

ARCHITECTURE OF
THE BUDDHIST WORLD



THE
CAMBODIA, INDONESIA, LAOS
GOLDEN
MYANMAR, THAILAND & VIETNAM
LANDS

VIKRAM LALL

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THAILAND & VIETNAM

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A GROUNDBREAKING STUDY OF THE BUDDHIST
ARCHITECTURE OF SOUTHEAST ASIA

ABUNDANT NEW COLOUR PHOTOGRAPHY
ORIGINAL ARCHITECTURAL MODELS

Over the course of its 2,500 year history, Buddhism has found expression in countless architectural forms, from the great monastic complexes of ancient India to the fortified Dzongs of Bhutan, the rock-carved temple grottoes of China, the wooden shrines of Japan, and the colourful Wats of Laos and Thailand. Architecture of the Buddhist World, a projected six-volume series by the noted architect and scholar Vikram Lall, represents a new multi-disciplinary approach to this fascinating subject, showing how Buddhist thought and ritual have interacted with local traditions across the Asian continent to produce masterpieces of religious architecture.

The first volume in the series, The Golden Lands, is devoted to southeast Asia, home to many of the most spectacular Buddhist monuments. Following a general introduction to the early history of Buddhism and its most characteristic architectural forms (the Stupa, the temple, and the monastery), Lall examines the Buddhist architecture of Cambodia, Indonesia, Laos, Myanmar, Thailand and Vietnam. For each country, he provides both a historical overview and case studies of noteworthy structures. Lall's concise and accessible text is abundantly illustrated throughout with new colour photography, as well as original architectural models that make even the most complex structures easily comprehensible.

The monuments that Lall considers in The Golden Lands range from the modest Bupaya Stupa, constructed in Pagan, Myanmar, in the third century, to the vast complex of Borobudur in central Java, the world's largest Buddhist monument; his achievement is to place them all within a single panorama of history, religion, and artistic innovation.



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The author, Vikram Lall asserts his moral right to be identified as the author of this work.
The architect, Vikram Lall asserts his moral right to be identified as the originator of all the 3-dimensional architectural models in this work.

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ARCHITECTURE OF THE BUDDHIST WORLD

THE CAMBODIA, INDONESIA, LAOS **GOLDEN** MYANMAR, THAILAND & VIETNAM *LANDS*

VIKRAM LALL

Editorial Direction
Joan Foo Mahony

JF Publishing

Abbeville Press Publishers

PUBLISHER'S FOREWORD

According to Cambodian legend, Jayavaram VII (r. 1181–1218), the Khmer king who built some of the most enduring Buddhist monuments during his long reign, when asked why he ceaselessly erected temple after temple, he replied that he did so because he was 'full of deep sympathy for the good of the world'; that he wanted to 'bestow on mankind the ambrosia of remedies to win them immortality'; and that 'by virtue of these good works would that I might rescue all those who are struggling in the ocean of existence'.

About seven years ago, my good friend, Vikram Lall, the well-known international architect and academic shared with me his lifetime of research and study on Buddhist architecture. His profound knowledge and passion shone through. Buddhism already was a subject very dear and close to my heart, and I agreed that it was indeed timely to publish a book covering all aspects of Buddhist architecture – complete with text, original architectural models and new photography. With this book and the other volumes to follow in the series, both Vikram Lall and I hope that Buddhist architecture as a subject will finally come out of the shadows and stake a commanding place of its very own together with Buddhist art, literature and religion.

Vikram Lall has written an extensive scholarly text on the entire scope and span of Buddhist architecture. In addition, he has also provided us with rare and unseen architectural drawings. As the Publisher and Managing Editor responsible for the editorial direction of the book series, I am extremely grateful to Vikram Lall for sharing with the readers his lifetime of knowledge, work and meticulous studies on the subject.

In the editing process, we agreed that The Golden Lands and the entire series of books on the Architecture of the Buddhist World would give to not just architects, but to all our readers, enough knowledge, understanding and detail on Buddhist architecture to have a full appreciation of this immense subject. Vikram Lall has provided us with copious material, and while organizing and editing the flow of the chapters with the unavoidable page limitations, our editorial team has tried not to lose his vision and his scholarship.

To complement the information already in this book, we have a dedicated website www.architectureofbuddhism.com, and we hope that you will be able to thereby enhance your enjoyment of The Golden Lands.

Joan Foo Mahony
Publisher & Managing Editor

EDITING NOTES

Foreign names:

With six diverse countries in The Golden Lands, each one with its own distinctive language and cultural heritage, the general rule which we have adopted for the book is to render names whenever possible in a spelling which will be easily recognizable for English speaking readers. For example, in the case of the many non-English names throughout the book, the word 'That' or 'Tat' is Lao for temple, but to avoid our readers reading it as a possessive pronoun, we have standardized the use of the word to 'Tat' because the words are used interchangeably in Laos as 'Tat' or 'That'.

Glossary:

Places, the names of temples, monuments, and all words in the Glossary are not italicized nor are they bolded; instead they are in their title case. This is to avoid distracting the reader with too many words in italics or bold. We have an extensive Glossary at the back of the book and it will be self-evident for the reader to refer to the Glossary whenever it is necessary.

Measurement units:

In the case of measurement units, we have tried to use the metric system and we have rounded up most of this unless it is strictly necessary for architectural measurements.

Usage:

We have used the UK English spelling style as far as possible. However, although, we use the UK English style, if certain words are already the more common forms and use '-ize/-izing/-ization' spellings, then we do not change them.

Dates:

With respect to dates, this book covers periods before and after the Common Era (CE). We use BCE for BC and CE for AD. All dates in BCE have BCE written consistently for the years of that era. However, in the case of post BCE dates, we have used the first year of the second millennium (1001) of the Common Era as the cut-off date. In other words, a temple constructed in 956 CE might, for example, have been destroyed in 1089. The 2nd century before the Common Era will be 2nd century BCE but when referring to the written form of the century after the Common Era, we would only indicate it as 2nd century.

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PRODUCTION TEAM



THE DHAMMA AND THE CAITYA-GRIHA

WORSHIP OF A SYMBOLIC IMAGE AND CREATION OF THE BUDDHA IMAGE

A turning point in the history of Buddhism was the creation of the Buddha's image in the 1st century. No longer was it necessary to represent the Buddha through aniconic symbols such as the lotus, Bodhi tree, wheel and Stupa; the Buddha could now be portrayed in human form. This development of the iconic image of the Buddha, and the practice of rituals led to the conception of temples, known as 'Caitya-grihas'. Caitya-grihas housed the Buddha image and provided the assembly with shelter. Originating from India, the architecture of these early Caitya-grihas, and even Buddhist temples today, inevitably share the vocabulary of design with the Hindu and Jain temples of India. In their plan, form and arrangement, Buddhist temples are rarely distinguishable from Hindu and Jain temples. What sets them apart, however, is their particular iconography.

The earliest architectural forms manifesting worship in Buddhism were the shrines enclosing Bodhi trees, dating to the period 175 BCE to 225 CE. These were designed for the veneration of the Bodhi tree that served as an iconic symbol for the Buddha. Also worshipped in the Bodhigara was the Vajrasana, the stone seat that the Buddha was supposed to have been sitting on when he received enlightenment. Though no original structures of Bodhigaras have survived, their architecture can be interpreted from the numerous bas-reliefs vividly depicting the architectural form and rituals of tree worship. Eleven bas-reliefs from Bharut, Mathura, Sanchi and Amravati in India have been identified that reveal the various architectural designs of the Bodhigaras. All of them belong to the period of four centuries between 175 BCE to 225 CE and have varied plans – circular, square, apsidal and octagonal.⁵ The consecration of the tree and the Vajrasana was achieved by defining a sacred enclosed space called the 'Bodhi-manda', or wisdom space, by an encircling wooden gallery. The enclosed space was open to the sky and along with the encircling wooden gallery, formed the hypaethral temple. The gallery was raised on wooden pillars, which comprised an aerial corridor for circumambulation, or Pradakshina. The structure was constructed of wood and was designed to support the weight of several persons. The gallery was designed to serve the rituals⁶ and ceremonies, called the 'Bodhi-maha', associated with the worship of the Bodhi tree and the Vajrasana.

The spread of Buddhism by the Emperor Asoka was marked by the planting of saplings of the Bodhi tree across the Indic region, and it can be safely presumed that many Bodhigaras would have been erected until, with the popularity of the iconic image of Buddha, emerged the design of the Caitya-grihas or temples, with the sanctum sanctorum housing the image of the Buddha.

One of the earliest surviving examples of Buddhist temple architecture is the Temple No. 17 at Sanchi in India, built in the Gupta period (320–550 CE). This temple comprises a square sanctuary with a front porch of four pillars. A single opening leads into the sanctuary from the porch, and the whole form is covered with a flat roof. This architectural arrangement of a cuboid form with a front porch is regarded as the generic model from which developed more elaborate temple designs.

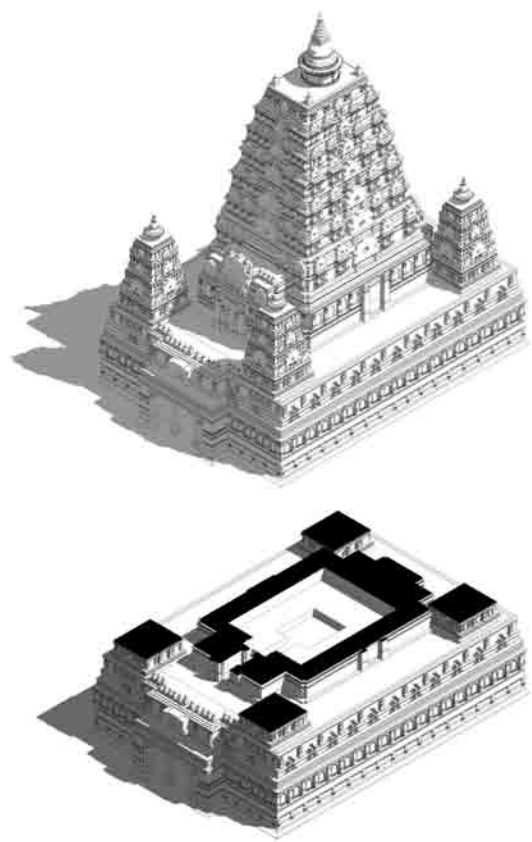


BELOW
Temple No. 17, built in the Gupta period, 320–550 CE, Sanchi, India

OPPOSITE PAGE
The two storied Sulamani temple complex, with its elaborate brickwork, 12th century, Pagan, Myanmar

5. The nature and use of such structures have been described in various texts such as the Ashokavandana, Diriyadana, Mahavamsa and the Jatakas which establish the relationship between architectural forms and functions of worship.

6. The rituals comprised pouring water from the raised platform, offering flowers and garlands, and prayers within enclosed space.



A significant development that soon followed was the addition of a pyramidal tower, the Shikhara, over the Cella or inner chamber of the temple. The temple attached to the Monastery No. 45 at Sanchi, built in the 10th century, is an example of such a temple. A similar one is seen at Ratnagiri, where the roof is crowned with a typical Shikhara.

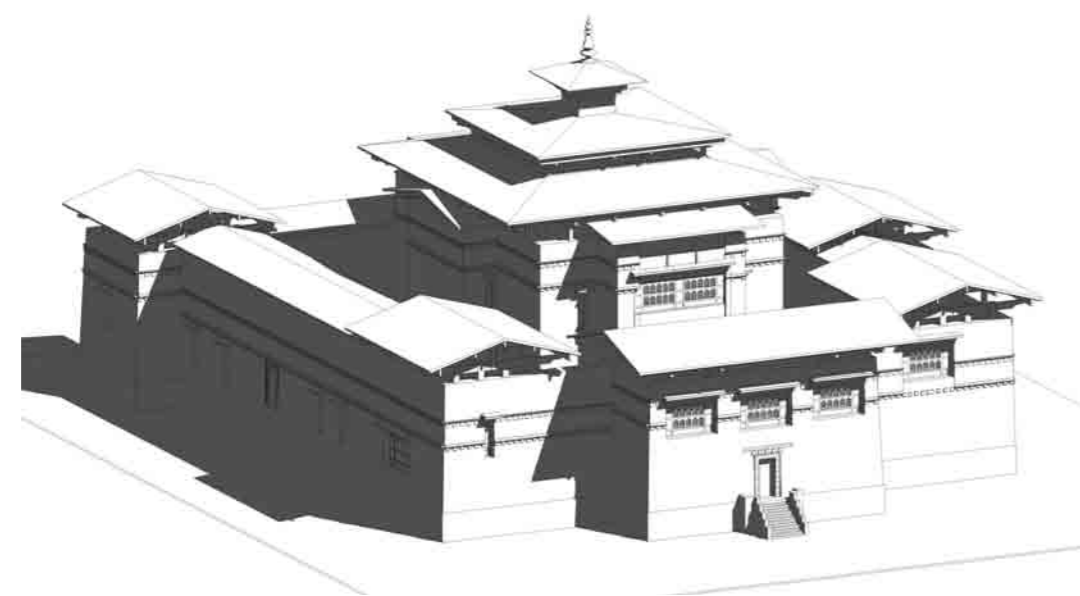
The pyramidal tower, the Shikhara over the Cella housing the image, was further elaborated into a Pancayatana-type temple with the addition of four additional complementary towers making a total of five towers known as the Pancayatana. The oldest remains in India of this typology are seen in Nalanda and Sarnath, dating from the 4th century. A century later, the Mahabodhi temple was constructed at Bodhgaya with a single tower, but later, four more were added to the central tower displaying the formal architectural qualities of the Pancayatana-type temple. Since it was considered immensely sacred in India, attempts were made to build exact copies of this architectural form in other Buddhist regions of Thailand, Myanmar and China. The five-pyramid temple form was further transformed when it was exported into the cultural landscapes of southeast Asia. Candi Sewu (9th century) in Indonesia employs the geometry of the Mandala to distribute 249 temples around a central temple having a Pancayatana architectural form. The Bayon temple (12th century) in Cambodia elaborates the Pancayatana form on a Mandala plan through a stepped-terrace formation commonly referred to as a mountain-temple. The idea of the terraced mountain-temple was also employed in India at Vikramshila, Lauriya Nandangarh in Bihar, and at the Sompura temple in Bangladesh.

