CHAPTER V

ART AND ARCHITECTURE

A. ARCHITECTURE

The story of Indian architecture covers a long period of five thousand years. It was essentially a product of the soil, and whatever touched it in its long course of development practically grew into it giving it new form and colour in each successive phase.

1. Pre-historic and Proto-historic Architecture

The earliest remains of the builder's art are those of the pre-historic settlements of peasant communities in Baluchistān and Sind. The constructions were most rudimentary; the conditions improved in the succeeding phase with the growth of highly developed urban communities. Along the valley of the Sindhu and its tributaries, from Rūpar in the north to Suktagendor in Makrān in the south and to Lothāl in Gujarāt, seventy such settlements have been discovered; some of them represent small villages, others small towns, while about five hundred kilometres apart were two large cities—Harappa on the left bank of the river Rāvi in the Punjab and Mohenjo-daro on the right bank of the river Sindhu in Sind. This urban culture dates back to the middle of the 3rd millennium B.C.

The remains of the two cities reveal a remarkable sense of town planning. Each city was divided into several blocks of houses by broad streets running north-south and east-west and crossing one another almost at right angles. These blocks were further subdivided into individual residential buildings by smaller lanes. At the western end stood an imposing citadel. The constructions were of burnt-brick, mud-brick being occasionally used in the foundations and as inner core of rampart walls. The mature and advanced technique of building in brick is shown by the use of such constructional principles as breaking the bonds between the courses, binding the corners and a course of headers alternating with several courses of stretchers. Openings were probably spanned by corbelling, and rooms by flat roofs of timber supported on wooden beams and rafters. Wood seems to have been used also for doors and window openings. Remains of staircases indicate the existence of upper floors in not a few instances. All these bespeak a high degree of excellence in the technique and art of building. Further, what impresses one is the fact that the inhabitants of these cities enjoyed a comparatively high standard of civil

amenities, such as bath rooms in individual houses, public baths, underground drainage with cess pits at intervals, rubbish shoots, etc. The regular arrangements for all such amenities suggest that the planning and lay out of the cities was vested in an organization corresponding to a municipal corporation of the present day. The most outstanding monuments of the architecture of the proto-historic phase are the Great Bath at Mohenjo-daro and the citadels and granaries in the two cities.

2. Early Historical Architecture

A long stretch of time separates the proto-historic phase of architecture from the early historical. The Vedic Aryans, who appeared next on the scene, lived in houses built of wood, bamboo and reeds. Since their religion was simple, such houses were adequate for their daily ritualistic needs. They contributed little to the development of architecture except for the fact that the types of these houses, copied in brick and stone, provided a few significant forms pointing to the wooden origin of early historical architecture.

In the 6th century B.C. India entered a significant phase of her history. Two new religious systems arose and there was a new orientation of the Vedic religion. Almost simultaneously larger states sprang up. These factors provided the climate for the development of arts and crafts. With the expansion of Magadha into an extensive empire this development received further impetus. From this period it is possible to trace the history of Indian architecture in an almost unbroken sequence. The remains of early historic architecture bear the deep impress of earlier wooden prototypes including structural techniques evolved in wood. Early historical cities, as represented in reliefs of early Indian art, point to the same. The transition from wooden to brick or stone forms was gradual and lithic forms, suitable and appropriate to the nature and logic of the material, took a fairly long time to be evolved.

With the advent of larger states and flourishing trade and commerce, as revealed in the Jātaka stories, cities again began to play a vital role in the life of the community. Few vestiges of an early city have survived, but it is possible to glean some information from literary and archaeological sources. References in Buddhist literature, *Kauṭilīya Arthaśāstra* and the Epics, as also the account of Megasthenes on the composition and functions of the municipal corporation of the capital city of Pāṭaliputra make a glowing picture of rich and prosperous cities. The city of Sagala, as described in the *Milindapañho*, represents a standard-type—quadrangular, usually square in plan, surrounded by a moat or moats and protected by a wall all around. A gateway at the middle of each

side is approached by a bridge across the moat. Four main streets from the four principal gateways converged to the centre of the city.

Early Indian reliefs at Bhārhut, Sāñcī, Mathurā, Amarāvatī and Nāgārjunīkoṇḍā provide the outer view of the city wall with its moat, gate-house and defensive towers, and give occasional glimpses of the buildings inside. The city walls are usually shown as made of brick, occasionally of wood, sometimes with re-entrant angles of which the salient corners were provided with projecting bastions. At the top the walls end in a coping or in battlements. The gate-house is flanked by two lofty towers, each rising to several storeys—the topmost has a wagon-vaulted roof with gable ends. A city building usually faced a court, occasionally flanked by subsidiary erections at the sides, but left open in front. Often it rose to several storeys, the uppermost having a vaulted roof with gables at the ends and with pointed finials at the top. Along the fronts of the upper storeys ran balustraded verandahs, while the ground floor was sometimes an open pillared pavilion. The open court was sometimes approached by a light wooden *toraṇa* (gateway).

Every essential of wooden technique was scrupulously copied in these lithic representations and leaves little room for doubt that the buildings were essentially made of wood. The wooden technique in the erection of the stone balustrades and gateways of the early *stūpas* (Bhārhut and Sāñcī) is a corroborative evidence of an age of wood in Indian architecture. In spite of the frail and flimsy character of the material, the cities with their buildings seem to have been imposing in dimensions and appearance. The description of the city of Pāṭaliputra given by classical writers supports this view to a great extent. Excavations at Kumrahar and Bulandi Bāgh in the suburbs of Patna have brought to light interesting remains of the massive wooden rampart and splendid palace of the old city. The nature of the material precluded any extensive change in the shape and form of the building, but the simplicity in this regard is amply compensated for by the varied wealth of ornament; of this an idea may be obtained from the elaborate cave facades which are imitations of structural modes and patterns in wood.

3. Religious Architecture

It was in religious architecture that the genius of Indian builders played a significant role in creating, developing and perfecting a number of significant forms. The growth of Buddhism and Jainism and the rise of the sectarian cults of Hinduism gave a great impetus to the progress of architecture. With Buddhism was particularly associated the *stūpa,* a domical structure of brick or stone masonry. Shrines known as *caityas* with the votive *caitya* installed for worship, as also monasteries (*vihāras,*

saṅghārāmas), were essential features of Buddhist religious establishments. The early sanctuaries of the Jainas have perished, but cave dwellings for recluses still exist. The *Bhakti* doctrine and its offshoot, the cult of the divine image, produced a tremendous impulse for the erection of temples enshrining images. An abundance of building activity marks the later centuries of the pre-Christian era. Structural monuments of this early phase, apparently in perishable materials, have not survived. A continous movement may be traced in respect of the *stūpa* and other architectural forms connected with cave excavations. In course of time, there was an increasing use of durable materials like stone or brick in structural practices, particularly in the construction of temples, and it is possible to trace the history of this form of Indian architecture from its beginning till its maturity and final culmination.

Stupa. The *stūpa* was a conventional representaion of a funeral tumulus, evolved out of earthen funerary mounds (*śmaśāna*), in which the ashes of the dead were buried. Buddhist tradition mentions the erection of a number of *stūpas* immediately after the death of the Buddha—eight of them over his corporeal relics and the ninth over the vessel in which such relics were originally deposited. Here the votaries of the Buddha were simply following a long established custom. Before the master was defied and his image introduced in the Buddhist cult, relic worship occupied a prominent place in the rituals of early Buddhism and the *stūpa,* as the container of the relics, gained in sanctity and importance. It was raised for a number of purposes, besides the original one, enshrining the relics, and became practically an ubiquitious symbol of the Buddhist faith.

Although varying in detail and elaboration according to time and space, the *stūpas* seem to have been evolved out of a simple dome-shaped hemispherical structure on a circular base. Tradition has it that Aśoka pulled down the original *stūpas* and re-erected them, besides raising up many new ones. In these monuments the form of the *stūpa* acquired a precise architectural character which served as a model for the later ones. The extant Aśokan *stūpas* have undergone successive restorations and additions. However, this general pattern may be recognized in the great *stūpa* at Sāñcī. Built of brick at the time of Aśoka, it was encased in stone about two centuries later and enlarged to nearly twice its original size. It comprises of an almost hemispherical dome (*aṇḍa*) flattened at the top, supported on a low circular base (*medhi*) approached by a double ramp on the south and enclosed by a balustrade serving as an upper procession path. Over the dome is a square pavilion, literally box (*harmikā*) enclosed again by a balustrade surrounding the sacred parasol (*chatra*). The whole structure is surrounded by a massive rail with four imposing gateways on the four sides; these stone adjuncts evidently replaced the original wooden ones. The technique of construction is essentially wooden. In contrast to the rail which is severely plain, the gateways are covered

with elaborate carvings. There are also early *stūpas* in which the rails as well as the gateways bear profuse carvings.

This simple design of the *stūpa* underwent many developments in the succeeding centuries. In the evolutionary process the tendency was towards elongation and increase of the height of the structure as a whole. As the height of the dome, the hemispherical shape of which is almost ritual, was governed by its diameter, a possible course to increase the height of the structure was to add a number of components in the lower and upper sections. This tendency to verticalism was emphasized again by increasing the height of each such component. So in course of time the circular base was transformed into a tall cylindrical drum. The whole structure again was raised on a square plinth, sometimes with a single projection, or more, on each face. The crowning *chatra,* originally one, gradually increased in number in a tapering row of flat discs, the topmost usually ending in a point. Side by side with these additions there was a corresponding elevation of the component parts, each of the lower components forming the substructure was subdivided into a number of stages for the sake of balance.

This evolutionary process is illustrated by the few fragmentary remains of the post-Christian epoch, the lithic representations of votive *stūpas* found in sacred Buddhist sites and rock-cut *caityas* in *caitya* sanctuaries. Confirmation may be found in the graphic description of the Kaniṣka *stūpa* at Peshāwar left by the Chinese pilgrims who state that it consisted of a basement in five stages and a superstructure of carved wood in thirteen storeys surmounted by an iron column with thirteen to twenty-five gilt copper umbrellas. Representations of *stūpas* on *toraṇa* architraves at Mathurā seem to indicate that the superstructure over the basement comprised a lofty drum supporting a comparatively small dome. The Kaniṣka *stūpa* at Peshāwar represents a transition from the simple *stūpa* to the Far Eastern pagoda.

A number of important *stūpas* once stood at Amarāvatī, Jaggayyapeṭā, Bhaṭṭiprolu, Ghaṇṭaśāla and Nāgārjunikoṇḍā in the lower course of the Kṛṣṇā. Though none of them now exists in its entirety, sculptured replicas on their casing slabs enable us to determine the shape and form of these southern *stūpas* which show interesting developments. A distinctive feature is the rectangular projection on each face of the lofty drum of which the front is in the form of an altar-piece supporting five free-standing pillars, known as *āyaka-khambas* or 'worshipful columns'. This feature is unique in India, having perhaps a parallel in the *vāhalkada* projection in the Ceylonese *dagobas*. The mode of erecting these *stūpas* is also of interest. The body of the *stūpa* was composed of two circular walls, one at the hub and the other at the outer end, with radiating partition walls joining the two. The intervening spaces were packed with earth and the monument was given the required shape. This innner body

was next encased in richly carved slabs usually of limestone. With the free-standing *āyaka* pillars ranged on the front faces and with rich embellishments of the balustrades, the drum and even the dome, these southern *stūpas* presented a new expression.

Caitya Shrine. The *caitya* shrine in its typicalform was a long rectangular hall, apsidal at the rear end and divided into three sections by two rows of pillars along the length of the hall meeting at the back end. The few remains of structural *caitya* halls are extremely fragmentary; in most cases only the foundations are left, and in plan they conform to the typical *caitya* shrine. Western India abounds in rock-hewn monuments of this class, and from these it is possible to ascertain other characteristic features of such shrines. The nave is covered by a barrel-shaped vault and the two aisles by two vaults, each being half the section of that of the nave. Over the entrance doorway is placed a huge arched window, shaped like a horseshoe, dominating the entire scheme of the facade. In rock-cut architecture no new form was evolved; instead, the form of structural buildings of this class was adapted and adjusted.

