

BUDDHIST ARCHITECTURE IN INDIA

The places connected with the four principal events of Buddha's life, viz. his birth, enlightenment, first preaching and decease, which took place respectively at Lumbini, Bodh-Gaya, Sarnath and Kasia, were looked upon with greatest sanctity. To these were added four other places also intimately associated with his life, viz. Sravasti, Sankasya, Rajagriha and Vaisali, which together with the first four were regarded as the eight holy places (*ashtamahasthanas*), celebrated alike in Buddhist lore as well as art. At Sravasti and Sankasya (modern Sankisa, District Farrukhabad) Buddha is believed to have performed great feats of miracles. At Rajagriha the Master tamed the mad elephant which had been let loose on him by his cousin Devadatta. Vaisali witnessed the memorable event of the offer of honey to the Master by the monkeys. There were several other places in the present States of Bihar and Uttar Pradesh, such as Nalanda and Kausambi which were also hallowed by Buddha's visits during his ministry extending over nearly half a century. It is but natural that those places should be adorned by devout Buddhists with shrines, *stupas* and monasteries. Further, according to tradition king Asoka (273-32 B.C.) opened the eight out of the ten original *stupas* enshrining the body-relics of the Master and distributed them into eightyfour thousand *stupas*, which he is said to have erected throughout the length and breadth of his vast empire. This explains why sites like Sanchi and Taxila (Pakistan) have such fine Buddhist monuments, even though they were not visited by Buddha.

The earliest Buddhist monuments in India are attributable to Asoka (273-32 B.C.) who exerted his energies and the resources of his empire to the propagation of Buddhism. He is credited with the authorship of three principal types of monuments, viz., (1) pillars, (2) *stupas*, and (3) rock-cut caves, of which the first two have Buddhist associations. Asoka set up at least thirty pillars including ten inscribed with his edicts on sites which are scattered in Districts Champaran and Muzaffarpur of north Bihar, in the Nepal Tarai, at Sarnath near Varanasi and Kausambi near Allahabad, in the Meerut and Ambala Districts and at Sanchi in central India. Made of Chunar sandstone and bearing a highly lustrous polish, the pillars are tapering monolithic shafts, between 10 and 15 m. high, with an ornamental capital, surmounted by powerful animal-sculpture of symbolical significance. Distinguished by dignity, exquisite finish and monumental quality, these free-standing columns probably formed part of larger architectural schemes on sites like Sanchi and Sarnath. The best-preserved pillar is that at Lauriya-Nandangarh (District Champaran), which is complete with the Asokan edicts and a capital crowned by a stately figure of lion.

I. STUPA—ARCHITECTURE

The *stupa* originated as a piled-up burial-tumulus and constituted the most characteristic monument of Buddhist religion, although *stupas* of other faiths are not unknown. Symbolizing the decease (*parinirvana*) of Buddha, the *stupa* came to be looked upon as an object of Buddhist cult-worship by the time of Asoka, who, as stated above, is believed to have erected an enormous number of *stupas* over Buddha's relics which had originally been enshrined in eight or ten monuments. *Stupas* were of three types and were built either to enshrine the body-relics (*saririka*) or the personal effects (*paribhogika*) of Buddha and Buddhist saints or to commemorate spots and events of religious significance (*uddesika*).

The *stupa* was a solid structural dome (*anda*), usually raised on one or more terraces and surmounted by a railed pavilion (*harmika*) from which rose the shaft of the crowning umbrella (*chhatra*). The *stupas* had one or more circumambulatory passages (*pradakshina-patha*) which were usually enclosed by railing (*vedika*). The earlier *stupas* were hemispherical in shape with a low base, while the later ones assumed an increasingly cylindrical form with a well-developed drum. In the later examples, which tended to be more ornate, the base-terraces and the umbrellas were multiplied.

The only brick *stupa* of a probable pre-Asokan date is that at Piprahwa in Basti District of Uttar Pradesh, which yielded among its relics a vase, inscribed in characters believed to be pre-Asokan, and a figure in gold relief, representing the mother-goddess in a frontal pose. The *stupa*, built of large bricks, has a diameter of 116 ft. and an extant height of 21 ft. indicating a low ratio of height to diameter, which is a sign of antiquity. According to the inscription on the relic-casket, the relics found in the *stupa* pertained to Lord Buddha himself.