ABOVE
Architectural model of the pyramidal tower, Mahabodhi temple, 7th century, Bodhgaya, India

BELOW
Architectural model of one of the first fortress monasteries, Simtokha Dzong, 16th century, Thimphu, Bhutan

OPPOSITE PAGE (TOP)
The monumental mountain-temple complex of Borobudur, 9th century, central Java, Indonesia

OPPOSITE PAGE (BOTTOM)
The mountain-temple of Bayon, 12th century, Siem Reap, Cambodia



Over time, temple complexes grew in size as their monumental scale was conceived to represent the idea of the cosmic mountain, Mount Sumeru.

Numerous types of temples or Caitya-grihas were conceived in different cultural regions reflecting the diverse range of design ideas – in the Indic region they were built of stone or brick with a vertically rising spire; in southeast Asia, they emerged as monumental mountain-type temples; in the Sinosphere regions, they were derived from the secular wooden architecture of the region, and are developed along the horizontal plane; and in the mountain regions of the Himalayas, they adopted characteristics of fortified architecture as can be seen in the Dzongs of Bhutan.





MYANMAR



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II. ARCHITECTURAL CHARACTERISTICS

BUDDHIST ARCHITECTURE IN MYANMAR, MAINLY OF THE PAGAN PERIOD

The Burmans of Pagan imbibed the best of the architectural principles, techniques and artistic styles of the Pyus and Mons, infused them with their own genius, and produced what was perhaps the widest range of architecture in the Buddhist world.

MONUMENT CATEGORIES

During the reigns of successive kings of Pagan over two centuries, several thousand Buddhist buildings were constructed in the kingdom of Pagan. These included Stupas, temples (Caitya-grihas) and monasteries (Viharas) – the three main structures associated with the religious architecture of early Buddhism – and also ordination halls and libraries.

STUPAS

The remains of early Stupas (or Pagodas) in Pagan – the c. 3rd century Bupaya and the Naga-kywe-nadaung – show the Pyu influence in their bulbous forms, the rising domes recalling the cylindrical profile of the Stupas at Sri Ksetra. In later years of the Pagan period, a generic form of the Stupa with specific design characteristics began to emerge.

BELOW
Bupaya Stupa, c. 3rd century,
Pagan, Myanmar

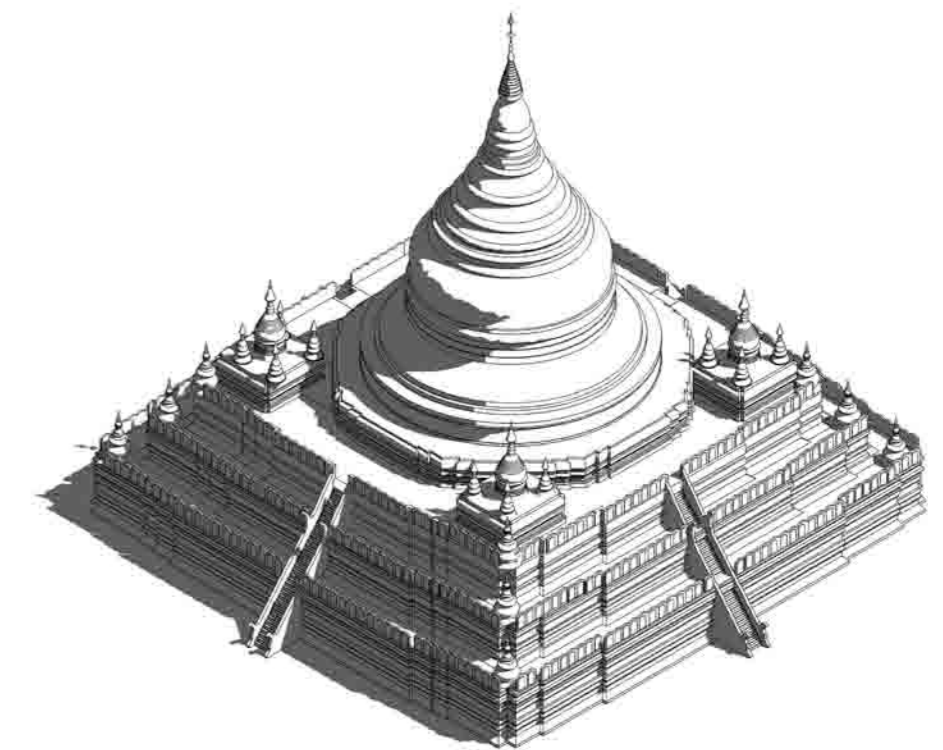
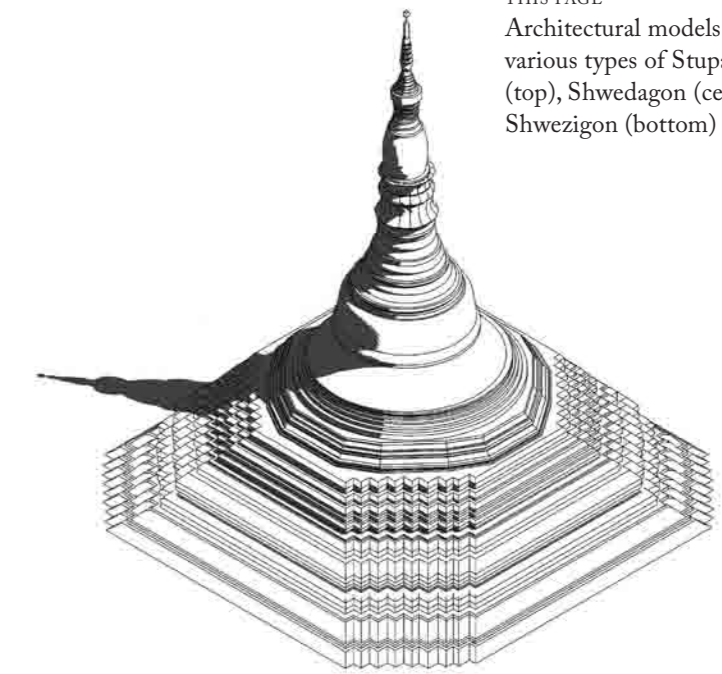
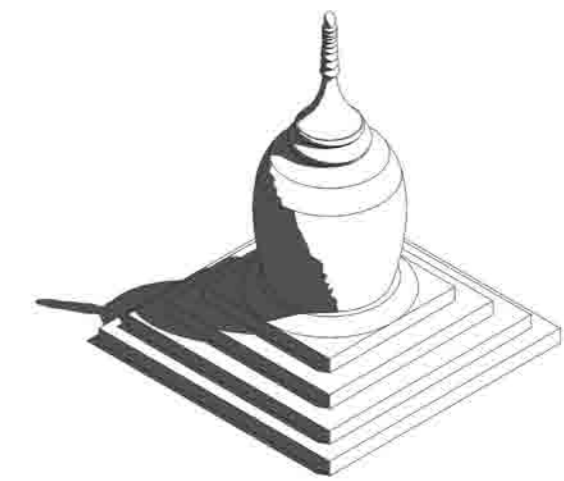
BELOW (RIGHT)
Shwe-san-daw Stupa, early 11th
century, Pagan, Myanmar



The typical Stupa at Pagan comprised a square pyramidal base of receding terraces, surmounted by a bell-shaped dome, with each level accessed via staircases provided in the middle of each face. The walls of the terraces were lined with bas-reliefs of the Buddhist Jatakas, allowing the devout to learn something about their religion as they perform the ritual circumambulation or Pradakshina. The profile of the dome of the Stupa evolved from the convex and vertical shape to an increasingly bell-shaped concave one.

The transformation of the early Pyu forms from the bulbous convex shapes (Bupaya) into the distinct Pagan structure is seen in the early 11th century Shwe-san-daw Stupa. The Shwe-san-daw, built by King Anawrahta to enshrine a sacred hair relic of the Buddha brought back from Thaton, is considered to be one of the first to have adopted the bell-shaped form. Its five square terraces have flights of steps on each side, reaching up to the base of the bell-shaped dome. The dome sits on two receding octagonal terraces, and is topped by thick ringed bands. The Harmika, a box-like structure on top of the dome, serving as a reliquary casket and a staple in Indian Stupas, is absent. The dome is crowned by a distinct Burmese finial called the Hti, formed like a tiered umbrella, made out of metal; this is a later addition.

This typology was further refined in the design of the Shwedagon (c. 6th to 10th centuries; rebuilt in the 14th century) in Yangon, and the Shwezigon (12th century) in Pagan. All the Stupas enshrine various relics of the Buddha. In the case of the Shwedagon and Shwezigon, they are considered two of the most sacred monuments of the Buddhist world. Shwezigon is described in detail in the Selected Examples section.



THIS PAGE
Architectural models showing the various types of Stupa – Bupaya (top), Shwedagon (centre), Shwezigon (bottom)

SHWEZIGON

11TH–12TH CENTURY
PAGAN

The Shwezigon Stupa is one of the most sacred Buddhist monuments built in Myanmar. It has special sanctity in the Buddhist world because it houses the holy relics of the Buddha including a tooth-relic from Sri Lanka and his frontlet bone from Prome. The Pagoda is also revered because it incorporates the shrines of the entire pantheon of the thirty-seven Nat spirits within its enclosure, symbolizing the synthesis of native Burmese religious beliefs with Buddhism. King Anawrahta who is credited by the Chronicles as having commenced the construction of the Stupa is believed to have justified the inclusion of the Nat shrines in Buddhist monuments by declaring ‘men will not come for the sake of a new faith. Let them come for their old gods and gradually they will be won over’. It was also seen as the symbol of the triumph of the purification of Buddhism that was initiated by the early kings of Pagan.

It is believed that the construction of the Stupa was started by King Anawrahta (r. 1044–1077) around 1059–1060, and completed only after his death by King Kyanzittha (r. 1084–1112). It was originally named ‘Nirbbana-mula-bajra-paryamahaceti’, or ‘the great Caitya, circle of Adamant, Nirvana’s root.’ Legend states that the site for the Stupa was chosen because when a white elephant carrying the tooth relic on its back was let loose, it chose to rest there, and that spot was interpreted as an auspicious location.

The Shwezigon is located in the centre of an enclosed precinct that has four gates, one on each side. Like other Buddhist Stupas, the architecture of the Shwezigon embodies the cosmological symbolism of Mount Sumeru. The form of the Pagoda is composed of three square terraces, an octagonal terrace and a circular terrace rising pyramidally, on top of which rests the dome in the form of an inverted bell capped by a finial, the Hti. The square terraces recede as they rise upwards, creating space for circumambulation, or Pradakshina, at each level. The octagonal terrace provides the transition from the geometry of the square terraces to that of the circular one on which the dome rests.

The receding square terraces are reached by median stairways located at each of the four cardinal directions. Smaller spires

with circular form articulate the corners and increase in size with each rising terrace. The walls of the three square terraces are lined with niches that house plaques depicting the Jataka tales of Buddhism in bas-relief. There are 597 niches and 420 surviving plaques. They appear to have been carved out of stone and then covered with a green glaze.

The width of the Stupa at the base is about 48 metres which equals its total height. The Shwezigon is unique in that it is the only stone Stupa in Pagan, all others being made of brick.