A circular chamber suits best the circular design of the votive *caitya* and the above typical form of a long apsidal shrine with the votive *caitya* installed at the rear end seems to have evolved out of a circular shrine chamber with the votive *caitya* within a peripteral range of pillars, as we have in the fragmentary remains of a shrine at Bairāṭ (Jaipur, Rājasthān) belonging to the time of Aśoka. Rock-cut counterparts of such circular shrines are also seen in the Tulaja *leṇa* group at Junnar and in a cave at Guṇṭupalli. Though much later in date, they recall this archetypal design of the circular *caitya* shrine. The next stage in evolution is found in two caves at Barābar (Bihār), the Sudāmā and the Lomaśa Ṛṣi, both Mauryan in date. Each consists of two apartments, a rectangular one at the outer end with the entrance doorway and, separated from it by a solid wall with a narrow connecting passage, a circular (oval in case of Lomaśa Ṛṣi) one at the back. The apartments are cut along the face of the rocks and the doorway of the latter carries at the top a framework of arched shape after the pattern of the curved roof in wood. An identical design of a Buddhist shrine of two apartments is furnished by a cave at Koṇḍāne where the circular chamber at the back is found to contain a votive *caitya*. Though later in date, the design of the circular sanctuary preceded by a hall of approach seems to imply a transitional stage in the evolution of the *caitya* shrine of the typical apsidal form which is obtained by converting the two apartments into one by elimination of the wall separating the two. There is a bold move also in driving the long apsidal hall axially into the depth of the rock.

Rock-cut *caitya* shrines of the typical form in Western India may be divided into two groups representing two phases of development. Of the early group, the shrine at Bhājā, near Poona, seems to be the oldest

(*c.* 2nd century B.C.), representing in some respects an initial movement in this direction. Numerous shrines of this class were excavated at Koṇḍāne Pitalkhorā, Bedsā, Nāsik, Kānheri, Ajaṇṭā (IX & X), Kārle and other places in Western India. A study of the design and setting of the interior pillars and of the scheme of facade ornamentation may enable one to arrange them in chronological and stylistic sequence. The *caitya* cave at Kārle (*c.* 1st century A.D.) is the most mature expression of this early movement, at once grand and imposing in its noble proportions, richness of carving and the striking and organic combination of the colonnade and the vault at the interior.

The later group of cave-shrines, particularly Ajaṇṭā (XIX and XXVI) and Ellora (X) also known as Viśvakarmā, register significant change in the psychology and attitude of the Buddhist votaries. Ajaṇṭā (XIX), the earliest in this group, belongs to the closing years of the 5th or the early years of the 6th century A.D. The plan and general layout remain the same in each case, but a change in attitude is reflected in the style of ornamentation of the facade as also of the interior. In the earlier group the ornamentation of the facade consists of repetitive architectural motifs like the rail, the *stūpa,* the *caitya* window and pilaster; the enormous horse-shoe opening over the doorway in the centre dominates the entire scheme in which figure sculptures are strikingly absent. The ornamental scheme in the later group, with predominant importance of figure sculptures, stands in marked contrast to the above. In these later shrines they are made to cover every possible space, eliminating or reducing the earlier architectural motifs. In Ellora (cave X) even the horse-shoe opening over the doorway, a distinctive and almost a ritual feature in shrines of this kind, has substantially diminished in size. In each of these caves, above and below on the facade, on the walls of the excavated court, in the elaborate frieze of the triforium over the colonnade of the interior, and, most significantly, on the body of the votive *caitya* itself appear figures of the Buddha, the 'worshipful one', standing or seated, all carved in bold relief. This new style reflects the change from the earlier aniconic attitude to an extremely iconic one. With this change the *caitya* as the votive object gradually dwindles in sanctity and importance in relation to the image which becomes the supreme object of veneration.

Monastery. A monastery (*vihāra, saṅghārāma*) was planned in much the same way as a private dwelling house, i.e., with four ranges of cells or sleeping cubicles on four sides of an open quadrangular courtyard. In course of time the monasteries became large establishments and served, besides their usual purposes, as important educational centres. Fragmentary remains of many of these have been excavated in the North as well as in the South. The remains at Nālandā and Pāhārpur are the most noteworthy. The monastery at Nālandā belongs to the 5th century A.D. and one at the Pāhārpur (Somapura *mahāvihāra* of old) was established

towards the close of the 8th or the beginning of the 9th century. Both survived many vicissitudes till the Muslim conquest. Hiuen Tsang has left a graphic description of the monastery at Nālandā. He refers to its many-storeyed and imposing buildings, and tall and stately temples. The excavated remains indicate that this establishment comprised several-storeyed monastic blocks, each being an aggregate of four ranges of cells with continuous corridors around an open courtryard and aligned in a row; opposite and separated from the monastic blocks by a broad promenade stood a row of temples. The two groups, which faced each other, were surrounded by high protecting walls with other accessory buildings, coherently disposed within the enclosure. The Somapura monastery at Pāhārpur, planned on much the same lines, consisted, however, of a single extensive structure with as many as 177 cells. Running corridors in front were aligned on four sides of an enormous open quadrangle, at the centre of which stood the colossal temple of an interesting design and form. Built of bricks and storeyed in elevation, these two monastic establishments bear testimony to the technical skill of the builders and an orderly sense of grouping the various accessories into an organic whole.

Rock-hewn monasteries show a slight deviation from the above plan. The typical one has three ranges of cells on three sides of a central hall opening out into a pillared gallery in front. It took some time, however, for this characteristic plan to be established. The earliest of such caves, the Barābar caves for the Ājīvikas belonging to the 3rd century B.C. consisted each of a single cell only. Occasionally such cells or a number of cells in a row are provided with a pillared verandah in front (Jaina caves at Udayagiri and Khaṇḍagiri, Orissa, belonging to the 1st century B.C.), sometimes double-storeyed in elevation (Mañcapurī cave, Udayagiri). The Rāṇīgumphā at Udayagiri, also double-storeyed, has three ranges of cells on three sides of an open courtyard, the plan being facilitated by the peculiar formation of the rock with projecting scarps on its two flanks.

The classic plan of cells radiating from a central quadrangular hall and the facade opening out into a pillared verandah took definite form in the rock-cut monasteries of Western India. Like the *caitya* shrines they may be divided into two groups indicating two phases of development. The early group is marked by a certain simplicity, the decoration which consists of imitations of structural motifs is confined to the facade and the doorways of the monastic cells in the interior. The most notable in this group are Ajaṇṭā, (VIII, XII and XIII), Nāsik, (X and III), the Gaṇeśa *leṇa* at Junnar and the monastic caves at Koṇḍāne and Pitalkhorā. They belong to the centuries immediately preceding and succeeeding the Christian era. The last two caves introduce a new feature, that of pillars forming a square at the centre of the hall. Kārle has examples of storeyed

vihāras of the rock-cut order. Both these features are known to have gone through interesting developments in the later phase.

The rock-cut mode reaches its most exuberant expression during the 4th to the 8th centuries A.D. The rock-cut monastery becomes larger and more decorated as in the *vihāra* caves at Ajaṇṭā (XVI,XVII,I,II,XXIV), Ellora (II, V, VIII, IX, XI, XII) and Aurangābād (III, VII), all in Mahārāshtra, and Bāgh in Madhya Pradesh. The classic plan remains, but with notable innovations. One is the peristylar arrangement of the central hall, usually more spacious in contrast to the usually astylar formation in the former group. Of varied designs and with rich embellishments, the pillars and their architraves add to the decorative beauty of the spacious interior, further enhanced at Ajaṇṭā and Bāgh by exquisite paintings. A new development may be seen in the location in each monastery of a chapel or sanctuary, the image of the Master is installed in a chamber recessed in the depth of the rock at the middle of the rear end of the hall. At Aurangābād (VII) and Ellora (VIII), the image sanctuary in each case is situated as a free-standing shrine at the centre of the monastic hall. Again, at Ellora (II and XII, second storey) the central halls are provided with galleries for images instead of monastic cells on the lateral sides, each in the form of a kind of iconostasis. Ajaṇṭā (VI) and Ellora (XIand XII) are storeyed in elevation; the last two cave structures rise to three storeys.

Brahmanical and Jaina Caves. The brilliant expression of the rock-cut mode is exemplified also in Brahmanical and Jaina monuments. The earliest of the Brahmanical shrines are to be seen in group of caves at Udayagiri (Madhya Pradesh), belonging approximately to the early 5th century A.D. The majority represents small rectangular shrines (occasionally natural caverns enlarged and given the required shape) with a pillared structural portico in front. Cave No IX, perhaps the latest in the series, introduces four pillars forming a square at the centre for support of the roof of the shrine chamber. At Bādāmi, the design develops into that of a pillared verandah, and a columned hall with the square sanctum *cella* cut deeper at the far end (6th century A.D.). In the Drāviḍa country the cave style was introduced in the 7th century by Mahendravarman Pallava. A shrine of this mode in the South usually takes the shape of a shallow rectangular hall, or *maṇḍapa* (*mantapam*) as it is locally called, with one or more cells cut further deep on one or more sides of the hall. The facade is composed of a row of pillars with brackets supporting the architrave and their design and decoration give useful data for determining the chronological and stylistic sequence of these caves.

The Brahmanical caves at Ellora are distinguished for the boldness of their design, spaciousness of their dimensions and skilled treatment of the facade and the interior. Of the sixteen excavations belonging to this faith, the Daśāvatāra (XV), the Rāvaṇa-kā-khāi (XIV), the

Rāmeśvara (XXI) and the Dhumar *leṇa* (XXIX), besides the far- famed Kailāsa—an entire temple-complex hewn out of the rock in imitation of a distinctive structural form—are the most important. They may be divided into three types. The first, represented by the Daśāvatāra cave, comprises a many-columned hall with the sanctum *cella* dug out at its far end and the lateral sides of the hall disposed each as a kind of iconostasis. In the second type the sanctum, a free-standing cubical *cella* with a processional passage around, is shaped out of a mass of rock at the centre of the back end of the hall. Of the two caves of this class, the Rāvaṇa-kā-khāi and the Rāmeśvara, the latter is the more eminent because of the magnificent wealth of sculptures overlaying all its parts and the rich and elegant design of the massive pillars of the facade with their charming and graceful bracket figures. The Dhumar *leṇa* (middle of the 8th century A.D.), belonging to the third group, is the most elaborate of the Brahmanical cave-shrines. It consists of a cruciform pillared hall, having more than one entrance and court, with the free-standing square *cella*, shaped out of the rock, near the back end. This cave is probably the finest among the Brahmanical excavations, the more well known cave at Elephanta following its pattern generally.

Two caves, one at Bādāmi and the other at Aihole (middle of the 7th century A.D.), represent the earliest of the Jaina caves of this phase. Each exhibits a pillared quadrangular hall with the sanctum *cella* dug out at the far end. The Jaina caves at Ellora date from the 9th century. Of these the Choṭā Kailāsa (XXX), the Indra Sabhā (XXXII) and the Jagannātha Sabhā (XXXIII) are important. The first is a reduced copy of its more famous namesake. The second and the third are each partly a copy of structural form and partly cave excavation. In the forecourt of each is a monolithic shrine preceded by a gateway, both shaped out of the rock, while behind rises the facade of the cave in two storeys, each reproducing the usual plan of a pillared hall with a chapel at the far end and cells at the sides. Though identical in plan and arrangement, the Jagannātha Sabhā lacks the balance and organic character of the Indra Sabhā.

