CHAPTER THIRTY-ONE (A)

ART AND ARCHITECTURE
NORTHERN INDIA

1. ARCHITECTURE OF NORTHERN INDIA A.D. 320 TO A.D. 985

The Gupta period marks a turning point in the history of Indian architecture. The architectural activities in the earlier period, it has been observed in the previous volume, were mostly concerned with cave excavations and simple erections in wood or brick. Caves continue to be excavated during the period under review and the elaborate cave excavations of the Deccan and the South furnish us with some of the most magnificent examples of this expression, beautiful alike for their rich sculptures and their bold and varied conceptions. Sometimes they are found to have been embellished with fine and elegant paintings. The caves of the period belong to all the three principal religious denominations—Buddhism, Brahmanism and Jainism, and in each group there are a few that may be recognised to be outstanding creations in the history of Indian architecture. With this magnificent series the cave style, which may be regarded as a continuation of the earlier practice and tradition, reaches its utmost fruition leading ultimately to an exhaustion and decline of the tradition. In this respect the period marks the close of a brilliant era in the history of Indian architecture.

On the other hand, our period saw the ushering in of a new epoch which is particularly connected with the growth and development of structural monuments of distinctive forms and styles. The remains of the earlier structural buildings, constructed chiefly of impermanent materials like wood, bamboo, brick, etc., are now too fragmentary in character to be of any real use for a study of the development of the structural types and forms. In the Gupta period a new zeal and sensibility marked every sphere of human activity and pursuit, and architecture took a rational character with the use of dressed stone which, apart from the use of brick, came to be employed in a gradually increasing degree. Our period thus saw the beginning of the structural procedure in right earnest, and the serious application of structural mode and principles put immense
power in the hands of the builders. It is this first definite step toward the technique of building construction and the principles of architectural composition that foreboded immense possibilities. Apart from the use of the structural mode in the architectural forms already established like the stūpa, the chaitya hall or the monastery, this new movement is particularly concerned with the erection of temples for the proper enshrinement of images. Varied experiments were conducted till suitable forms were crystallised. With regard to the growth and development of the monumental temple styles the Gupta period may hence justly be regarded as a creative and formative age, an age portent with tremendous future possibilities.

With the above general observations regarding the main tendencies of the period it will be possible for us to confine our discussion to the monuments of Northern India and trace the history of architecture during the whole period under review. It should be emphasised, however, that for the earlier part, say, up to the eighth century A.D., it is difficult, if not impossible, to separate regionally the march of the architectural movement which retains a more or less all-India character. Moreover, the monuments of the North have suffered most from the successive political avalanches from which the South remained comparatively immune. We shall have to refer frequently hence to the South for the sake of completeness and for a better elucidation of the various points involved in the study of the monuments of Northern India in a historical and stylistic perspective.

CAVES

In the Deccan and the South, up till the eighth century A.D., there is felt a marked persistence of the rock-cut method and some of the finest examples of the rock-cut mode were executed during this period. In Northern India, however, the rock-cut mode does not appear to have been as persistent as in the South. A few caves are known to have been excavated in the North during the period under notice; but they seem to have been localised in certain areas where the mode was in vogue in the earlier times. Moreover, the North-Indian caves, except the Buddhist series at Bagh (Gwalior), do not pretend to be such elaborate and magnificent conceptions as those of the Deccan or the South. They were more in the nature of simple excavations without either the elaborate details of their plan or their rich ornamentation and decorative style.

As those in the South, the caves of Northern India belong also to the three principal religious orders—Brahmanism, Buddhism and Jainism. The Brahmanical caves appear to have been the earliest. The remains of one such cave, possibly the only instance of a cave shrine in Bengal, may be found at Susunia in the Bankura district of
West Bengal. The cave, according to the inscription, was dedicated to the god Chakravâmin (Vishṇu) by Mahârâja Chandravarman, son of Mahârâja Simhavaran, Lord of Pushkaraṇâ.¹ Pushkaraṇâ may be identified with Pokharna, a village with extensive ruins on the river Dâmodara in the Bankura district, and Mahârâja Chandravarman appears to have been a local ruler of Southwest Bengal. It is also possible that he was identical with Chandravarman mentioned in the Allahabad pillar inscription of Samudra-gupta along with other king of Āryâvarta who were forcibly uprooted by that monarch. The cave dedicated to the god Chakravâmin thus belonged apparently to the fourth century A.D. Only the back wall of the cave containing the inscription now remains and we are not in a position to ascertain the plan or other arrangements of this cave shrine. The technique as well as the practice are new to the locality and the shrine appears to have been nothing more than a rude and primitive cell dug out of the ledge of the rock.

The hill of Udayagiri, near Bhilsa (Bhopal), contains a series of cave shrines, nine in number, partly rock-cut and partly stone-built.² There are two inscriptions belonging to the reign of Chandra-gupta II, one being dated in the (Gupta) year 82 corresponding to A.D. 401-02. Evidently all the caves represent one single movement which may hence be dated about the beginning of the fifth century A.D. Cave no. I, also known as the ‘false cave’, represents apparently the earliest of the series. Here we find a natural ledge of the rock converted into a primitive shrine with the addition of a pillar to project from the front. The other caves of the series, each consisting of a plain and rectangular sanctum cella, dug out of the rock, preceded by a shallow structural portico with pillars in front, indicate a gradual advance of the design. Partly excavated and partly stone-built, these shrines follow the type and conventions of the contemporary structural temples to be noticed hereafter. In the fundamentals of their plan, in their richly carved doorways of the typical Gupta style, in the design and ornamentation of the pillars of the portico and in their columniation we may recognise the same principles which are noticeable in the structural temples of the age; and in the gradual refinement of the treatment of the various features it is easy to discern signs of an advance of this style in which the two modes—the rock-cut and the structural—have been pleasingly combined. Cave no. IX, locally known as the Amrita

¹ Kp. Ind., XII, p. 317f; XIII, p. 135; ASR, 1927-28, p. 188f.
² ASC, X, p. 41f.
Cave, represents perhaps the latest example of the series, not only on account of its spacious dimensions and introduction of new features consequent thereto, but also because of the finished treatment of its decorations. In the entire series the cella of the Amrita Cave is the largest, being 22 feet by 19 feet 4 inches, i.e., nearly twice the size of the others. This increased spaciousness of the cella led to an innovation in the arrangement of the interior as may be seen in the four massive pillars, naturally hewn out of the rock, which are left in the centre of the hall to serve as additional supports for the mass of the rock forming the roof. It is this necessary feature that inaugurates further development of the design and is to be noticed equally in the cave excavations as well as in the structural forms of the subsequent days.

In the Buddhist group mention should be made of the series of caves in the neighbourhood of Bagh in the now-defunct Gwalior state. Situated in the southern slopes of the Vindhyan range on the left bank of the river Wagh or Bagh, a small tributary of the river Narmadā, the caves extend over a frontage of nearly 750 yards. There are no inscriptions in any of these caves to help us to determine the dates of these excavations with a certain amount of exactness and precision. But stylistic considerations of architecture, of sculpture and, above all, of paintings which form a distinctive feature of their embellishment, point to a period between A.D. 500 and 600 as the approximate age of these caves.

There were altogether nine caves in this series, but due to the friable nature of the rock a good many of them are now in an utter state of collapse. The porticos in front of the caves are now all gone and only the bases of the pillars supporting the roofs remain. Of the nine caves, nos. II, III, IV, V and VI are found in a comparatively fair state of preservation to enable us to form some idea regarding their plans and interior arrangements. The earliest in the series appears to be cave no. I, which consists of a single rectangular chamber, 23 feet by 14 feet, with a group of four pillars in the centre of the hall for support of the roof. This component of four central pillars appears to be a characteristic feature of the Bagh caves where the peculiarly friable nature of the rock makes this complement a functional necessity to support the mass of the rock forming the roof. The rock is not such as to sustain a bearing of considerable length and hence some central supports were thought necessary and were provided for by the group of four pillars forming a central square inside the hall. The Amrita Cave at Udayagiri, it is signifi-

3 London, The Bagh Caves; India Society.
cant to note, has also this complement of four central pillars provided, no doubt, for the same purpose.

Cave no. II at Bagh represents an elaborate monastic establishment and chapel combined. Locally known as the Pāñdavas’ cave, it consists of a square monastic hall with ranges of cells on the three sides, a pillared portico in front and a chaitya chapel preceded by an ante-chamber at the farthest rear end. The face of the portico with the six octagonal pillars has collapsed. Three doorways are provided in the back wall of the portico for access to the monastic hall and two windows in between for admission of light and air. The doorways as well as the windows exhibit a succession of receding reveals, which constitute a characteristic feature of the ornamentation of the openings in all the caves of the series. The monastic hall has twenty pillars ranged along its four sides in front of the cells with an additional complement of four in the centre. The pillars in the centre have tapering round shafts with spiral flutings and end at the top in square blocks under the brackets with sixteen-sided and octagonal bands as transitions. The pillars forming the colonnade in front of the cells are of varying designs. They are all square at the lowest sections with a plain torus moulding at the base. The supper sections are varyingly treated, some octagonal and sixteen-sided, others dodecagonal and twenty-four-sided, with bands either of spiral flutings or of oblique reedings or of diverse other patterns. The pillars are surmounted by bracket capitals of a type reminiscent of bundles of rods fastened together by an ornamental band. There are twenty cells, including one each on either side of the portico, each representing a bare chamber with a single lamp niche at the back. The chaitya chapel at the rear end, driven axially further into the depth of the rock, is preceded by a rectangular ante-chamber with two twelve-sided pillars in front. A narrow passage connects the two. In the chapel is enshrined a rock-cut chaitya, resting on an octagonal base with bold mouldings. It consists of the usual cylindrical drum and the hemispherical dome with the harmikā and the parasol, all complete and measuring over 14 feet in height. Though the chaitya retains its place of honour in the sanctuary, image of the Master is by no means unknown in the monastic caves at Bagh. The side walls of the ante-chamber preceding the sanctuary in cave no. II are decorated each with a group of three figures, apparently the Buddha between two Bodhisattvas. The back wall of the ante-chamber is likewise embellished by two Bodhisattva figures, one on each side of the passage leading to the sanctuary.

The monastic establishment at Bagh, as seen in cave no. II, is not
unlike those at Ajañțā, numbered XVI, I, II and XXIV, in plan and general arrangement, though a marked divergence may be recognised in the massive form of the pillars and in their decorative treatment. The four central pillars also supply a discordant note and the interior appears to be more congested. But they provide for a necessity which was less felt at Ajañțā because of the strong and homogenous fabric of the rock there. It should be mentioned, however, that this feature appears in a few of the Ajañțā caves, such as the lower storey of cave no. VI, belonging to a period of experimentation in the varied modes of interior columnation. The most significant divergence, however, is noticed in the sanctuary which, unlike those in the Ajañțā caves, has a chaitya, instead of an image of the Buddha, as the chief object of worship. The sanctum of cave no. IV at Bagh has also a chaitya enshrined in it, and in this respect the vihāra caves at Bagh may be found to have retained the ancient practice of enshrining a chaitya in the sanctuary, whereas in the nearly contemporary caves at Ajañțā the image of the Master occupies the place of honour in the chapels. It is on account of this significant feature that Vogel thinks that the Bagh caves represent a stage in transition prior to the development of the full-fledged monastic type at Ajañțā showing the image of the Buddha in the sanctuary at the rear end of the hall.

Cave no. III, locally known as the Hāthikhānā or elephant stable, is in a damaged state, much of the front having collapsed. From whatever is preserved it appears to have been of a singular type, not usually found in the monastic caves we are familiar with. The central hall is rectangular with its roof supported on eight octagonal pillars in two rows and has ranges of cells on the two longer sides and another hall, also supported on eight pillars, at the back. These halls are connected with each other by three doors. The hall at the back has no connecting cells and from its unfinished appearance appears to have been a later addition. Of the cells flanking the outer hall, one set slightly at the back on the north-east side has a two-pillared ante-chamber in front. On account of this distinction and from the presence of painted effigies of the Buddha accompanied by kneeling worshippers on the wall this cell appears to have been the chapel of this establishment. The hall as well as the other cells are embellished with paintings and must have looked quite different from its present gloomy appearance.

About 250 feet apart from cave no. III are situated three caves, nos. IV, V and VI which are contiguous to one another. The first two are joined together by a continuous portico which once ran along the entire length of the facades of the two caves, while
no. IV is connected with no. V by a broad passage linking up the two. It is not impossible hence that these three caves were contemporary to one another. Cave no. IV, locally known as the Rang Mahal from the fine series of paintings that still survive, was the most important of all the Bagh caves. The portico which ran along the facades of the two caves is now almost entirely gone. With three entrance doorways and two windows in the back wall of the portico, with the square hall with colonnaded corridors on the four sides and the central complement of four pillars inside the colonnade, with ranges of cells on the three sides and with the chaitya chapel slightly set back at the rear end, cave no. IV shows a plan and general arrangement not unlike those of cave no. II. The pillars in the colonnade, however, number 28, instead of 20 in cave no. II, and in this respect it has a parallel in cave no. IV at Ajanta. Moreover, a highly ornate porch projects inwards from the middle of the colonnade on each side, except on the side of the frontal portico. Each porch is supported on two columns, circular in shape and decorated with fine flutings, vertical as well as spiral, and elegantly carved decorative bands. These columns hold up a deep entablature adorned with seated Buddha figures and chaitya windows with human heads. This kind of ornamental porch inside is singular in its appearance in this cave and is not known to occur anywhere else. It is not impossible that these columns with deep entablatures, though having the appearance of ornamental porches in front of the colonnades, were primarily functional and were inspired by the desire to lend extra supports to the spacious roof, such additional precaution being felt necessary on account of the extremely soft and friable nature of the rock. The pillars of the surrounding colonnades, though of the same general design as those of cave no. II, exhibit more variegated decorations. The doorways and windows in the back wall of the portico are likewise elaborately carved. All the designs and patterns, whether on the ornamental porches or on the doorways and windows are exquisitely chiselled and the diversified and fine execution of the carvings, combined with the novel features in architectural setting, marks a distinct advance on the style presented by cave no. II. The rich carvings, coupled with the elegant paintings that were made to cover every available space, provided a highly decorative and colourful appearance to cave no. IV which may hence be regarded as the finest in the whole series.