Four small shrines referred to as ‘perfumed chambers’, or Gandhakuti, are located along the cardinal directions right opposite the median stairways. The shrines open outwards and have a tall roof in the form of a temple Shikhara. Housed within these structures are 3.3 metre-high gilded metal standing statues of the four Buddhas of this time era – Kakusandha, Konagamana, Kassapa and Gotama, in the posture of Vitarkamudra, one statue in each shrine. This arrangement of the ‘perfumed chambers’ is a refinement over the earlier Stupa, Shwe-san-daw, where the chambers were placed at random. This arrangement of four Buddhas, facing each of the cardinal directions around a square structure was a recurrent theme in the monuments of Pagan. The Ananda temple is an excellent example.

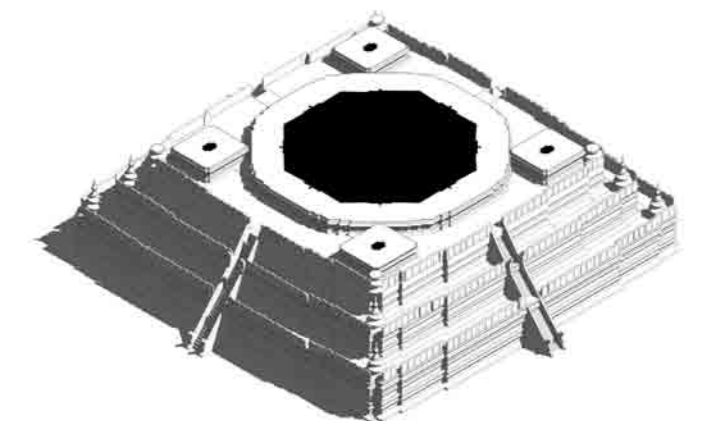
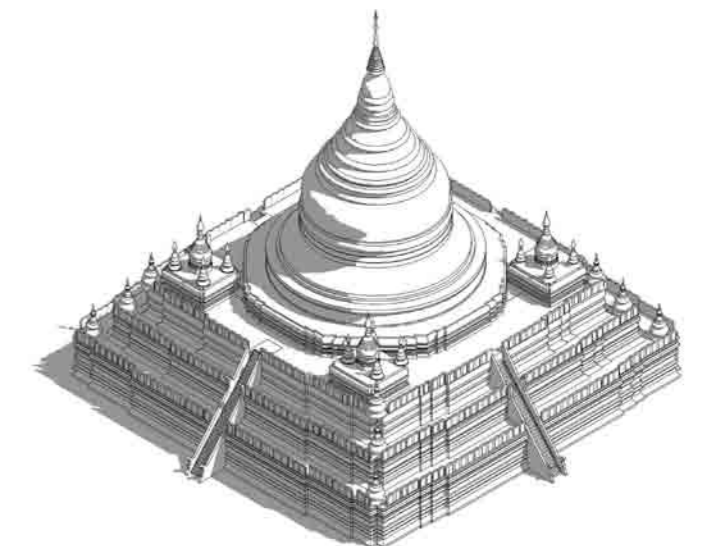
Various shrines and Stupas have been added over the years within this compound. The architecture of the Shwezigon created a vigorous and archaic form that became a prototype for most large Stupas that were built in Pagan in later years, till around the mid-13th century.

OPPOSITE PAGE (TOP)
Shwezigon Stupa, with its refined bell-shaped dome; the only stone Stupa in Pagan

OPPOSITE PAGE (CENTRE LEFT)
Close-up of lion statues at the terraces

OPPOSITE PAGE (BOTTOM LEFT)
Median stairway leading up to the top terrace

OPPOSITE PAGE (RIGHT)
Architectural model of Shwezigon





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DAU PAGODA

MOT COT

BUT THAP

THAY TEMPLE

indigenous popular beliefs. Unfortunately, most of the temples have been destroyed and there is no evidence of their planning and architectural characteristics.

Besides temple and towers, over a hundred Sutra pillars were also built in Hao Lu. The Sutra pillars are stone columns that are erected to record important scriptures or Sutras of the Buddhist faith. The Sutra pillars at Hao Lu are 70 centimetres in height with octagonal shapes, having inscriptions in Chinese on their surfaces. Many of them are inscribed with the *Usnishavijaya Sutra*, suggesting the presence of the Tantric form of Buddhism. The spread and consolidation of the faith laid the foundations for its further growth in the succeeding period of the Ly and Tran dynasties.

FROM THE 11TH TO THE 13TH CENTURY – THE LY DYNASTY AND THE GOLDEN AGE OF BUDDHISM

The period from the 11th to the 13th centuries under the kingdom of the Ly Dynasty (1010–1225) or the Dai Viet (the ‘Great Viet’) ushered in the golden age of Buddhism when Buddhist architecture and art, especially statuary and ceramics, blossomed. This kingdom was founded by King Ly Thai To, mentioned earlier. He had been brought up in the Buddhist temple, Kien So, and he further reinforced his personal relationship with the faith by spreading it across his kingdom. He actively promoted the faith, encouraging (by royal decree) citizens to become Buddhist monks. Upon ascending the throne, he shifted the capital to Thang Long in 1010, which is the present day Hanoi. He established the capital city by building a citadel along with several Buddhist monuments. His successors were also ardent Buddhists who actively supported Buddhism by sponsoring the construction of numerous large temples and towers. These state temple complexes served as centres for cultural and educational activities and had a large community of monks. The entire establishment of the temple and the Sangha were supported through endowments of rice fields donated to the temples by the state. Wherever there was beautiful scenery, temples were built and the royal temples were further categorised as great, medium and small according to the setting and landscaping of the temples.

While there are no complete architectural remains of Buddhist monastic buildings of the Ly dynasty, literary evidence records that practically every king during the Dai Viet period commissioned the construction of Buddhist monuments during their reigns⁹. King Ly Thai To, is said to have built as many as 150 temples including Tu Thi Thien Phuc on Mount Yen Tu in 1041, and the unique Dien Hu temple in Thang Long, also popularly known today as Chua Mot Cot or the One Pillar Pagoda in 1049, that was later enlarged in 1105.

The worship of Avalokiteshwara in the female form of the goddess Quan Am or Guanyin (similar to the Chinese instead of the Indic male version) continued to be popular and was manifested in a unique design of the Mot Cot temple. The temple was commissioned because the king, Ly Thai Tong, in a dream saw Avalokitesvara sitting on a lotus throne inviting him to join him. This was perceived as an inauspicious omen by the monks and as a result he was asked to construct a temple similar to the one he saw in his dream around which monks would circumambulate and pray for the king’s longevity. Thus its original name, Dien Hu, which translates as ‘prolong longevity’. The temple was constructed in 1049 and subsequently reconstructed to its present form.

OPPOSITE PAGE
Chua Mot Cot, 1049, Hanoi,
Vietnam

9. Various large temples that were sponsored by them across their land are recorded in annals such as Thien Uyen Tap Anh, Dai Viet Su Luoc and Dai Viet Su Ky Town Thu.



DAU PAGODA

C. 3RD CENTURY

THUAN THANH DISTRICT, BAC NINH PROVINCE

The historic and most ancient Buddhist monument in Vietnam, the Dau Pagoda, has been called by several names such as Thanh Dao Tu, Phap Vu Tu, Chua Vua (king's Pagoda) and Chua Ba Dau (Pagoda of the Lady Dau). The origin of the temple dates back to around the 3rd century when the Chua Dau was an important and well known Buddhist centre situated at the ancient Luy Lau citadel, where the famous Indian monk Vinitaruci taught on his way back from China, and was perhaps the initial source of Mahayana Buddhism in Vietnam. Inscriptional evidence suggests that its present architectural typology was constructed during the Ly dynasty in the 11th century and subsequently the Chua Dau been reconstructed several times, the most significant being during the Tran dynasty in the 14th century and the Mac dynasty in 16th century and finally in 17th century, when it reached its current size.

The name of the temple is steeped in local legends and derived from the principle deity, Lady Dau, the goddess of cloud, who is worshipped here along with other Buddhist deities. Local deities have been associated with Buddhism in Vietnam such as goddesses of cloud, rain, thunder and lightning. The goddess of cloud or Lady Dau is worshipped in another temple with the same name located in the Bac Nienh province. This temple represents the architectural manifestation of the integration of local beliefs with the original Buddhist teachings.

The planning of the temple follows the Noi Cong Ngoai Quoc typology (discussed earlier) comprising of three halls: the front hall, the incense burning hall and the main hall. The front hall and main hall are parallel to each other and the incense burning hall is positioned perpendicular connecting the two halls in between. All this is enclosed in a square with two galleries on either side. The three-door gate house opens onto a large courtyard, which is flanked by two buildings on its sides. These are single storey halls that served as rest houses for pilgrims. Opposite the gate across the court is the front hall which is followed by the incense burning hall that eventually links it to the main hall, within which are installed the Buddhas and also the statue of Lady Dau. The front hall is linked by two side galleries to the hall of patriarchs at the rear, thereby enclosing the ensemble of front hall – incense burning hall – main hall, forming the Chinese character of 'T' enclosed in a square.

There are several stone steles within the temple complex that are engraved with inscriptions. The temple also housed the preserved mummies of two important monks from the 17th century, Vu Khac Minh and Vu Khac Truong. In front of the Pagoda, there is a three-storied (used to be six storeys) Hoa Phong brick tower which houses a large bell dating back to the 18th century and a big bronze Gong dating back to the 19th century.



ABOVE (TOP)
The altar of Lady Dau in the main hall

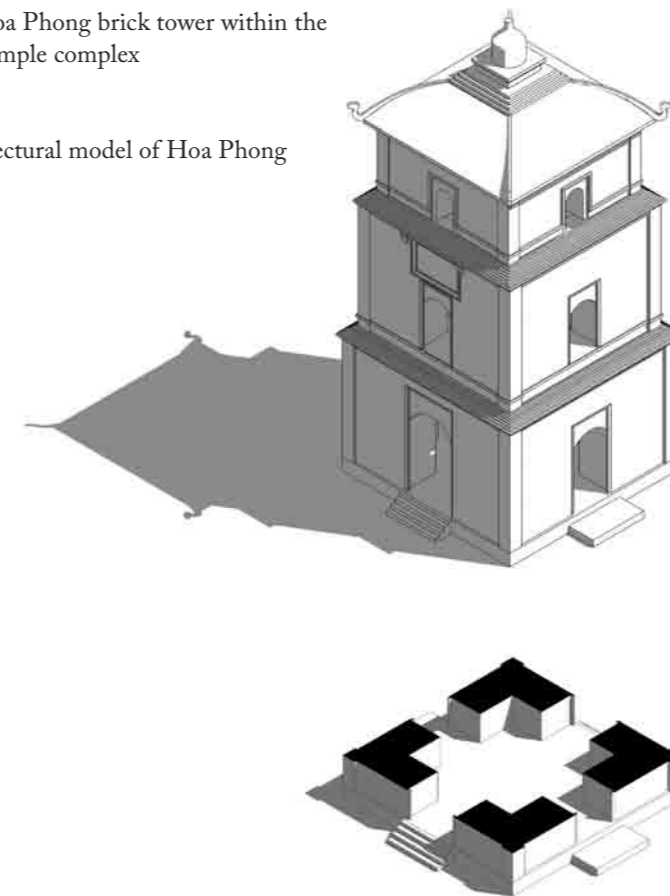
ABOVE
The bronze bell inside the Hoa Phong brick tower



ABOVE
The peaceful ancient courtyard, Dau temple grounds

RIGHT
The Hoa Phong brick tower within the Dau temple complex

BELOW
Architectural model of Hoa Phong





INDONESIA



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CANDI KALASAN

CANDI MENDUT

BOROBUDUR



II. ARCHITECTURAL CHARACTERISTICS

By the 7th century, a comprehensive idea of temple architectural forms had begun to emerge in the regions of central and eastern Java. Architecturally, both the Hindu and Buddhist structures in Indonesia shared the same typical Hindu architectural traditions in their layouts, hierarchy of zones, structure and temple designs, all according to Hindu cosmology which was then complemented by local Indonesian culture and beliefs.

CANDI – A SINGLE SHRINE STRUCTURE

The religious Buddhist architecture of Java has developed primarily from the Candi, an Indian type single-celled isolated shrine structure with a pyramidal tower on top along with an entrance portico. The architectural form of the Candi can be traced as far back to the Nagara type Shikhara towers of northern India, in particular to the Hindu temples of the Indian Gupta empire (320–550 CE); the Buddhist temples of the Indian Pala empire (750 CE–1174); and the monolithic Dravidian Pancha Rathas carved out of granite, of the Pallava dynasty (between the 2nd to the 9th centuries) in Tamil Nadu in south India.