Lauriya (District Champaran) contains, besides an inscribed Asokan pillar, fifteen *stupa*-mounds. Four of them were excavated in 1904-07 and as two of them yielded a deposit of burnt bones with charcoal and a gold leaf with a mother-goddess figure (akin to the one from Piprahwa), they were regarded by the excavator to be Vedic burial tumuli. As a result of their re-examination in 1935-37 they were definitely recognized to be *stupas* of mud or mud-bricks with baked-brick revetments (in two cases with actual brick-lining) and were regarded as roughly contemporary with the Piprahwas *stupa* on account of the analogous find of the mother-goddess figure on the gold leaf.

Nandangarh, about 2 km. from the Asokan pillar, represents a fortified habitation-site. At one end of the site was excavated a large brick-*stupa* reared up on multiple polygonal terraces with numerous

re-entrant angles. This edifice, of the early centuries A.D., is the earliest example of a form of terraced *stupa* which culminated in the celebrated monuments of Paharpur in Bangladesh and Borobudur in Java, both dating from *circa* A.D. 800.

Vaisali (District Muzaffarpur), which was a favourite resort of Buddha and one of the eight holy places of Buddhism has an uninscribed Mauryan pillar, besides extensive remains of ancient shrines, *stupas* and habitations including a fortified citadel (*garh*). A *stupa* was excavated here by Dr. A.S. Altekar in 1957-58. It was seen to have started as a mud *stupa* of unpretentious size (7.5m. in diameter) in the pre-Mauryan age and was enlarged four times, the first enlargement being executed in neat brickwork during the Mauryan times. From the find of a relic-casket within an ancient breach inside the core of the *stupa*, the excavator surmised that this was the *stupa* built by the Lichchhavis over their share of the body-relics of Lord Buddha, which, according to tradition, were opened up by Asoka for redistribution of the relic-contents.

Sanchi was a flourishing Buddhist settlement teeming with temples, monasteries and *stupas*, dating from the Mauryan to the medieval ages. The original nucleus of Stupa 1, Plate I



STUPA 1 SANCHI Plate I

attributed to Asoka, was a low brick structure, of almost half the diameter of the present *stupa*, in the core of which it is now concealed. This structure, built of large bricks, was much damaged when excavated. Presumably it was hemispherical in shape with raised terrace at the base, enclosed by a wooden railing, and a stone umbrella at the summit, of which pieces were recovered from the site. The only other structure which went with this was the Asokan pillar which stands at its original place near the southern gateway. About a century later, the original brick *stupa* was enveloped in a stone casing and was enlarged to its present dimensions (diam. over 120 ft., Ht. 54 ft.) to form an almost hemispherical dome, truncated near the top. At the same time a lofty terrace, approached by a double flight of steps on the southern side, was built against its base to serve as a processional path. The masonry of the dome and terrace was originally covered with plaster decorated with colour. At the summit of the *stupa* was built a diminutive square railing *harmika* (*harmika*) with a pedestal, from which rose the shaft of the triple umbrella that crowned the superstructure. Another paved processional path was provided on the ground-level which was enclosed by a plain and massive stone-balustrade. This balustrade, consisting of tenoned uprights, triple cross-bars of a lenticular section and copings with scarf-joints, was obviously copied from wooden prototype and formed the gift of individual donors.

It was in the latter half of the first century B.C. that the four lavishly-carved gateways were erected, one in each cardinal direction, as magnificent entrances to this imposing monument. These were manifestly conceived in wood and executed in stone, and each of them, over 10 m. high, was alike in design and consisted of two square uprights, surmounted by capitals, which in their turn supported three curved architraves with a row of sculptured balusters in between. Each of them was carved on both faces with the *Jataka* tales, scenes from the life of Buddha and miscellaneous motifs, the entire composition being significantly crowned by the symbol of *dharmachakra*.

Remains of Mauryan brick *stupa* of a unique type have been recovered at Bairat (Jaipur District). Of the *stupa* only bits of foundation have survived together with pieces of a stone umbrella and a bowl, bearing the distinctive Mauryan polish, the former being probably the crowning member of the *stupa*. The main interest of the monument lies in the enclosing circular shrine (diam. 27 ft.) which was made of lime-plastered panels of brickwork alternating with twenty six octagonal pillars of wood. The shrine was entered from the east through a small portico, supported on two wooden pillars and was surrounded by a 7 ft. wide circular processional path with an opening on the east, the whole being enclosed at a later date within a rectangular compound

containing an open space for assembly in front of the entrance. This *stupa*-shrine resembles on plan and in design a circular *chaitya*-cave in the Tulaja-lena group at Junnar.