Temple. Perhaps the highest achievement of Indian architecture is seen in the temple. With its stately height and dignified proportions, varied forms and wealth of carvings, the Indian temple is a most impressive structure. It had, however, very modest beginnings, and it was through a progressive movement spread over centuries that the distinctive styles and forms took definite shape.

a. Early Temple Styles

The erection of sanctuaries for the images of gods dates back perhaps to the 2nd century B.C. Several *deva-gṛhas* (houses of gods) of pre-Christian

centuries have been excavated in extremely fragmentary state. Presumably built of perishable materials, these sanctuaries afforded little scope for the application of the principles of architecture as an art. The Gupta period ushered in the practice of building with lasting materials, especially in dressed stone and brick. The initial stage is marked by a certain hesitancy, but in course of time the builders became aware of the freedom and elasticity afforded by the new structural practice and the scope and possibilities consequent thereto. Freed from the limitations inherent in wood or bamboo constructions and in cave excavations, Indian builders handled their material, especially stone, so dexterously and efficiently as to evoke the admiring observation that they built like Titans and finished like jewellers.

The Gupta period marks the beginning of Indian temple architecture. As the extant monuments show, this has a formative age in which there was experimentation in a number of forms and designs, out of which two significant temple styles arose, one in the North and the other in the South. The Gupta temples are simple and unpretentious structures, but their bearing upon later developments is of great significance. The following well defined types may be recognized:

(1) Flat-roofed, square temple with a shallow pillared porch in front.

(2) Flat-roofed, square temple with a covered ambulatory around the sanctum and preceded by a pillared porch, sometimes with a second storey above.

(3) Square temple with a low and squat *śikhara* (tower) above.

(4) Rectangular temple with an apsidal back and a barrel-vaulted roof above.

(5) Circular temple with shallow rectangular projections at the four cardinal faces.

The fourth type is represented by a temple at Ter (Sholāpur district) and the Kapoteśvara temple at Cezārla (Kṛṣṇā district), both belonging to the 4th or 5th century A.D. The fifth is represented by a solitary monument known as Maṇiyār Maṭha (shrine of Maṇi Nāga) at Rājgīr, Bihār, which is now in a fragmentary condition. It appears to be supported on an earlier *stūpa* basement and follows the plan of the latter. The Durgā temple at Aihole, apparently allied to the fourth in design, has, however, a flat roof with a *śikhara* over the sanctum—evidently an attempt to adapt and remodel an old and established form to new needs. The fourth and the fifth types which appear to have been survivals or adaptations of earlier forms, do not seem to have had any marked effect on subsequent developments.

The other three types of Gupta temples may be regarded as the forerunners of medieval Indian temple styles. Representative examples of the first include temple No. XVII at Sāñcī, Kaṅkālī Devī temple at Tigāwā and Viṣṇu and Varāha temples at Eran, all in Madhya Pradesh. Each of them consists of a simple square sanctum *cella* with an open pillared

porch in front. The richly carved door frame projects a little beyond the line of the front wall, while the other three walls are kept severely plain. The nucleus of a temple, namely a cubical *cella* (*garbha-gṛha*) with a single entrance and a porch (*maṇḍapa*), appears for the first time as an integrated composition in this type of Gupta temples. Elaborations of this basic form were soon to emerge.

The second type of Gupta temples is represented by the Pārvatī temple at Nācnā Kuṭhārā, the Śiva temple at Bhūmarā (both in Madhya Pradesh) and the Lād Khān at Aihole. Each consists of a flat-roofed square sanctum *cella* (in the Lād Khān two pillared naves of square shape, one within the other) inside a similarly roofed bigger square hall. The bigger hall, which provides a covered ambulatory (*pradakṣiṇā*) around the inner sanctum, is preceded by a slightly smaller rectangular porch of the open type in front. A variety is afforded by the Pārvatī temple at Nācnā Kuṭhārā and the Lād Khān at Aihole in each of which there is an upper storey above the inner chamber. A trellis or trellises in each of the ambulatory walls for admission of light into the hall lent some relief in the treatment of the exterior walls.

Notable examples of the third type are seen in the so called Daśāvatāra temple at Deogarh (Jhānsī district) and the brick temple at Bhītargāon (Kānpur district). Each consists of a square sanctum *cella* supported on a high basement and covered by a squat *śikhara*. Though there is the same simplicity of design, as in the first two groups, certain significant developments may be noticed. A high platform as the base and a tower as the superstructure of the sanctum add much to the elevation of the composition. Instead of plain bare walls, the Daśāvatāra temple, built of stone, has on each of its three faces an alto-relievo sculpture between two pilasters. This arrangement, besides setting forward the walls on three sides to balance the projection of the door frame in front, leads to a diversification of light and shade on the exterior and introduces a decorative scheme of great significance for the future. In the Bhītargāon temple this effect is further emphasized by a regular offset projection in the middle of each side which results in a cruciform ground-plan.

The second and the third types of Gupta temples, to be called storeyed and *śikhara* types, represent elaborations of the first in respect of both the ground-plan and elevation. In the following centuries these two types are known to have undergone further developments and to have crystallized to form two distinctive temple styles respectively in the South and the North.

b. Emergence of Medieval Temple Styles

The Indian *Śilpaśāstras* recognize three main styles, the *Nāgara,* the *Drāviḍa* and the *Vesara,* along with a geographical distribution of each.

The *Nāgara* style is said to have been prevalent in Northern India in the region between the Himālayas and the Vindhyas; the *Drāviḍa* in the Drāviḍa country, i.e., the territory between the Kṛṣṇā and Kanyākumārī; and the *Vesara* in the territory between the Vindhyas and the Kṛṣṇā. A close study of the temples themselves according to the geographical distribution of the *Śilpaśāstras* tends to show that the medieval temples respectively of Northern India and the Drāviḍa country are distinguished from each other both in ground-plan and elevation. The *Nāgara* and the *Drāviḍa* styles can thus be explained with reference to the temples of North India and the Tamil-speaking South respectively. Temples of the Deccan, lying between these two zones, are known to have evolved a hybrid style, borrowing elements and features from the *Nāgara* as well as the *Drāviḍa*. With regard to the evidence supplied by the monuments, the three styles of the *Śilpa* texts ultimately resolve into two, the *Nāgara* and the *Drāviḍa*.

Every temple of North India, irrespective of its situation and date, reveals distinctive features in planning and elevation. The North Indian temple is a square with a number of graduated projections (*rathakas*) in the middle of each face which gives it a cruciform shape in the exterior. In elevation it exhibits a tower (*śikhara*), gradually inclining inwards and capped by a spheroid slab with ribs round the edge (*āmalaka*). The cruciform ground-plan and the curvilinear tower may, hence, be regarded as the fundamental characteristics of a *Nāgara* temple. In these respects the archetypes of the *Nāgara* temple may be seen in the third (*śikhara*) type of Gupta temples in which these features may be found to occur, more or less in a rudimentary stage. A temple of the Tamil country has the sanctum *cella* situated invariably within an ambulatory hall and a pyramidal tower formed by an accumulation of storey after storey in receding dimensions. These are to be regarded as the distinctive characteristics of a *Drāviḍa* temple. The second type of Gupta storeyed temple, showing the beginnings of such a ground-plan and elevation, may reasonably be recognized to have been its precursor. These two styles of temples also exhibit a few other definitive features which may be found respectively in the above two types of Gupta temples.

(*i*) *Nāgara Style*

The *Nāgara* style of temple architecture has a long and varied history. The development of the Gupta archetypal design was concerned chiefly with the two basic factors of the style. The cruciform ground-plan began in the Gupta temples with a single projection on each face. This arrangement led to a division of the wall on each side into three vertical planes or surfaces (*rathakas, rathas*) and the corresponding plan came to be

known as *triratha.* In course of time the number of projections was increased for greater diversification of the walls and there emerged *pañcaratha, saptaratha* and even *navaratha* plans. The form of the *śikhara,* hardly recognizable in the extremely dilapidated Gupta monuments, gradually assumed a pleasing curvilinear shape. The unbroken contour of the tower together with the projections of the plan carried up the body in a similar manner led to an emphasis on vertical lines, further enhanced by a progressive increase of height. The term *rekha,* applied to this form of the *śikhara* in the Orissan canonical texts, is very appropriate.

Temples with the above distinctive characteristic of the *Nāgara* style are distributed over a greater part of India, from the Himālayas in the north to Bijāpur district in the south, from the Punjab in the west to Bengal in the east. In other words, the style transcends the canonical limit far to the south. There appeared regional variations and ramifications in the formal development of the style, though they did not alter its basic characteristics.

Of all the regional developments of the *Nāgara* style that of Orissa is one of the most remarkable. The Orissan temple remains nearest to the original archetype and has justly been described as exhibiting the *Nāgara* style 'in its greatest purity.' In Orissa is found again a set of canons of architecture and the terms they use to designate different sections and parts of the temple may be applicable also to other temple groups of the *Nāgara* style.

The typical Orissan temple comprises two main features: the sanctum *cella* covered by the curvilinear tower and the assembly hall (*maṇḍapa*), called *jagamohana* in Orissa, surmounted by a pyramidal roof formed by a succession of receding platforms or *piḍhās.* The latter is called the *piḍhā deul* in distinction to the former which is known as the *rekha.* Each of these two components offers a counterplay in the design of the other and along the vertical axis each is divided into a number of distinct sections, called respectively the *piṣṭa* (basement platform, not an essential part though), the *bāḍa* (cube of the sanctum *cella* or of the assembly hall), the *gaṇḍī* (superstructure) and the *mastaka* (parts forming the crowning section). The three lower ones are square in cross section while the *mastaka,* of which the topmost part is the *āmalaka,* is circular. Each of these sections has further subdivisions of which those of the *bāḍa* may be useful for a study of the evolutionary sequence.

Temple building activity in Orissa is centred round the sacred city of Bhuvaneśvara extending along the coast in the north-east and south-west and covering roughly the present area of the State. The earliest temples in Orissa (Śatrughneśvara group, Paścimeśvara, Mārkaṇḍeyeśvara and Bhuvaneśvara), all more or less fragmentary, have close affinity with the archetypal design of the Gupta *śikhara* temple. Each of them consists of a square sanctum *cella, triratha* in plan, surmounted by a tower which

in the last two has a distinctly curvilinear contour. In conformity with the *triratha* plan the *bāḍa* is divided into three segments along the vertical axis, namely the *pābhāga* or the plinth, the *jāṅgha* or the wall section and the *baraṇḍa* or the transition from the *bāḍa* to the *gaṇḍī*. This last has the shape of a recessed frieze of sculptures between two projecting mouldings. The *rathas* are carried up the body of the *gaṇḍī* as *pagas*. Next comes the finely preserved Paraśurāmeśvara temple (Bhuvaneśvara) which illustrates an advance on the archetypal design in its anticipation of the future *pañcaratha* plan and in having in front a *maṇḍapa* (*jagamohana*) with a clerestory roof. The small but exquisitely decorated Mukteśvara temple (Bhuvaneśvara) is perhaps the finest monument of this early style. The sanctum *cella* and its *jagamohana*, now more organically related, stand within a balustraded court with an elegant *toraṇa* in front—two columns supporting a superstructure of arched shape. The sanctum is *pañcaratha* in plan and the *jagamohana* with a pyramidal superstructure approaches more nearly the typical Orissan form of the *piḍhā deul*. The *pagas* on *gaṇḍī*, in continuation of the *rathas* in the lower section, are named in Orissan canons *rāhā-paga* (the central one), *anurāhā-paga* (two intermediate ones on either side of the central) and *koṇaka-paga* (the two corner ones). Along the vertical axis the *bāḍa* is, in each case, divided into three sections, as in the earlier temples, the moulding of the *pābhāga* and the treatment of *jāṅgha* and *baraṇḍa* being much more elegant. The *śikhara* likewise is superbly treated. With the corners carefully rounded off and the surface covered with exquisite ornamentation, the most important being the delicate tracery of *caitya* window motifs, the entire effect is one of sensitive refinement.