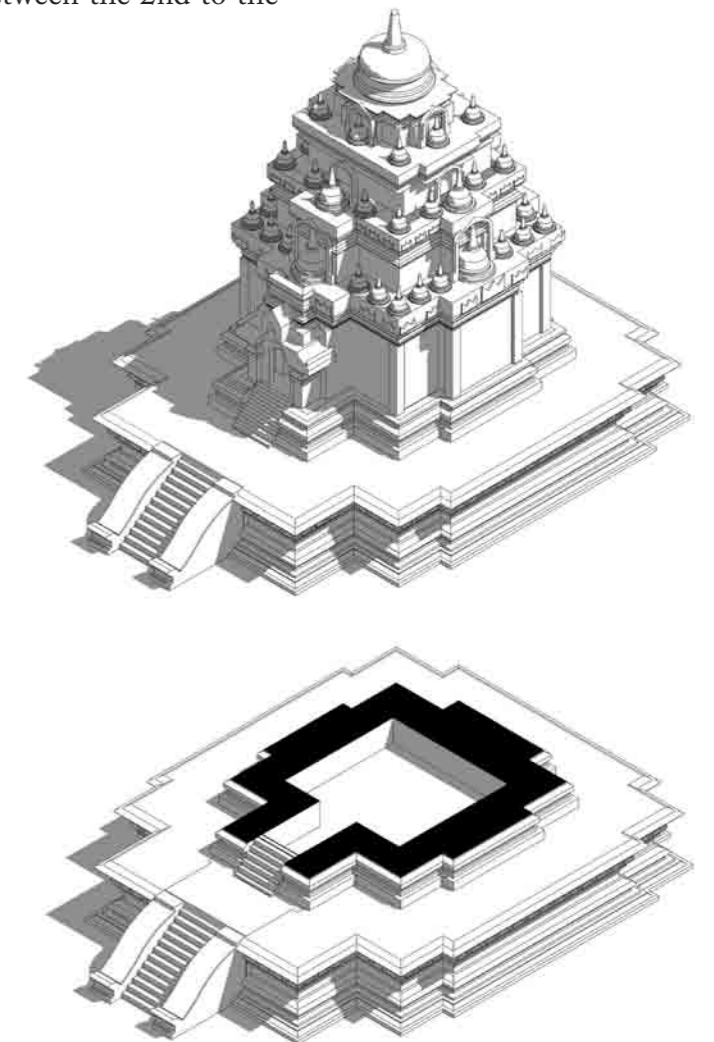
Although the form of the Candi is of Indian extraction, in Indonesia it has incorporated a distinct Javanese variation to the theme. The function of the Indonesian Candi has been associated with both the funerary practices of ancient Javanese societies and as a shrine or a temple of Indian origin, whereby it combines the two notions to establish the prototype of a distinct Javanese architecture.³ The association of Candis as repositories of ashes of deceased kings with Buddhist Stupas enshrining relics is merely an unintentional correspondence between the two architectural types.

Unlike the Rathas of the south Indian Pallava empire which carry the memory of timber construction in stone, in Indonesia there are no traces of timber construction evident in the forms of the Candis. This suggests the possibility that the Candi was imported as a mature form into the region without going through the evolutionary process of first fashioning native wooden architectural traditions into stone.

The term Candi is said to be a derivative of the Hindu goddess, Chandika, an incarnation of Durga, the consort of the god, Shiva the destroyer. The term Candi has also been variously argued to have been derived from the Sanskrit words ‘candida’ and ‘sandhi’ (to think).⁴ The generic architectural form of the Candi is shared by both Hindu and Buddhist architecture and often there is little to distinguish between Candis on the basis of religion. However, certain features such as the presence of miniature Stupas on the roof of the Buddhist Candi later developing into the more complex and cylindrical Dagobas, and the sculptural scheme of the walls comprising Buddhist deities distinguishes Buddhist Candis from their Hindu counterparts. The Candi can be further classified stylistically into central and eastern Javanese types based on their architectural form and the profile

OPPOSITE PAGE
The terraces ascending to the top of the main Stupa, Borobudur, 9th century, central Java, Indonesia

BELOW
Architectural model of Candi Mendut, 9th century, central Java, which represents a typical Candi – single-shrined structure



3. Soekmono, R, The Javanese Candi.

4. Mark Long; Lokesh Chandra, ‘Candi Mendut’.

THE MANDALIC PLANNING AND MOUNTAIN TEMPLES

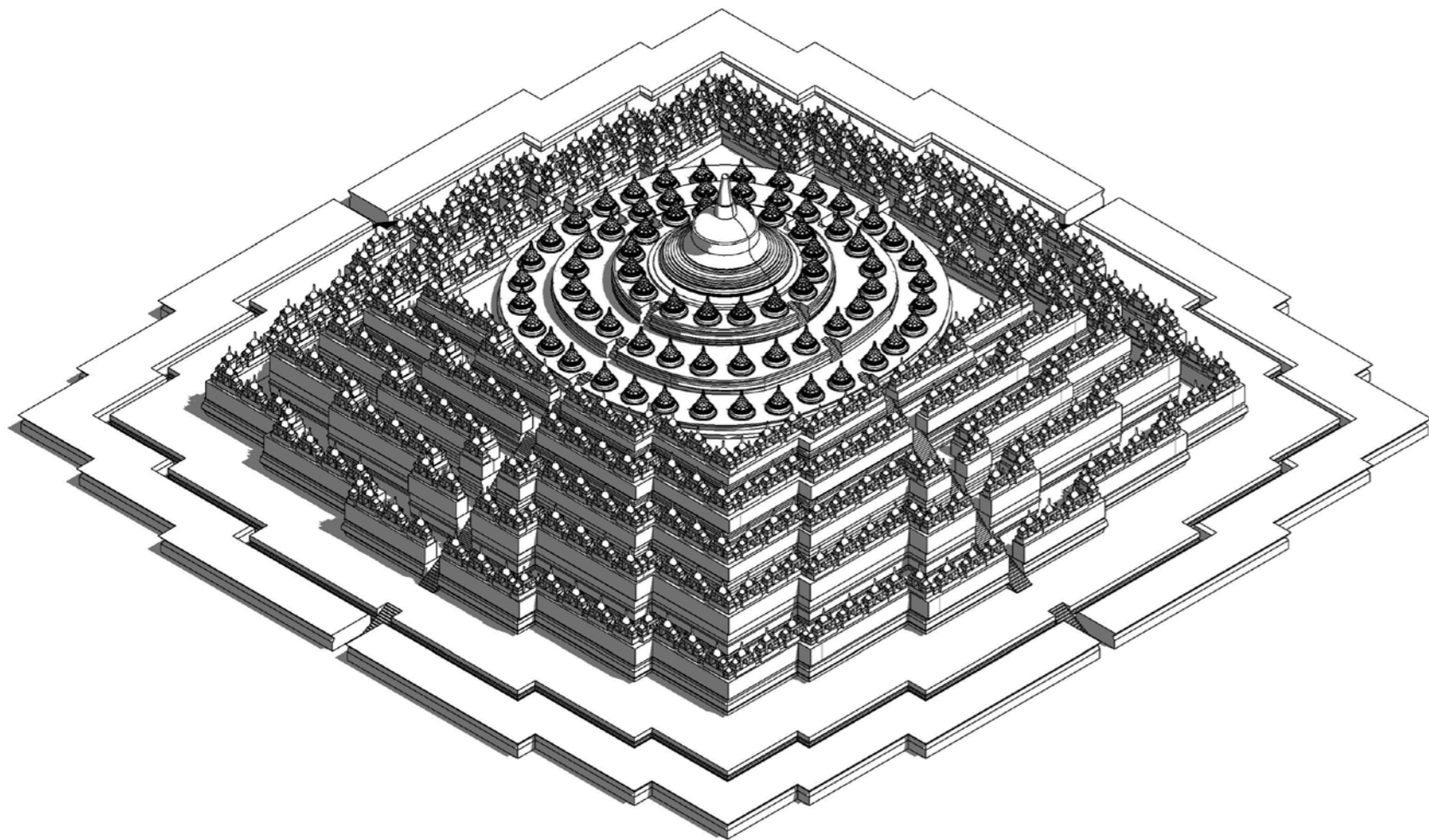
THE SACRED COSMOLOGY

Buddhist architecture and planning are derived from the principles of Hindu-Buddhist cosmology and follow plans based on the geometry of the Mandala which is a symbolic representation of the cosmos in the form of geometric diagrams.

It is the two Buddhist monumental complexes, the Borobudur temple complex and on a smaller scale, Candi Sewu, that incorporate most stunningly and dramatically, all these elements of the Mandala plan so clearly. At eye level, one sees that Borobudur is built as a single enormous Stupa but viewed from above, taking the aerial view of Borobudur, one sees that the shape of Borobudur is in the form of a gigantic tantric Buddhist Mandala.

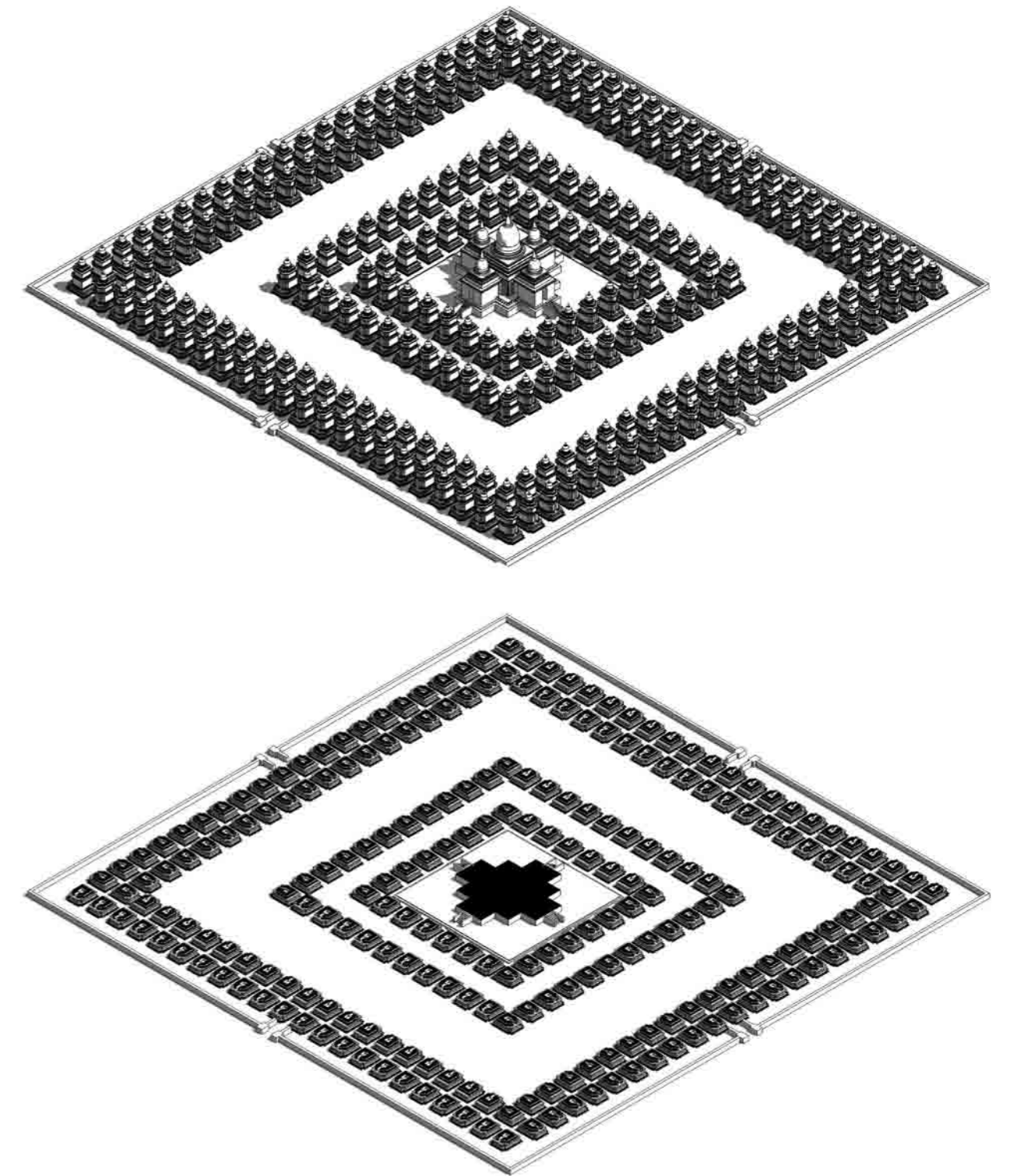
With its Mandala plan, the architectural scheme of Borobudur embodies the multiple layers of meaning associated with Buddhist cosmology and proselytizing, and combines this with local notions of ancestor worship to create a unique architectural form. Rising through a terraced formation, the top represents Mount Meru, the abode of the gods as a temple-mountain, the symbolic sacred mountain of both the Hindu and Buddhist faiths. The different levels of the terrace walls which have extraordinary well-carved stone bas-reliefs panels (more than 1,400 of them) with narrative Buddhist Jataka stories and the Lalitavistara (Buddha's life and teachings), enable Borobudur to function as an instructional medium. The enigmatic character of the monument has made it difficult to categorize, and it is perceived both as a temple and Stupa.