Sarnath, where Buddha first preached the Law, was among the four holiest places of Buddhism and developed as one of the greatest Buddhist establishments of India. Excavation at the site conducted between 1904 and 1928 uncovered numerous temples, *stupa* and monasteries, the earliest attributable to the time of Asoka. The nucleus of the brick-built Dharmarajika Stupa at Sarnath, comprising a hemispherical dome (diam. 60 ft.) with a low terrace at the base, was probably built by Asoka. A monolithic railing bearing a Mauryan inscription and polish, found near the *stupa*, presumably formed its *harmika*. The inscribed Asokan pillar with the celebrated Lion-capital, which was recovered not far from the *stupa*, appears to have formed part of its architectural scheme. The original *stupa* was encased in six successive ones, each larger than the other, which range in date from the second to twelfth century A.D.

Of the Bharhut stupa in Central India the surviving remains mainly consist of portions of the enclosing stone railing, dating from c. 125 B.C., and the eastern gateway, erected fifty years later. These are of the same design as the Sanchi railings and gateways and are richly carved with bas-reliefs. The *stupa*, of which all traces have now disappeared, was constructed of plastered brickwork. It had a diameter of 67 feet and contained recesses for lamps at the base.

Pauni in District Bhandara (Maharashtra) has recently revealed the remains of two *stupas* built during the pre-Christian period. One of the *stupas*, built of bricks with an original diameter of 38.20 m. and enclosed by wooden railings, was enlarged by 3.20 m. in diameter. In a subsequent reconstruction which was effected during the 2nd century B.C. the wooden posts were replaced by pillars and an outer railing with cardinal placed gateways in stone. Some of the railing pillars are inscribed and carved with figures of *yakshas*, *yakshis*, *nagas* and symbolical and decorative designs in the typical Sunga style. The other *stupa* built partly of baked and partly of mud-bricks and subsequently strengthened by a brick-revetment, measured 41.6 m. in diameter and was a plain structure, though it yielded in the centre a painted reliquary pot containing bone-fragments within a *kunda* surmounted by a wooden post. The latter *stupa* is assignable to circa 1st century B.C.-A.D.

Between the first century B.C. and third century A.D. were built numerous *stupas* along the Krishna in South-east India on sites including Amaravati and Nagarjunkonda in Guntur District and Jaggayyapeta, Ghantasala, Gudivada and Bhattiprolu in Krishna District. These

stupas consisted of brick-built hemispherical domes on a low base and were characterized by rectangular projections from the base of the dome at the four cardinal points, the projections supporting a row of five ornamental pillars (*ayaka-khambhas*). The earlier examples at Bhattiprolu and Gudivada were of solid brickwork, while those at Amaravati and Ghantasala had in the interior radiating brick walls with a hub and spokes, the spaces between the walls being filled with earth-packing, before the outer brick casing was constructed. The *stupas* were finished with plaster and most of the larger ones were embellished at the base with sculptured marble panels, the example at Amaravati being particularly noted for them. The superstructure of the *stupas* is invariably missing, but it can be visualized by contemporary plastic representations on the Amaravati marble friezes. As regards dimensions, their diameter ranges from 31 feet for the smallest example at Jaggayyapeta to upwards of 100 feet for those at Bhattiprolu, Gudivada, Ghantasala and Amaravati, the last having an approximate diameter of 162 feet for the *stupa* and 192 feet for the enclosing railing with a conjectured height of about 100 feet. The examples at Nagarjunikonda, definitely datable to second-third centuries, range in diameter from 27 to 106 feet.

Ter (District Osmanabad), is yet another site which yielded, during recent excavations, a *stupa* with *ayakas* and an apsidal *chaitya-griha*, both of brick and of the second century A.D. The brickwork within the core of the *stupa* is in the form of an eight-spoked wheel. The carved limestone slabs and copings, found at the site, bespeak the influence of the Amaravati School.

Like plastic art, architecture also had a peculiar regional development in ancient Gandhara, or the north-west region of Pakistan, during the first five centuries of the Christian era. This region is studded with numerous Buddhist sites, like Taxila and Manikyala in Rawalpindi District; Takht-i-bahl, Sahri Bahlol and Jamalgarhi near Mardan; and Charsada in Peshawar District, which have both *stupas* and monasteries, the latter built on the plan of an open rectangular court enclosed by cells and verandahs on four sides with an annexe comprising assembly-hall, kitchen and refectory. The *stupas*, which, like the monasteries are executed in stone-masonry and finished with lime or stucco-plaster, are embellished with Buddhist images and designs of Indo-Corinthian pillars which are typical of the Gandhara art. The earlier *stupas*, represented by the example at Manikyala and the *Dharmarajika-stupa* at Taxila, are characterized by a hemispherical shape. But the remaining Gandhara *stupas* are distinctive tall structures, raised on lofty square terraces, the drum consisting of several diminishing tiers crowned by multiple receding umbrellas. The top of the square platforms, approached by flight of steps, was utilized as a processional path. The *stupas* are generally surrounded by a large number of votive *stupas* or small chapels which, like the main