The Mukteśvara does not as yet signify any definite departure from the archetypal design of the *Nāgara* temple. Belonging approximately to the 9th century A.D., it represents a mature expression of the *Nāgara* temple in Orissa. Temples of similar design and form may be found in other *Nāgara* zones indicating a stage in the evolution of the *Nāgara* temple prior to the emergence of any regional characteristics. The Siddheśvara, the Kedāreśvara and the Brahmeśvara temples (Bhuvaneśvara) represent the transition from the *Nāgara* form to the typical Orissan form. Of these, the last is dated in the second half of the 11th century. In each of these temples, along with a *pañcaratha* ground-plan there is fivefold division of the *bāḍa*, the *jāṅgha* being subdivided into lower and upper sections by one or more courses of mouldings (*bāndhanā*) running along its middle. There is a greater number of mouldings in the *pābhāga* and the *baraṇḍa* take the shape of several courses of shallow mouldings. Again, at the bottom the *gaṇḍī* is found to have *śikhara* replicas (*aṅga-śikharas*), one on each *paga*, and the figure of a rampant lion projecting from the *rāhā-paga* on each face. In the Brahmeśvara the *jagamohana* roof is surmounted by a domical member with the *āmalaka* as its crown. These are new developments, absent in the

earlier temples of the *Nāgara* design in Orissa, but immensely significant for their ultimate crystallization into distinctive characteristics of the later Orissan temples. These characteristics exclusively confined to monuments in Orissa, may be described as typically Orissan. With the rounding off of the sharp angles at the corners there was a tendency of the different sections of the *gaṇḍī* being transformed into miniature *śikhara* replicas, an early stage of which is to be recognized in the above three temples. In Orissa this tendency found emphatic expression in the Rājāraṇī temple (Bhuvaneśvara), notable also for its rich exterior decoration. But its many *aṅga-śikharas,* each with its own mass and volume, had the effect of breaking up and dissolving the forceful outline of the *rekha* tower which seems to have been of great significance to the Orissan builders. Naturally then, they could hardly accept a position in which the essential prerequisite of the *rekhā* tower was likely to suffer. By the close of the 11th century A.D. a happy solution was reached by confining the *aṅga-śikharas* to the *anurāhā-pagas* only, and casually to the *rāhā-paga* on the front face; this was done in such a manner as not to disturb the linear ascent of the main tower.

In course of time the *Nāgara* temple in Orissa assumed a particular and individual form. Its principal characteristics were the five-fold division of the *bāḍa* and *aṅga-śikharas* on the *anurāhā-pagas,* besides rampant *gaja-siṁha* motif projecting from the *rāhā-paga* of the *gaṇḍī* on each face. The majestic temple of Liṅgarāja (Bhuvaneśvara) represents this Orissan type in its maturity. Situated within a large quadrangular court, enclosed by massive walls and with a monumental portal in the east, the complex consists of four adjuncts extending in axial length from east to west, viz., *bhoga-maṇḍapa* (refectory hall), *nāṭa-maṇḍapa* (dancing hall), *jagamohana* (audience hall) and the *deul* or the sanctuary proper. Of these, the *deul* and the *jagamohana* constitute the original scheme; the other two are later additions. In the original scheme all the characteristic features of the typical Orissan temple are displayed in the most elegant and organic manner. The great tower of the *deul* rises to a height of 50 metres. The height of the pyramidal roof of the *jagamohana* is a little over 30 metres. In the tower the stupendous mass is effectively broken up by the vertical *pagas,* while the *aṅga-śikharas* on the *anurāhās* ascending in graduated courses add to the fluency of the outline. The pyramidal mass of the *jagamohana,* again, is broken up in horizontal sections. In each the plastically modelled mass of different forms offers an effective counterplay in the design of the other. Judged as a whole, the Liṅgarāja temple is one of the supreme creations of Indian architecture, representing the Orissan temple in its most brilliant expression.

The Liṅgarāja, which is to be dated about A.D. 1100, supplied the norm to subsequent generations. Of the temples built on this model, few, not even the celebrated Jagannātha temple at Purī, reach the massive grandeur

and dignity of the Liṅgarāja. However, the far-famed Sun temple at Konārak, built during the reign of Narasiṁha I (A.D. 1238–64), excels the Liṅgarāja in the nobility of its conception and the perfection of its finish. Grand and impressive even in its ruin, the Konārak temple represents the fulfilment and finality of the Orissan architectural movement.

The Vaital *deul* at Bhuvaneśvara, with its rectangular plan and vaulted roof of two stages, belongs to a conception that is apparently alien to Orissa. A few other temples of this design and form are to be found in Orissa and other parts of Northern India. In Orissa the type is known as *Khākharā.*

In Central India was developed another expression of the *Nāgara* style, typical temples being found at Khajurāho (Madhya Pradesh). The direction of development of the *Nāgara* design here was almost the same as in Orissa. The evolutionary process had a full and unrestrained play in Central India where the *Nāgara* temple reached one of its most exuberant expressions. The process was a long one and temples in different parts of this region illustrate identical stages of development, as in Orissa, till the emergence of typical Central Indian features.

The process of variegating the temple structure by dividing and subdividing the body, both horizontally and vertically, was carried a little further in Central India. A typical Central Indian temple is usually *saptaratha* in plan and the cube of the *bāḍa* is divided into seven sections by two *bāndhanās.* The *jāṅghas,* thus diversified horizontally as well as vertically, offer a background for a pageant of elegant sculptures, all conforming to the varied composition of the walls. The evolutionary tendency with regard to *aṅga-śikharas* was carried to its logical conclusion, clusters of them imparting a plasticity and volume hardly paralleled elsewhere. Boldly projected and rising one above the other, they signify a restless upward urge which, not infrequently, hampers disciplined movement. This restlessness is indicated further by projections of the *pagas* beyond the top of the *gaṇḍī.* Another typical feature is supplied by *āmalakas* forming the crowning member of the principal *śikhara* and of the *aṅga-śikharas.*

A typical Central Indian temple is, again, a component of a large number of elements, all joined together in one axial length and raised over a substantial and solid terrace. From the back to the front they are the *garbhagṛha* (sanctum *cella*), the *antarāla* (vestibule), the *maṇḍapa* (audience hall) and the *ardha-maṇḍapa* (frontal portico hall), the last leading to the tall flight of steps forming an impressive approach. The first is covered by a *śikhara,* the second by an ornamental pediment abutting on the *śikhara,* and the third and the fourth by a *piḍhā* roof with a slight domical outline. In Orissa such halls are usually astylar, but in Central India pillars have been introduced in the interior as well as at the lateral ends to support the roof. These pillars with their architraves, supporting the domed ceiling, afford suitable background for elegant carvings with the

result that the interior of these halls is richly ornamented in strong contrast to the bare and dull appearance of the interior of the Orissan hall. Again, the halls in Orissa are closed, but in Central India they are open on the lateral sides, the openings between the pillars forming balconied windows shaded by projecting eaves. Along the sides there are seats (*kakṣāsanas*) with sloping balustrades. In the more ambitious monuments the sides of the *maṇḍapa* hall form transepts which, going round the sanctum *cella,* constitute an inner ambulatory with balconied windows on three sides. These openings not only provide well-lighted halls, but also throw intense shadows athwart the intermediate section of the complex, providing a sharp contrast to the solids in the lower and upper sections of the temple scheme. This contrast of solids and voids lends an unparalleled effect.

The typical Central Indian characteristics, gradually evolved, reached their fruition in the temples at Khajurāho of which the Kandarya Mahādeva represents the most notable creation. The course of evolution is indicated by several interesting temples in different parts of Central India. The *Pañcaratha* temple at Baroli (near the Chambal falls), with three divisions of the *bāḍa,* introduces for the first time the double *āmalaka* and projections of the *pagas* beyond the *gaṇḍī.* The Amarkaṇṭaka temples of Keśavanārāyaṇa, Macchendranātha and Pātāleśvara have a sanctum, an *antarāla* and a *maṇḍapa* as a unified scheme, and along with the *Pañcaratha* plan with fivefold division of the *bāḍa,* exhibit balconied windows and *kakṣāsanas* on the lateral sides of the *maṇḍapa* hall; the last two are a central complement of four pillars for support of the roof. The triple shrined temple of Karṇa at Amarkaṇṭaka has three shrines, each laid out in the *saptaratha* plan with a sevenfold division of the *bāḍa.* The Virāṭeśvara Śiva temple at Sohāgpur (Rewā district) records further advance with the sanctum, *antarāla, maṇḍapa* and *ardha-maṇḍapa,* all on the same axis raised over a common low platform; compositionally the Central Indian temple complex may be said to have reached its typical form in this structure. With three tiers of elegant sculptures in three sections of the *jāṅgahas* separated by *bāndhanās* and a line of *aṅga-śikharas,* one on each *paga,* with the *rāhā* repeating the pattern on a bigger scale, the Virāṭeśvara Śiva temple offers the nearest approach to the typical Central Indian style which is at its richest in the magnificent creations at Khajurāho.

The Khajurāho temples were built during the supremacy of the Candella rulers of Jejākabhukti. In spite of a general agreement in plan and composition, they admit of a division into two broad groups. A few temples (Vāmana, Ādinātha, etc.) without the *aṅga-śikharas* around the main *śikhara* illustrate probably the earlier structural practice. The majority (the most eminent being the Devī Jagadambā, Dulādeo, Pārśvanātha, Lakṣmaṇa, Viśvanātha and Kandarya Mahādeva), however, show an exuberant play of *aṅga-śikharas.* This group may be further subdivided into what

may be described as *nirandhāra* and *sāndhāra* temples, the former is without the inner ambulatory and the latter has this feature formed by the continuation of the transepts of the *maṇḍapa* around the sanctum *cella*. The Kandarya Mahādeva temple represents the peak point of the Central Indian architectural movement, and is at once brilliant in its conception and imposing in its perfect finish and grace. In vertical section the temple is seen to be a mountain of masonry with the superstructures of the different components rising and falling alternately and ultimately converging on the main tower. The three elaborate tiers of sculptures (nearly 900 in number) on the *jāṅgha,* following the alternate projections and recesses of the plan, present an animated throng of plastic forms 'shapely in appearance, exquisite in workmanship and of inexhaustible interest.' The temple, indeed, pulsates with vitality not ordinarily met with in the art of building.

In Gujarāt and Rājasthān there is another ramification of the *Nāgara* temple style. As in Orissa and Central India, *Nāgara* temple building activity started rather early with temples of *triratha* plan ultimately developing into *pañcaratha*. Monuments of this class are found both in Gujarāt (Rhoda, Pasthar, Sutrapada, Sandera, Miāni) and Rājasthān (Osian). In Gujarāt many of the early *Nāgara* temples appear to have been provided with a wooden ambulatory around the sanctum. This feature, unknown in early *Nāgara* temples elsewhere, seems to have been an exotic development in this region. The earliest and most eminent temple of this type is that at Gop in the Barda hills, in which the square sanctum *cella*, with a roof of two stepped courses crowned by a graceful domical finial, had in all probability, wooden ambulatory around.

It was during the time of the Caulukya or Solāṅkī rulers of Aṇahilapāṭaka that the characteristics of the *Nāgara* temple in Gujarāt took a precise form. This development has been called Solāṅkī, after the rulers. The term may be extended to include an identical development in Rājasthān, especially in view of the fact that in the days of their greatness the Solāṅkī rulers held substantial parts of Rājasthān under their sway.

