attacked and defeated the Cham before embarking upon a series of campaigns which extended the borders of his kingdom further than ever before.

Returning from war, Jayavarman VII converted to Buddhism and proceeded to launch the most ambitious architectural scheme of all, the construction of a spacious new capital city at **Angkor Thom** (1190-1210) with the massive Buddhist sanctuary known as the **Bayon** at its centre. In practice the mythology governing the design of the Bayon simply reworked the old mythology of cosmic Mount Meru, replacing Shiva with Lokeshvara, Lord of the World. The colossal faces that look out in four directions from the towers of the Bayon and the gates of Angkor Thom served to demonstrate the compassionate, all-seeing power of Lokeshvara and the king.

Between the 11th and 13th centuries major Khmer sanctuaries were also constructed in many other parts of the country; of those which survive, the complexes of **Beng Melea** in Siem Reap Province and **Prasat Banteay Chhmar** in Banteay Meanchey Province are particularly noteworthy.

However, extant Khmer temple architecture is not restricted to the territory of present-day Cambodia. At its height the Khmer empire embraced a vast region of South East Asia which extended from the borders of Burma in the west to the southernmost tip of Indochina in the east and from the borders of Yunnan in the north to the Malay Peninsula in the south. Accordingly substantial Khmer temple complexes were built in what is now southern Laos (Wat Phu in Champassak Province) and in a broad expanse of north eastern Thailand (Prasat Narai Jaeng Waeng near Sakhon Nakhon; Prasat Kamphaeng Noi, Prasat Kamphaeng Yai, Prasat Sikhoraphum, Prasat Yai Ngao, Prasat Phum Phon and Prasat Ban Phluang near Srisaket; Prasat Phnom Rung, Prasat Phimai, Prasat Non Ku and Prasat Muang Khaek near Nakhon Ratchasima), extending into the central region (Wat Mahatat near Lopburi, Wat Sisawai near Sukhothai and Wat Chao Chan near Uttaradit) and stretching as far west as Kanchanaburi (Prasat Muang Singh) and as far south as Petchaburi (Wat Kamphaeng Laeng).

The construction of Angkor Thom and the Bayon constituted a serious drain on the resources of the Khmer kingdom and those monuments proved to be the last major architectural projects undertaken by the Angkorian kings. By the time of Jayavarman's death the neglected irrigation system of the royal capital had fallen into terminal decline, leading to a steady reduction in rice yields. Thereafter the kingdom came under increasing threat from Siamese military incursions in the west and, as Theravada Buddhism became the religion of the people during the 13th century, the grandiose vision of a cultural unity based on sacred kingship disappeared, undermining the prestige of the king. In 1431 the Khmers were finally driven out of Angkor by the Siamese.

The architecture of the Angkorian monuments is well documented. The earliest temples were of relatively simple design, constructed from brick and often covered with stucco. Soft sandstone was used for sculptures, lintels and doorframes, and sometimes for relief figures framed in niches that were, in turn, set into the brickwork. Later structures made greater use of laterite or sandstone as foundations and bases, while the monuments themselves were constructed almost entirely from carved blocks of sandstone. The sanctuaries of the 11th, 12th and 13th centuries were more grandiose than their predecessors and featured elaborately carved causeways, courtyards and galleries decorated with bas-reliefs (engravings raised from their background) intended to inspire worshippers both before and after ritual ceremonies. Though strongly influenced by Indian models and often designed to recount Hindu epics such as the Ramayana and Mahabharata, these bas-reliefs were uniquely Khmer in aesthetic conception. Of particular note are the exquisite apsara dancers of Angkor Wat and the sacred naga (serpent

god of water), a common decorative element on stairways, railings, roof finials and towers which reflects the importance of water in a region where rice is the staple crop.

The extant monuments of Angkor and the surrounding countryside belie the historical reality. Whilst the temples themselves were constructed of stone, most residential buildings, including royal palaces and the houses of priests, servants and officials, would have been made of timber which has long since rotted away. According to Zhou Daguan, a Chinese emissary who visited Angkor between 1296 and 1297, the Khmer king resided in a carved wooden palace centrally located within the walled city of Angkor Thom, with columns which supported a tiled roof. Certain sections of the palace were overlaid with gold.