monument, are usually decorated with Buddhist images in niches framed with Indo-Corinthian pilasters. A representative and well-preserved example of the Gandhara-stupa occurs at Takht-i-bahi, which, though small, has retained all essential architectural features and is situated in the centre of a court enclosed by chapels. An example of exceptional plan and dimensions (diam. 286 feet) was unearthed at Shahji-ki-dheri near Peshawar which yielded the celebrated relic-casket of Kanishka. This monument has a cruciform base with circular tower-like projections at the four corners, though its superstructure is of the normal Gandhara type.

A series of brick *stupas* were built in Sind (Pakistan) during the fifth-sixth centuries in the characteristic Gandhara style, the only difference being of the building-material. These monuments show a liberal use of moulded bricks for mouldings and designs which include the Indo-Corinthian pillar of Gandhara. The most notable of these is the *stupa* at Mirpurkhas which is embellished with sculptured terracotta panels in the best Gupta style. While sharing the general plan and design with other monuments of the group, it is unique in having three arched cells in the basement, each being treated as a sanctum with an image of Buddha in it.

The recent excavation at Devnimori in District Sabar-Kantha of Gujarat has exposed the remains of large Buddhist establishment, comprising a brick-stupa and monastery. The *stupa* with a cupola, resting on two square platforms, is a massive edifice measuring 26 m. square and is more than 10.4 m. high. The lower platform, which served as a processional path, was divided into eleven bays by twelve Indo-Corinthian pilaster, while the upper platform was adorned by ten similar pilasters on each face. The central bay on each face contained an ornate arch, while each alternate bay appears to be adorned with a Buddha image in terracotta. Thus the facades of the *stupa* were elaborately embellished with statuary and decorative patterns including pot-and-foilage, scrolls and dentils. This monument resembles the brick-*stupa* at Mirpur-Khas (Pakistan) in design and style and elegance of terracotta sculpture. The discovery from the heart of the *stupa* of an inscribed relic-casket recording that the 'great *stupa*' was built near the 'great monastery' during the reign of (the Western Kshatrapa) king Rudrasena (III) in the year 127 (A.D. 375) probably dates it to the second half of the fourth century. There is evidence to show that the *stupa* underwent reconstructions later on.

In the North Indian plains the *stupas* were made principally of bricks and continued to be built till the twelfth century. They occur on Buddhist sites like Sarnath, Saheth-Maheth (Gonda-Bahraich District), and Kasia (Deoria District). the earlier nuclei of the Dharmarajika at

Sarnath exhibiting a hemi-spherical form have already been referred to. Most of the existing *stupas* date from the Gupta and later times and are of a definitely cylindrical shape with a high base, usually consisting of more terraces than one. The cylindrical type is best represented by the Dhamekh stupa at Sarnath, dating from the Gupta period. It is a massive towering structure (diam. 93 feet; extant ht. 143 feet including foundation) with a 36 feet high basement made of solid masonry, while its foundation and lofty cylindrical drum are built of bricks. The basement has eight projecting faces with niches for statuary. The monument is further adorned with delicately carved arabesque and geometrical patterns. The *stupas* of the post-Gupta period, while retaining the cylindrical form, tended to be even more ornate in design and with their multiple terraces and umbrellas inspired the *stupa*-architecture of Greater India including Tibet, Burma, Siam, Cambodia and the islands of Indonesia.

The development of the *stupa* in western India generally followed the lines identical with other parts of the country, as evident from a study of the rock-cut *stupas* which were but replicas of the structural forms. We shall see in the following section how the earlier type with a low drum and few or no ornaments evolved through successive stages into a lofty drum with an elongated dome, decorated with a wealth of imagery, and finally culminated in a kind of shrine.