The general scheme of a Solāṅkī temple consists of the sanctum and the pillared *maṇḍapa* combined in axial length. In more ambitious conceptions, there are additional complements of a *sabhā-maṇḍapa,* a *kīrti-toraṇa* and a sacred tank; each is a detached creation but axially situated in relation to the principal scheme. To a certain extent the Solāṅkī temple reveals in its composition several parallel features with the Central Indian temple, e.g., pillared arrangement of the ancillary halls, windows and *kakṣāsanas,* occasional occurence of *sāndhāra* design, appearance, in a few instances, of such Central Indian features as extensions of *pagas* and double *āmalaka*. There is, however, a difference in their treatment and tone. The pillared arrangement of the hall in Western India is more elaborate and the decorations richer. The Western Indian builders

devised the more efficient mode of octagonal grouping of pillars in the interior, and joining them by flying ornamental struts springing from the pillars and meeting the architraves at the apex. The concentric courses of the ceilings are finely conceived and richly wrought in the manner of delicate filigree work (Dilwārā temples, Mount Abu). In the subdued light the varied decorations of the different component parts, intricately designed and minutely executed, add to the pleasing effect of the interior.

The Solāṅkī temple differs from the Central Indian or the Orissan temple in some fundamental aspects of planning and elevation. In plan the sanctum is normally *pañcaratha* with the *bāḍa* divided into three sections along the vertical axis. The practice of balancing the vertical chases formed by the *rathaka* projections with horizontal segments in the *bāḍa,* as one finds in Orissa and Central India, is absent in the Western Indian temple. Apart from the *rathaka* projections the Western builders have used in several instances a different mode of diversifying the exterior walls with vertical chases. The technique is to rotate the square of the plan on its own axis and to stop at required intervals—this gives a foliated star-shaped plan in the exterior. The mode is not entirely unknown in other zones of the *Nāgara* style. It seems to be a different application of the same idea that inspired the introduction of the system of adding *rathaka* projections on the exterior walls of the early *Nāgara* temple, and is known to have been used in a substantial measure in the Deccan and Mālava as also in the Cālukya and the Hoysala territories. In Western India, again, a cornice extending in the form of a sloping eave over the frontal parts serves as the *baraṇḍa* or transition between the cubical and curvilinear sections of the temple elevation, thereby presenting a significant deviation from the form of that section in the *Nāgara* temple or its ramifications, the Orissan and the Central Indian. The *aṅga-śikharas* in the Western Indian temple are emphatic in expression, no doubt, but four-square in shape, they are subordinated to and kept strictly within the linear arrangement of the *pagas* of the main tower of Mahādeva temple at Sunak, Gujarāt and Jaina temples at Kumbharia, Rājasthān.

Among the many temples in Gujarāt and Rājasthān, brief mention may be made of two complexes as representing the Western Indian type of temple in its full maturity. One is the impressive ruins of the Sun temple at Modhera. The entire scheme is raised on a paved terrace and resolves itself into three principal components—a large rectangular reservoir with flagged flights of steps interspaced by small shrines, the lofty *kīrti-toraṇa* and the open pillared hall (*sabhā-maṇḍapa*) of cruciform shape; this is placed diagonally with the axial line of the next component consisting of the sanctum and its adjoining *maṇḍapa.* All these components are skillfully adjusted to one another in a manner that results in the production of an organic and effective unit out of these three seemingly separate compositions. Bereft of the superstructure, which has collapsed in each

component, the scheme is now a mere shell of what it was in its original state. But the structural propriety of the various parts as well as of the whole, the rich and varied embellishments which match and blend with the architectural lineaments (seen best in the *sabhā-maṇḍapa* aptly described as 'a magnificent pile of pillared splendour') and the sense of organic unity, all combine to rank this complex among the supreme creations of Indian genius. The Jaina temples at Dilwārā have put to admirable use the white Makrāna marble of Rājasthān. The best works are to be seen in the temples associated with the names of Vimala (A.D. 1031) and Tejapāla (A.D. 1230). Each complex, besides the principal elements, has a colonnaded cloister of cells around (*devakulikā*); it is in the cloister and the *sabhā-maṇḍapa* that the infinite skill of the artists has been expended and 'the crisp, thin, shell-like treatment of the marble', as seen on the pillars, architraves, ceilings and colonnades, surpasses anything seen elsewhere.

The Deccan temples of the *Nāgara* conception fall into two well defined groups. The earlier group is confined to Southern Deccan, in the Kṛṣṇā-Tuṅgabhadrā basin, while monuments of the later group are found scattered over the western part of Upper Deccan in the region of Khāndesh and its neighbourhood. In respect of shape and form this later series, illustrating yet another distinct type of the *Nāgara* style, is affiliated to a group of temples in Mālava and the adjoining regions. A study of the distribution of temples of this series reveals that the territory covered by them was for some time under the hegemony of the Paramāras of Mālava. It is during this Paramāra hegemony again that the type reaches mature expression. It may hence be designated as Paramāra after the name of the dynasty, or as Mālava after the name of the territory forming the nucleus of the Paramāra dominions.

Temples with the early form of the *śikhara* are found side by side with the *Drāviḍa* at Aihole, Paṭṭadakal, Mahākūṭeśvara and Alampur, all in the Kṛṣṇā-Tuṅgabhadrā basin. Such temples bear the characteristic features of the early *Nāgara* temple, though the attenuated and globular shape of the *āmalaka* provides a significant divergence. There are temples (e.g., Pāpanātha at Paṭṭadakal and Viśva-Brahmā at Alampur) in which the essential idea that governed the composition was more of *Drāviḍa* extraction than of *Nāgara,* the impact of the latter conception being emphatically expressed in each case by the curvilinear *śikhara* surmounting the sanctum *cella.* It should be observed that this co-existence of two apparently differing conceptions of temples, the *Nāgara* and the *Drāviḍa,* helped the fusion of ideas and elements and led, in course of time, to a new, though hybrid, style of great prolixity and richness.

The distinctive expression of the *Nāgara* style designated as the Mālava or Paramāra comes into view as fully formed, since there is no extant temple of a transitional stage to help us in tracing the gradual evolution of

the type. Two notable monuments belonging to the second half of the 11th century A.D., the temple at Ambaranātha (Thāna district, Mahārāshtra) and the Nīlakaṇṭheśvara temple at Udayapur (Madhya Pradesh), illustrate the type in its mature expression, and indicate respectively its southern and northern limits. Important conceptions of the type are to be found in between, especially in the region between the lower reaches of the Narmadā and the upper course of the Godāvarī.

A temple of this characteristic type consists usually of the sanctum and the *maṇḍapa* which sometimes have the appearance of being joined diagonally to each other on account of the great diversity in the exterior walls, broken up by a multiplicity of vertical chases. The earlier division of the *bāḍa* into three main horizontal sections is, however, maintained all through. The vertical chases are obtained either by the usual system of *rathaka* projections or on the principle of rotating the square of the plan on its axis, leading to the production of foliated angles in between the projected central offsets (*rathakas*) on the four faces which are made to run parallel with the square plan of the sanctum in the interior. In either case, the central offset on each face of the sanctum cube is carried and continued on the body of the *śikhara* upto its top as an unbroken vertical band covered all through by rich tracery of *caitya* window motifs. These prominent bands, following the main contours of the *śikhara* on the four sides, act, so to say, as spines to keep the latter in shape. The vertical chases in between the spines are filled in upto the top by horizontal tiers of miniature *śikharas* diminishing in size as they go up. Here we have a new interpretation of the theme of the *aṅga-śikhara* in which the disturbing effect on the contours is effectively held in check by the strongly pronounced vertical spines. The latter, with their emphatic verticalism, keep the *aṅga-śikharas* subordinated to the principal design. The finest monument of this distinctive expression is furnished by the Nīlakaṇṭheśvara temple at Udayapur, built by the Paramāra king Udayāditya and hence known also as Udayeśvara. Here, all the above characteristics are found to be coherently designed and exquisitely treated.

In the upper belt of Northern India, in the rich riverine plains watered by the Sindhu and the Gaṅgā-Yamunā systems, very few old temples now survive, possibly on account of the political cataclysm from which the territory had repeatedly suffered. The extant monuments claiming some antiquity indicate, as is to be expected, that this long stretch of country was familiar with the *Nāgara* temple and must have used that design in pre-Muslim days. A few dilapidated brick temples in Uttar Pradesh (Parauli, Kurari and Tinduli, all in Fatehpur district) exhibit characteristics of the early *Nāgara* style, except for their preference for a circular shape in which respect they are related to temples of like design in Central India (Gurgi Masaun and Candrehe in Rewa district). Besides, in the north-west, in the Himālayan regions are found several temples (Masrur

and Baijnāth in Kāngra, Chamba and Bajaura in Kulu) decidedly of early *Nāgara* conception, while in the east, in West Bengal and the adjoining region of Chota Nāgpur, the same conception is illustrated by a number of monuments such as brick temple at Sat Deuliyā, Siddheśvara brick temple at Bahulārā, brick temple known as Jaṭār *Deul*, the temples at Dehār, all in West Bengal, and the temples at Pārā, Borām and Dulmi, among others, in Chota Nāgpur.

(*ii*) *Drāviḍa Style*

The nucleus of the *Drāviḍa* temple is the storeyed form of the Gupta temple, and the rock-cut *rathas* of Mahābalipuram (7th century A.D.) supply an interesting stage in the evolution of the *Drāviḍa* style. Everyone of the *rathas,* except the Draupadī, exhibits a storeyed elevation of the roof, each storey terminating in a convex rolled cornice ornamented with *caitya* window arches. The walls of the ground storey are broken up by pilasters and sculptured niches, while the upper storeys are surrounded by small pavilions. In spite of this general resemblance, there may berecognized divergences in shape and form. Among these, the square and the rectangular forms seem to be significant for future developments. The former, represented best by the Dharmarāja and the Arjuna *rathas,* has the storeyed roof topped by a domical member, the *stūpī* or *stūpikā*. The latter, illustrated by the Bhīma and the Gaṇeśa *rathas,* has an elongated barrel-shaped vault, with gable at the two ends, as the crowning element of the roof. In these two forms one may recognise the origin of the two fundamental components of the full-fledged *Drāviḍa* temple—the *vimāna* representing the sanctum with its tall pyramidal tower, and the *gopuram* or the immense pile of the gateway leading to the temple enclosure. At Mahābalipuram the square and the rectangular types of *rathas* appear each as an independent conception. Their association together to form two important elements of the *Drāviḍa* temple complex was yet to come.

With its beginnings in two distinct types of Pallava rock-cut *rathas* in the first half of the 7th century A.D., the *Drāviḍa* style passes through a long process of evolution and elaboration under different dynasties of kings which came to be politically supreme in the South. The style flourished for nearly a thousand years and, confined within a comparatively small area, remained more or less compact and unilateral. A succession of datable monuments, spread over the southern end of the peninsula, supplies definite landmarks in the development of the style. This long period of activity may be divided into several well-marked phases, corresponding, in a large measure, to the significant political changes in the territory. Each succeeding phase starts with the heritage of the preceding one, leading the style, along with a richer elaboration and maturity, to its

ultimate fulfilment. There is no real break in the continuity of the tradition, and strongly marked individualities, constituting the distinctive characteristics of the style, remain prominent throughout.