Cave no. V consists of a rectangular hall with a central doorway and four windows in the back wall of the portico and with sixteen round columns in two rows supporting the roof, but without any range of connecting cells. The columns are all of the same pattern
and entirely devoid of any fluting or of any other decorative device. Each row stands on a common plinth that extends from end to end of the hall, and parallel to it and at the foot of each wall there runs a raised platform, evidently intended as a seat. An almost similar arrangement may also be recognised in the Mahanwada cave at Ellora. The appearance of this cave at Bagh is singularly bare except for the paintings on the walls, pillars and ceiling. This cave, it has already been stated, is joined to cave no. IV by a continuous portico and is usually described as the śālā attached to the vihāra cave. It is possible that it served as a refectory, or perhaps an oratory, for the inmates of that vihāra.

The next cave, no. VI, is connected again with no. V by a broad passage and consists of a hall with cells opening out on its two sides. It has a single doorway flanked by two windows; the portico, had there been any, has entirely collapsed. The four octagonal pillars that supported the roof of the hall has also fallen and little is left of the painted decorations that once adorned the walls. The remaining three caves, no. VII, VIII and IX, call for little attention as they have entirely collapsed. Of these, the first appears to have been an establishment not unlike cave no. II, though not so decorative in appearance as the latter.

Though few in number and in decayed states, the Bagh caves are interesting in more than one aspect. The chaitya hall, a familiar type in the earlier period and persistent also in the period under notice at other places, is singularly absent in the Bagh series. Like those at Ajañṭā and Ellora the principal caves here represent monastic establishments and chapels combined into one, though a significant divergence is recognised in the sanctuaries at Bagh which, unlike those at Ajañṭā, contain chaityas, and not images of the Buddha, as the chief object of worship. The group of four central pillars, as already noted, forms a characteristic feature of the Bagh caves and added to this, the three ornamental porches fronting the colonnades in cave no. IV strike an altogether new and singular note. The plan of cave no. III constitutes also a novel arrangement not found elsewhere, while that of cave no. V is very rarely met with, the only other instances of this plan being the Mahanwada cave at Ellora and the Durbar cave at Kanheri. The massive pillars and their decorative treatment, as we find in the Bagh caves, have no exact prototypes elsewhere. In all these respects the Bagh series appears to have represented an independent local movement, parallel to, and possibly synchronous with, the group of Ajañṭā caves belonging to the Guptā-Vākāṭaka period. Because of the fragile nature of the rock, sculptures formed a minor part of decoration in the
Bagh caves. But the art of painting was fully exploited in the embellishment of the caves and from the scanty remains the pictorial art seems to have been in a highly developed state, in no way inferior to the style and tradition that we find at Ajanṭā.

Buddhist excavations belonging to the period may also be found in Rajputana at Dhamnar, halfway between Kota and Ujjain, and at Kholvi, 22 miles south-east from Dhamnar. The former group of nearly sixty to seventy excavations is laid without any regular plan and even the principal establishments lack the ordered and harmonious design that we recognise in the caves at Ajanṭā, or at Ellora or at Bagh. Cut in a coarse laterite conglomerate they have suffered greatly, and every detail, architectural or decorative, was probably in plaster and has now entirely vanished. The excavations consist of chaitya halls and monastic establishments, as well as shrines dedicated to the image of the Master. Of the monastic caves one is particularly interesting as exhibiting a rather unusual plan not found elsewhere. This peculiar cave represents a monastic establishment consisting of a pillared hall with cells opening out on the three sides. Its interest, however, lies in the fact that a chaitya shrine, complete in itself and of the usual stereotyped apsidal plan with the chaitya situated near the apsidal rear end, has been accommodated in the midst of the monastic hall. At Kholvi there appears again a number of excavations which are of peculiar interest as exhibiting chaitya shrines in which the chaityas themselves have been hollowed out to form cells for the enshrinement of images. The series of caves at Dhamnar and Kholvi probably represent the latest phase in the history of such kind of shrines envisaging a transitional stage to what is to come later, namely the age of the independent free-standing shrines for the proper installation of images.

So far as North India is concerned, caves of the Jaina order are very rare during the period and the few that might have been executed during the period were more or less primitive in character and do not call for any detailed notice. In the Udayagiri-Khandagiri group, near Bhuvanesvara, in Orissa, a few of the caves might have belonged to this period. The Ganeśa Gumpā at Udayagiri belonged, no doubt, to the earlier movement discussed in the previous volume. In this cave there appears an inscription of the reign of Sāntikara, a member of the Bhauma-Kara dynasty of Orissa, apparently belonging to the first half of the eighth century A.D. The inscription is concerned with some kind of dedication made by a physician, named Bhimata. Apparently the object of dedication was a cave shrine which, however, is difficult to identify in the present state of our knowledge. The inscription indicates that about
the first half of the eighth century A.D. there was again a movement concerned with excavation and dedication of caves.

A group of caves in the Khandagiri hill were apparently medieval excavations. Of these, the Lalāṭendu Kesārī and Navamuni caves contain inscriptions respectively of the fifth and the eighteenth years of the reign of king Udyotaka Kesārī of the Somavamśa dynasty of Orissa. Udyotaka Kesārī is placed approximately in the middle of the eleventh century A.D. and these caves may fall outside our period. The other caves, the Dhyānghhar, the Bārabhuji and the Triśūla or the Hanuman caves, from the stylistic evidence of the sculptures of the Jaina Tīrthankaras and of other Jaina divinities appear to have belonged to the period under review. There is a possibility also that the caves bearing the two aforesaid inscriptions, might have been earlier than the period of the inscriptions. All these caves are hence treated together for the sake of completeness. They are all in the nature of rude rectangular cells preceded by pillared verandas, and there is very little to be said of their architectural character and composition. The pillars as well as the intervening walls between the verandaha and the cells have mostly vanished, and the caves are now open to the front. The Navamuni and the Dhyānghhar, which are adjacent to each other, appear to have been once provided with a structural portico in front, as is known from the long sunken groove on the front wall of the caves. All the caves are rude and primitive in character as well as in execution, and, except for the images on the walls of a few, are entirely devoid of any sculptural decoration. They thus stand in significant contrast even to caves that we find in the earlier group at the same place, or to caves of this order at Bādhāmi and Aihole, not to speak of the magnificent examples at Ellora.

The rock-cut tradition in Indian architecture which had such a long and persistent history through centuries declines roughly from about the eighth century A.D. and no new form or conception appears to have emerged after this date. In our discussion of the structural forms it will be apparent that the structural mode has been radually gaining ground from as early as the fourth century A.D. The popularity of the structural mode and of the forms dependent thereon is also reflected in the application of the rock-cut technique for shaping out monolithic shrines and other appurtenances out of the natural rock in imitation of the structural forms. From a long practice the Indians boldly directed this mode to the rearing up of enormous shrines by cutting the rock both inside and out as free-standing monuments in space, just like the structural buildings. In the
cave series also this tendency is manifest in some of the caves at Ellora, for example, the rock-cut gateway preceding the forecourt in cave XII, the free standing mandapa in the centre of the courtyard of the Dasāvatāra cave, separate shrine for Nandī in the centre of the forecourt of the Rāmeśvara and the monolithic shrine in the courtyard and its rock-cut gateway in the Jaina cave, Indra Sabha. In the Brahmanical caves the sanctuary proper usually takes the shape of a free-standing shrine within the hall of the cave. Such experiments in carving out structural forms out of the rock indicate on the one hand the persistence of the rock-cut tradition, and on the other the unsuitability of cave excavations for shrines intended for the installation and worship of images. In the rathas of Mahabalipuram we have free-standing monolithic shrines shaped in direct imitation of structural forms and isolated from any context of cave excavations. In the far-famed Kailāsa at Ellora we have an extensive composition with all the appurtenances of the temple complex entirely cut out of the rock in imitation of the celebrated Kailāsanātha temple at Kāñchipuram. In Northern India also an experiment in this direction is recognised in the gable-shaped shrine, cut out of the rock at Colgong (Bihar), which is tentatively assigned to the ninth century A.D. It is apparent that the unsuitability of the caves for image shrines was becoming more and more felt, and the structural mode with its unlimited scope and possibility was soon to replace the rock-cut mode.

**STRUCTURAL BUILDINGS:**

**A.D. 320 TO 750**

The Gupta period, it has already been observed, saw the beginning of the structural procedure in right earnest. The ritualistic needs, connected with the worship of an image, are not quite suited to cave excavations. The proper enshrinement of an image requires a free-standing temple, and this can be more easily put up by the structural method. With the growing popularity of the image the structural mode gains a momentum and it is not surprising that the new movement is particularly associated with the production of structural temples. India is noted for her excellent varieties of building stone, while in the plains the rich alluvium supplied a convenient material for bricks, which, when burnt, assumed a warm red texture. The use of brick for structural purpose is very antient in India, and the technique and method of brick-laying had already reached a high level of maturity even as early as the period of the Indus civilisation. The use of stone has also been known. But the employment of sized and dressed stone for building pur-
poses began in a large scale in the Gupta period. With a gradual advancement of the technique and methods and a growing masterpiece over the principles of construction architecture was rationalised and the period saw a prolific building activity in stone as well as in brick. With their innate decorative sense, Indian craftsmen covered these buildings with beautiful embellishments, in stone as well as in terracota and stucco, the latter being usually confined to brick buildings. Apart from temples the structural mode was also manifest in other kind of buildings, religious as well as secular.

The advantages of the structural mode came to be more and more increasingly felt and the new movement gained ground rapidly. How abundant in output the new movement was may be gathered from inscriptions of the period as well as from the itinerary of the celebrated Chinese pilgrim, Hiuan Tsang. The Gangdhara inscription of Visvavarman of the (Mālava) year 480 (A.D. 432) enumerates the different kinds of public works, executed by Mayūrākshaka, including temples, halls, bridges, pleasures tanks, etc. It is Bilsad inscription of the (Gupta) year 98 (A.D. 415-16) one Dhruvaśarmā is said to have erected a high gateway provided with a flight of steps in the temple of Svāmī Mahāsena. The Mandasore stone inscription, dated the Mālava year 493 and 529 (A.D. 436 and 473) describes Daśapura (Mandasore) as a city of a great beauty adorned with temples as high as the Kailāsa mountain and with buildings which appear to have shot out of the earth. The Junagadh rock inscription, with dates respectively in the Gupta years 136, 137 and 138 (A.D. 455, 456 and 457) records how Chakrapālita, restored the breach, caused by excessive rain, in the ancient embankment of the Sudarśana lake by causing to be made anew a massive and enormous masonry embankment. He also erected a resplendent temple dedicated to the god Chakrābhṛt (Vishnu) which is said to have obstructed the passage of the birds, no doubt in reference to its lofty height. Such statements are also to be found in other inscriptions and that they represent no poetic fancies is testified to by the itinerary of Hiuan Tsang who, in the seventh century A.D., found the whole country literally studded over with fine buildings of diverse orders. Unfortunately, very few of such monuments have escaped destruction. The remains that can now be seen are, further, mostly fragmentary and represent naive and simple executions bearing the

4 CII. III, p. 72.
5 lbd., p. 42.
6 lbd., p. 79.
7 lbd., p. 56.
8 T. Watters, On Yuan Chwang’s Travels in India, 2 vols.
impress of primitiveness and immature technique. Nevertheless these primitive efforts are pregnant with future possibilities and have a supreme significance, because of their historical import, to the student of Indian architecture.

1. TEMPLE

The few temples of the Gupta period that have survived are found to be small and unpretentious and represent, without doubt, an initial stage of the movement. The remains, again, are, in most cases, fragmentary. But they are significant enough because of the wide variety which they present in form as well as in general appearance. The Gupta period constitutes an age of experiments in temple forms and types, and of the various forms, prevalent during the period, significant ones were chosen for further elaboration and final crystallisation into distinctive styles.

In Northern India the following well-defined groups may be recognised among the temples of the Gupta period: 9

(i) The flat-roofed square temple with a shallow porch in front.
(ii) The flat-roofed square temple with a covered ambulatory surrounding the sanctum cella and preceded by a porch in front, sometimes with a second storey above the shrine chamber.
(iii) The square temple with a low and squat tower or śikhara above.
(iv) The circular temple with shallow projections at the four cardinal faces.

The last is represented by a single example, namely, the peculiar cylindrical brick structure, known as the Maniyar Matha, i.e. the shrine of Mani Nāga, standing almost in the heart of the old city of Rājaigrīha. 10 It is now in a fragmentary state, the top having entirely collapsed. As it now stands, it represents accumulations through successive ages, of which one definitely belong to the period under notice. The building of this period consists of a circular structure with shallow projections at the four cardinal directions and further embellished and diversified with fine stucco sculptures in niches all around. Unfortunately, the stucco sculptures, which were in a highly decomposed state, have crumbled away and some of the finest specimens of Gupta plastic art have been lost thereby. The circular wall with these stucco embellishments is found to have been supported on an earlier structure of hollow cylindrical shape with a projected buttress in each of the cardinal faces and an entr-

10 M. H. Quraishi and A. Ghosh, Guide to Raigir, pp. 21-24, pl. V.
ance doorway in the north. The circular plan with the projected buttresses closely resembles the stūpa designs of the Andhra country which, with their āyaka projections at the cardinal faces, supply a close parallel to the plan of the Maniyar Maṭha. This peculiar structure is enclosed by a surrounding wall which, though square now, also appears to have been originally circular. The plan of the earlier structure, it appears more than probable, was borrowed from the almost contemporary stūpa designs of the Andhra country, and in the upper structure, belong to the period under notice, the cylindrical form with projections at the cardinal faces is more a result of following the alignment of the earlier building beneath than of a conscious or deliberate attempt towards creating a new form. The type represents a survival from an earlier practice and appears to have no place in subsequent Indian architecture. The circular temples of the later ages can be found to have no connection with it.