2. CAVE ARCHITECTURE

The earliest rock-cut caves in India are attributable to Asoka (273-232 B.C.) and his grandson Dasaratha both of whom excavated a group of seven caves on the Barabar and Nagarjuni hills in Gaya District of Bihar. All of them bear the distinctive Mauryan polish and, with the exception of one cave, are engraved with inscriptions of Asoka and Dasaratha, which testify that they were excavated for the recluses of the Ajivika sect. The remarkable examples of the group are the Sudama cave, dedicated in the twelfth year of Asoka's reign, and the Lomash Rishi cave, the only excavation without a Mauryan inscription. Both are lithic copies of structures in wood, their plan consisting of a rectangular antechamber leading to a circular cell. The antechamber ($32\frac{3}{4}$ feet x 19 half feet x $12\frac{1}{4}$ feet) in the Sudama cave has a side-entrance and is vaulted, while its cell (diam. 19 feet; ht. $12\frac{1}{4}$ feet) has a hemispherical domed roof with an overhanging eave representing thatch and parallel grooves on the walls imitating wooden planks. The Lomash Rishi cave is even more notable and shows an ornamental entrance-porch, caved to represent the gabled entrance of a wooden building with sloping uprights, jointed beams and rafters, an eave-arch of laminated planks crowned by a finial and perforated lattice-work—all features of wooden architecture. Below the lattice-work occurs a beautiful carved frieze depicting elephants worshipping *stupas*.

The rock-cut architecture, initiated by Asoka in the third century B.C., blossomed from second century B.C. onwards into a powerful and popular architectural mode, as is evidenced by nearly twelve hundred excavations, scattered throughout the country from Kathiawad and Rajputana in the west to Orissa in the east and down in the south to the tip of the peninsula. This architecture has three definite phases, the earliest dating from the second century B.C. to second century A.D., the second from the fifth to seventh century and the last from seventh to tenth century. All the phases developed primarily on the Western Ghats, the trap-formations of which were particularly suited for excavations, while they occur only secondarily in other parts of the country. The greatest centres of excavations in western India are Bhaja, Bedsa, Junnar and Karle in Poona District; Elephanta and Kanheri near Bombay; Nasik; and Pitalkhora, Aurangabad, Ajanta and Ellora in Aurangabad District. Ajanta has twenty nine Buddhist excavations ranging in date from second century B.C. to seventh century A.D., while Ellora has as many as thirty-four excavations, dating from fifth to eighth century, of which the earliest are Buddhist followed by Brahmanical and Jaina caves in the chronological order.

EARLY BUDDHIST CHAITYA-HALLS OF WESTERN INDIA (c.200 B.C. A.D. 200)

The first phase of excavations in western India was exclusively devoted to the earlier form of Buddhism which worshipped Buddha in a symbolical form. The excavations took the shape of (1) *chaitya*-hall and (2) monastery and copied in rock the structural forms practised in less permanent material like wood. The *chaitya*-hall is more important of the two constructions and consists of vaulted congregation-hall with an apsidal end containing a *stupa* (also cut out of the living rock), the hall being longitudinally divided by a double row of colonnades into a central nave with two side-aisles. In its elementary form this plan is directly derived from the Sudama cave at Barabar by eliminating the barrier between the antechamber and the cell of the latter and providing a circumambulatory passage round its circular cell which is substituted by a *stupa*. That these *chaitya*-halls were copies of timber structures is evident not only from the servile adoption in rock of many designs and devices peculiar to wood-architecture, but from the actual presence in many cases of woodwork in the roof and the entrance arch, etc.

The most attractive and carefully-designed part is the facade which consists of a screen with a doorway or doorways below and a prominent arch-window above, through which light is admitted into the hall. The facade is relieved with designs of arcade and railing and occasional sculpture and in some cases has a front portico or vestibule, usually of timber, attached to it.

The more important *chaitya*-halls occur at Bhaja in Poona District, Kondane in Kolaba District; Pitalkhora and Ajanta (cave no. 10) in Aurangabad District; Bedsa in Poona District; Ajanta (cave no. 9); Nasik (Pandu-lena); Junnar and Karle in Poona District; and Kanheri on Salsette island near Bombay. They are mentioned in an approximate chronological order which is largely determined by stylistic development based mainly on the degree of imitation of wooden prototype, the earlier examples being closer to the latter with a liberal use of actual timber. The evolution of the shapes of the window-arch from a simple to elaborate curve, of the pillar from a plain to decorated form, and of the *stupa*-dome from a hemisphere to a cylinder are other guiding principles.