The rock-cut method of the initial phase was replaced by the structural during the reign of Narasiṁhavarman II, also known as Rājasiṁha Pallava (*c.* A.D. 700–728). The change to the structural mode furnished the builders with more powers and freedom and the results are obvious in the striking advance that became perceptible within a generation. The Shore temple at Mahābalipuram, possibly the first to be built, consists of two shrines, symmetrically joined to each other, each having its own pyramidal tower complete with *stūpikā* and finial. In this example, a formal temple scheme is found to be in a process of formation. Being the first of its kind, the different elements in the structure are somewhat loosely knit and lack coherence. An organic and unified conception of a temple scheme in which all the appurtenances, that were to be distinctive of the *Drāviḍa* style, are clearly expressed and harmoniously adjusted to one another, first comes into view in the celebrated Kailāsanātha temple at Kāñcīpuram, also built by Rājasiṁha Pallava. This complex consists of the sanctum with its pyramidal tower and a pillared hall or *maṇḍapa* with flat roof, both situated in an axial line within a rectangular court composed of a series of cells. In the pyramidal tower there is far greater harmony in the different storeyed stages leading to a more effective design of great beauty and graceful contours. In the middle of the peristyle on the east and in one axial line with the sanctum and its *maṇḍapa*, there is a rectangular building with a barrel-vaulted roof. Though now serving as a subsidiary chapel, it is not difficult to find in this building the original entrance to the temple enclosure. With all the appurtenances, like the walled court, the *gopuram*, the pillared *maṇḍapa* and the *vimāna*, all complete and in their forms and positions, the Kailāsanātha temple at Kāñcīpuram may be described as one of the key monuments of the early *Drāviḍa* style. A more developed sense of composition is clearly evident in the Vaikuṇṭha Perumāl temple at Kāñcīpuram, probably slightly later in date.

In these early Pallava monuments, the *Drāviḍa* temple may be said to have attained its definitive form and character. Outside the limits of the Drāviḍa country, in the Cālukyan territory to the north of the Kṛṣṇā, the *Drāviḍa* style in its fundamental conception was already known. Among the monuments of this style in this area, the most notable is the Virūpākṣa temple at Paṭṭadakal (2nd quarter of the 8th century A.D.). There are reasons to believe that its design was inspired by that of the Kailāsanātha temple at Kāñcīpuram. The most outstanding monument of the *Drāviḍa* conception further north, and perhaps a unique creation of Indian architectural art, is the famous Kailāsa temple at Ellora. An entire temple complex which resolves itself into four principal components (the *vimāna*, 29 m. in height, and its *maṇḍapa* on a lofty stylobate, the Nandī pavilion and

the double-storeyed *gopuram,* all in the same axial length) repeating the fundamental pattern of a *Drāviḍa* temple, as seen in the Kailāsanātha at Kāñcīpuram or the Virūpākṣa at Paṭṭadakal, has been completely hewn out of the living rock. Besides, on either side of the Nandī pavilion there is a free-standing column, nearly 15 metres high from the level of the court which measures 90 metres by 60 metres and is surrounded by cloistered cells. With the immensity of its scheme and the bold technique employed, the Kailāsa temple is certainly a titanic undertaking, superbly executed in respect of composition as well as beauty of decoration, and has been described as 'the world's greatest rock poem'.

Architectural activity in the South continued in the later phase of the Pallava rule. The rich heritage of the Pallava tradition passed on to the Coḷas who supplanted the Pallavas as the dominant power of the South about the end of the 9th century A.D. During the regime of the Coḷas the *Drāviḍa* style enters yet another brilliant and distinctive phase. The early Coḷa monuments are usually small; yet each represents a complete formation in which the relation with the Pallava monuments remains clear and unmistakable. At the same time they display a certain freshness of spirit that may indicate a revivifying of the style from its dormant state in the late Pallava phase. A typical monument of the early Coḷa phase is the Koranganātha at Śrīnivāsanallur, attributed usually to the reign of Parāntaka I (A.D. 907–955). Fundamentally of the same conception as the Pallava temple, it also heralds a new phase in the development of the *Drāviḍa* style under the great Coḷas. A notable feature of this temple is the string-course with a row of griffin heads in the stylobate, entirely a new element which was to become distinctive of the Coḷa development of the style.

Two supreme creations of the *Drāviḍa* temple style are the Bṛhadīśvara temple at Thanjāvūr and the temple of the same name at Gaṅgaikoṇḍacoḷapuram. The first was built by Rājarājacoḷa and the second by his son, Rājendracoḷa. The two are fundamentally identical in composition, shape and form. Each of them stands within a walled quadrangle, approached by an immense *gopuram.* The first has an additional court in front, square in plan. Though identical, the Thanjāvūr temple is bolder in conception. Near the back end of the principal court rises majestically the sanctum with its mighty *vimāna* with the forward complements of the temple complex—a large *maṇḍapa,* a pillared portico and a Nandī pavilion—combined axially in front. Together, they cover a total lengh of 55 metres, while the lofty *vimāna* rises to a height of 58 metres. Not in dimensions alone but in architectural treatment of the whole and in the clarity of the disposition of the parts, each organically related to the other, coupled with a correct sense of decorative scheme, the Thanjāvūr temple is distinguished alike for its rhythm, poise and dignity. The superb treatment of the magnificent pile of the *vimāna,* dominating the entire composition, also calls for a brief mention. Along the vertical axis it is divided into three

principal sections, namely, the upright cube enclosing the sanctum *cella* with its ambulatory, the lofty and massive pyramidal body ascending in thirteen diminishing zones and the graceful dome-shaped *stūpikā* forming the crowning element. The first is 25 metres square rising to a height of 15.2 metres from the base. Along the horizontal section this huge mass is broken up by five projecting bays alternating with recesses, and this theme is continued right up to the top of the pyramidal tower. Along the vertical axis the wall section is divided into two equal stages by a bold and heavy cornice-like moulding that casts a deep horizontal shadow. The bays, above and below, are occupied by image-niches. The pyramidal section of the *vimāna* is evidently a derivation from the Pallava prototype. In the Thanjāvūr *vimāna,* however, the horizontal aspect of the storeyed stages has been deliberately suppressed for the sake of an emphatic vertical contour. In this massive pyramidal pile there is a sense of strength and stability, and at the same time a rhythmical quality of soaring verticalism, accentuated further by the dome-shaped *stūpikā.*

The great temple at Gaṅgaikoṇḍacoḷapuram is larger in horizontal dimensions. Within the court the principal composition occupies a rectangle, about 104 metres by 30.5 metres, with its long axis from east to west, and consists of a large *maṇḍapa* and the massive *vimāna,* the latter 30.5 metres square, connected by an intervening vestibule. The main entrance in the middle of the east wall of the *maṇḍapa* is designed as an impressive portal, while two subsidiary entrances are provided in the north and south walls of the vestibule, each in the shape of a deeply recessed doorway flanked by domineering figures of *dvārapālas.* The *vimāna,* though larger in horizontal dimension, is only 48.8 metres high. The treatment of the lower upright sections is essentially the same as at Thanjāvūr. But in the tapering body above consisting of eight diminishing zones, the introduction of curves, in place of the strongly pronounced straight lines in the previous example, adds a richer note to the creation of Rājendracoḷa. In these two monuments the *Drāviḍa* temple style may be said to have reached its supreme expression. After Rājendracoḷa the style loses much of its force and tends to become more and more ornate and florid, a tendency already envisaged at Gaṅgaikoṇḍacoḷapuram.

(iii) *Vesar, Cālukya or Karṇāṭaka style*

The *Vesara* style of Indian temple architecture has been equated with what is known to the archaeologists as the Cālukyan style, which emerged under the rule of later Cālukyas in the Kannaḍa-speaking region and attained its ripest expression under the Hoysalas. The style may also be designated as *Karṇāṭaka* after the name of the territory in which it developed. This style cannot, however, be said to have an independent origin

but represents 'an outgrowth of the earlier Dravidian style, so modified in its development as to have attained a separate style in their hands.' The beginnings of the development may be traced back to the days of the early Cālukyan kings in the 7th and 8th centuries A.D. At Aihole and Paṭṭadakal and other places, *Drāviḍa* and *Nāgara* temples were being erected side by side. This co-existence afforded an opportunity for a certain admixture of the ideas of the two, leading to the emergence under the later Cālukyan rulers of a seperate development that may be explained as representing a mixed or hybrid style. In this development the *Nāgara* conception played a relatively less important part. It is the *Drāviḍa* conception that formed the nucleus of future developments.

The Cālukyan temple, like the *Drāviḍa,* consists of two principal components, the *vimāna* and the *maṇḍapa* joined by an *antarāla,* with sometimes an additional open *maṇḍapa* in front. The *vimāna* is surmounted by a pyramidal tower of storeyed elevation with a dome-shaped crowning member, while the *maṇḍapa* is covered by a flat roof supported on pillars. In course of time there is a marked tendency to compress the heights of the storeyed stages of the *vimāna.* At the same time ornamental niche motifs, repeated one above the other up the ascent of the tower, simulate the vertical bands of the northern spire. Here, obviously, is an inspiration from the *Nāgara śikhara.* The Cālukyan temple presents an essential divergence from the *Drāviḍa* in not having its sanctum *cella* enclosed within a covered ambulatory. The *maṇḍapas,* again, are usually wider in dimensions than the *vimānas.* In the treatment of the exterior walls there seems to have been a blending, again, of *Nāgara* and *Drāviḍa* ideas. The walls are broken up by *ratha* offsets in the characteristic *Nāgara* fashion, further spaced at regular intervals by pilasters in accordance with the usual *Drāviḍa* mode. The recesses, thus formed, are usually filled up by niches with superstructures of the *Nāgara* or of the *Drāviḍa* style, thus producing a refrain of great artistic beauty. A further elaboration is noticed in the stellate plan based on the system of rotating the square on its axis. In the Cālukyan territory there is only a single example of this plan in the temple of Dodda Basappa at Ḍambal. In the Hoysala temples of Mysore the stellate plan becomes the usual fashion. A few of the Cālukyan temples as well as the Hoysala are distinguished for their multiple-shrined compositions in which two, three or four shrines are arranged around the common *maṇḍapa* hall. Apart from architectural treatment, the Cālukyan temple, or its descendant the Hoysala, is also characterized by an exuberant plastic ornament covering all its external surfaces which seem to have a richly fretted appearance from the base to the top. In the interior the pillars and door-frames, as well as ceilings, are likewise exuberantly treated. Considered as a whole, the Cālukyan temple, together with its offshoot the Hoysala, represents one of the most ornate and florid expressions of Indian architecture. Of this style there are numerous monuments

within the old Cālukyan boundaries. The Hoysala mode is also represented by a large number of temples (the best examples dating not earlier than the 13th century A.D.) in Mysore territory.

The Kalleśvara temple at Kukkanūr and the Jaina temple at Lakkuṇḍi, their external walls broken up by slender pilasters with shrines or identical structural motifs in the recesses so formed, exemplify an initial stage in the development of the style. The introduction of structural motifs in place of figure-sculptures characteristic of the *Drāviḍa* temple, along with the insertion of a number of gable-shaped motifs on the storeyed stages of the tower, though much compressed in height, represent significant innovations on the *Drāviḍa* scheme. The Jaina temple at Lakkuṇḍi has a wide projecting eave of a straight-edged incline around the open pillared hall. The Mukteśvara temple at Chauddadampur contains, in addition to the double-curved cornice over the porches, a smaller eave of the same pattern running around the rest of the building. Such eaves henceforth constitute regular features of the Cālukyan temple scheme. Again, in this temple the ornaments on the exterior walls are far richer, and a greater amount of surface decoration is applied to the mouldings of the plinth. The tower, topped by a domical member with a double flexion, has attained the typical Cālukyan form. The storeyed stages, considerably reduced, are obscured by the exuberant detail that covers the surfaces. The niche-facets in the middle are fully emphasized and, repeated one above the other, simulate more completely the vertical band that characterizes the *Nāgara śikhara.* In the Cauddadampur temple, belonging to the close of the 11th century A.D., the Cālukyan temple may be said to have reached its complete form.