(i) The First Group

The other three groups of Gupta temples are, however, supremely important as supplying the genesis of the medieval Indian temple styles. On a closer analysis, again, the first group, i.e. the flat-roofed square temple with a shallow verandah, may be found to have supplied the basic and fundamental form of which the second and the third appear to have been elaborations. One of the most well known examples of the first group may be found in temple no. XVII at Sanchi.\(^\text{11}\) It is a modest and unpretentious shrine consisting of a square sanctum cela with a pillared verandah in front. Small in dimensions though, in structural propriety, in symmetry and proportion, in appreciation for plain surfaces and for restraint in ornament it has often been compared to the best creations of classical architecture in Greece. Other temples of this group may be found at Tigawa in the Jubbulpore district\(^\text{12}\) and at Eran in the Saugor district\(^\text{13}\) of Madhya Pradesh. At Nachna Kuthara in the former Ajaiyarh state\(^\text{14}\) in Madhya Pradesh there are remains of a few early temples of which two from their foundations, may be known to have belonged to this group. The numerous sculptural and architectural

\(^\text{11}\) ASC, X, pp. 60-62, pls. XVI, XX; HIJA; p. 78; fig. 131; J. Marshall, Guide to Sanchi, pp. 117-19, pl. VII. b.

\(^\text{12}\) ASC, IX, pp. 42-45, 116, pls. X & XI; Percy Brown, Indian Architecture (Buddhist and Hindu), pl. XXXIV; R. D. Banerji, Age of the Imperial Guptas, pl. VI.

\(^\text{13}\) ASC, X, pp. 82-88, pls. XXV, XXX.

\(^\text{14}\) PRASI, WC, 1919, p. 61.
remains, found at Gharwa (Allahabad district), Bilsad (Etah district), Khoh (former Nagod state in Baghelkhand), etc., from their style of carvings as well as from the evidence of inscriptions, are known to have belonged to the period under notice, and it appears that the buildings of which they formed parts belonged possibly to the group under discussion. The above evidences indicate the popularity of this type of building during this early period. Cunningham and Coomaraswamy were inclined to think that the Pataini Devi temple, near Unchanara (former Nagod state), belonged also to our period, the plain square design and the flat roof being probably responsible for such a dating. But the style of the carvings of the door-frame, which is, no doubt, an original and integral element of the temple, is much later, and on account of this the temple can hardly be dated earlier than the tenth or the eleventh century A.D. But the close affinity which the temple presents to those at Sanchi, Tigawa, etc. is worth noticing and the example may be regarded as a survival of the plan and archaic type of early flat-roofed shrines in the medieval period.

By a comparative analysis of the pillars of the verandah it is possible to attempt an approximate chronological arrangement of the temples of this group. In this connection we should take into account the temple no. XVII at Sanchi, the Kankali Devi temple at Tigawa and the Vishnu and the Varaha temples at Eran as they represent the best preserved examples of the group. Long ago Cunningham proposed a chronology of these temples on the basis of the relative proportion between the diameters and the heights of the so-called 'bell' capitals of the verandah pillars. This point, however, cannot be too much relied on; but the ornamentation of this so-called 'bell' may offer an approximate indication regarding the relative chronology of these temples. At Eran every pillar of the verandah shows at the top a highly ornate 'bell' with elaborate turnovers below the corners of the abacus. The pillars in the Tigawa temple exhibit just the beginnings of these turn-overs thereby indicating a stylistic priority, further corroborated by the plastic considerations of the carvings. In the verandah pillars of the Sanchi temple we have the plain reeded 'bell' without turn-overs of any kind and the suggestion of its being the oldest structural temple extant might be quite likely. Smith assigns the temple at Tigawa to the period

15 ASC, X, pp. 1-19, pls. VI-VII.
16 ibid., XI, pp. 17-18, pls. V-VI.
17 Ibid., X, p. 6; PRASI. WC, 1920, pp. 105-06 & pls.
18 ASC, X, p. 62.
19 V. A. Smith, "Indian Sculpture of the Gupta Period" OZ. III, p. 4.
of Samudra-gupta and this chronology does not appear to be far off the mark. But we can hardly accept his suggestion that the Vishnu temple at Eran might also belong to the time of Samudra-gupta. The form and ornamentation of the 'bell' capital represent an advanced phase and assign the temple certainly to a later date to which fact an additional confirmation is supplied by the appearance in the Vishnu temple of a buttress-like projection in the middle of each of the three faces of the temple walls corresponding to the projection of the doorway in front. This feature, conspicuously absent in other temples of the group, is itself late in appearance and indicates an advance in the temple design. The plain and bare walls are thus diversified and this scheme is destined to play henceforth a most significant role in the effective distribution of lights and shades in Indian temple architecture of later days.

The first group, the flat-roofed square temple, has a distinct place among the temple forms of the period as the basis of future elaborations of the temple structure. The sanctum is square in plan, except in the Vishnu and the Varāha temples at Eran where they are rectangular. In front of the sanctum cella there is a shallow verandah with four pillars supporting the architrave on which the roof rests. The intercolumniation is slightly wider in the middle than at the sides, and this significant feature constitutes, according to Cunningham, one of the minor characteristics of the Gupta architectural style. A flight of steps in front of the middle intercolumniation leads up to the verandah and the sanctum is entered through a single doorway in the middle of the front wall. The walls of the temple, both inside and out, are severely plain, except for the string-course around at the top in continuation of the lines of the architrave supporting the roof over the verandah. This is also a characteristic feature of the style according to Cunningham. The roof was made up of long rectangular slabs of stone laterally placed from end to end on the top of the walls, sometimes extending in front to the architrave of the verandah and, occasionally with overlapping grooves, as we have in the Tigawa temple. The flat roof, thus formed, is provided with projecting spouts for the discharge of rain water. In strong contrast to the severe plainness of the walls the pillars and the door-frames are richly carved in the best traditions of Gupta plastic art.

Small and unpretentious though, these flat-roofed structures may really be found to have been the precursors of the monumental tem-

20 ASC, X, pl. XXV.
21 ibid., IX, p. 45.
amples of the later days and with them begins the story of Indian temple architecture. The nucleus of a temple, namely a cubical sanctum cella, i.e. the garbhagriha, with a single entrance and a pillared verandah that is to grow into the mandapa or the porch hall, appears for the first time in the archaic group of flat-roofed structures. At Udayagiri may be seen rock-cut shrines of identical form, each with a structural portico in front, which, as we have seen before, belonged to about the beginning of the fifth century A.D. Similar cave shrines were, in all possibility, in existence in the earlier times when the rock-cut mode was the prevailing practice, and it is quite likely that the simple primitive-looking type of buildings, as we have at Sanchi, Tigawa, Eran, etc., represents nothing more than a translation, in structural form, of the plain rock-cut cave shrines of the earlier period. The flat roof, the square or rectangular form and the stern simplicity of the walls, characteristic of these early buildings, lend a strong probability to this hypothesis. The structural mode in these flat-roofed temples and the almost contemporaneous Udayagiri shrines, partly excavated and partly structural, may represent parallel reverberations of the same movement.

(ii) The Second Group

The second group of Gupta temples is represented in Northern India by the so-called Pârvatî temple at Nachna Kuthara and the Siva temple at Bhumara (in the former Nagod state), both situated in Madhya Pradesh. Further afield in the Gangetic plains there have been exposed the remains of a brick-built temple at Baigram (Dinajpur district, North Bengal), possibly the remains of the temple of Govindasvâmin referred to in a copperplate grant, dated A.D. 447-48, found at the same site. The remains exhibit a ground plan similar to that of the group under notice and might, in all probability, have belonged to the same type. At Aihole in the Deccan the type is represented by the temples of the Lad Khan, the Kont Gudi and the Meguti, thereby indicating its wide popularity both in the north and in the south, and it is in Southern India that the type experienced further elaborations ultimately leading to the development of an independent temple style in the medieval period.

22 Ibid., XXI, pp. 96-97, pls. XXV-XXVI; PRASI. WC, 1919, p. 61; pls. XV-XVI; AIG, pp. 137-39, pl. III.
23 R. D. Banerji, “Siva Temple at Bhûmara”, MASI, No. 16; AIG. 142-45; pls. II & IV.
24 ASR, 1934-35, p. 42, pl. XIX. b, c, d.
The Pārvatī temple at Nachna Kuthara and the Śiva temple at
Bhumara are much alike in their plans as well as in their dimensions.
In each we have a square sanctum cella inside a similarly roofed
square cloister. The temple at Bāigrama, now in ruins, also exhibited
a similar plan which may be described as that of a small square
sanctum cella within a larger square hall that serves as a covered
abulatory for pradakshinā around the inner sanctum. The temple
with such a covered ambulatory came to be known in the later days
as sāndhāra prāśāda, as opposed to the one without which was
called nirandhāra. The entire building is preceded by a slightly
smaller open portico, rectangular in shape, with a flight of steps pro-
jected further in front. A trellis or trellises in each of the three sides
lights up the covered ambulatory. In the Nachna Kuthara temple
the inner sanctum cella has further a trellis in each of the two side
walls, and in the front wall of the ambulatory one each on either
side of the doorway. The doorways leading to the ambulatory and
to the sanctum cella are in a line with the flight of steps in front and
are richly carved in the typical Gupta tradition. Apart from the
above features, which the temples of this group share in common,
the Nachna Kuthara temple along with those at Aihole, offers a
variety in the type as having an upper storey above the inner sanctum.
This second storey, supported as it is on the inner sanctum, is
smaller than the bigger hall forming the ambulatory and is neces-
sarily set back. This receding storey forms a distinct scheme in the
elevation of such a temple. The Bhumara temple exhibits also pecu-
liar feature in having a miniature shrine on either side of the stair-
case in front. In this respect the Bhumara temple indicates the be-
inning of a design that came to have its logical culmination in
temples of which several remains have been laid bare at Nālandā.26
In plan these brick temples at Nālandā appear to have been indenta-
tical with that of the group under discussion. They show, further, the
remains of four subsidiary shrines, one at each corner of the temple
proper. Such an arrangement came to be known as pañchāyatana
and may be found in not a few temples of the later days irrespective
of the style to which they belonged.

In the simplicity of the design and of decoration the Pārvatī tem-
ple at Nachna Kuthara corresponds to the early temples of the first
group with which it was probably co-eval in date. The exterior
walls are embellished by a peculiar kind of carving, in imitation of
rock-work, and by elegant sculptured panels of early Gupta work-
manship. The Śiva temple at Bhumara, now all but in ruins, was

26 A. Ghosh, Guide to Nālanda, p. 17, plan at end.
once a splendidly ornamented monument, as is evidenced by the sculptured stones lying all about. Exquisite figures of gaṇas, kīritimukhas, divinities, etc., usually within elegantly carved chaitya-window niches, testify to the richness of the decorative motifs used for the embellishment of this temple. The late Mr. R. D. Banerji, who discovered the temple, is inclined to assign it to about the middle of the fifth century A.D. The carving and workmanship are, however, in a maturer tradition of Gupta plastic art and the rich, obliquely cut arabesques of the pillars and the door-frames indicate a date somewhere about the first half of the sixth century A.D. The temples at Nalanda, referred to above, are still later; but they are too fragmentary now to be any real value in the study of architectural forms.

So far as the extant remains go the earliest temples of this group belonged to Central and Northern India. The type was also known in the Deccan. Gradually, however, it became obsolete in the north and it is in the south that we recognise its further development and elaborations.

(iii) The Third Group

The third group of Gupta temples is characterised by a square sanctum cella surmounted at the top by a low and stunted conical tower. In general plan and arrangement it differs very little from the type presented by the first group. It records, however, a notable advance on the temples of the first group in having a tower or śikhara capping the sanctum cella. In this respect it marks the beginning of monumental temple architecture in Northern India. An aspiration for ascending height is always felt in religious buildings, the lofty height, to a certain extent, symbolising the supreme aspect of the divinity enshrined in the temple. Towers or śikharas thus soon make their appearance in the temples, and such temples provide a significant contrast to the early and archaic flat-roofed buildings of the first two groups. We have previously referred to inscriptions which, even as early as the fifth century A.D., speak of high and lofty towers (vistīra-tūṅgaśikharāṁ śikhariprakāśāṁ), figuratively described to be as high as the Kailāsa mountain (Kailāsa-tūṅgaśikhara-pratima)27 or as reaching the sky (nabhāḥpritesāṁ).

No extant example of a śikhara temple can, however, be placed earlier than the sixth century A.D. The most representative and well known example of the early śikhara temple is found in a dainty little

27 It is not known whether such statements have any allusion to a class of buildings, known as Kailāsa, in such texts as the Brīhāt Samhitā, the Matsya Purāṇa, etc.
structure at Deogarh (Lalitpur district), unfortunately in a bad state of preservation, known as the Daśāvatāra temple. Other examples of this class are found in the Mahādeva temple at Nachna Kuthara and also, possibly, in one of the ruined temples at Pathari (Gwalior). The well-known brick temple at Bhitarang (Kanpur district) and the great Mahābodhi at Bodhgaya, also seen by Hiuan Tsang, belonged also to this group. A number of śikhara temples of early form, dating possibly not earlier than the seventh century A.D., may also be found in the Deccan, at Aihole, Pattadakal and Bādāmi.

The Daśāvatāra Temple at Deogarh and the brick temple at Bhitarang may be regarded as the two representative examples of the early śikhara type in Northern India. The former is in stone and stands on a high and wide basement terrace approached by a flight of steps in the middle of each side. This terrace itself is nearly five feet high and lends to the monument a dignified appearance. The sides are embellished all around with panels of sculptures set between pilasters and surmounted by a continuous coping, recalling, in a certain measure, the disposition of the railing of an early stūpa. The sanctum cella is placed in the centre of the terrace. The cube of the cella ends at the top in double cornice from over which rises the śikhara or tower, now in a dilapidated condition with the top portion entirely gone. It is made up of tiers of stone courses, each superposed above the other and receding as they go up. Thus a tapering outline is obtained, but from what little is preserved of the śikhara it is difficult to say whether the contour is straight-edged or curvilinear. At the corners there still remain the vestiges of angle-āmalakas thereby indicating the division of the śikhara into bhūmis or horizontal stages; there is a possibility, hence, that there was a spheroid āmalaka at the top.