Meanwhile the lower classes resided outside the city in houses of wood, raised on stilts, with thatched roofs and woven walls of palm leaves or grass. Houses echoing this description can be seen today throughout rural Cambodia. By the Angkorian era the development of villages and towns had evolved from circular earthwork sites to more fluid clusters of housing, many of which organically followed the riverbanks with little evidence of geometric urban planning. The word *kompong*, which occurs frequently in Cambodian village, town and provincial names, translates directly as 'a landing stage' (for watercraft) or as 'a place of access to the river', once more underlining the influence of water in the development of Cambodia's built heritage.

The middle period

The next 400 years were an era of political and social decline, marked by frequent wars with the Siamese and the Viêt. During this so-called Middle Period the Khmer kings established a succession of temporary capitals, constantly moving on as a result of warfare, commercial advantage or sometimes simply the preferences of the king for a more favourable location.

Principal cities serving intermittently as the nation's capital during this period included Phnom Penh (1434-1473), Lovek (1516-1618) and latterly Oudong (1618-1861). Besieged, burned or simply abandoned and left to decay, the majority of structures from this period have long since disappeared, leaving just a few scant foundations. Even at the former royal capital of Phnom Preah Reachtrop at Oudong, 40 kilometres north west of Phnom Penh, very little remains apart from the moat, some old cannon placements and a series of stupas containing the remains of kings of the Oudong period.

During this period wats began to proliferate throughout the countryside, taking on an important community role as a place of worship, education and social encounter. Whilst the architecture of the typical wat complex seems to have developed by accretion rather than by the studied working out of space articulations, a basic form began to emerge during this period. This involved a large principal structure where ceremonies were held, surrounded by various other buildings such as a holy relic store, a library, a pavilion, a bell tower and living quarters for the monks. Nearby was the chedi or stupa. By the 17th century these temples had acquired their characteristic steep-angled, multi-tiered roof with overhanging eaves and gables, spires and filials and in subsequent centuries ornamentation became steadily more elaborate.

The emergence of Phnom Penh

Sited at the confluence of four major waterways – the upper and lower Mekong, the Tonle Sap and the Bassac – the city of Phnom Penh was founded by King Ponhea Yat (1405-1467), briefly becoming the Khmer royal capital between 1434 and 1473. The royal court moved back to Phnom Penh following the construction of the present Royal Palace by King Norodom in 1866.

The city's original name was 'Chaktomuk Mongkol'. Translated into English, *chaktomuk* means 'the four faces', a reference to the *quatre bras* or four arms of the waterways that

converge in front of the Royal Palace and possibly also to four directionally orientated Buddhas.

In 1864, following a devastating war on Khmer soil between Siamese and Vietnamese armies, King Norodom (1860-1904) sought French protection. Twenty years later the French imposed on the Khmers a treaty which limited the king's power and established a colonial beurocracy. The French presence in Indochina (Laos, Cambodia and Việt Nam) was ratified in 1887 when Cambodia became part of the Indochinese Union.

French colonial architecture

Prior to the arrival of the French, Phnom Penh comprised mainly wooden or bamboo houses with thatched roofs, constructed on stilts to protect their inhabitants from insects, reptiles, dampness and the periodic flooding which persists even today due to poor drainage.

At the heart of French urbanist plans was the segregation of Phnom Penh into quartiers, based primarily on the ethnicity of residents. These comprised a quartier Cambodgienne, a quartier Annamite, a quartier Chinoise and a quartier Européen.

The development of modern Phnom Penh began during the 1890s under the direction of architect-town planner Daniel Fabré (1850-1904).

During this period the colonial administration made various attempts to resolve the recurrent problem of flooding by filling in several small natural lakes and digging a series of interlinked canals to provide better drainage. The most important of these was the canal completed in 1894, which effectively encircled the quartier Européen. This canal entered from the Tonle Sap, ran east to west along quai Vernéville (now Street 106) and south to north adjacent to boulevard Monsignor Miche (now Monivong Boulevard), before swinging eastwards again to exit into the Tonle Sap at the end of boulevard Charles Thomson (now France Street 47) at the site of a former bridge, the Pont de Vernéville.