Of the many temples of the next phase a few represent the style at its best. The Kāśī-Viśveśvara temple at Lakkuṇḍi would date back to the later half of the 12th century A.D. It is a double-shrined temple with the second shrine facing the principal complex. The Mahādeva temple at Ittagi (A.D. 1112) forms the central scheme of a number of structures on a common terraced platform. Each of these temples has the usual complements of the Cālukyan temple complex, so organically related to one another as to form a complete whole. Each bears the above distinctive features of the style treated in the most affluent fashion. From the base to the top the entire exterior surface is encrusted with rich ornamental detail, bold in design and exuberant in expression. The deep and crisp plinth mouldings produce a sparkling effect of light and shade. The embellishment of the tower is far more delicate and refined, while the decorative treatment of the doorways excels anything seen till then. In the Ittagi temple the hypostyle hall in front of the complex with its range of many pillars of varied and of almost bewildering patterns and its coffered ceiling of rich and spirited arabesque work, is itself an imposing conception. In each of these two temples is revealed a certain voluptuousness in its wealth of ornamentation, but the scheme, as a whole, still remains

perfectly balanced and expresses the style at its height. The tendency to over-ornamentation finds its full scope in the Hoysala temples which, with their amazing display of sculptural exuberance, betray a certain lack of architectural balance.

B. SCULPTURE AND ICONOGRAPHY

Introduction. The art of sculpture was practised by the people of India from ancient times. Many specimens of different kinds of figures, both animal and human, belonging to the pre-historic and proto-historic ages, have been found in various parts of the country. The materials used at first were generally impermanent, like wood and clay, and rarely of a more durable nature like stone and bronze. As wood does not last for long, no early wooden figures have been found. But clay figurines burnt in fire have been discovered in large numbers and they represent the early attempts of Indian sculptors in the field of plastic modelling and composition. Artistic activity turned soon to the use of harder and more lasting materials like stone and bronze. Numerous terracotta figurines and a few partially preserved stone and bronze figures of the early Indus Valley sites testify to the gradually advancing skill and efficiency of the Indian sculptors of those days. Their knowledge of animal anatomy is also fully borne out by the highly realistic modelling of bulls and other animals carved on terracotta, faience and steatite seals. The style of the sculptural remains of Harappa belonging to the second half of the third millennium B.C. shows that plastic art was practised by the people of the adjacent regions from a much earlier period.

Mauryan and Sunga Sculptures. The next group of extant sculptures belongs to the Mauryan period. As metal and stone were used, many of the human, animal and other sculptural motifs of the Mauryan and following ages are still extant. These are primarily religious in character. Besides animal figures on the capitals of Aśokan edict pillars, there are figures in high and low relief resting on the abacuses. In the succeeding phase, there occur bas-relief carvings on sections of the railings and gateways of the Buddhist *stūpas* at Bhārhut, Sāñcī, etc., and on the facade and interiors of the rock-cut cave temples of Eastern and Western India (Khaṇḍagiri, Udayagiri, Bhājā, Kārle, etc.). The bull capital on the Rāmpurwā column shows a highly developed tectonic quality reminiscent of the modelling of the animal figurines of the early Indus Valley seals. There is some similarity between Indian and Persian or Perso-Hellenic art forms; this can be explained by the fact that, as a unit in the West Asian culture-complex, Indian sculpture had inherited the artistic tradition of West Asia.

The free-standing stone sculptures of the post-Mauryan period found

in Northern India have basic affinities, although they mark different stages of development in the sculptural art. They have been found at Parkham and Baroda near Mathurā, Besnagar and Pāwayā in Gwalior district (Madhya Pradesh), and Lohanipur, Dīdārganj and Patna in Bihār. On the analogy of the inscribed statue of Maṇibhadra Yakṣa found at Pāwayā, the other sculptures have justifiably been recognized as images of Yakṣas and Yakṣiṇīs, the objects of worship in folk-religion. It was mainly the cult images and their accessories that set the standards of plastic modelling in ancient and medieval India.

Image-worship. The practice of making images of various deities for worship does not seem to have been in vogue among the higher orders of the Indo-Aryans of the early Vedic period. But it is highly probable that image-worship was current among the lower orders of the people including the pre-Aryan settlers. Sculptural finds in the early Indus Valley sites, such as the phalli and ring-stones, many terracotta and a few stone figurines, have been considered by certain scholars as cult objects. They have interpreted some words in the *Ṛg-Veda* as deprecatory of this pre-Aryan mode of worship. But while the Vedic sages might condemn the religious practices of the earlier inhabitants, their own sacrifice-ridden religion came to be gradually modified through its long contact with the indigenous cult. With the development of the *Bhakti* cult different religious sects arose. It postulated a deep mystical feeling of single-minded devotion to a personal deity with whom the devotee had intangible moral nexus. The deities were chosen not from the Vedic pantheon but from the folk divinities described in Buddhist and Jaina texts as *Vyantara-devatās,* from mythical ones like Śiva and Śakti and from apotheosized heroes like Vāsudeva-Kṛṣṇa, the Buddha and Mahāvīra. The worshippers of Yakṣas and Nāgas appear to have been the most primitive group and it was primarily their example that was followed by the members of the other sects.

Aniconic Tradition in Early Art and Gradual Appearance of Cult Icons. That the Buddha was not represented in human form in the early stages of his deification emphasizes the aniconic tradition followed by the earlier sculptors of India. Various symbols like the Bodhi tree with the *Vajrāsana* beneath it, the footprints of the Buddha, the *stūpa,* etc., were used in the early Buddhist art for representing the Master. The architectural remains of Bhārhut, Sāñcī and early Amarāvatī testify to this; and the exact period when the first regular icons of the Buddha came as also the region of their origin are still a matter of doubt. Some scholars believe that the Hellenistic artists of Gandhāra were the earliest iconographers, but others give the credit to the indigenous sculptors of Mathurā. It may be incidentally noted that the sculptures made by the former have been reckoned as belonging to the Gandhāra school, while those made by the latter have been ascribed to the Mathurā school. It is probable, however, that the images of the Master came to be made almost simultaneously

by both the schools, for the sculptural and iconographic traits of their respective handiwork differ in essential details. Stone images of the Buddha and the Bodhisattvas have been found in Gandhāra, while such images as well as other sculptures connected with the Brahmanical and Jaina creeds have been discovered at Mathurā. Both these groups can be collectively dated in the first two or three centuries of the Christian era. The fragmentary sculpture with polish on it of the Śuṅga period found at Lohanipur near Patna may stand for a Digambara Jina. One of the earliest images of a Brahmanical deity is that of Śaṁkarṣaṇa-Balarāma. Discovered at Mathurā, it now belongs to the collection of the Lucknow Museum.

Early Epigraphic references to Images and Temples. The followers of the theistic cults wanted the images of the various deities and their accessories for ritual use, and the icons had to be enshrined in temples (the *deva-gṛhas* or *prāsādas*) for regular worship (*nitya pūjā*). In a fragmentary inscription of the 1st century B.C. found at Besnagar, there is a reference to the 'excellent palace of the god Vāsudeva', and it seems certain that an image of the deity had been housed there. In another fragmentary inscription found at Mora, a village near Mathurā, and of the time of the local Śaka Mahākṣatrapa *Ś*oḍāsa mention is made of the enshrinement of 'the five worshipful Vṛṣṇivīras' (*bhāgavatām Vṛṣṇīnām pañcavīrānām pratimā*) in a stone temple (*śaila deva-gṛha*) by a lady named Tosa, possibly of the Śaka race. Many other inscriptions of the early centuries of the Christian era refer to the enshrinement of the divine images belonging to various other theistic cults. That many among them were at the same time excellent examples of sculptural art is proved by the extant specimens. The Mora inscription describes the images of the five Vṛṣṇivīras as 'shining with lustre due to their beautiful bodies' (*jvalata iva parama vapuṣā*). The inscription engraved on the pedestal of the Yakṣa image describes it as Maṇibhadra and refers to its enshrinement by the clan of Maṇibhadra-worshippers (*Maṇibhadrabhaktāḥ*). The discovery of many inscribed and uninscribed images of the Buddha, the Bodhisattvas, the Jinas and their male and female attendants (Yakṣas and Śāsanadevatās) belonging to the early centuries of the Christian era prove how iconism had come to play a great part in the rituals of the various Brahmanical and non-Brahmanical religions of contemporary India.

Icon-making rules in the Late Gupta and Post-Gupta periods. There was a phenomenal development in art during the Gupta age when sculptural representations of divinities were at their best. In this period many changes were introduced in the tenets of the different cults, and with this reorientation new varieties of icons had to be made. There was also an attempt to codify the canons followed by the artists. Some of the Purāṇas, the Upapurāṇas, and the Pāñcarātra and Śaiva Āgamas which appear to have attained their present shape during the late Gupta period and after, contain sections dealing with the characteristic signs of the various

kinds of images (*pratimālakṣaṇas*). The *Bṛhat Saṁhitā* of Varāhamihira, generally assigned to the 6th century A.D., contains a chapter which deals not only with the essential details connected with the iconography of some principal Brahmanical deities, of the Buddha and the Jinas, but also expatiates on the iconometric technicalities. Sections of some of the Mahāpurāṇas like the *Matsya* and *Agni,* a few of the Upapurāṇas like the *Viṣṇudharmottara,* and Āgamas like *Hayaśīrṣa Pañcarātra, Vaikhānasāgama, Suprabhedāgama* and *Aṁśumadbhedāgama,* contain important iconographic and iconometric details useful for the identification and study of Brahmanical icons. Many other works dealing mainly with these and other allied topics, like the *Rūpamaṇḍana, Devatāmūrtiprakaraṇa* and *Śilparatna,* compiled at a much later period are also of great use for the study of medieval Hindu images. Development of theistic Buddhism into Mahāyāna and Vajrayāna forms necessitated the making of various types of the Buddha and Bodhisattva images, and the canons for their construction were codified afterwards. A short Sanskrit text of the medieval period, *Pratimālakṣana* or *Samyak-Sambuddhabhāṣita Pratimālakṣana* deals with the iconography and iconometry of the Buddha image in about fifty couplets. Special types of texts known as *Sādhanamālā* (collection of regulations serving as aids for the progress of the Vajrayāna aspirants in the attainment of the *Śūnyatā* or *Nirvāṇa*), compiled mostly in the late medieval period in Eastern India and Nepāl, contain useful materials for the study of the Mahāyāna and Vajrayāna Buddhist iconography. Canonical literature compiled by the Jaina theologians of the early medieval period are helpful in the study of Jaina iconography.

Divine Images. The codification of rules for the making of varieties of divine images was one of the many factors that contributed to the development of icono-plastic art in India. A brief survey of some of these images connected with the different creeds as developed in medieval times will affirm this observation. The *Vaikhānasāgama,* a medieval Pāñcarātra text, lays down the rules for the making of as many as thirty-six varieties of the *Dhruvaberas* of Viṣṇu, and medieval sculptures partly corresponding to at least some of these textual descriptions have been found. There are also the esoteric concepts of the *Vyūha* (emanatory) and the *Vibhava* (incarnatory) aspects of the Lord Vāsudeva-Viṣṇu as delineated in various Pāñcarātra texts, and numerous images corresponding in essential details to these textual delineations have been discovered. It is true that comparatively a few among them were meant for enshrinement in the main sancta of the Vaiṣṇava shrines, but the numerous others that were used as decorative motifs in the various sections of the temples or the shrines subsidiary to them were also of great interest and importance. The different varieties of the anthropomorphic images of Śiva, comprehensive descriptions of which are found in many of the Śaiva Āgamas, were, however, given a secondary position in Śaiva temples, the main sancta there being

almost invariably occupied by the phallic emblem of Śiva *(Śivaliṅga)*. The Śākta and Saura temples were comparatively few, but varieties of images originally associated with them, descriptions of a good many of which occur in the relevant texts, have been found in all parts of India. The *Sādhanamālā* canons already mentioned, contain descriptions of numerous types of Mahāyāna and Vajrayāna deities, such as the Dhyānī Buddhas, the Dhyānī Bodhisattvas, many male and female deities like Jambhala, Heruka, Yamāri, Tārā and her different aspects, Mārīcī, Nairātmā, Parṇaśavarī and others. Medieval images mostly corresponding to these textual descriptions have been discovered in various parts of India, especially Eastern India. The same remark can be made with regard to Jaina iconographic literature, as well as types of Jaina images more or less similar to the delineations in the texts. The medieval Jaina icons are comparatively abundant in Rājasthān and adjoining regions, where the creed is even now very popular.