The exterior walls of the sanctum are no longer plain. In conformity with the richly ornamented door-frame in front there appears in the middle of each of the other three sides a sculptured panel, within an architectural setting of pilasters and architrave, containing a mythological scene carved in high relief. These sculptured niches with their architectural frames appear to set off the walls in the middle of each face of the cube and divide the surface into three

28 ASC, X, pp. 105-10, pls. XXXIV, XXXVI; HIIA, p. 80; AIG; pp. 146-52; M. S. Vats, "The Gupta Temple at Deogarh", MASI, No. 70.
29 ASC, XXI, p. 96; PRASI. WC, 1919, pl. XVI b; AIG, pp. 154-55.
30 ASC, X, pp. 70-71.
31 Ibid., XI, pp. 40-50; ASR, 1906-09, pp. 6-16, pls. I-V.
33 J. Burgess, Ancient Monuments, Temples and Sculptures of India, Figs. 218, 252.
vertical planes which are further carried up the body of the tower. This expedient results in a variegation of the ground plan and consequent diversification of lights and shades. Such a scheme constitutes certainly a move towards a greater and richer elaboration of the plain and square type of temple, as represented by the little shrine at Sanchi and others of its kind. The advanced design also leads to a greater aesthetic significance because of an effective and charming play of light and shades along the elevation of the temple.

From pillars lying on the terrace on which the temple stands Cunningham reconstructs another notable feature of the Deogarh temple. He was of opinion that these pillars were intended as supports for the roofs of the porticos, one on each side of the sanctum, that to front protecting the entrance doorway and other three the sculptured panels on the three walls. Percy Brown also supports this reconstruction and says "the most notable feature of the Deogarh temple is the arrangement of its portico. Instead of only one of these, as is usual in front of the entrance to the sanctum, there are four of them, one projecting from each side of the central structure, each with a flat roof supported on a row of four pillars, with the customary wider intercolumniation in the middle." According to R. D. Banerji, however, the terrace was covered over with a flat roof, thus forming a covered ambulatory round the sanctum cella with its sikhara. In the present fragmentary state of the temple, particularly of the basement terrace, it is difficult to ascertain whether the terrace was open to the sky or was wholly covered, or whether there were narrow porticos only to protect the carvings of the doorway and of the sculptured niches, as Cunningham and Percy Brown would suggest. The last suggestion would appear to be more plausible, as such an arrangement of the exterior of the sanctum provides a pleasing harmony with the design of the basement terrace underneath with its projected flights of steps in the middle of each face. Excavations conducted by Daya Ram Sahni around the basement of the temple have revealed the remains of a square miniature shrine at each corner. This is, perhaps, the earliest occurrence of a pañchāyatana composition in Indian temple architecture.

The brick temple at Bhitargaon, as the excavations have shown, stands also on a wide basement terrace, the latter being made up of cell-like foundations. It consists of a square sanctum cella with a smaller vestibule boldly projecting from the front, the two connected with each other by a narrow passage. In conformity with the

34 Percy Brown, Indian Architecture (Buddhist and Hindu).
projection of the vestibule in front the other three sides show each a comparatively shallow projection in the middle and the ground plan may thus be described as square with double recessed angles. The walls rise perpendicularly upwards and terminate in a double cornice of carved brick-work enclosing recessed friezes of smaller terracotta plaques. The lower portion is much damaged, but there still remain traces of bold mouldings serving as the plinth. In the upper portion the surface is decorated by a regular row of terracotta panels alternating with ornamental pilasters. The skilful treatment of the surfaces, broken up into vertical planes and accentuated horizontally by bold mouldings of the plinth and cornice and by dado of terracotta panels, relieves the flatness inherent in a brick structure. The double cornice separates cube of the sanctum from the body of the tower. The tower is made of well-defined superposed horizontal courses with straight or nearly straight sides, and as each successive course recedes several inches the śikhara gradually diminishes towards the top. The projections on the body of the cube are carried up and the śikhara is decorated with successive tiers of chaitya niches containing boldly carved busts or heads or even entire figurines. The decorative treatment of the temple as a whole has been effective throughout and, when entire, it appears to have been one of the most charming monuments among the śikhara temples in respect of form as well as of decoration. The structural expedients used in the temple are also of considerable interest and anticipate a long tradition in brick construction. The vestibule and the sanctum cella are each covered by a domical vault and the connecting passage between the two by a waggon-vault. The voussoirs employed in the construction of these vaults are placed, not face to face as is usual, but end to end—a structural mode which Cunningham calls the Hindu fashion. Above the sanctum there was a hollow space covered, in all possibility, by a second dome, and the two together anticipate the double-dome construction of the later days.

From the above it is clear that the brick temple at Bhitargaon resembles the Daśāvatāra temple at Deogarh in the essentials of shape, form and elevation. The Deogarh temple may be assigned to about the sixth century A.D. on considerations of the style of its carvings. Scholars, however, differ with regard to the date of the Bhitargaon temple. Cunningham, who discovered it, observed that it could not be placed later than the seventh or the eighth century A.D. and might probably be even older. Vogel, on the analogy of the decoration

35 Percy Brown’s reconstruction of the top of the temple (loc. cit., pl. XXXIII. b) as consisting of a barrel-shaped vault does not suit the square plan and other arrangements of the temple.
of the surface of the temple with pilasters and niches which corresponds to a similar treatment in the plinth of the Parinirvana temple at Kasia, assigned the Bhitargaon temple to a date at least three centuries earlier than the period proposed by Cunningham. Percy Brown categorically places the temple in the fifth century A.D., while R. D. Banerji observes that it cannot have been earlier than the medieval period. The bold and vigorous carvings of the terracotta panels, the shape and form of the sikhara, etc. are sufficiently indicative of a Gupta date, and though the date proposed by Vogel may appear to be too early it is not far removed from the Deogarh temple with which it presents certain clear affinities in shape and plan and in decorative scheme.

The famous Mahabodhi temple at Bodhgaya has undergone so many restorations and renovations that it is rather difficult now to determine its original architectural form. As it stands at present, it consists of a square sanctum cella covered by a straight-edged conical pyramidal tower, approximately 160 feet high, crowned by a conical hti with a fluted āmalaka-like lower member. Angle-āmalakes appear at regular intervals at the corners of the tower thus dividing it into a number of bhūmis. The four faces of the tower present each several tiers of niches of chaitya window shape, every one of which, no doubt, originally contained a Buddhist sculpture. There is a tall lancet opening on the front face which, apart from lighting the interior, is effective as reducing the load of the masonry of the lofty tower. At the base of the tower there rise four turrets at the four corners, each a replica in a small scale of the main tower. An entrance porch appears on the east and is evidently later than the date of the original temple.

The Mahabodhi is perhaps the most sanctified Buddhist shrine, now extant in India. Associated with the Master's enlightenment it was held in great veneration, and shrines were raised to mark the sacred spot since the early days of Buddhism. Regarding the construction of the present temple reliable evidence is very scanty. We have hence to depend on the evidence of architectural style, coupled with the descriptions left by the Chinese pilgrims, for an approximate indication as to the age of the temple. Ferguson ascribed the 'external' form of the present temple to the fourteenth century A.D. In this connection it should be noted that the Chinese pilgrims, Fahien and Hsin Tsang, visited this sacred place and Hsin Tsang specially had left a rather detailed account of the temple which he called the 'Mahabodhi Vihāra'. It is noteworthy that the dimensions and the general appearance and form of the 'Mahabodhi Vihāra', as given by Hsin Tsang, approximately correspond to what we
see now in the temple before us. The restorations and renovations during the successive ages appear hence to have followed the fundamental lines and arrangements of the original temple and Cunningham’s suggestion that the temple in its present shape and essential elements must have existed in the seventh century A.D. might not have been far from truth. The technique of construction in brick—particularly the method of placing the voussoirs of the vault edge to edge—the straight contour of the tower, the tall lancet opening in front indicating the existence of a hallow chamber above the sanctum cella, the chaitya niches accommodating figures of the Buddha, etc. have close parallels in the Bhitargaon temple. Even if the date of the actual construction of the temple remains problematic on account of the various legends connected with it, it would be reasonable to assume, from the above evidences, to assign it to a period contemporaneous or nearly contemporaneous with that of the Bhitargaon temple. It should be noted further that the relief replica of the shrine, apparently of the Mahābodhi at Bodhgaya, on the terracotta plaque found at Kumrāhar (Patna), shows, inside a square railing, the temple which is not unlike the present one minus the corner turrets. The date of the plaque has been a matter of controversy. At any rate, it does not appear to have been later than the sixth-seventh century A.D. on considerations of style, and existence of the temple, about that time essentially in its present shape and form, without, however, the corner turrets, appears to be a reasonable conclusion.

The monastic institution at Nālandā (Patna district) grew up to be a famous establishment from about the fifth century A.D. as a result of the munificence of several royal patrons and we have to discuss in brief its arrangement and general form in the section of monasteries. Hiuan Tsang describes the establishment in detail and among the notable monuments he mentions a great temple, erected by king Bālāditya, as being over 300 feet in height and resembling the great tower at Bodhgaya.36 Unfortunately, nothing now remains of this lofty structure, except the massive basement. Hiuan Tsang’s comparison of this temple with the great Mahābodhi is instructive and there seems to be hardly any doubt that when entire, it presented a shape and form not unlike those of the Mahābodhi which appear to have been characteristic of the early śikhara temples of the period.

We have already observed that the chief interest of this group of temples lies in the śikhara or tower covering the sanctum and be-

36 HTE, II, p. 176 ff.
cause of this the group provides a marked contrast to the low and flat-roofed temples of the archaic type. The addition of a tower over the sanctum adds grandeur and dignity to the building and this may justly be regarded as an advancement of the temple form. In almost every case, at least in the early temples of the group, the tower is either badly damaged or entirely gone. The śikhara temple at Pathari, already referred to, appears, from the remains near about, to have belonged to about the sixth century A.D. It is a slightly better preserved monument and its height is found to be just twice the width of the building. In this connection one should note that Varāhamihira, the celebrated astronomer, prescribed that the height of a temple should be double its width (yo vistāra bhaved-yasya dviguna tat-samunnatih) and the strict conformity of the Pathari temple with this almost contemporaneous injunction is interesting and might have been followed in a few other temples also. The group of three ruined temples known as the Satruṅgnesvara, the Bharatesvara and the Lakṣaṇesvara, at Bhuvanesvara, also appears to have belonged to this period. The contours of the towers of the early monuments that have been preserved suggest a straight-edged pyramidal form of the śikhara, not unlike the one shown by the present Mahābodhi temple at Bodhagaya, though they lacked the lofty height of the latter. The curvilinear outline of the śikhara, characteristic of a temple of the later days, is a subsequent growth and may first be noticed in the Mahādeva temple at Nachna Kuthara, probably of the seventh century A.D., and in the brick temple of Lakṣaṇa at Sirpur (Raipur district), probably of the same or a slightly later date. The śikhara in each case in its upward ascent exhibits a pleasing inward curvature which softens the harsh outline of the straight-edged pyramidal form of the earlier temples. The Nachna Kuthara temple is in perfect preservation and shows angle-āmalakas at the corners of the tower demarcating the different bhūmis and a complete spheroid āmalaka at the top. The Lakṣaṇa temple at Sirpur, though damaged at the top, represents one of the most beautiful monuments among the śikharas temples of the early period. A greater variegation of the ground plan leading to attractive effects of lights and shades, richer ornament and more refined treatment indicate a considerable experience in the art of building. Already new forces are seen to be at work and a detailed discussion of the temple should better be reserved for a later section.

2. MONASTERIES AND STŪPAS

Monasteries and stūpas are also known to have been structurally

37 Brhat Saṁhitā (Vangavasi ed.), chap. 56,
erected during the period under notice. The monastic institutions attained vast proportions consisting of large aggregations of various kinds of buildings grouped together within a spacious courtyard, surrounded by walls, and all constructed mainly of brick. They were usually raised in spots specially consecrated to Buddhism, such as Kapilavastu, Bodhgaya, Sarnath, Kusinagara (Kasia), Sāvastī (Saheth Maheth), etc. Sānci continued its flourishing existence, while a new mahāvihāra grew up at Nālandā during the period under the period under the patronage of successive royal personages. Hiuan Tsang has left glorious accounts of many of these, especially of the last, the great vihāra at Nālandā. Many of these institutions lasted for several centuries and naturally consisted of collections of building erected from time to time. Apart from these successive periods of building, many of the monuments, during their chequered history, have undergone successive restorations and renovations, including even re-erectures over older structures. With the Islamic occupation of Northern India the monasteries were deserted and the monuments, left to neglect through all these centuries, fell into ruins and were turned into shapeless mounds. Recent excavations have laid bare several such ruined sites, but the structures, exposed therein, are in extremely fragmentary states. Sometimes, only the foundations and parts of the walls are left. With the help of Hiuan Tsang's accounts of Sarnath and of Nālandā one may visualise their splendour and magnificence. Of the latter Hiuan Tsang gives the following description:38

"The whole establishment is surrounded by a brick wall, which encloses the entire convent from without. One gate opens into the great college, from which are separated eight other halls, standing in the middle (of the saṅghārāma). The richly adorned towers, and the fairy-like pointed hill-tops are congregated together. The observatories seem to be lost in the vapours (of the morning), and the upper rooms tower above the clouds.

"From the windows one may see how winds and clouds (produce new forms) and above the soaring eaves the conjunctions of the Sun and Moon (may be observed).

"All the outside courts, in which are priests' chambers, are of four stages. The stages have dragon projections and coloured eaves, the pearl-red pillars, carved and ornamented, the richly adorned balustrades, and the roofs covered with tiles that reflect the light in a thousand shades; these things add to the beauty of the scene.

38 HTB, II, p. 6.
“The Saṅghārāmas of India are counted by myriads, but this is the most remarkable for grandeur and height.”

Unfortunately, very few vestiges of the past splendour now remain. From the excavations at Sarnath and Nālandā it appears that the usual practice was to group the stūpas and religious monuments on one portion and the residential establishments on the other. The latter normally took the shape of four rows of cells on four sides of a square courtyard, with the entrance doorway in front and usually a sanctuary in the centre of the rear end. In front of the cells there ran continuous corridors with pillars supporting the roofs. Sometimes these residential structures consisted of more than one storey and in the bigger establishments the view of the colonnades from the inner courtyard looked dignified and imposing. To relieve the flatness of brick constructions ornamentations and mouldings were applied to the surface, carved brick, terracotta and stucco being employed for these purposes. The skill in brick-laying, corner-binding, breaking the bonds in different layers, strengthening the construction by occasional layers of headers, use of voussoir arches, etc. indicate the technical efficiency of the builders whose power and sense of design and composition are further reflected in the execution of such vast schemes as the monastic institutions were in days of their prime. The fragments of such institutions that are still before us represent an architectural activity of remarkable power and dignity.