BELOW
Architectural model of Borobudur
– the Mandala plan



In the case of Candi Sewu which was built shortly after, all the 250 to 253 buildings (an exact total figure is not known because so much of the temple is in ruins), are arranged in a Mandala pattern on rectangular grounds. Around the central main mother temple, the smaller ancillary guardian temples or Perwaras (around 240 Perwaras), and some larger Perwara temples known as Perwara Utama, are laid out in four rectangular concentric rows surrounding the main temple within the square frame. The main temple is very large and imposing and there are five other bigger temples close to it. The layout of Candi Sewu is almost a square measuring 185 metres by 165 metres. With irreparable damage caused by the 2006 earthquake, today almost all of Candi Sewu is in ruins with only the main temple and three larger Perwara Utama standing. However, the effect of the monumental symmetry of Candi Sewu is still quite impressive.

BELOW
Architectural model of Candi
Sewu – the Mandala plan





CAMBODIA



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TA PROHM

PREAH KHAN

NEAK PEAN

TRANSFORMATION OF PRASAT INTO FACE-TOWER

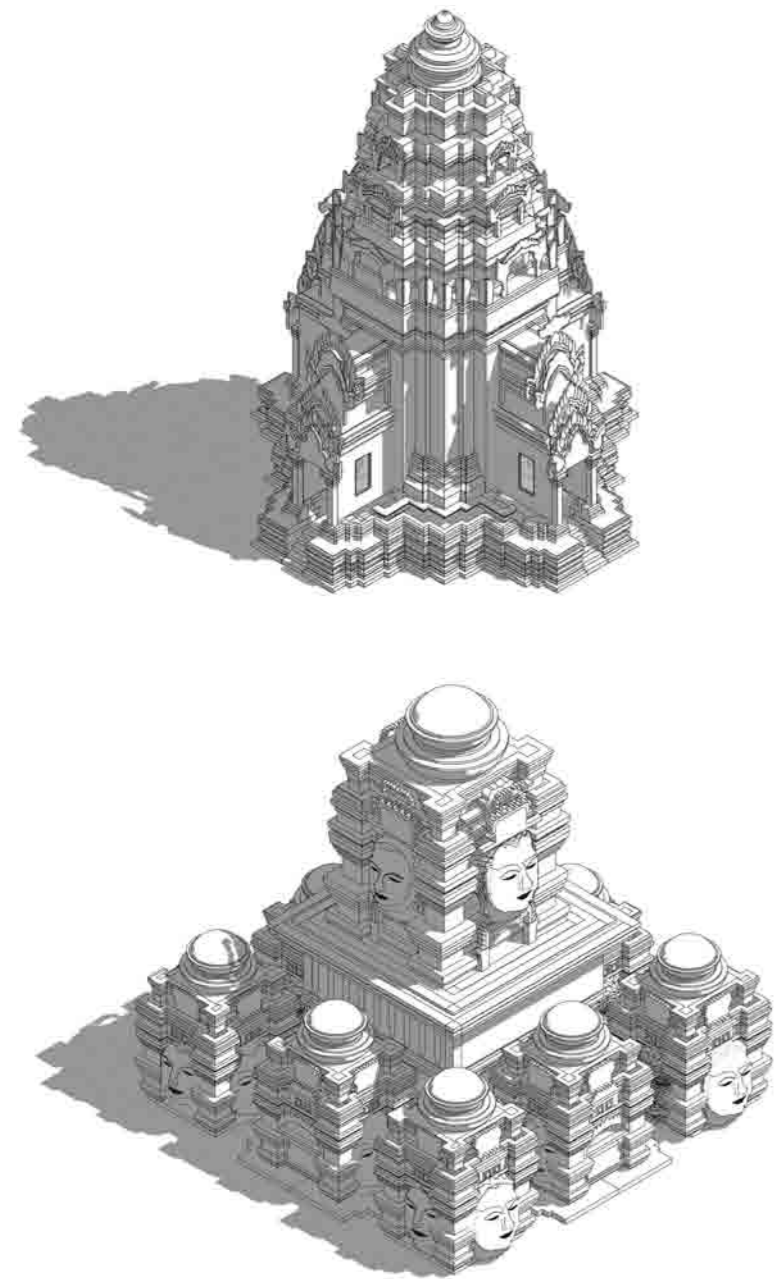
The Khmers adopted the concept of Mount Sumeru from India and Java and developed it further in a distinctive fashion. The cosmology of Mount Sumeru – located at the centre of the universe, separating as well as connecting heaven above and earth below, surrounded by seven concentric rings of mountains and oceans, and expanding outwards in all four cardinal directions.

The composition of the temple-mountain, at its most basic, consists of a central structure in tiered pyramidal formation reducing proportionately in size as it rises upwards, all surrounded by rings of enclosures and moats. The central structure represents Mount Sumeru while the moats and wall enclosures symbolise the surrounding oceans and mountains. The Khmers developed it further to manifest the cult of Buddhist divine kingship or Buddharaja, where the towers of the temple developed as face-towers, consisting of the facial image of the king, as in the Bayon temple. This transformation of the traditional form of the Prasat into a face-tower was first seen in the temple of Prasat Preah Stung (located at the Preah Khan Kompong Svay), and later on the gates of the city of Angkor Thom and finally, on the iconic Bayon.

BELOW
Architectural model showing the development from Prasat to the face-tower

BELOW (RIGHT)
Face-tower on the gate of Angkor Thom, late 12th century, Siem Reap, Cambodia

OPPOSITE PAGE
Close up of the monumental face-tower on the iconic Bayon, late 12th or early 13th century, Siem Reap, Cambodia



TA PROHM

LATE 12TH CENTURY
EASTERN ANGKOR

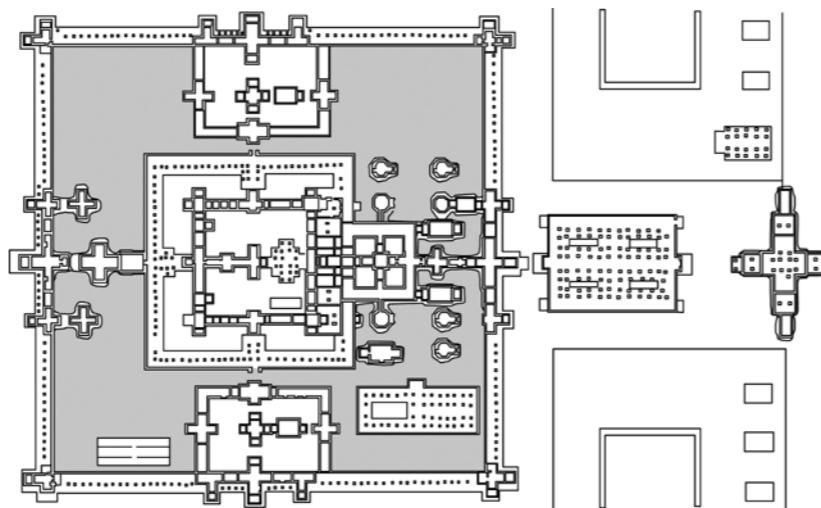
The temple of Ta Prohm, which means 'Ancestor Brahma', was built by Jayavarman VII in the late 12th century. According to inscriptions on a stele in the temple premises, the main deities in this temple were consecrated in 1186 and the temple was constructed as a dedication to the king's mother, Jayarajachudamani. The main deity in this temple, Prajnaparamita or the 'perfection of wisdom', who was supposed to be the spiritual mother of the Buddha, was carved in her likeness. There was also an image of the spiritual Guru of the king, Jayamangalartha, and another of his elder brother, Jayakirtideva. The original name of the temple was Rajavihara, or 'the royal monastery'.

This large Buddhist monastic complex in the Bayon style comprises concentric galleries with towers, Gopuras and several other buildings in a walled enclosure. The temple owned 3,140 villages around it, and 79,365 people helped to keep it functioning. The outer enclosure measures 1000 metres by 650 metres. Within this there are four other enclosures (numbered from the centre outwards). The fourth enclosure measures 250 metres by 220 metres and contains three concentric galleried enclosures within a moat; the third enclosure measures 112 metres by 108 metres; the second enclosure measures 50 metres square; and the first enclosure, 30 metres square. Within the first enclosure is the central sanctuary. Each enclosure has Gopuras at the cardinal points. Axial galleries connecting the concentric galleries are punctuated with cross-shaped towers. There were several clusters of four-faced towers, depicting the Bodhisattva Lokeshvara, but most have collapsed completely. Several small shrines are located within the enclosures. It is quite likely that there were wooden buildings in the complex, but these have not survived.

Originally 260 divinities and Bodhisattvas were planned, and many more were added to the complex later. From the inscription on the stele, we learn that the king hoped that his good deeds would earn his mother merit and deliver her from the 'ocean of births'.

Laterite and sandstone were used in the construction of Ta Prohm. Quarried locally in the Kulen Mountains, sandstone was suitable for the extensive carvings that adorned the walls

of the temples of the Khmers. Ta Prohm was discovered in the 19th century and it was consciously decided to leave it in its natural, overgrown state, to show how the Angkor buildings looked when they were discovered. Trees, mainly the silk-cotton and the strangler fig, overrun the ruins of the temple complex.



ABOVE (TOP)
Close-up of sandstone bas-reliefs

ABOVE
Plan of Ta Prohm temple-monastery complex showing the concentric enclosures

OPPOSITE PAGE (TOP & BOTTOM LEFT)
Trees and undergrowth overrunning at Ta Prohm

OPPOSITE PAGE (BOTTOM RIGHT)
Prasat, showing decorative colonnettes, pilasters and lintels





THAILAND



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THE PRANG

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HYBRID ARCHITECTURAL FORMS

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THE REDENTED CHEDI

THE REDENTED ADDED ANGLED CHEDI

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THE KHMER REVIVAL

THE RABBETED ANGLED CHEDI

SRIVIJAYAN INFLUENCE

THE ASSEMBLY HALLS – UBOSOT OR BOT AND WIHAN

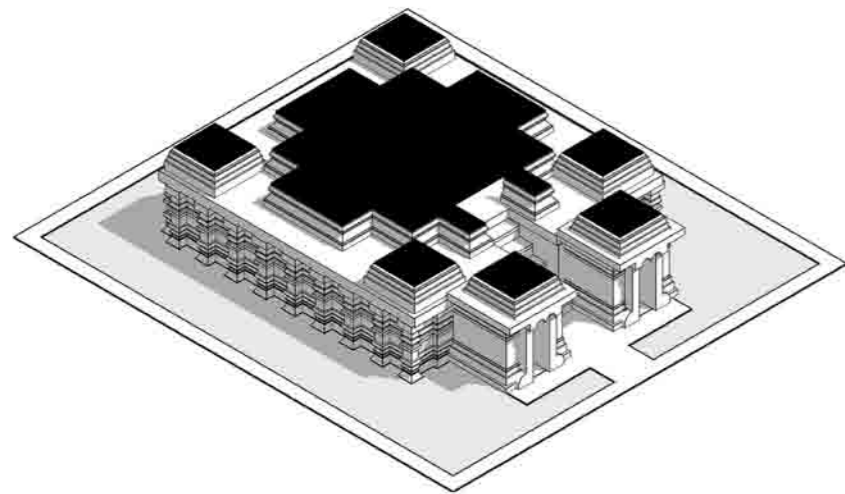
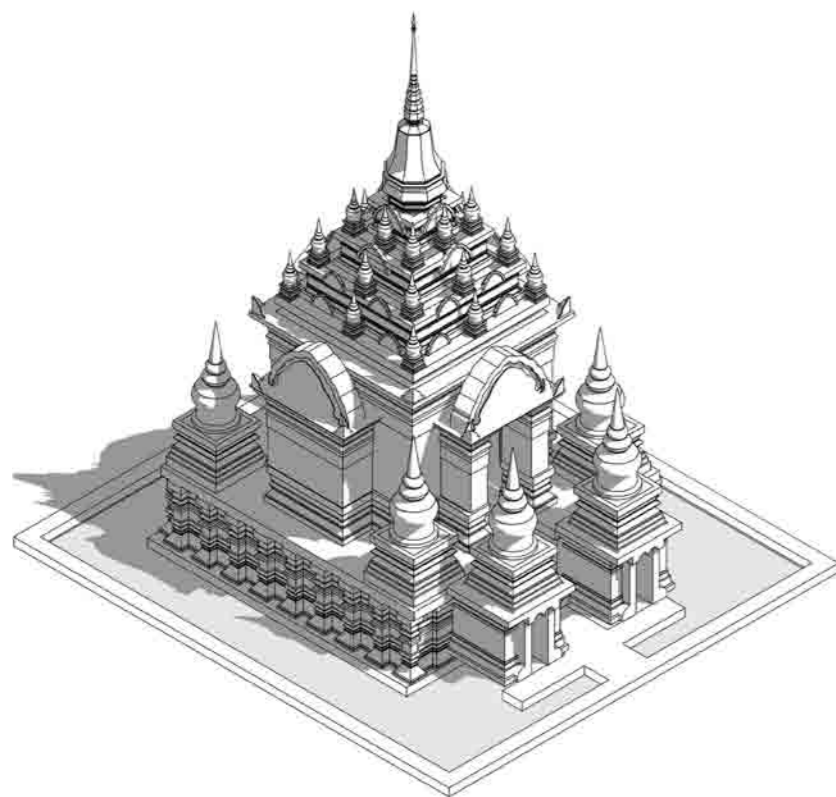
SUMMARY