Urban planning was stepped up during the 1920s. In 1925 architect and town-planner Ernest Hébrard drew up a plan for the extended urbanisation of Phnom Penh, which was published in the same year in *l'Éveil économique*. Thereafter the Indochina Town Planning Service (Service de l'architecture et de la urbanisme de l'Indochine, founded by Hébrard two years earlier in Hà Nội) was responsible for overseeing the systematic development and rationalisation of much of the city as it stands today.

An integral part of Hébrard's plan was to partially fill in the canal surrounding the quartier Européen, planting extensive public gardens which extended west to the Beng Kak Lake and extending the city to the other side of the Tonle Sap River (Chrouy Changvar peninsula). Whilst neither the gardens nor the planned extension to the Chroy Changvar peninsula were realised, Hébrard is widely credited for his achievement during this period in turning a small, Cambodian-French colonial town into a bustling, well-planned metropolis.

In the years which followed, wide boulevards were created and numerous neo-classical French style buildings were constructed. These included the National Library (1922), the Hotel Le Royal (1929) and the Cercle Sportif (1929, recently demolished to make way for the new US Embassy), The house of the Résident Supérieur was sited on the riverfront adjacent to Wat Phnom, while his office (now the Ministry of Finance) was constructed nearby. Many of these colonial buildings were constructed in brick and rendered in plaster. As time went by, ferro-concrete buildings such as the Phnom Penh Railway Station (1932), the Grand Hotel d'Angkor at Siem Reap (1932) and Phnom Penh's art deco New Market (Psah Thmei, 1937) became more widespread.

Today, French colonial architecture can still be seen throughout Phnom Penh and in numerous other provincial centres. Unfortunately in the recent past some fine examples have been demolished, whilst many extant examples are currently in a poor state of repair and in urgent need of restoration.

Modern Khmer architecture: the buoyant 50s to 70s

Cambodia obtained independence peacefully from France in 1953 while the rest of the region was in turmoil. Thereafter the country experienced a dynamic period of economic development and cultural prosperity, unique in South East Asia. Unfortunately this period came to a brutal end in 1970 with the military takeover by Lon Nol, after which there followed 20 years of war and chaos.

Between 1953 and 1970, backed by Prince Norodom Sihanouk, Khmer architecture blossomed with the construction of an impressive number of noteworthy buildings. Not only is this period easily definable politically, but it also corresponds to the emergence of an effervescent style of architecture closely linked to a Khmer 'renaissance of the arts' and to an *effet du Prince*, the commitment of Sihanouk to promote a high standard of excellence.

Important figures in the architectural flowering of this period are the architects, engineers, public works and ministry officials whose visions and capacities were channelled into concrete realisation. Notable amongst them are the architects and officials H E Vann Molyvann (b 1926), H E Ing Kieth (b 1926), H E Keat Chhon (b 1934) and Mam Sophana (b 1936). Important structures from the period include the Chaktomuk Conference Hall (1961), the National Sports Complex (1964), the Royal University at Kompong Cham (1965) the Preah Suramarit National Theatre (1968) and the Preah Kossomak Centre for Training Electrical Technicians (1969).

The new Khmer architecture of the period from 1953 to 1970 was characterised by high standards coupled with innovative style, reflecting the self-confidence that this independent nation had in itself. The contrast between this period of enlightened construction and the destruction which followed in the 1970s could not be greater.

An in-depth study of this period was recently undertaken by Helen Grant Ross, Darryl Collins and Hok Sokol with funding from the [Toyota Foundation](#), described in the report 'Building Cambodia: New Khmer Architecture 1953-1970'.

Contemporary Khmer architecture

On 17 April 1975 Phnom Penh fell to the Khmer Rouge and soon afterwards the capital city and other urban centres were completely evacuated. People began to return in 1979 and reconstruction has been going on ever since.

In recent years the urban landscape has been changing rapidly, with the result that the pace of development has sometimes outstripped planning. Although larger foreign-funded projects have followed the architectural rules, a considerable amount of unsystematic construction has taken place in residential areas.