Among the stūpas belonging to this period two merit special attention. They are situated in widely apart regions, one at Mirpur Khas in Sind and the other at Sarnath in Uttar Pradesh. The stūpa at Mirpur Khas was built of bricks and consisted of a square terrace as basement supporting a cylindrical drum in three stages and a hemispherical dome along with the crowning elements of the harmikā and the chattrāvali. The upper elements, including top portions of the dome, are entirely gone, but can easily be reconstructed as the form of each of these changed but very little. The general shape and appearance correspond to those of the later stūpas of the Gandhāra country, the extensive river system having supplied an easy means of intercourse between the two regions. The basement terrace, a square of 50 feet side and rising to a height of eight feet from the ground, is embellished on three sides by ornamental niches between pilasters, each such niche originally accommodating a sculpture. The western side, however, shows a distinctly individual treatment. This sides is projected in the middle, the projection having possibly an

39 Percy Brown, Indian Architecture (Buddhist and Hindu), p. 52, pl. XXXII. 9.
40 D. R. Saññi, Guide to the Buddhist Ruins of Sarnath, pp. 36-37.
external portico with flight of steps leading to the platform of the terrace. Internally it leads to a vestibule with three chapels on three sides, further driven into the solid masonry of the basement terrace, each chapel originally containing an image. The central chapel has an arch constructed of voussoirs on the radiating principle. From stylistic indications of the decorative scheme, the structure appears to belong to the fourth century A.D., at any rate, not later than the fifth.

In spite of its battered state the Dhāmekh stūpa is now the most imposing monument among the ruins of Sarnath. As it now stands it rises in three stages, the basement, the drum and the dome, the upper elements having entirely gone. The basement is circular and consists of a low platform on which rises the drum of cylindrical shape relieved on the outside by eight projecting bays, each with a large niche apparently for the reception of an image. No such image can, however, be seen now. The lower section of the drum shows, further, a broad carved ornament of intricate geometric pattern with floral arabesques above and below it. The basement and the drum are built of stone masonry, but the upper stage, the dome proper, was of bricks, in all probability originally faced with stone. The top portion of the dome has suffered a good deal; but as it is now seen it is also of a cylindrical shape, instead of the orthodox hemispherical one. The name Dhāmekh is probably derived from the Sanskrit dhārmekṣhā, meaning the "pondering of the Law"—possibly not an unreasonable suggestion from its association with the site of the first preaching of the Law by the Master. Excavations have revealed that the present stūpa stands on an older structure and from its position, in a line with the Dharmarājikā stūpa originally built by Aśoka, it appears to have been an important monument, the original building on the spot possibly going back to the days of that far-famed emperor. The carvings on the body of the drum of the present structure are singularly vigorous and exquisitely beautiful and on the evidence of the plastic diction of the ornament the monument, as it now stands, may be ascribed to the Gupta age, at any rate not later than the sixth century A.D. One of the two stūpas at Jarāsandha-kī-Baiṭhak at Rajgīr exhibited an identical shape and form and might probably have belonged to the same period. Another stūpa at Kesariya (Champaran district), known as Rājā Bena Ka Deur or Deorā shows again a cylindrical shape with a slight bulge towards the top. The

41 Among instances of the occurrence of true voussoir in Indian architecture of pre-Muslim age the example at Piṇḍara (JRAS, 1898, p. 573f) and the arch-stone of Mauryan date, now in Patna Museum, are possibly the earliest.
present structure is built over an older stūpa which may go back to the pre-Christian period. From the shape it appears that the present Kesariya stūpa might have belonged to the period under review. Because of elongated elevation on account of the increased heights of the different elements of the structure the Dhamekh stūpa looks almost like a tower, and this shape and form seem to have been characteristic of the stupas of the period. It is significant that Hiuan Tsang is sometimes known to have described a stūpa by the term tower.

3. FORMATION OF THE NĀGARA TEMPLE STYLE

The next phase in the history of Indian temple architecture is connected with the development of distinctive styles of which three are recognised in the canonical Silpa texts. They are the Nāgara, the vesara and the Drāvida. The name Drāvida indicates that these terms were primarily geographical and the texts refer to some sort of a regional distribution of the different styles. The temple style prevalent in the region between the Himalayas and the Vindhya, i.e., in Northern India has been described as the Nāgara in the available Silpa texts. The descriptions given of the different styles in the various texts are, however, rather vague and inadequate and in the present state of our knowledge it is difficult to equate such descriptions with the extant monuments of Indian temple architecture. The three styles, the Nāgara, the Drāvida and the Vesara, have been distinguished in the texts according to their shapes. With reference to the Nāgara, that is, the style prevalent in Northern India, the texts unanimously describe it as being quadrangular all over. Every type of building may be found to have begun from a quadrangular shape which is retained, with slight modifications, till a very late stage in evolution. This kind of ground plan is a rather general and common feature with almost every type of building and cannot be regarded as a sure and distinctive cognisance of a parti-

42 Mayamata, chaps. XIX and XXI; ISGDP, Paṭala XXX; Tuntarasamuchchaya, Paṭala II; Suprabhedāgama, chap. XXX (Kesara of this text is apparently a mistake for Vesara); Kāmikāgama, paṭala XLIX; Kāśyapa-śilpa, chap. XXV; Samarāṇganasūtraḥ, chap. LVII (this text replaces Vesara by Vāraṭa); SR, chap. XVI; Ap.-p (Ms. in S. K. Roy collection, fol. 51) omits Vesara and mentions, along with Nāgari and Drāvida, Laṭṭi and Vaiṣṇavi; an inscription from Holal adds Kāṇiga to the list of Nāgara, Drāvida and Vesara. (Annual Report of the Assistant Archaeological Superintendent, Southern Circle, for Epigraphy, 1915, pp. 40-90).

43 ISGDP; SR; Kāśyapa-śilpa; Kāmikāgama.

44 SR; Tuntarasamuchchaya.

45 Kāmikāgama; Mayamata. Here stūpi means top of the śikharā.
cular style of temple. The octagonal and circular shapes, prescribed respectively for the Drāvīḍa and the Vesara styles, are also too inadequate to be regarded as distinguishing marks for the styles concerned. Under the circumstances, one has to depend on the evidence of the extant monuments for a knowledge of the particular characteristics of one or other of the styles. As the Silpa texts hint at a geographical distribution of the styles, a study of the extant temples geographically is expected to yield fruitful results.

In the classification of the different temple styles the Nāgara and the Drāvīḍa have been sharply distinguished in the Silpaśāstras, one as belonging to the region between the Himalayas and the Vindhyas, i.e. Northern India, and the other as belonging to the Dravid country between the river Krishñā and the Kanvākumāri. A careful study of the extant remains inevitably leads also to the conclusion that the medieval temples in each of these two regions admit of some common denominator in respect of ground plan as well as of elevation. In regard to these factors the temples in the two regions may be found to be clearly distinguished. The Nāgara and the Drāvīḍa styles may hence be explained with reference respectively to the temples of Northern India and the Dravid country and it is possible to determine the characteristic form and features in each case.

Here we are concerned with the temples of Northern India which, the Silpa texts say, belonged to the Nāgara style. A study of such temples reveals two distinctive features, one in planning and the other in elevation. In respect of the first a North Indian temple always shows a square ground plan with a number of graduated projections in the middle of each side thus leading to the shape of a cruciform on the exterior with a number of projecting and re-entrant angles. In elevation it has as a superstructure a tower (śikhara) which gradually inclines inwards in a convex curve and is capped by a flat spheroid slab with ribs round the edra (āmalaka-śilā). A prominent feature of such a temple is supplied by the vigorous and unbroken linear ascent of the tower for which it is also known in some regions as the rekha śikhara. Temples with the above characteristics are found widely distributed not only throughout Northern India, but also over parts of the Deccan and Western India. It is likely, therefore, that there would be distinct varieties and ramifications of the style in different localities, due to local factors as well as to different lines of elaboration followed by each. In spite of such elaborations and consequent individual modifications, the cruciform plan and the crucilinear tower are common to every medieval temple of Northern India, wherever it is situated and whatever its local
stamp might be. Indeed, the above two features may justly be regarded as the sure and distinctive marks of the temple style prevalent in Northern India, that is, of the Nāgara style.

The projections on each face of the square plan, characteristic of the Nāgara temple, each leaves out a small portion at either end and a number of projecting angles (āras) and vertical planes are thus formed. The latter are known as the rathakas in Sanskrit and as the rathas in the Orissan śilpa texts. The Kāmikāgama and the Mayamata describe a Nāgara temple both as chaturāra (quadrangular) and āyatāra. Some scholars interpret the term āyatāra as rectangular in which case there is no sense in juxtaposing the terms chaturāra and āyatāra which become more or less synonymous. In the circumstances, chaturasi-āyatāra of the texts should better be explained as “square with angles projected” (āyatāra, i.e., with angles made āyata or projected). This meaning finds confirmation in the characteristic plan of the Nāgara temple which, on account of the projections on each face, may appropriately be described as a square with projecting angles.

The cruciform ground plan and the curvilinear śikhara thus constitute the fundamental characteristics of a Nāgara temple of which the simplest arche-type may be recognised in a group of shrines of approximately the sixth century A.D., discussed in a previous section. The Daśāvatāra temple at Deogarh and the brick temple at Bhitargaon represent the most well known examples of that group, and though belonging to the Gupta period in its later phase, they present a significant deviation from the archaic Gupta type of flat-roofed shrines, each on account of the low and stunted śikhara, gradually receding upwards, over the square sanctum. This constitutes a distinct departure, certainly a new direction in temple building, and in this respect these temples may justly be classed with the medieval temples of Northern India of which they were surely the precursors. In the Daśāvatāra temple we recognise, again, a new feature, apart from the śikhara, in the arrangement of an ornamental sculptured panel between two pilasters, on each of the three walls, corresponding to the decorative door-frame in front. These sculptured panels, along with the door-frame in front, appear to set off the walls in the middle of each face. Such an arrangement may hence be regarded as the beginning of a device that subsequently developed into the regular practice of setting forward the middle of each side of the square, a design that we have already seen to be a characteristic of

46 Chaturasāyataśrōtaḥ yan- Nāgaram paryākritam—Kāmikāgama; Mayamata,
47 I.C. VII, pp. 74-75.
the ground plan of a Nāgara temple of the later days. We already notice one such projection in the brick temple at Bhitargaon and in the Mahādeva temple at Nachna Kuthara. In the Deogam as well as in the Bhitargaon temples the śikharas are badly damaged. The former, however, shows the use of corner-āmalakas indicating the existence of a fairly big-sized spheroid āmalaka as the crowning member of the śikhara. These features also constitute inseparable elements of a Nāgara temple. The projections on the body of the sanctum, whether by sculptured panels, or by regular buttresses, are carried up the body of the śikhara in every one of the above monuments and such features may also be recognised as the essential element of the Nāgara temple. In each of these śikhara temples of the early period a recessed frieze usually separates the cube of the sanctum from the body of the tower, i.e. such a frieze serves as a transition. This feature may also be recognised in the early temples of the Nāgara style. In the graceful and wellproportioned Mahādeva temple at Nachna Kuthara with the pleasing curvature of the śikhara towards the top we have the nearest approach to a temple of the Nāgara style in all its essential elements. The brick temple of Lakhana at Sirpur, contemporary to, or slightly later than, the Nachna Kuthara monument also offers a plan and elevation of the superstructure that are not far removed from those of the Nāgara temple. With its origins and antecedents in the Gupta period, the Nāgara temple style emerges in its typical form and characteristics by the seventh-eighth century A.D.

4. THE NĀGARA STYLE

In Indian temple architecture the Nāgara style had a long and varied history. Temples with the distinctive marks of the style, as mentioned above, are found to have been widely distributed over a greater part of India. The Śilpaśāstras define the geographical extent of the style as the region between the Himalayas and the Vindhyas, Āryāvarta as it is called by the writers of the Dharmaśāstras, and Fergusson’s nomenclature for the style as Āryāvarta is, to a certain extent, correct. Temples belonging to this style can, however, be seen from the Himalayas in the north to the Krishnā-Tungabhadrā basin in the south, from the Punjab in the west to Bengal in the east; the style may thus be said to have transcended the canonical limits far to the south. With such a wide geographical distribution, local variations and ramifications in the formal development of the style are only natural and expected. Such variations are due to local conditions, to different directions in development in different localities, and to assimilation of extraneous trends wherever such
trends made themselves felt. But such local developments do not materially alter the basic characteristics of the style. In view of such a wide distribution and varied developments a consecutive historical study of the Nāgara style is possible only on a regional basis. The various developments of the Nāgara style will hence be discussed geographically, each according to the region in which it flourished.

(i) Orissa

One of the most remarkable regional developments of the Nāgara temple may be found in Orissa (ancient Kaliṅga). This Orissan development represents one of the earliest movements in the history of style and its prolificity is well illustrated by the large number of extant monuments dating from the seventh century onwards if not earlier. From the seventh to the thirteenth century A.D., and occasionally in the later period also, numerous temples were erected in Orissa and one scholar rightly observes that “there are more temples now in Orissa than in all the rest of Hindusthan put together”. The sacred city of Bhuvanesvara, literally a temple town, alone furnishes us with hundreds of temples, large and small, in various stages of preservation and provides the hub of this abundant architectural activity. The movement extends along the coast in the north—east and the south-west and approximately covers the area of the modern state. The temples within this area form, to quote Fergusson, “one of the most compact and homogeneous architectural groups in India”.48 This vigorous and sustained architectural activity was due as much to the religious sanctity of the different centres as to the patronage of the different dynasties of Orissan kings. A comparative immunity of the country from the Islamic inroads till a late period of Muslim rule in India has further been responsible for the preservation of so many fine examples with the result that there is a consecutive series of notable monuments to trace the history of this local movement of the Nāgara style from the earliest days down to the latest with a certain degree of exactness and precision. One other notable fact about the Orissan movement is that, in spite of an unbroken history of several hundreds of years, this development remains nearest to the original arche-type of the Nāgara style, whereas other regional manifestations of the style undergo significant modifications and transformations in course of evaluation, as a result of the elaboration of the original prototype and, sometimes also, of the assimilation of other trends. In this respect

48 J. Fergusson, HIEA, II. p. 92.
the Orissan group may be said to have furnished, to a certain extent, a pure form of the basic Nāgara style. In its graceful proportions, solemn and unbroken outline of the lofty tower, and elegant design and decorative scheme the beauty of the original prototype has been greatly enhanced, but without any loss of balance, strength or stability. Historically, as well as architecturally, Orissa supplies us with one of the most interesting and instructive series of monuments among all the temple forms of the Nāgara style and it is quite natural and logical that a study of the development of the style should begin with Orissa.