The earliest *chaitya*-hall at Bhaja, which dates from roughly 200 B.C., betrays its initial character in many features including a pronounced slope of the pillars, wooden roof-girders, a free use of timber in other parts, and an undeveloped ogee arch-window, closely approximating the form of the Lomas Rishi cave. The hall measures 55 feet x 26 feet x 20 feet high, each side aisle being $3\frac{1}{2}$ feet wide. The Kondane example, which is a little larger and later than Bhaja, differs from the latter in having the facade-pillars of stone instead of wood. In the Pitalkhora and Ajanta (cave no. 10) *chaitya*-halls the roof-ribs over the side-aisles are not of timber but are cut out of rock. The latter is a more ambitious production, measuring 100 feet x 40 feet x 33 feet, and its *stupa* has a double tier at the base and a slightly elongated dome. The Bedsa cave shows elaborate facade with pillars and pilasters in the front decorated with bell-capital crowned by spirited human and animal sculptures. Cave no. 9 at Ajanta and the Pandu-lena at Nasik have no timber attachments to their frontage. The former has the distinction of containing a rectangular hall with flat-roofed aisles and an elaborately designed facade with a minstrel galley. The latter shows a two-storeyed ornamental facade characterized by a carved lunette above the doorway and an arcade with repeated *stupa* motif and with bell-capital pillars flanking the arch-window. The pillars of its interior are almost perpendicular and better proportioned and have a pot-base and a square abacus, while its *stupa* has a tall cylindrical drum. The Manmoda *chaitya*-hall at Junnar is contemporary with the previous example and shares many of its features including a carved lunette on the facade and the absence of a front portico. There are four other roughly contemporary caves at Junnar of which the *chaitya*-hall known as the Tulaja-lena is remarkable for its circular plan (diam. $25\frac{1}{2}$ feet) with a *stupa* in a domed aisle of twelve pillars.

The *chaitya*-hall at Karle is the largest (124 feet x $46\frac{1}{2}$ feet x 45 feet) and most evolved example of its class, showing truly perpendicular pillars and a well-developed screen. It has an ornate two-storeyed

facade with an enormous sun-window surmounted by structural woodwork in the upper storey and three doorways with the intervening space decorated with fine sculpture of donor couples and indifferent Gupta palimpsests of Buddha-figures in the lower storey. The sides of the outer porch are sculptured with architectural storeys, the lowest one showing grand elephant figures. In front of the facade stood two free-standing pillars with bell-capital, surmounted by a vivid group of addorsed lions, originally supporting a *dharma-chakra*. But more impressive than these are the pillars dividing the nave from the aisles, which show a pot base, octagonal shaft and an elaborate capital, crowned by spirited statuary, consisting of two kneeling elephants, each bearing a noble couple in front, and caparisoned horses with riders at the back. The *stupa* is of the tall cylindrical variety with two rail-courses, and with the original wooden umbrella intact. Datable to the close of the first century A.D., this is indeed one of the most magnificent monuments of India.

The chaitya-hall at Kanheri is the latest example of the phase dating from c. 180. Architecturally it is an inferior copy of the Karle *chaitya*, though it maintains the quality of the sculptural decoration intact.

LATER BUDDHIST CAVES OF WESTERN INDIA (c. A.D. 500-642)

After a lapse of more than two centuries of inactivity started the second phase of the rock-architecture of western India in the fifth century. This phase is characterized by a practical elimination of timber constructions or imitations thereof and by the introduction of the Buddha statuary as a dominant feature of the architectural design. Nevertheless, the plan of the excavations, particularly the *chaitya*-hall, remained essentially identical with that of the previous phase. This is exemplified by *chaitya*-halls nos. 19 and 26 at Ajanta which are the earliest products of this phase. The former, which is the earlier (c. 500) and finer of the two, has practically the same plan and dimensions as Ajanta *chaitya*-hall no. 10. Its facade has only one doorway instead of the usual three, but in front of it is an elegant pillared portico which opens in an attractive entrance-court with side-chapels. The pillars of the interior have decorated shafts with cushion-capitals and massive bracket which support a broad panelled triforium or frieze running round the nave. Over this triforium rises the vaulted roof, the ribs of which are now hewn out of rock. The brackets and the triforium, like the facade, are richly sculptured with figures of Buddha and attendants in niches or panels. But the focal point of the entire composition is the large canopied figure of Buddha, occurring in a recessed niche on the *stupa* which is of a very ornate and elongated design with a tall finial, consisting of a *harmika*, triple umbrellas and a vase, the last touching the roof above.

Chaitya-hall no. 26, which is a little larger and later (c. sixth century), resembles hall no. 10 in the general architectural design. It, however, lacks the grace and dignity of the preceding, as its style is too ornate and encumbered with an excess of sculpture which is particularly evident on the pillar brackets and the triforium of the interior. The elongated drum of its *stupa* is richly laden with plastic carvings of which the central one is a seated image of Buddha in an elaborate pillared niche.