III. SELECTED EXAMPLES 225

WAT MAHATHAT, SUKHOTHAI

WAT ARUN

WAT SUTHAT



ABOVE
Architectural model of Wat Phra Boromathat, early 13th century, Chaiya – the Chedi or Stupa bears a close resemblance to the Candis of Indonesia

The bell-shaped Stupa of Wat Phra Boromathat was first built in the early 13th century prior to the other buildings in the temple compound which followed in the late 13th century and restored and conserved through each century until the last great restoration undertaken from 1994–1995. The restored structure is constructed of bricks and also bears resemblance to the ancient building traditions of the Chams in the east. It has a square plan over which rises a tiered superstructure in a pyramidal formation. Stupas, known as Chedis in Thailand, are repeated on each floor at the corners. The temple is surrounded by an enclosing wall and moat. In the early 13th century, the Sri Lankan style structure of the Chedi was built upon the remains of the then existing Javanese Srivijayan style Candi. The form of the dome and spire was inspired by the bell-shaped Stupas or Dagobas of Sri Lanka. The Chedi is raised on a terrace which has many elephant heads in niches similar to the Buddhist architectural traditions of Sri Lanka. The terrace can be accessed by a stairway for circumambulation. (See further discussion under Architectural Characteristics – the Chedi).

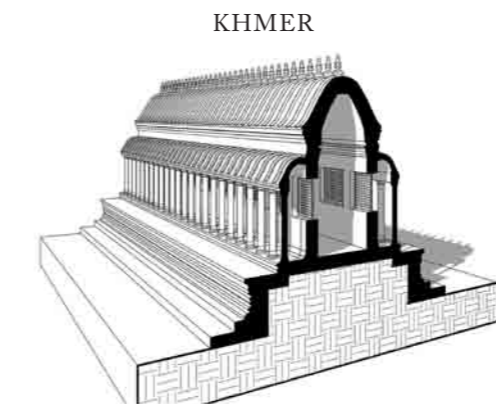
THE KHMER LEGACY

The great power in the region, before the founding of the first Tai³ kingdoms, were the Khmers, whose architectural traditions were inherited, adapted and transformed by the Tais for the design of their own religious monuments. The Khmers had extensively explored in their own temple architecture, the concept of Mount Sumeru and the surrounding cosmology⁴. Although the Khmers followed a rigid geometry to interpret the Hindu-Buddhist cosmology the Tais would, in contrast, be more flexible in the layouts of their monastic precincts and the conception of architectural forms, while still utilizing many elements from the Khmer planning and architecture.

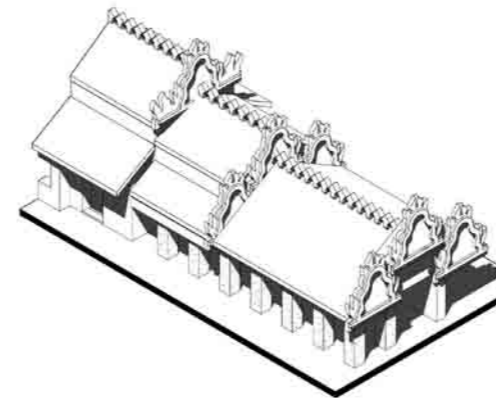
There was a continuity of the use of some of the elements of the Khmer temples, but each of these elements was adapted and transformed uniquely into the architectural design of the Buddhist monuments of the Tais. The Khmer temples' use of the mythical serpent, Naga, that represents the guardian of the cosmic waters were adapted as balustrades along the access stairs of Tai temples. Moats that surrounded the Khmer temples symbolizing the cosmic oceans surrounding Mount Sumeru were also adopted. Another variation of the use of water bodies within the design of temple complexes is in the use of water ponds within monastic complexes, which is derived from the Theravada Buddhist traditions from Sri Lanka.

3. The Tais come from the ethnic group in central Thailand. In etymology, the Tais were later referred to as the 'Thais'.

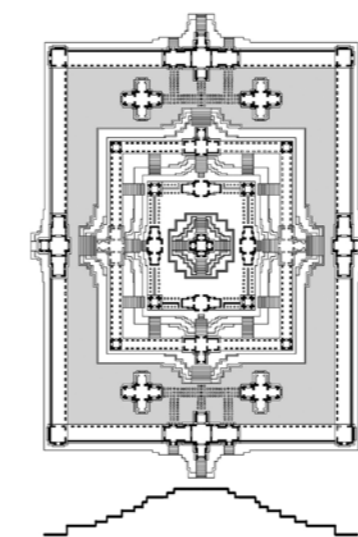
4. In Hindu-Buddhist cosmology, Mount Sumeru or Mount Meru is at the centre of the cosmic universe, made up of thirty-one planes of existence and the three realms of formlessness, form and desire.



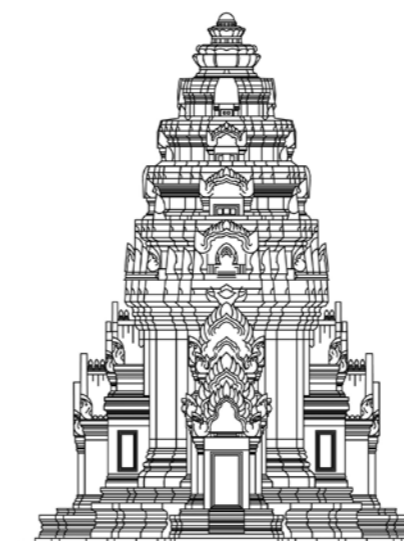
KHMER
ENCLOSED GALLERY



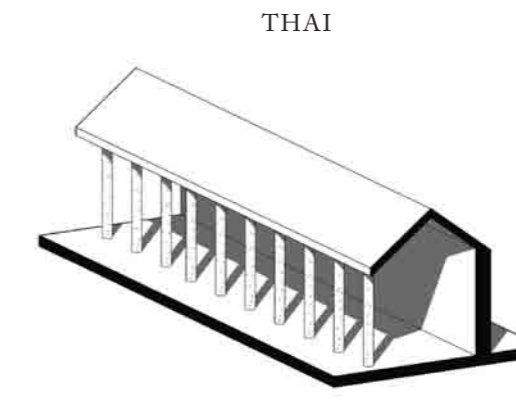
BAYON



ANGKOR

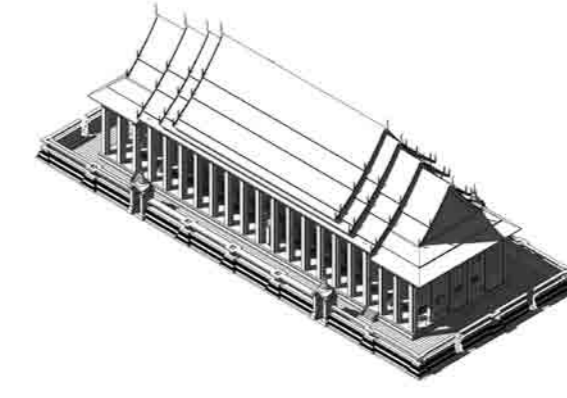


PRASAT (OGIVAL SHAPE)

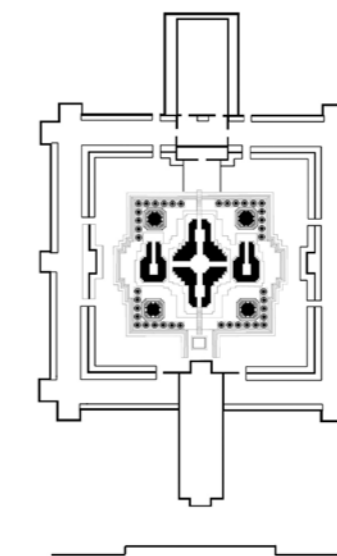


THAI

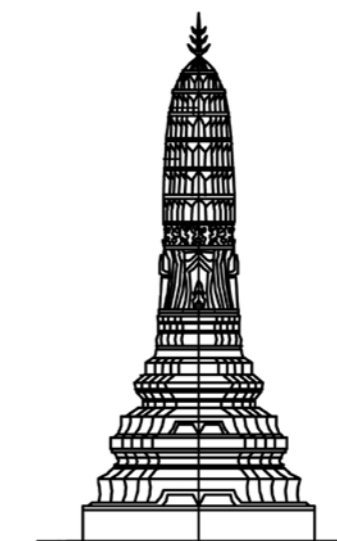
OPEN GALLERY (RABIANG)



WAT RATTANARAM



WATHANARAM



PRANG (ELONGATED SHAPE)

THIS PAGE
Architectural models –
comparison of Khmer and Thai
architecture

GALLERY

TELESCOPIC ROOF

CONCENTRIC ENCLOSURES

PRASAT TO PRANG

WAT ARUN (WAT ARUNRATCHAWARARAM RATCHAWORAMAHAWIHAN)

C. 19H CENTURY
BANGKOK

One of Thailand's best known landmarks, Wat Arun, or the Temple of Dawn, is located at the banks of the Chao Phraya river in Bangkok. During the Ayutthaya period a temple existed on the site called Wat Makok which was included in the planning of the new capital by King Taksin, which was to be in the Thonburi district of Bangkok, and was renamed Wat Chaeng. In 1806 King Rama II started the construction to increase the size of the Prang, a project finally completed in the reign of King Mongkut, Rama IV, in the mid-19th century.

Mount Sumeru is represented in Wat Arun through a symmetrical and centralized architectural composition. The soaring, central Prang, rises steeply in seven diminishing levels to 70 metres, and represents the axis mundi of the cosmic mountain. The whole architectural ensemble surrounding the central Prang is raised on a terrace that consists of four Mondops located at the cardinal points, along with four corner Prangs housing the guardians of the four directions. One can walk a limited way up the Prang – the very steepness of the access staircase is symbolic – progress to higher levels of existence is difficult.

The central Prang was constructed of brick and finished with colourful stucco and multi-coloured Chinese porcelain, rising in four receding tiers – the first tier is decorated with tree and flower designs in Chinese ceramic; the second and third tiers form niches housing Kinnara and Kinnari figures and the niches of the fourth tier house figures of Brahmins. The Prang is topped with a three-dimensional nine-pointed finial, Fak Pega, Indra's weapon, the Vajra thunderbolt. The design is meant to evoke the lush vegetation of the fantastical realms of Mount Sumeru and the Himaphan forest.¹⁰

On the eastern side lies a low structure having porches at the front and back, known as Bot Noi where King Taksin spent time as a monk. Adjacent to this Bot is the Viharn Noi which contains the Chulamani Chedi, an artefact cast in metal with four earth-protectors, Jatulokaban, at the corners to exercise control over the cardinal directions.

Wat Arun illustrates the transformation of the Chedi and the Prang, where the two forms are syncretised, redented and elongated along the vertical axis to create an architectural



form on a monumental scale that is a distinct Thai conception. This great series of towers has justifiably become an instantly recognizable symbol of Thailand. Those familiar with the rich history of Thailand will recognize Wat Arun as an embodiment of that history. It is a fusion of Buddhist, as well as Hindu beliefs about the nature of the universe, and a marvellously coherent syncretization of the variety of cross cultural influences that have been absorbed and adapted by the Thai.