Orissa had its own set of canonical Silpa texts in the vernacular of the province interspersed with passages in rather indifferent Sanskrit. These texts have been critically edited by an eminent scholar who studied them with the help of traditional craftsmen, still to be found in Orissa, further supplementing the study by his extensive knowledge of the extant monuments.49 In the study of Orissan monuments we have thus a happy collaboration between modern archaeological approach and traditional knowledge. The canons of building art of Orissa may be found to have a separate and distinct nomenclature, each part and each section of the building having a particular name. Of these, those describing the essential elements may, with a certain amount of appropriateness, be applied with reference to other temple groups of the Nāgara style.

Of the extant Orissan temples the earliest to be erected may be recognised to have been closely related to the Sikhara temples of the Gupta and post-Gupta periods and to have many things in common with them. The individual features and peculiarities, which may be termed as local on account of their being confined to the temples within the area of the province, make their appearance much later. But whatever the local marks, the Orissan temple type, as has already been stated, remains nearest to the original archetype i.e., to the earlier Sikhara temple. The beginnings of Orissan temple architecture are not clearly known. The earliest of the monuments that are extant already exhibits a developed form and a mature sense of decorative scheme. Such a temple represents a single building consisting of a square sanctum with a curvilinear tower as the superstructure. On the exterior it shows a single buttress-like projection in the middle of each face, this portion in the front accommodating the doorway. In plan as well as in elevation, it is the same as the early Sikhara temple. The typical Orissan temple is, however, a component of two members joined axially, the

49 N. K. Bose, Canons of Orissan Architecture.
sanctum proper (garbha-griha) surmounted by a curvilinear tower (rekha) and the assembly hall in front distinguished by a pyramidal roof (piḍhā). In the early Orissan temples, such a frontal adjunct (mukha-mandapa or jagamohana as it is known locally) appears to have been absent. In the Parasurāmeśvara, temple at Bhuvanēśvara one of the best preserved monuments of the early group, there is a rectangular hall in front with a roof of sloping tiers forming a clerestory. Some scholars are of opinion that this frontal hall in the Parasurāmeśvara temple represents a later addition. Whatever the case, in the later examples the assembly hall is found to have been a necessary concomitant of the typical Orissan temple, though the disposition of the roof of this hall takes some time to acquire the typical Orissan form. The sanctum with the curvilinear tower is known in Orissa as the rekha deul, while the jagamohana with the pyramidal roof as the bhadra or piḍhā deul. The rekha and the bhadra or the piḍhā constitute the two essential elements of the typical Orissan temple. Abutting on each other one offers a counterplay on the design of the other.

The sanctum and the jagamohana may each be divided along the vertical axis into four distinct sections. They are the pishṭa (the pedestal or the platform on which the temple stands), the bāda (the cube of the sanctum cella or of the assembly hall), the gandi (the superstructure or tower), and the mastaka (the head, i.e. the crowning elements). The first, however, does not appear to have been an indispensable element and there are important examples where it is found to be absent. The bāda or the cube rises perpendicularly and, in case of the rekha deul merges into the gandi usually with a transitional element known as the baranda. The gandi of the rekha gradually inclines inwards in a convex curve and is further subdivided into a number of sub-sections, known as bhūmis, literally stages, by ribbed elements at the corners. This ribbed element evidently stands for a sectional amlā, called the bhūmiamlā as separating the bhūmis or stages, and as a substitute in the body of the gandi of the massive and spheroid ribbed stone, āmalaka-śilā, that surmounts the gandi. In the bhadra or piḍhā deul the gandi is made up of a number of compressed horizontal platforms (piḍhās) piled up in receding tiers in the shape of a stepped pyramid. The piḍhās are sometimes, particularly in the later monuments, grouped in two or more sections known as the potalas. In the rekha, as well as in the bhadra, the crowning elements, collectively called the mastaka, rise from the top of the gandi. The recessed circular portion above the flat top of the gandi is known as the beki (corresponding to the neck; Sanskrit—kaṇṭha). Next comes the amlā (Sanskrit—āmalaka-śilā-
umalasāraka) which is an enormous flattened spheroid ribbed round the edge. In the full-fledged Bhadra deul an elongated domical member, shaped like a bell and sometimes ribbed like the āmalaka, intervenes between the beki and the amlā. This is known as ghan-tā-srāhi. Over the amlā appears the khapuri (literally the scalp of the head) which is a flattened domical element resembling an unfolded umbrella. Next comes the kalaśa or water jar, an auspicious object in Indian religion and ritual. In the Rekha, as well as the bhadra, the bāda along with the ganḍī is square in cross-section, but the crowning elements are all circular. Cresting the entire structure appears the dhvaja or āyūdhā, i.e., the emblem of the particular divinity enshrined in the sanctum.

In plan the sanctum and the jagamohana are square internally; but externally the walls in each have buttress-like projections in the middle of each face with the result that a cruciform shape is obtained in the external plan which may hence be described as one of projecting and re-entrant angles. One such projection divides the wall on each face into three vertical planes, literally known as rathas or rathakas, and this kind of plan is hence known as tri-ratha, i.e., consisting of three rathas, the two on either side being on the same plane and the central, representing the projection, being set forward a little. Similarly there may be recognised pañcha-ratha, sapta-ratha and nava-ratha plans according as there are two, three or four such projections on each face of the cube of the bāda. These projections on the bāda are carried up the body of the ganḍī up to its top and the corresponding sections on the body of the latter are known as the pagas. A narrow and continuous depression usually runs between any two of the vertical sections and separates and accentuates the projections still more.

The above description is generally valid for every temple of Orissa, early or late. Basically it is also correct with reference to other temple groups of the Nāgura style. The tendency in evolution is recognised in a greater elaboration, increasing exuberance of details and a more pronounced accentuation of height. Among the early group of Orissan temples there are a few which exhibit each a tri-ratha plan and a corresponding three-fold division of the bāda along the vertical axis. These segments are the pābhāga (from Sanskrit pādabhāga, the portion of the foot, i.e., the plinth), the jaṅghā (the shin, i.e., the perpendicular wall portion of the bāda) and the baranda, i.e. the section intervening between the bāda and the ganḍī to separate and demarcate the two elements, tectonically the transition. Of the extant Orissan temples those with the above shape and form may be recognised to have been the earliest in date.
In this connection reference should first be made to the three ruined temples in front of the Râmeśvara at Bhuvanesvara. They are locally known as the Lakshaśeśvara, the Bharatesvara and the Satrushishviva. These three temples stand side by side and were in all probability, erected at the same time. They are now extremely damaged, the facing stones having mostly fallen down, so that each now represents a mere shell of its original form. Of the three, one is slightly better preserved and may be examined with profit for an idea of the shape and form of each. In spite of its battered state, a tri-ratha plan, a three-fold division of the bâda and a curvilinear form of the śikhara may be recognised in this temple. The top has entirely collapsed, but from the use of bhūmi-amalās on the body of the gândi it is reasonable to infer the existence of a complete āmalaka at the top. In the tri-ratha plan, in the three-fold division of the bâda, in the form of the transition between the bâda and the gândi, in the curved outline of the śikhara, in the frequent use of the chaitya window motif, and in its other decorative arrangements, this particular temple supplies a close analogy with the early śikhara temples already noticed and the group may be placed about the end of the sixth or the beginning of the seventh century A.D. A tiny little shrine that once stood by the side of the Vindusaravara at Bhuvanesvara, from its plan and shape and decorative features, also appears to belong to the same or a slightly later date. Only about a generation ago it was seen complete and standing. It has since been pulled down, unfortunately without any regard to its architectural importance, and thus was lost a shrine that aesthetically as well as architecturally constituted a landmark in the history of Orissan temple architecture in its initial phase.

With the small, but exquisitely decorated, shrine of the Paraśurâmeśvara at Bhuvanesvara we reach the next phase and from it can be traced the story of the development of Orissan temple architecture through an unbroken series of notable monuments. As in the temples of the previous group, the ground plan is tri-ratha, but with indications of a further advance in the design. On each face of the jaṅghā, above the pâbhâga, there are two subsidiary niches on two sides of the central niche accommodated in the buttress-like projection in the middle—a mode that may justly be regarded as an anticipation of the future pañcha-ratha plan. The bâda is divided into three segments—the pâbhâga or the plinth consisting of three simple mouldings, the jaṅghā with three niches on each face each capped by a tiered superstructure, and the baranda, i.e., the transition between the bâda and the gândi, consisting of a narrow recessed frieze showing human couples alternating with chess-board-pattern-
ed panels. The gāndī appears low and stunted and shows inward curvature even from its lowest stage thus resulting in a gradually curvilinear outline. The projections on each face of the bāḍa are carried up the body of the gāndī. The continuation of the buttress of the central niche forms the rāhā-paga (the central paga), while two other intermediate pagas (anurāhā-pagas) are seen on two sides of the rāhā as a result of the continuation, though not in the same alignment, of the projections of the two subsidiary niches on two sides of the central buttress of the bāḍa. The gāndī is divided into five stages, i.e., bhūmis, by bhūmi-amlās shown on the corner pagas (konaka-pagas). Above the fifth bhūmi the gāndī ends in a flat tier, known as the bisama, also called the vedī or the altar. Right up to the top of the gāndī the temple is square in cross-section and the harsh edges at the corners and in the ratha-paga projections are rigidly maintained. The gāndī, as a result of the gradual inward inclination, ends at the top in a much smaller square. The bisama, i.e., the tier with which the gāndī ends at the top, is a plain square without the indentations of the paga projections seen on the body of the gāndī. This is a feature which constitutes a characteristic of the early sikhara temples, noticed elsewhere. Above the bisama begins the circular section of the crowing elements. The massive āmalaka-śilā resting on the beki, appears to have been supported at each of the four corners on a sedent lion with two hinder parts, locally known as dopichā sinha, placed over the bisama. The finial is gone and what we see now represents a modern reconstruction. It is possible that the āmalaka was originally topped by a prism-shaped object, as seen over the āmalaka of the little shrine by the side of the Vindusaravara, now lost. This prism-shaped object, from its occurrence on the now-lost shrine, appears to have been the usual finial of the early group of Orissan temples, especially of the Saiva order. The nearness of the prism to the shape of a linga, usually enshrined in such shrines, may warrant such an inference. The height of the paraśurāmeśvara temple is approximately three times the inside length of the sanctum chamber, whereas the early sikhara temples, already discussed, were roughly double that length. In this emphasis for height and in the indications foreshadowing the pañcharatha plan, the Paraśurāmeśvara reveals advanced ideas in temple conception, when compared to the early sikhara temples elsewhere or to those of Orissa just discussed. The plastic treatment of its decoration also bears this out. With reference to the Paraśurāmeśvara temple Monomahan Ganguli observes that it is “probably dated in the 5th or the 6th century at the latest.”

50 M. Ganguly, Orissa and her Remains—Ancient and Mediaeval, p. 307.
palpably wrong on tectonic as well as plastic considerations. R. D. Banerji, on a palaeographic examination of the inscribed labels on the Navagraha lintel over the doorway of the sanctum, assigns the temple to the eighth century A.D.\textsuperscript{51} Another scholar has tried to place the temple, on the same palaeographic considerations, approximately a century earlier.\textsuperscript{52} In view of the nearness of the temple, in form as well as design, to those of the earlier group, a date about the close of the seventh or the beginning of the eighth century appears to be quite probable.

The joining between the sanctum and the rectangular hall in front is rather a haphazard piece of work and the view that the frontal adjunct represents a later addition is not beyond the range of probability. It should be noted, however, that in Orissan temples the system of joining between the different components remains always a crude and perfunctory process and too much emphasis need not be laid on this feature. Rectangular in shape and with a sloping roof of flat stone slabs having in the centre a sort of a clerestory, this frontal hall, it has already observed, does not partake of the usual from and elevation of the bhadra deul typical of the Orissan jagamohanas. In the composition of the Orissan temples pillars have seldom a place and the two rows of three pillars reach in the interior of this hall supporting the clerestory offer a rather unusual note in the essentially astylar arrangement of the Orissan temples. The hall had three doorways, one on each of the two larger sides and the third in front which was later on closed by a sculptured slab forming a grilled window. Besides, a latticed window of the chess board pattern in one of the longer walls and the clerestory of the roof admit fairly sufficient light into the interior of the hall which with, its mellow and subdued light, offers a contrast to the dark and mysterious appearance of the sanctum chamber. The walls of the sanctum as well as of the hall in front are covered with sculptured decorations in good and elegant taste. On the gândhi the chaitya window forms the principal motif of ornamentation executed with a care and skill reminiscent of the shape and form of the motif as seen in the Gupta age.

The Parâsurâmeśvara temple is a comparatively small structure. The sanctum is only twenty feet at its base, the frontal hall only forty-eight feet in length and the rekha only forty-four feet in height from the base to the top. The entire structure was built of stone masonry of large and massive size without any binding mortar. The


\textsuperscript{52} \textit{JRASBL}, XV, pp. 109-14.
masonry was kept in position by their weight and balance, strengthened further by a system of inter-locking flanges. The mode of construction was thus very simple, though effective, as is proved by the survival of the monument through all these centuries. This simple mode was widely in vogue in Orissa and was followed later even in raising up such massive and monumental piles as the great Lingarāja at Bhuvanesvara and the celebrated Sun temple at Konarka.