The last *chaitya*-hall of this phase and the best known of the Buddhist excavations at Ellora is the Visvakarma cave, datable to c. seventh century. Larger (85 feet x 34 feet) than the foregoing Ajanta *chaitya*-halls, it is not so lavishly sculptured as the latter, though its *stupa* is more evolved and shows conspicuous projecting niche containing a large seated image of Buddha flanked by attendants and flying figures. The entrance to the hall lay through a large open court surrounded by a pillared corridor with a carved frieze above the pillars. Its most distinguishing characteristic, however, is the facade where the great sun-window is now replaced by a small circular opening with an ornamental trefoil curvature, comprising the culmination of the original horse-shoe opening.

While the rock-cut monasteries of the earlier phase (as exemplified by Ajanta caves nos. 8, 12 and 13) were essentially copies of structural dwellings, consisting of cells surrounding a courtyard, those of the later phase were combined shrines and dwellings and may be briefly noticed here. They are generally single-storeyed excavations, entered through a verandah, with a large central hall having a cella in the rear. The addition of a shrine-chamber to the monastic plan and the decoration of the mural surface by niches containing images were innovations brought about by the introduction of the Buddha statuary in the architectural scheme. The representative examples of this class are the Ajanta caves (all with the exception of nos. 8-10 and 12-13), of which nos. 1 and 16 are the finest; they are of the same size and design, each having an outer verandah, 65 feet long; a main hall, 65 feet square, containing an aisle of twenty pillars; together with the usual group of cells and shrine-chamber. The monastic plan was developed still further at Aurangabad and Ellora, the latter site showing some enormous triple-storeyed monasteries of elaborate design like the Tin-thal and Do-thal, besides simpler ones.

3. TEMPLES AND MONASTERIES

Buddhist art and architecture is largely undistinguishable from the general run of Indian art and architecture in technique, style and form and differs mainly in its iconographical content. Since the same guilds of artists worked for all the religions, there is hardly any difference

in the treatment of Buddhist, Brahmanical and Jain temples in a particular region at a given period.

The earliest structural Buddhist temple is Temple 17 at Sanchi which is also the earliest known example of the Gupta temple style. It is a plain, flat-roofed structure of ashlar stones comprising on plan of a square sanctum with a shallow portico resting on four pillars in front. The decoration is confined to its doorway showing a pair of bands of scrolls and rosettes and the pillars which are square below and eight and sixteen-sided above with a fluted bell-capital surmounted by lion-brackets. Considered as a classic example of lucid diction, perfect articulation and restrained decoration, this temple lays the logical foundation of temple architecture in north India, which developed in due course a *sikhara* over its basic form.

Marking the holy spot of the enlightenment of the master, Bodhi-Gaya is looked upon with greatest sanctity and became a flourishing Buddhist establishment with numerous temples, *stupas* and monasteries. According to tradition a large number of shrines and memorials were erected at the site to commemorate the incidents before and after enlightenment but only few can now be recognized. Of the earliest shrine, traditionally attributed to Asoka, only the *vajrasana* or the sandstone throne with the characteristic Mauryan polish and decorative designs has survived and is seen beneath the holy Bodhi tree. To the Sunga period belongs a portion of the sandstone railing carved with bas-reliefs, typical of the age. The remaining portion of the railing pertains to the Gupta period. The main brick-built shrine known as the Mahabodhi temple Plate II,



MAHABODHI TEMPLE, BODHGAYA PLATE II

which appears to have been originally erected in *circa* second century A.D., is encumbered with heavy renovations, the four corner-towers being an arbitrary addition of *circa* fourteenth century. Its central

tower is a 170 ft. high *pancha-ratha sikhara* of a straight-edged pyramidal design demarcated into 7 storeys by *bhumi - amalakas* and embellished with bold *chaitya*-windows and niches framed by pilasters. Its appearance substantially agrees with the following description left by the Chinese pilgrim Hiuen Tsang:—

“To the east of the Bodhi Tree was a temple (*ching-she*), above 160 feet high, and with a front breadth at the base of above twenty paces. This temple was made of bricks and coated with lime; it had tiers of niches with gold images; its four walls were adorned with exquisite carvings of pearl-strings and genii; on the roof was a gilt copper amalaka; connected with the east side of the temple were three lofty halls one behind another; the woodwork of these halls was adorned with gold and silver carvings and studded with precious stones of various colours, and an open passage through them communicated with the inner chamber. On the left-hand side of the outside door of these halls was an image of Kuan-tzu-tsai P’usa, and on the right one of Tzu-shi (Maitreya) P’usa, each made of silver and above ten feet high.” The temple is built in two stages, the first stage being a terrace, 50 ft. square and 20 ft. high which encompasses the lower cella (now the main sanctum) with its porch and two flanking stair-ways leading to the terrace and the upper cella. Both the lower and the upper cellas are vaulted. The great tower described above constitutes the second or the upper stage and rises immediately over the upper cella as a prominent landmark.