ABOVE
Wat Arun glowing at sunset on the banks of the Chao Phraya

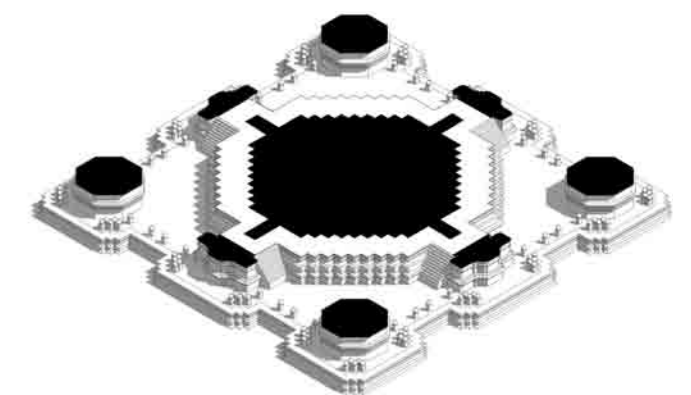
10. The Himaphan Forest is a fairy-tale land supposedly existing in our world. Ordinary mortals are unable to reach this place, as it is a region of bliss. Rice grows abundantly without the need for cultivation. Fantastical, beguiling creatures inhabit this realm, such as the Singh and the Narsingh, Kinnari and Kinnara. Situated there is the great lake Anotatta, the ultimate source of all the world's great rivers, the Ganges included.

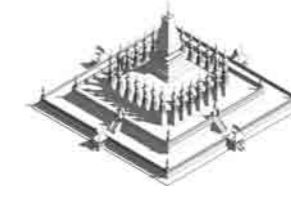


ABOVE (TOP)
The majestic, soaring 70 metres high central Prang with its steep staircase

ABOVE
Close-up of a Prang, decorated with multi-coloured Chinese porcelain

RIGHT
Architectural model of Wat Arun





LAOS



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OTHER BUILDINGS IN A VAT

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III. SELECTED EXAMPLES 261

TAT LUANG

VAT XIENG THONG

VAT MAI



ABOVE
Tat Luang, 1566, Vientiane, Laos

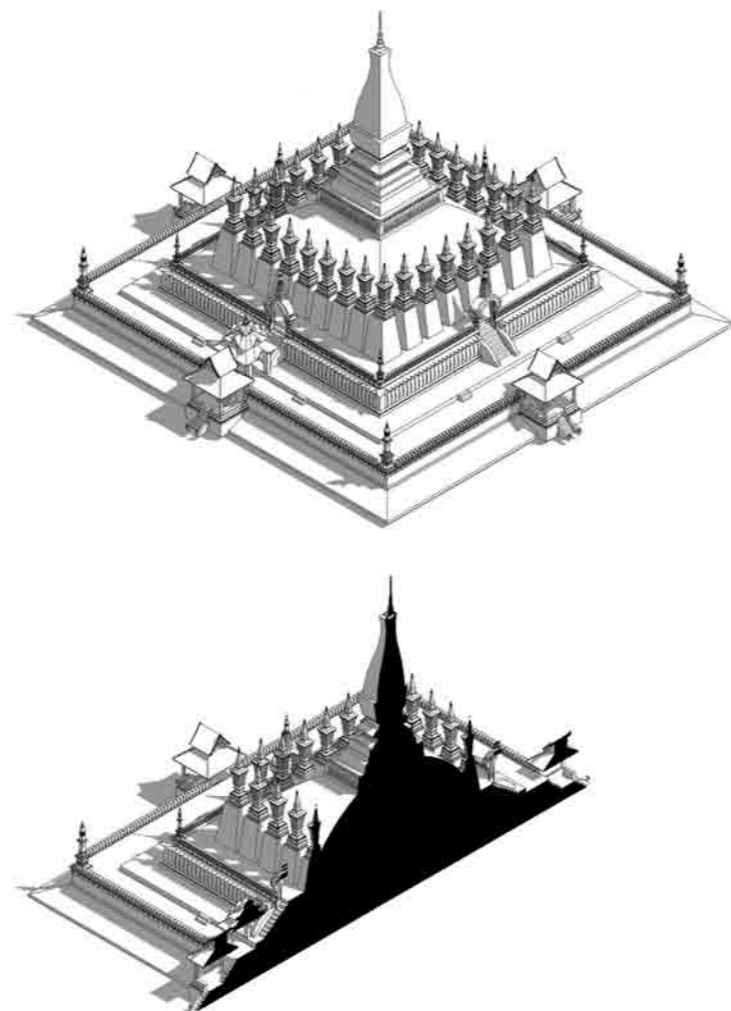
ABOVE (RIGHT)
Architectural model of Tat Luang

BELOW
Vat Xieng Thong, 1560, Luang Prabang, Laos



In the new capital city of Vieng Chan, Setthathirat also built the great Stupa, the Tat Luang. Located to the east of the city at Vieng Chan, the current Stupa is believed to have been built over an older shrine that contained the relics of the Buddha. It was conceived to serve as a political symbol of unification for the Lao Mandala as well as the religious icon for Lao Buddhism. The architectural form of the Tat Luang is distinctly Lao and is now the national monument for the state of the Lao PDR. See further description below.

Setthathirat, while shifting the capital to Vieng Chan, however, left behind the sacred statue of the Buddha, the Phra Bang, in Xieng Dong-Xieng Thong. This was partly out of respect for its symbolic association with the city and to ensure continued loyalty from its people. In honour of the Phra Bang the name of the city was changed to Luang Prabang, literally meaning 'the place of the Buddha'. As one of the greatest patrons of architecture in Lao history, Setthathirat embellished not only his new capital with Buddhist monuments but the old capital as well and Setthathirat sponsored the construction of the splendid temple, Vat Xieng Thong in Luang Prabang, which is considered an architectural masterpiece of Lao Buddhist architecture. The architectural scheme of Vat Xieng Thong has been classified as the Luang Prabang Style II. Other examples of this style are Wat Sene, Wat Si Boun Houang and Wat Paphane.

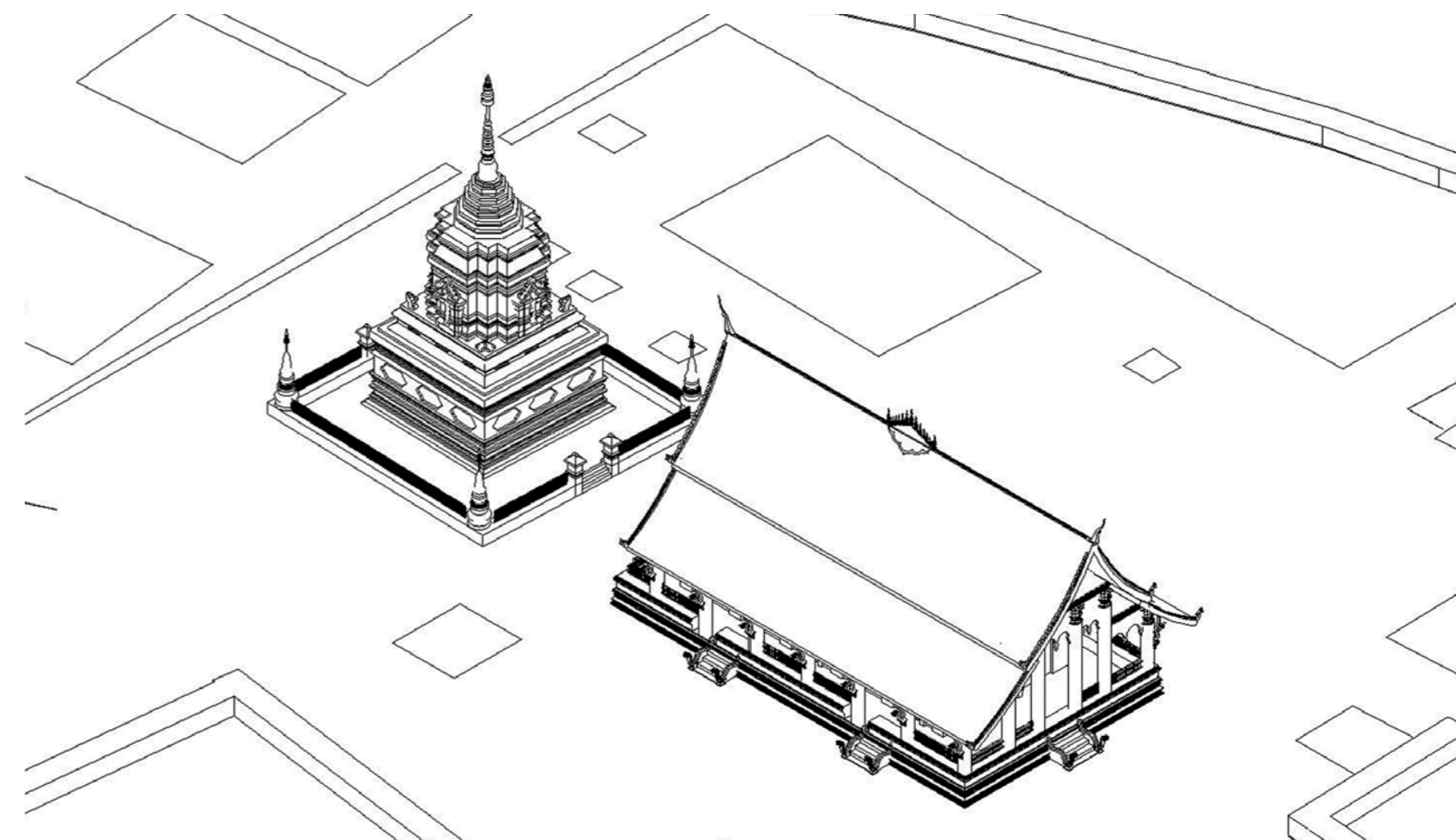


BELOW
Vat Phra Mahathat, 1550, Luang Prabang, Laos

BELOW (BOTTOM)
Architectural model of Vat Phra Mahathat and its Stupa or Tat

Another significant temple that was commissioned by Setthathirat was Vat Phra Mahathat or Vat That in Luang Prabang. Built around 1550, the temple has been rebuilt several times – in 1907, in 1963 and in 1991. The Sim of the temple has a hall surrounded by a verandah on all sides. The side verandahs have short rectangular columns while the front has four tall columns that rise to support the large gilded gables. There are no columns within the hall and the three-tiered roof is supported by the masonry walls of the hall. The plinth of the Sim is raised and approached by stairways having balustrades in the form of Nagas. Right behind the Sim is a large Stupa, or Tat, that is aligned to the Sim along its longer axis which rises in three tiers. This alignment of the Stupa behind the Sim recalls a similar arrangement in Thai architectural traditions. Several other Tats were constructed within the precincts of the Vat, which are believed to enshrine the ashes of other members of the royal family.

This period also witnessed the deepening of cultural ties with the Thai Mandala of Lan Na and its influence on the material culture of Lan Xang. Setthathirat and his father had Thai wives from Lan Na that built a close bond between the two kingdoms. The cultural influence of Lan Na was further intensified with the exodus of Thai people from Lan Na to Vieng Chan after the sacking of the Thai city by the Burmese. The influence of the artistic traditions of Lan Na can be seen in the temples of this period with their characteristic high roofs that sweep down in multiple tiers, best exemplified by Vat Xieng Thong.



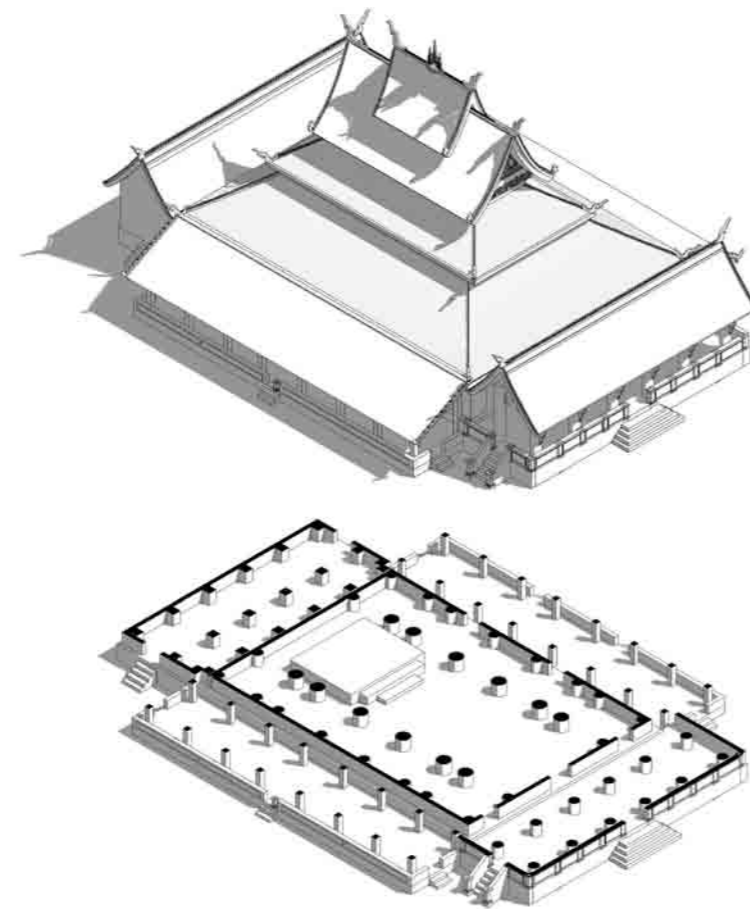
VAT MAI SUWANNAPHUMAHAM OR VAT MAI

COMPLETED 1891
LUANG PRABANG

Vat Mai or the 'new monastery', besides being one of the most splendid royal monasteries in Luang Prabang, is also among the few buildings that was spared destruction by the marauding Chinese Haw hordes in 1880, presumably because they found it too beautiful to be destroyed. Supported by the kings of Lan Xang, it is a royal monastery and has served as the residence of the chief abbot. Vat Mai is of great religious significance as it also housed the golden statue of Phra Bang, the palladium of Lan Xang, between 1894 (after it had been moved there from Vat Visoun) until 1947 when the Phra Bang was moved to its current location at the Royal Palace Museum nearby.