A few other temples with distinct analogies with the Paraśurāmeśvara may still be found at Bhuvanesvara and among these mention should be made particularly of the Svarṇajaleśvara, near the Kotitirtha, the Sīsireśvara by the side of the Vaitāl Deul, and the Mohini by the side of Vindusarovara. In plan as well as in elevation each of these temples offers a close resemblance to the Paraśurāmeśvara, the second and the third having a further point of analogy the rectangular frontal halls. The sculptural decoration of the Sīsireśvara betrays, however, an advanced conception, on account of which the temple, though belonging to the issue architectural group as the Paraśurāmeśvara and temples of this class appears to be of a slightly later date. The twin temples at Gandharadī in the now-defunct Baudh State also belong to the Paraśurāmeśvara class, in plan as well as in elevation and general form and shape. The frontal hall in each is rectangular in plan and the roof is composed of two receding stages of sloping tiers, but without the clerestory as found in the hall of the Paraśurāmeśvara. Several instances of such an arrangement of the roof in sloping stages may be found in different parts of Orissa and in such a process may justly be recognised the nucleus of the typical pyramidal form of the Orissan pāṭhā deuls. In the Gandharadī temples the general scheme of ornamentation remains the same as in the Paraśurāmeśvara, but the rounded corners and bevelled edges of the pāgas testify to a tendency to refinement from harsh to soften contours, obviously a sign of advancement of the temple design.

The next landmark in the development of the Nāgara temple in Orissa may be recognised in the little shrine of Mukteśvara, situated in the neighbourhood of the Paraśurāmeśvara at a place known as the Siddhāranya or the forest of the perfect. It stands within a quadrangular court surrounded by a low wall with a battlemented coping and panelled sides. An elegant torana composed of two richly decorated columns supporting a semi-circular arch, serves as an effective approach in front. Built in sections each of the columns consists of a square base, a sixteen-sided shaft and a capital composed of an āmalaka with a spread-out many-sided vedikā supporting the arch.
The last is built of oversailing courses with the ends shaped as *makara* heads and the top surmounted by a *kalasa*. Each of the faces is beautifully carved with elegant floral patterns, miniature niches enclosing human heads and a pair of female figures in gracefully recumbent attitudes occupying the entire segment of the arch. Superb in its setting and chastely carved, this ornamental frontage to the temple enclosure acts as an appropriate prelude to the temple behind; it is unlike any gateway in Orissa and there is a tradition, which might have some basis of truth, that it was intended for swinging the god on festive occasions.

Like the Paraśurāmesvara, the temple of Muktesvara stands on a low plinth and belongs to the same class, though a further advancement of the temple design is recognised in the regular *pañcha-ratha* plan and the piled up *piṭhā* form of the *jagamohana*. The latter is a nearly square hall with a projection each in the front and the other two sides. That to the front accommodates the doorway and the side ones, each a latticed window of class-board pattern. The roof is pyramidal with gradually receding tiers, piled up one above the other, surmounted at the apex by the auspicious *kalasa*, the pediments over the projections on the three sides having each the figure of a prancing lion. The spite of the pyramidal shape of the roof, the *jagamohana* is yet to reach the typical Orissan *piṭhā* form.

In plan the sanctum of the Muktesvara, it has already been observed, is a regular *pañcha-ratha* and the *pābhaga* consists of five elegant mouldings instead of three in the Paraśurāmesvara. A recessed frieze separates the *bāda* from the *gandī*. The latter consists of five *bhūmis* and is surmounted by the recessed *heki*, the *āmalaka* and the usual *kalasa*. It is interesting to note that the *bisama*, unlike that in the Paraśurāmesvara, partakes of the indentations of the *ratha-paga* division. The corners of the building are also gracefully rounded and the sharp edges of the *ratha-paga* projections are bevelled to a certain extent with the result that the four-square contour of the earlier group gives place to an elegant and softened outline to the *śikhara* as it goes up. Further, rich carvings, consisting of a luxuriance of ornamental detail executed and finished with the greatest care and taste, cover the entire surface of the temple. The rich and deep fret-work, possibly an adaptation of interlacing chaitya window motifs in miniature, decorate the intermediate *ratha-paga* sections from the base to the top as well as the upper portion of the *piṭhā-paga*. Clean-cut and decisive, it constitutes an effective surface adornment of a continuous pattern pleasingly diversified by lights and shades. This mode of ornamentation is rare in its appear-
ance in Orissa. Elsewhere too it has been seldom used and the only place where the pattern has been executed with an equally successful effect is Osia in Rajputana. On the rāhā-paga on each face the Muktesvara shows again a bold design consisting of a couple of grinning dwarfish figures on two sides of a highly ornamental chaitya window device surmounted by the kirttimukha. A characteristically Orissan motif and technically known as the ‘bhō’, it invariably appears on the well known Orissan temples; but none excels the superb treatment and masterful animation of the motif on the Muktesvara. Apart from these, the floral bands, the rich scroll works, and other details display a remarkable sense of design and a perfect delicacy of execution on the part of the artist. In spite of lavish details, everything is orderly, balanced and distinctive. Not a scrap is out of place. The reliefs, again, are bold and impressive and the charming and elegantly modelled statuettes, naturally stepping out, as it were, from the surface, are full of animation. One of the smallest of the Bhuvanesvara temples, the Muktesvara is barely 35 feet in height. Yet, at the same time, it is one of the prettiest. Apart from its rich, and at the same time chaste, ornamentation, much of its beauty rests on its elegant proportions. The artist has so beautifully adjusted the different parts of the building and has so cleverly adapted the ornaments to the scale of the monument that one fails to detect the smallness of the structure. In spite of its modest size, the entire conception appears to have been inspired by a brilliant and rhythmical design in which the structure and its ornament are in full accord. Fergusson has described it as the “gem of Orissan architecture”53 while Rajendra Lal Mitra speaks of it as the “handsomest—a charming epitome of the perfection of Orissan architecture”.54 These are well-deserved praises, no doubt, especially in view of the fact that both these discerning critics saw the temple furrowed and wrinkled by the decay and overgrowth of centuries.

The Pārabhūtesvara and the Muktesvara represent two notable examples of an early period of Nāgara temple building activity in Orissa. The Muktesvara, though representing an advance over the Pārabhūtesvara in design and form, does not signify as yet any definite break with, or departure from, the earlier monuments of this class. The erection of this fine temple is usually assigned to about A.D. 950, i.e. approximately three centuries after the date of the Para-bhūtesvara. Architectural and stylistic considerations, however, indicate that this date for the Muktesvara appears to be much too late.

53 HIEA, II, p. 97.
and the longest interval that separated the two temples could not possibly have been more than a century or a century and a half.

At Bhubanesvara and other places in Orissa there are temples almost similar in shape and design, and from their nearness to the older arche-types they may be recognised as belonging to an early period in the evolution of the Orissan type of the Nāgara temple. Temples of this class represent, no doubt, an early expression of the Nāgara style which may be found to be widely distributed over a large territory from the Himalayas in the north to the Krishna-Tungabhadra basin in the south, from the western to the eastern seas. A common arche-type, namely the Gupta śikhara temple, was the basis from which each locality within this vast area derived its inspiration and none of them, as the extant monuments show, can be said to have developed as yet any local or regional characteristic.

The simple and early form of the Nāgara temple in Orissa represented by the Parašurāmeśvara-Muktesvara group, experiences a distinct transformation, as a result of evolution, into an individual and elaborate type which may be termed as particularly Orissan. The tendency in evolution is towards an elaboration and refinement of the simpler design of the earlier temple and also towards an accentuation of height. The elaboration is recognised in a greater variation of the ground plan, obtained by adding to the number of projections. The archetypal tri-ratha plan elaborates, in course of time, into the pañcha-ratha, the sapta-ratha and even the nava-ratha. Each of these rathas, again, is further subdivided into a number of smaller facets, leading not only to greater diversification of lights and shades but also provision of additional planes for the application of or ornament. The sapta-ratha and nava-ratha plans are met with only occasionally; it is the pañcha-ratha plan which is characteristic of the typical Orissan development of the Nāgara temple.

Similar elaboration is noticed also in elevation. In conformity with the archetypal design, the earlier Orissan temple exhibits a three-fold division of the bāṭa along the vertical axis—the pabhāga, the jaṅghā and the baranda. The later group of Orissan temples invariably shows a five-fold division of the bāṭa, there being a further subdivision of the jaṅghā into two segments, the tala-jaṅghā and the upara-jaṅghā, by a course of mouldings, known as the bōndhanā or the bond. Correspondingly, there was an increase in the number of mouldings of the pabhāga and those of the baranda, the former consisting of five and the latter of seven in almost every important Orissan temple of the later period. The gandā is divided into a larger
number of bhūmis and in contour it takes a more perpendicular rise with an abrupt inward bend towards the top. The greater variegation of the elevation of the temple is, no doubt, dependent on an urge for increased height.

Along with such greater diversification of the different parts and elements, there is correspondingly an increased variety of decorative detail and the whole exterior is not only covered with rich and elegant mouldings, and intricate carvings, but also with pilasters, niches and figures—human, animal and composite—each having its proper and appropriate place in the scheme of ornamentation. Along with increased height the ratio between the length of the sanctum and the total height of the temple also increases. In Gupta and post-Gupta śikhara temples this ratio is approximately double the inside length of the sanctum cella. In the Paraśurāmesvara and other early Orissan temples it is approximately 1:3, whereas in temples which, in plan (multiplication of rathas) as well as in elevation (five segments of the bāda, multiplication of the mouldings), greater detail in decoration, etc., exhibit late features in evolution the ratio increases from 1:4 to 1:5, and in the magnificent Sun temple at Konarka the estimated ratio is approximately 1:7. All through the history of Orissan temple architecture there is recognised a correspondence between elaboration and heightening.

Further, a refinement and delicacy of the outline may be recognised in the gradual rounding off of the sharp edges at the corners as well as in the ratha-paga projections. But in doing so the Orissan builders took especial care not to break up the vertical outline in any section, and the unbroken contour of the tall tower, together with the emphasised verticalism of the ratha-paga projections, gave the monument an impression of aspiring height and grandeur. This rounding off of the corners and of the edges of the projections logically leads to the practice of decorating the exterior of the gāndi with miniature replicas of śikharas. The corner pagas, rounded off and with bhūmi-amālās at the different stages, tend to take the shape of miniature rekhas and soon they begin to appear on the gāndi all around. The different stages of the spire thus simulate the main one by repeating themselves on the body, and quite in a logical way too. The Rajarani temple at Bhavanesvara has a cluster of smaller towers round the body of the main tower. Some scholars consider it to be an exotic growth in Orissa as the feature is rare in its occurrence in the area. It can, however, be explained as the natural outcome of a logical course of evolution following the direction outlined above. In this context the Rajarani, instead of being an exo-
tic growth, represents a logical stage in the normal cycle of the evolu-
tion of the Nāgara temple in different regions, Orissa not excluded.
The different miniatures had the effect of breaking up and dissolv-
ing the forceful outline of the tower, an outline that was more
pleasing and architecturally more sound. For this reason, it seems,
the process was not carried further in Orissa. It had, however, its
full play in Central India where the aspiring outline of the tower
had been whittled away by an exuberance of turrets, each with its
own mass and volume, clinging to the body of the main tower and
thus breaking up its emphatically vertical ratha-paga arrangement.
To the Orissan architects the aspiring verticality of the rekha tower
seems to have been of greater import and when they realised that
the process of evolution, if carried to a logical culmination, would
lead to a loss of architectural effect they reached a compromise and
confined the miniature rekhas to the anurāhā-pagas only and casual-
ly to the rāhā-paga on the front face. While thus accepting the
logic of evolution, they showed a rare manipulative skill in adapting
this logic to their own idea about the overbearing importance of the
rekha tower.

Thus the Nāgara temple assumed a particular and individual form
in Orissa. The distinctive characteristics of this typical Orissan
development may be described as the five-fold (pañchāṅga) divi-
sion of the būda and miniature replicas of the rekha tower on the
anurāhā-pagas of the gāndā. The figure of a lion rampant on an
elephant (gaja-sīmha) projecting from each face of the gāndā and
caryatids, called deul-chāranis, above the bīsama supporting or ap-
ppearing to support the heavy āmalaka-śilā, also occur invariably in
this characteristic type of Orissan temple and may be recognised to
be among its distinguishing elements. Again, an Orissan temple of
this characteristic design may be found to exhibit an almost per-
pendicular rise of the rekha tower with a pronounced inward curve
very near the top. The mouldings of the pābhāga, the bāndhanā
and the bāranda increase in number, no doubt, as a necessary co-
rollary to the increased height of the temple. The above features,
confined to temples in Orissa alone, may be considered to be typi-
cally Orissan. And the emergence of this typical Orissan form of
the Nāgara temple may be studied with reference to several inter-
esting examples at Bhuvanesvara, namely the Siddhesvara, the Ke-
dāresvara and the Brahmesvara. By reason of the inscription that
once existed in the Brahmeśvara temple, but is now lost, it may be
assigned to a date in the second half of the eleventh century.55 Be-

55 JHASBL, XIII, pp. 63-73.
cause of the nearness of the design to the Brahmaśvara, the Siddheśvara and the Kedāreśvara do not appear to have been very much earlier. Possibly, they belonged to a period outside the scope of this volume. They are intimately associated with the evolution of the typical Orissan temple which emerged with all its characteristic elements in the century between 1000 and 1100. A study of these temples should hence be reserved for the next volume.

To the early phase of building activity in Orissa may be assigned certain temples, apparently of an alien inspiration in the north. Of course, the precursors of the type may be recognised in the representations of a particular form of structural buildings occurring frequently in the reliefs of early Indian art, in the north as well as in the south. A mediaeval shrine of this order appears, however, to be a new conception, rare in its occurrence in the north. The most notable example of the type in Orissa is supplied by the Vaitāl deul at Bhuvanesvara, a shrine dedicated to the worship of the goddess in her terrific form. Situated within a quadrangular court enclosed by a low wall, it stands on a raised platform and consists of a sanctum chamber preceded by a porch hall in front. Unlike the usual type of the Orissan temple, the sanctuary is rectangular in plan (13 feet by 25 feet) and is surmounted by a superstructure which is also of an unusual shape. The porch hall in front is also rectangular and is roofed as the jagamohana of the Paraśurāmaśvara. In the jagamohana of the Vaitāl deul there is, however, a new feature that consists of a small replica of a tri-ratha rekha temple embedded at each of its four corners, a parallel of which may be found in the jagamohana of a temple at Baijnath (Kangra district), the latter however, having a pyramidal roof.