According to literary tradition, Nalanda, 10 kilometres north of Rajgir and a suburb of the ancient city, was visited by Lord Buddha. Asoka is said to have worshipped at the *chaitya* of Sariputra, Buddha’s disciple, and erected a temple. But the excavations which were conducted here from 1916 onwards have not revealed any per-Gupta remains. By the time of Harsha (A.D. 606-48) Nalanda had become the principal centre of Mahayana learning and a famed university-town with numerous shrines and monasteries which attracted scholars from far and rear. The Chinese pilgrim Hiuen Tsang and I-tsing studied at Nalanda and have left accounts of the settlement and its life.

Nalanda had a planned lay-out with an almost symmetrical row of monasteries facing a row of temples, with wide spaces in between. The temples were solid rectangular structures of two tiers, the sanctum being placed on the upper tier which was approached by a grand flight of steps. The facades of both the tiers were plastered and embellished

with elegant pilasters and niches containing images. Temple 3 was more than 31 m. high and consisted of seven successive accumulations of which the two latest belonged to the eleventh and twelfth centuries

and the fifth one, dating from *circa* sixth century, was a *panchayatana* with its four *stupa*-like corner-towers and facades adorned with niches containing fine Buddhist stucco images of the late Gupta style. The monasteries were imposing multi-storeyed rectangular buildings, each with an open courtyard, enclosed by a covered verandah which led into cells, arrayed on the four sides. The cell facing the entrance served as a shrine.

Nalanda was also an important centre of Pala sculptures and bronzes and has also yielded seals and sealings of great historical significance.

The Jetavana monastery at Sravasti, the capital of the Kosala kingdom, was the scene of many a sermon of Buddha and has been identified with the twin sites of Saheth-Maheth, located in Gonda and Bahraich District of Uttar Pradesh. Excavations conducted between 1907 and 1911 have revealed at Saheth, representing ancient Jetavana, a number of shrines, monasteries and *stupas*, the earliest of which, probably of the Mauryan age, yielded a sandstone casket containing bone-relics together with a gold leaf and a silver punch-marked coin. Maheth, representing Sravasti, is a fortified town with ruins of residential houses as well as brick *stupa* and shrines, one of which exhumed more than three hundred terracotta panels, depicting scenes from the *Ramayana* in the Gupta style.

Kausambi (District Allahabad), the reputed capital of the ancient Vatsa kingdom, is one of the oldest and richest historical sites of India, claiming intimate association with Buddha. Following a small excavation by the Archeological Survey in 1937-38, the site is being continuously excavated by the Allahabad University since 1949. The excavations have thrown light on the age and character of the massive fortifications which enclose the ancient ruins and of the connected habitations. In a corner of the fortified city have been cleared the extensive remains of the Goshitarama monastery, intimately associated with Lord Buddha, which show continuous occupation from *circa* sixth century B.C. to sixth century A.D. when it was destroyed by the Hunas.

The excavation conducted since 1958 at the Buddhist site on the Ratnagiri hill in District Cuttack of Orissa has confirmed the testimony of the late Tibetan traditions that Ratnagiri was a great centre of Mahayana and Vajrayana learning and art.

The main *stupa*-shrine made of brick, had a base measuring 14.5 m. square with six elegantly-moulded projections on each side and a circular drum, the interior of which was designed as a wheel with twelve spokes with the interspaces packed with mud-filling. Dating from *circa* eight century, it was twice enlarged and enclosed by numerous votive *stupas*

of brick and stone, including clusters of miniature monolithic ones. Facing the main stupa were two brick monasteries in a row, with the usual plans, the larger one measuring 54.8 m. square and the smaller one 29 m. square. One of them had a magnificent entrance-porch flanked by pylons and a shrine in the back wall with elaborately-carved stone door-frames, exhibiting a rich wealth of sculptural and decorative ornaments. At least this monastery was multi-storeyed and was in occupation from *circa* eighth to thirteenth century. The second one had also a shrine in the back wall.

The site has also yielded an eleventh century temple of Matakala in the typical Orissan style, besides a rich crop of Buddhist images of bronze and stone and terracotta sealings.