Vat Mai was built by King Anourouth around 1796 but after a long construction period, it was not actually finished until 1891 under the next king, Zakarine. At this time, in the 19th century, two colonnaded porches at the east and west were added to the main Sim and work on a library and other buildings continued. Several other structures were further added within the monastic precinct and more renovations were undertaken in the 20th century. The architecture of Vat Mai is defined by its imposing, low-swooping five-tiered roofs that rise gracefully to the golden roof finial having three parasols, the Dok So Fa symbolizing the central axis of the sacred Mount Sumeru.

Vat Mai as a Lao Buddhist monastic precinct has an enclosed boundary wall within which various buildings are distributed for different functions. Unlike the planning traditions of the neighbouring Khmers and the Thais, the Vat follows a more flexible distribution of buildings. However some distinct aspects of the building types and their planning can be discerned in the layout of Vat Mai. The main hall or Sim faces east, but is not positioned in the geometrical centre. It is distinguished by the provision of a large open space around it. At the front of the Sim along its longitudinal axis, is a Stupa or a Tat. Two chapels, a library and a drum house are aligned by the side of the Stupa. At Vat Mai, the Koutis or the monks' living quarters follow various different architectural patterns that are derived from the vernacular architectural traditions of Laos and can be distinguished depending on the roof system and layout. One Kouti is raised on stilts and has a single gable roof covering a set of rooms and a verandah. Another Kouti also raised on low stilts, has halls that are distributed around a central space and is



ABOVE (TOP)
Luang Prabang style II – the Sim
and its five-tiered roofs, Vat Mai

ABOVE
Architectural model of Sim of
Vat Mai

covered with three gable roofs. As a secular building, the Koutis are constructed parallel to the alignment of the Sim. Behind the Sim is an open pavilion that serves as a boat house for keeping boats that are used during various cultural festivals such as the Lao New Year, 'bun pi mai lao' in April, and during the water festival in October, 'Bun Bam'. The presence of such structures testifies to the significant role of Buddhist monastic precincts as cultural spaces for the community. These festivals which are held at the Vat are an indication of the monastery's role both religious and cultural, in the Lao community.

The rectangular plan of the Sim consists of a nave that has six wooden columns on each side that rise up to support the top three of the five-tiered roofs through a system of wooden beams that reduce in size as they rise up. The longitudinal distribution of the six columns are grouped in pairs such that the first and last pair of columns have less spacing between them. The altar of the Buddha image is positioned at the end opposite to the entrance. An aisle encircles the nave on all four sides, and its roof slopes down from the columns towards the walls of the Sim having engaged columns supporting the lower end. All four sides of the enclosing walls of the Sim have verandahs. The verandahs on the longer sides are unadorned and are covered with the final sloping roof that continues the profile of the tiered roofs above, but the front and side verandahs are vividly ornamented and have a gable roof. The columns of the nave rise up to support the roof beams through golden capitals of lotus petal design, and their black colour surfaces are covered with intricate gilding. The entire Sim is raised on a plinth and is accessed via steps at the verandahs.

The main building acquired an unusual form when King Zakarine added two more verandahs to the four verandahs. These were added as distinct outer verandahs at the eastern and western ends of the temple and these additional verandahs had their gable ends oriented towards the sides rather than to the front of the temple – a transverse nave perpendicular to the principal nave, perhaps inspired by the vernacular architecture of Lao houses. Yet, these added verandahs have become one of the most distinct architectural components of the Vat Mai Sim with its elaborately painted interiors. The walls, ceilings, beams and columns of the verandahs are covered with golden stucco illustrating various scenes from Buddhist mythology such as the Lao interpretation of the Ramayana, Phra Lak Phar Lam and the most popular Jataka tale in Laos, the Vessantara Jataka. The magnificently restored interiors were only completed in 1960.



ABOVE (TOP)
Intricate gold stucco and stenciling
at the Sim's front verandah

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Buddha image, Borobudur, 9th
century, central Java, Indonesia

ABOVE
Red interior nave with gold
stenciling on columns, beams
and walls with a variety of gilded
Buddha images

GLOSSARY

Abhidhamma Pitaka

The last of the three Pitakas (Pali for 'baskets') constituting the scriptures of Theravada Buddhism and is a detailed scholastic reworking of material appearing in the Suttas.

Acanthus leaf

The Acanthus is a common Mediterranean plant, the form of which is extensively used in Roman and Greek architecture to make foliage ornamentation. Usually carved into stone or wood to resemble the leaves of the plant.

Addhayoga

See Monks' Dwellings.

Ajanta

Comprises more than 300 rock-cut Buddhist caves dating from the 2nd century BCE. The caves with their Buddhist religious frescos, paintings and sculptures are the finest surviving examples of Indian art.

Amaravati

Amaravati is a small town situated in Andhra Pradesh, India and is famous for the Amareswara temple dedicated to the Hindu God, Shiva. The temple is one of the famous Pancharamas and was the site of a great Buddhist Stupa built by the emperor Asoka. The Amaravati school of art occupies an important place in Indian art history.

Amitabha or Amida

The principal Buddha in the Pure Land sect, a branch of Mahayana Buddhism practiced mainly in east Asia. Amitabha translates as 'infinite light' and Amitabha is often called 'the Buddha of infinite light'.

Anavatapta

A mythical Himalayan lake in Buddhist cosmology, the sacred waters of which were supposed to have healing properties, and from which place emanates four sacred rivers through the mouths of a lion, an elephant, a horse and an ox.

Anda

Literally means an 'egg' in Sanskrit and is the dome-shaped main body of a Stupa.

Angkor

The Angkor period in Khmer history lasted five centuries from the beginning of the 9th century. Angkor also refers to the region that the Khmers ruled from.

Angkor Borei

A city near present-day Takeo in Cambodia that might have been the

capital of Funan at one time.

Angkor Thom

A city in the Khmer empire.

Aparanta

Could mean Myanmar in general, or specifically a city on the western shores of the Irrawaddy.

Apse

In architecture, the Apse is a semi-circular recess covered with a hemispherical vault or semi-dome.

Arahant or Arahāt or Arhat

One who has attained the ultimate goal, and is therefore 'worthy'; one who has realized enlightenment.

Arakan

Former name of present-day Rakhine state in Myanmar; the Arakanese are an ethnic group, and their language is Arakanese too.

Aramas

Permanent structures built by followers as donations to the Buddhist Sangha for use by Buddhist monks to stay during rain retreats or Vassavasas.

Arupaloka or Arupadhatu

The 'world of non-form' in the three worlds or three realms (Tri-loka or Tri-dhatu) described in Hindu-Buddhist cosmology. See also Kamaloka and Rupaloka, the other two realms.

Arupaphum

See Traibhumikatha.

Asoka

An Indian emperor of the Maurya dynasty, also known as Asoka the Great. He was born around 304 BCE and reigned from 268–232 BCE. Asoka embraced Buddhism after the deadly battle of Kalinga after which he was appalled by the terrible deaths and destruction caused. Asoka was responsible for propagating Buddhism over much of Asia and he was known and revered for his philanthropic good works.

Attha-maha-thanani

See Eight Sacred Places of Buddhist Pilgrimage.

Avalokitesvara

Also called Lokeshvara, Kuan Yin in China and Quam Am in Vietnam, Avalokitesvara is the Bodhisattva of compassion who liberates devotees from suffering.

Avasas

Temporary structures used as shelters by Buddhist monks during rain retreats or Vassavasas.

Ayeryarwaddy

The river Irrawaddy, Myanmar's

largest river and most important waterway, that flows across the north to the south of the country.

Ayodhya

The home city of Rama in the Hindu epic, the Ramayana.

Ayutthaya

Derived from Sanskrit. Also known as Ayudhya, the capital and name of the Thai kingdom after Sukhothai, which existed from 1351 to 1767, a cosmopolitan hub and one of the great port cities of the world before being sacked by the Burmese.

Bai Sema or Sima Stones

Upright stone slabs that are boundary stones which designate the sacred area for an ordination hall within a Buddhist temple. Eight stones are placed at each of the cardinal and sub-cardinal points.

Balaha

Lokesvara depicted as a horse, seen in the Neak Pean Temple in Cambodia.

Baray

An artificial body of water, commonly found in Khmer architecture.

Beikthano

Same as Peikthano.

Bhairat

A town in Jaipur district, India.

Bhaisajyaguru

Master of healing; the Buddha who gives relief to worshippers from troubles of this world.

Bhikkhu

A Buddhist monk.

Bhumisparsha Mudra

A hand gesture where the right hand is pointing down towards the ground; said to have been used by the Buddha when he called upon the earth to bear witness.

Biguan

'Wall gazing contemplation', a form of meditation initiated by Bodhidharma, a Buddhist monk who lived during the 6th century and who is regarded as the first Chinese patriarch of the Chan school of Buddhism or the Zen tradition. In Vietnam, the meditation technique of the Vo Ngon Thong school is the Biguan, and the school is therefore also known as the school of wall contemplation or Quan Bich.

Bodhi

The ficus tree or Ficus Religiosa. It was under one of these that the Buddha became enlightened.

Bodhgaya

See Eight Great Places of Buddhist

Pilgrimage.

Bodhigara

A shrine enclosing a Bodhi tree. Rituals and ceremonies associated with the Bodhi tree were known as Bodhi-maha.

Bodhisattva

An enlightened being (literally, a being whose essence is enlightenment).

Bonze

A Chinese or Japanese Buddhist monk.

Bot

Ordination hall in Thailand; short for Ubosot.

Brahma

One of the gods in the sacred Hindu trinity; the others being Shiva and Vishnu. Brahma is the creator.

Brahmajala Sutta

One of the sacred texts in Buddhism.

Buddhaghosa

A 5th century Buddhist commentator, most likely of Indian origin, author of the Vissuddhimagga.

Buddhaksetra

The 'pure land' in Mahayana Buddhism. It is considered the celestial abode of a Buddha or a Bodhisattva. There are multiple types of Buddhaksetras in Mahayana Buddhism.

Buddharaja

A 'buddha-king' or the living representation of the Buddha on earth; the Buddhist equivalent of the Devaraja cult which had Hindu origins.

Buddhavasa

Literally means 'Buddha's place' and is that part of a monastery lined with Buddha images devoted to religious rites and ceremonies.

Burmans

Burmese-speaking peoples who originated from the north and established the kingdom of Pagan around the 9th century.

Burmese

The people of the kingdom of Pagan and its successors; ethnically, they comprised Burmans and those that had inter-mixed with them; also the main language of Myanmar; in a broader context, it stands for the people of Myanmar, or anything referring to the country.

Caitya-griha

Temple. 'Caitya' means an object of worship, and 'griha' means house, so Caitya-griha may be loosely translated as temple. There are a number of





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Vikram Lall was trained as an architect, and he divides his time between design practice and academics. As a teacher and scholar, he has lectured on architectural history, design theory and cultural studies at institutions worldwide. This work presents his many years of research into the manifestations of Buddhist practice and ideology in architecture.

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As a publisher, Joan Foo Mahony has produced elegant illustrated books on diverse subjects, including art, gardens, cooking and now, architecture. She is also the author of two best-selling books: 'Indispensable QiGong: For People on the Go!' and 'Leaving The Heart Behind', a novel.

Under her editorial direction, this book has been accomplished with skill, flair and creativity. A true proponent of her spiritual beliefs, Joan hopes that with this book, Buddhist architecture will stake a place of its own along with Buddhist art, literature and religion.

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‘There is a fascinating relationship between Buddhist thought and its manifestation in the physical world. Through the observant eyes of a designer, Vikram Lall illuminates the wide-ranging ritual origins of Buddhist architecture.’

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