The most significant deviation that the Vaitāl deul presents to the usual type prevalent in Orissa is to be recognised in the shape and form of the superstructure over the sanctum cella. In the lower section this has a rise not unlike that of the gāndi of Nāgara temple of Orissa. In the upper section there is an elongated barrel-vaulted roof in two stages, separated by a recess in between, and further crowned by three āmalakas, each with the usual finials, placed along the ridge of the upper semi-circular vault. The bāda again, has no rathaka projection on any face; the manner of treating and diversifying the exterior walls is of a kind that is new in Orissa and in Nāgara style of temple as well. Each wall is divided into richly patterned pilasters and recessed panels with sculptures—a highly

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58 For the information the author is indebted to Professor N. K. Bose,
effective mode that is identical with that of the treatment of the exterior walls of a temple of Drāvida style. With its beginnings in the storeyed temples of the Gupta and post-Gupta periods this mode becomes clearly established as a distinctive decorative scheme in the seventh century as may be recognised in the Jain temple of Meguti at Aihole (A.D. 634) and the rock-cut rathas of Mahabaliapuram. The semi-cylindrical vaulted roof of the Vaitāl deul, clear analogies of which are furnished by the Bhima and the Ganeśa rathas at Mahabaliapuram, provides a further link with South India. It should be noted, however, that analogies with the south end with the shape of the roof and the manner of treatment of the exterior walls. Such features, in their origins, were not particularly South Indian, though in the early medieval phase they formed distinctive elements of a South Indian temple. Again, the storeyed arrangement of the superstructure, a characteristic feature of a South Indian temple, is conspicuous by its absence in the Vaitāl deul. In spite, hence, of the shape of the superstructure, the manner of treatment of the walls, and rectangular plan, which may indicate a familiarity with South Indian types, the Vaitāl deul cannot be considered to an exact copy of a South Indian model. Rather, the other essential arrangements, including the rise of the superstructure up to a certain height, exhibit a more general conformity with the early Nāgara form as presented in Orissa and the distinctive quality of the architectural treatment of the temple may, hence, be described as of Nāgara inspiration.

A rich profusion of carved work, elegant and graceful in an extreme measure, covers the exterior surfaces of the building. The pleasing proportions of the sanctum, the skilful disposition of its surfaces and decorative elements denote an aesthetic sense of a very high order. Many of the decorative elements are closely approximate to those of the Paraśurāmeśvara. With the latter, again, it is clearly allied in respect of the form and disposition of the jaga-mohana and on stylistic considerations of its sculptures. The Vaitāl deul has, hence, to be assigned to a period not far removed from that of the Paraśurāmeśvara.

The rather exotic shape of the Vaitāl deul may indicate its derivation from an alien inspiration or its assimilation of extraneous influences. It is to be noted, however, that the shape is recognised in the canonical texts of Orissa as constituting a distinct class of temples, known as the khākhārā. Miniature relief replicas of the Khākhārā often appear in the surface decoration of the usual shape and form. In North Indian temples of this shape and form are
not quite unknown, a likely parallel, though much transformed due to subsequent renovations, being possibly the Durgā temple at Bhuvanesvara. In Orissa several other temples of this design may be noticed, namely the little shrine of Durgā at Badeswar (Cuttack), a ruined temple at Ranipur Jharial (Patna), the Vārāhī temple at Chaurasi, et al. Of these, the Durgā temple at Badesvara and the Vārāhī temple at Chaurasi seem to have been structures of remarkable beauty and excellence. Outside Orissa, examples of the type may be met with in the well known Teli-ka-mandir at Gwalior, the Navadurgā temple at Yagesvar (Almora district, U.P.), and also possibly in the rectangular temple, now ruined, at Osia, Rajputana. It is also interesting to observe that the majority of the temples of the type in Northern India are dedicated to the worship of the goddess Sakti in one or other of her forms, and an association of the type with this cult may not be entirely ruled out. The canonical texts of Orissa refer to several varieties of the Khākharā temple, namely the Drāviḍa, the Varaṇi and the Koṣali. The first name, no doubt, echoes the South Indian affinity of the type, and this is only too apparent in the extant monuments to be missed.

Three ancient temples within the compound of the modern Rāmeśvara temple at Baudh supply us with yet another interesting type of temple in Orissa. Each of the temples stands on a raised platform and consists of a naicact cella with an attached portico in front. The sanctum cella in each case is planned on the principle of two squares placed diagonally and intersecting each other at an angle of 45 degrees. The angular faces, thus formed in the exterior walls, give it the shape of an eight-pointed star. In other words this star-shaped plan is the result of rotating the square of the plan on its own axis and stopping it once midway at 45 degrees angle. Each angular face is, again, subdivided into three smaller facets thereby leading to a charming arrangement of light and shade along and across the entire design. The angles of the plan rise boldly up the height of the gandī and convey an appearance of greater height than any of the temples really possesses. Notwithstanding the star-shaped plan, other arrangements of the bāda and the gandī are not different from those of the Bhuvanesvara temples of the early phase. From the base to the top each temple is covered

57 JASB, VII, pp. 828-29, pl. XL.
58 Information kindly supplied by Professor N. K. Bose.
59 JAS.
60 ASR, 1928-29, p. 16, pl. IV.a.
61 JBORS, XV, pp. 65-68, pl. IV, V; ASC, XIII; pp. 118-19; S. K. Saraswati-
Three Old Temples at Baudh”, P. B. Desai Felicitation Volume.
with rich and elaborate carving, the most prominent motif being the intricate tracery work, with deep shadows in the interstices, which accentuates still more the effect of light and shade. The scheme of ornamentation is not inconsistent with that of the early temples of Bhuvanesvara, and in respect of their general shape and form and plastic considerations of their sculptures, these Baudh temples could not have been far removed in date from the Muktesvara at Bhuvanesvara. Another temple of an identical plan in Orissa is recognised, perhaps, in a ruined brick monument at Rani-pur Jharial (Patna) which, from the single wall, now remaining, may be found to have a star-shaped plan obtained obviously on the principle of intersecting or rotating squares.

The stellate plan of intersecting squares, though a rare occurrence in the early phase of the history of Indian temple architecture, seems to be latent, along with the plan of rathaka projections, as a parallel measure of elaboration, in the variegation of the ground-plan and diversification of the walls of a Nāgara temple. A further advance on this simple plan of two intersecting squares may be noticed in a temple within the Nurpur fort that has the angles of intersections filled up, leaving only small projecting angles between the sides of the resulting octagon. Another direction of elaboration consists in the addition to the number of intersecting squares obtained by rotating the square on its own axis and stopping it at more frequent and regular intervals.

Further elaboration of this principle consists in the addition to the number of intersections obtained by rotating the square on its own axis and stopping it at more frequent and regular intervals than the plan of two intersecting squares would require. Other regions of the Nāgara temple style are known also to have made use of this principle occasionally which, hence, does not appear to be entirely outside the scope of development that a Nāgara temple might have. In Mālava and the Dakhan the two principles, i.e. those of the rathaka projections and of the intersecting or rotating squares, are found to have been combined in a number of important monuments of the regions concerned. The principle had its extreme expression outside the limits of the Nāgara temple style, in the later Chalukyan and Hoysala monuments of the twelfth-thirteenth centuries in which the full-fledged stellate plan, because of its many points of intersection owing to an increased number of

62 Information kindly supplied by Professor N. K. Bose.
63 ASR, 1904-05, pp. 118-20, pls. XXXVI, XXXVII.
stoppages of the rotating square, is found to have described a complete circle at the periphery.

(ii) Central India

Central India provides another regional expression of the Nāgara temple style. The direction of development of the Nāgara design in Central India was not different from that in Orissa. The evolutionary process had, however, a full and unrestrained play in Central India, and the Central Indian type of the Nāgara temple may be said to have reached one of its most exuberant expressions. The course of evolution was a long one and temples in different parts of Central India illustrate identical stages of development, as in Orissa, till the emergence of the typical Central Indian features. Such typical features make their appearance, however, in the period that falls outside the scope of this volume.

Central India had been the home of early śikhara temples, the nucleus of the Nāgara design, as described above. The temple of Vaidyanātha Mahādeva at Bajjnath, 64 9 miles from Rewa, supplies us with the archaic form of the Nāgara temple in Central India. It is in a dilapidated state and a greater part of the śikhara has collapsed. But enough remains to provide an idea of its plan and elevation. The sanctum is tri-ratha in plan and the cube is divided into the three usual sections (aṅgas). The cubical section ends in a recessed frieze separating it from the curvilinear. From the portion of the śikhara preserved, it appears to have curved inward from the very bottom and to have a rather stunted elevation. Chaitya window motifs, simple in execution, cover the faces of the śikhara. The shrine is said to have an antarāla and a maṇḍapa in front, but such adjuncts appear to be later additions. The late Mr. R. D. Banerji cites the evidence of the Bilhari inscription to identify the temple with the one given by king Lakshaṇarāja to the Śaiva teacher Hirdayaśiva. The suggestion, however, is a tentative one. Stylistically the Bajjnath temple seems to be much earlier to the time of Lakshaṇarāja. In plan, in elevation, in the general character of its ornaments the temple has its closest parallels in the Śatrughnēśvara group and in the Uttareśvara at Bhuvanesvara and could not be far removed from them in date. At Bargaon there may be found the ruins of a temple of the Bajjnath type.65

In the well known Lakshaṇa temple at Sirpur66 may be recognis-

64 MASI, No. 23, pp. 61-62, pl. XVIII.b.
65 Ibid., p. 66, pl. XVIII.a.
66 ASC, XVII, p. 28; ASR, 1909-10, pp. 11-14; 1922-23, pp. 49-50.
a lineal descendant of the Vaidyanātha Mahādeva temple of Baidynath. In it may be noticed a further elaboration of the archaic Nāgara design. It is built of large size red bricks and is supported over a raised terrace. The scheme consists of the sanctum proper and a forward mandapa hall with an antarāla (vestibule, antechamber) connecting the two, all raised over a substantial terrace. Of the mandapa only a few pillars remain. A greater variegation over the plan of the Baidynath temple is recognised in the pañcha-ratha plan of the sanctum cella. The result is a more attractive effect of light and shade and with the continuation of the rathas on the body of the śikhara there is, again, an emphasis on the verticality of the conception. The cube of the sanctum is divided vertically into three sections, as in the earlier temples and the transition to the curvilinear section of the śikhara is formed by two lines or recessed friezes of sculptures. The mouldings of the plinth (pābhāga) are bold and elegant. On the rathas of the next section (jaṅghā) there appear recessed niches for accommodation of sculptures, that on either side of the central being surmounted by a graceful chaitya window. On the śikhara, likewise, graceful chaitya windows, repeated one above the other, on the vertical planes, lend a charming effect to the entire ensemble, enhanced further by the rounded forms of the attached āmalakas at the corners. The top has toppled down and has been replaced in modern times by an ill-fitting hut-shaped cap. The contour of the tower has a pleasing inward curvature and on the analogy of temples of similar design and elevation as well as from the vertical sequence of attached āmalakas at the corners of the tower there can be very little doubt that a flattened and spheroid āmalaka-śilā supported on a recessed neck (beki, kāntha) formed the crowning element of the śikhara. Over the doorway in front there is a triangular dormer opening, a prominent characteristic also of other early brick temples, that has probably been introduced to relieve the load of the masonry over the doorway opening. The brickwork in the construction of the temple is highly efficient; the surfaces and the joints have been rubbed to a beautiful smooth texture and the ornaments are bold, well-defined and finely cut. In its perfect proportions, in the pleasing disposition of its parts, in its rich red texture and refined treatment of its surface this brick temple at Sirpur is, perhaps unequalled among the early Nāgara temples in Central India. There are differences of opinion regarding its date. Some scholars would like to place it in the seventh century A.D. while others bring it down to the ninth. The fine construction of the temple together with the refined treatment of the exterior indicates, no doubt, a long experience in the art of building, especially
building in brick. At the same time, a link with the Gupta brick temple at Bhitargaon is supplied by two lines of recessed friezes separating the cubical section of the structure from the curvilinear. On these considerations, and in the light of the development of the Nāgara temple design in other parts of India, including Orissa, it would not be wrong to assign the temple to about seventh-eighth century A.D., a date midway between the two proposed by previous scholars. In Central India, in the seventh-eighth century there was apparently an abundant activity in brick building. Among the few fragmentary examples, the two battered shrines at Kharod (Bilaspur district) and the one at Pujaripalli (Sambalpur district) appear, from the available remains, to have been impressive productions.

The above temples illustrate an early phase in the development of the Nāgara style in Central India. In form and appearance they are identical with the typical Nāgara temples distributed over other parts of Northern India and a substantial part of the Deccan, and do not indicate, as yet, any deviation from the typical Nāgara design. In Central India the essential characteristics of the early Nāgara form were retained and elaborated, while others were added in course of the evolution of the style in this region. In this manner was developed a distinctive and individual type of the Nāgara temple which may be said to be peculiar to Central India alone.

At Baroli, at a wild and romantic spot near the Chambal falls, there is an interesting temple that affords an instructive example in the evolution of the distinctive Central Indian type of the Nāgara temple. Partaking of the characteristics of the early Nāgara design, the sanctum is pāncha-ratha in plan with the usual three-fold division of the cube along the vertical axis. A recessed frieze between two projecting mouldings separates the perpendicular cube from the curvilinear sikhara, in which the paga offsets, in continuation of the rathas in the lower section, extend beyond the shoulder course, each in the shape of a triangular finial, almost touching the flattened āmalaka-śilā above. Over this āmalaka there is, again, a smaller one supporting the kalasa. Two āmalakas in the crowning section and the extension of the pagas beyond the shoulder are characteristically Central Indian features and are not found to occur anywhere else, except in very rare instances. But for these two, the Baroli temple closely corresponds to those of the early Nāgara form. Stylistically it appears to belong to the ninth century. The pillared portico at-

68 ASC, XVII, p. 8; ASIWC, 1903-04, p. 50; ASR, 1909-10; p. 16.
69 HESA, II, pp. 133-34.