Secular Sculptures. The observations made above do not necessarily prove that secular sculptures were never made. A passage in the *Śukranītisāra* says that 'images of divinities' (*devavimba*), even if they are without the characteristic signs, are beneficial to men; those of mortals (*martyavimba*), on the other hand, even if they are endowed with them, are never so. This indicates that statues of royalty and dignitaries were also made. A fragmentary sculpture consisting of only the two feet of a standing human figure firmly planted on a pedestal in the collection of the Mathurā Museum is described in the inscription as 'the image of Mahādaṇḍanāyaka Ulāna' (*Mahādaṇḍanāyakasya Ulānasya pratimā*). This Ulāna appears to have been a Śaka dignitary (commander-in-chief) of the 1st century A.D. The inscribed sculptures of Wima Kadphises, Kaniṣka and the Mahākṣatrapa Caṣṭana found in the vicinity of Mathurā also substantiate this theory. It is true that these Kuṣāṇa emperors especially were endowed with some divine traits, and their statues were placed in royal galleries with some sanctity attached to them, but they could certainly not be put in the same category with the images of gods and goddesses. Sculptures of some Pallava kings, some kings and queens of Vijayanagar of a much later date, as also of other potentates have been found, and many of them again were shown in the attitude of paying homage to the deities they worshipped. Secular sculptures were also being carved in high relief as accessories and decorative motifs on sections of religious structures from a very early period. The funerary monuments of Bharhūt, Sāñcī and Amarāvatī contain scenes depicting divine and secular themes side by side in a very interesting manner. This practice continued afterwards; Indian artists, generally averse to leaving any space on their religious structures uncarved, filled these spaces with reliefs depicting mythological themes connected not only with Buddhism, Jainism and Brahmanical Hinduism, but also with those illustrating the various aspects of secular life. They drew equally on the Jātaka

tales of the Buddha, the life-story of the Jina Pārśvanātha, the *Rāmāyaṇa* and *Kṛṣṇāyaṇa* mythology and the epic stories of Rāma-Rāvaṇa and Kuru-Pāṇḍava wars. They made use of erotic themes which had aberrant developments in the temples of Khajurāho, Bhuvaneśvar and Konārak. Whatever the reasons behind these aberrations, there is little doubt that the ancient and medieval sculptors of India practised the kind of art in which secular and religious elements were intermixed, though the former were usually subordinated to the latter.

Principal chracteristics of Gupta Sculptures. It will be necessary now to refer briefly to some main features of Indian sculptural art in the Gupta age. The sculptures of the Śaka-Kuṣāṇa period belonging to the Mathurā school retained to a great extent the volume and physicality of the earlier folk art. But the Gupta sculptures especially those of the Sārnāth school, though based on early traditions, are clearly indicative of a new aesthetic quality, serving as 'the conscious vehicle of the intellectual and spiritual conceptions of the people'. The youthful human form became the pivot of Gupta sculpture, and was rendered 'in terms of similitudes drawn from various elements of nature'. The sculptors of the age presented the human form in different attitudes, mostly standing and seated, in accordance with the nature of the divine image type which it was meant to represent. The idealized human form again with its delicate curves and nuances was shown to the fullest advantage with the help of diaphanous drapery which revealed more than it concealed. The human figure meant to represent various types of deities and its hands shown in a variety of poses (*mudrās*) which were suggestive characterizations of their individual actions. The major *mudrās* like the *abhaya* (assurance), *varadā* (boon conferring) and *dhyāna* (meditation) are found in earlier sculptures, but Gupta art introduced many more and rendered them all with a great deal of ethereal delicacy. These hand-poses are particularly noticeable in the Buddha figures, one significant variety of which, the *dharmacakra-mudrā,* is a very intelligent rendering of the two separate poses of *jñāna* (attainment of knowledge) and *vyākhyāna* (expounding the knowledge) in a skilful combination. The *āsanas* (sitting postures) and the *sthānaka bhaṅgas* (standing flexions of the body) also attained characteristic variations which were now plastically rendered with graceful poise and spiritual elevation seldom attained in the later art of India. Sārnāth was the principal centre from which radiated the Gupta sculptural tradition to various other parts of India, though it lost much of its charm and delicacy in the course of its migrations.

Post-Gupta and Early Medieval Sculptures. The sculptures of the post-Gupta period, though retaining to some extent the earlier classical idiom, came to be characterized by regional variations which were instrumental in ushering in the medieval schools of sculpture associated with different parts of India. Such regions as Eastern India,

Western India, Gaṅgā-Yamunā valley, Central India, Deccan, the Tamilnād and the extreme North (especially Kashmīr) served as the venues of bands of skilful sculptors who practised their art through the media of stone, bronze and clay. Tārānātha refers to the two famous artists of Gauḍa, Dhīmān and Bīṭpāla, who flourished during the early Pāla period. We are not in a position now to recognize in any of the sculpture groups of medieval Bengal specimens of their handiwork, but we can at least point out one fine medieval image of Sūrya in the collection of the British Museum. This is the work of Amṛta, another Gauḍiyan sculptor of no mean ability, mentioned in two line pedestal inscription in characters of the 10th century A.D. The Pāhārpur reliefs and many other extant sculptures of Eastern India belonging to the early medieval period, mark the intermediate stage in the evolution of the hieratic art of the Pāla period out of local adaptations of the Gupta idioms. In these art objects is to be noticed a growing tendency towards a general heaviness of form also characteristic of the other contemporary art creations. The sensuous element which is manifest in some groups of Pāhārpur sculptures, was to culminate later in the voluptuous figure of Gaṅgā of the Sena period in the collection of the Rājshāhi Museum. But hieratism also developed side by side, and the medieval images of the principal sectarian deities came to be smothered with heavy decorative details not so obtrusively noticeable in classical art.

The Deccan and the Tamilnād witnessed an important outburst of sculptural art in the early medieval period, clearly indicating a heightened aesthetic consciousness of the people. The groups of rock-cut sculptures of Mahābalipuram, Ellora and Elephanta, to name only a few, characterize in a remarkable manner the different phases of this artistic consciousness. The Mahābalipuram reliefs with their intense naturalism and disciplined vitality, the Ellora sculptures with their vivid, dramatic and dynamic presentation of epic themes, and lastly Elephanta with its elemental carvings illustrating in a superb way stories connected with Śiva show how the noble artists of South India could raise the art of sculpture to magnificent heights of aesthetic achievement. The subsequent art creations of Coḷa sculptors of the time of Rājarāja the Great and Rājendracoḷa, though they were remarkable in their own way, could not reach the standard of their earlier counterparts. The Coḷa artists, however, excelled in the casting of metal images, and the bronze images of Naṭarāja and several other deities rank as some of the finest sculptures of India.

C. PAINTINGS

Proto-historic and Pre-historic Paintings. Recent exacavations at Nevāsa have yielded two pieces of pottery bearnig painted representations

of a dog and a deer with a pair of wavy horns. Treated in a generalized manner but with emphasis on linear and plastic movement, sense of volume and feeling for life, these are the earliest specimens of creative painting in India. Potteries painted with geometrical or vegetal patterns are known from the Chalcolithic Indus Valley as well, but they can hardly be considered as creative expressions in meaningful line, volume and colour. Drawings and paintings on the walls of rock-cut caves of primitive people of a relatively later age are also known from other places in India such as Mirzāpur. These are mostly hunting scenes drawn in sharp lines and angles, in isolated units or groups. Full of life and movement, they are presumably of magical significance. It is a far cry from the Pre-historic Indus Valley or Nevāsa to the historical period, and much happened along the arrowline of time of which we have no record until we reach the 5th century B.C.

Both Brahmanical and Buddhist literatures dating back to the pre-Christian period contain numerous references to painting of various types and techniques, to *citrāgāras* or picture galleries, to *lepya-citras, lekhya-citras* and *dhūli-citras. Lepya-citras* were representations of legendary lore, in line and colour on textiles, and were akin to the *carāṇa-citras* of an earlier and *paṭa-citras* of a later tradition. They might as well signify wall-paintings, later known as *bhitti-citras,* or walls and ceilings and floors where colour was applied with a brush. *Lekhya-citras* were probably line drawings or sketches, patterns and designs in colour rendered with a style or brush, and presumably of a decorative nature like *ālimpanas* or *ālpanās* of a later tradition. *Dhūli-citras* were in the same genre, except that the material used was dry powdered rice, white and coloured.

Earliest Evidences about Painting in the Historical Period. Literary records with a direct bearing on the art of painting are indeed numerous, and they show that from very early historical times painting, both secular and religious, was considered an important form of artistic expression and widely practised. The theoretical basis of the art of which there are frequent allusions, led at a later period to the formation of definite principles of theory, technique and classification of various kinds of painting. Of the ancient paintings, however, no specimens exist, since paintings were done generally on perishable materials such as textiles, leaves and barks of trees, and wood, or on semi-permanent materials such as plastered walls. The earliest extant painting of the historical period consists of a few irregular rows of human figures in yellow and ochre, and a band with representation of large aquatic animals in the same colours, arranged in sections of the irregularly vaulted ceiling of the Sītābeṅgā or Yogīmārā caves in the Rāmgarh hills. Enough of these paintings remain to indicate that they were done in 'tempera', and that the artists had considerable knowledge and practice. These paintings have been assigned to about the middle of the 1st century B.C. on the basis of parallelism of

their form with that of the early Sāñcī and Jaggayyapeta sculptured reliefs. Mural paintings in caves nos. IX and X of Ajaṇṭā are also of certain significance in the evolution of painting in the early historical phase. Only small portions of these are preserved, but enough remains to indicate that they are mature works. Certain faint traces of early painting are also found on the walls of the *caitya* cave at Bedsā, but these have been obscured by later whitewashing. The paintings are laid over a fine coat of plaster, finished by another coat of finely polished white priming. The outlines were drawn first in broad sweeps, and details were added later. Natural earth and rock, found locally, formed most of the pigments in which red in different tones, green, grey, brown, yellow and white predominate. These paintings correspond to contemporary tradition in narrative reliefs as at Sāñcī and Buddha Gayā.

Paintings in classical Literature. From extant records, literary and archaeological, the art of painting seems to have achieved a high popularity and an equally high aesthetic and technical standard during the classical period (*c.* A.D. 350–700). The literature of the period, both creative and technical, shows that painting was considered an essential social accomplishment not only in the cities, among members of the upper strata of society including princes, ladies and nobles of the court, but also among members of the various professional guilds and amateurs. The *Kāmasūtra* of Vātsyāyana lists painting as one of the sixty-four *kalās* or fine arts and mentions paints, brushes and drawing-boards as essential accessories of an average citizen (*nāgaraka*). Yaśodhara's commentary on Vātsyāyana's work indicates that attempts were already being made to give theoretical and technical guidance to an increasingly large number of amateurs and professionals practising the art. Yaśodhara refers to the *Ṣaḍāṅga* or six limbs of painting, viz., *rūpabheda, pramāṇas, bhāva, lāvaṇyayojana, sādṛśya* and *varṇikabhaṅga,* even if differently interpreted by various modern scholars, they have a striking similarity with the list of six canons of more or less contemporary texts on Chinese painting. The *Bṛhat Saṁhitā* (*c.* 6th Century A.D.) and the *Viṣṇudharmmottara* (*c.* 7th century A.D.) introduce such technical details as *vajralepa* or method of preparation of the ground for murals, preparation and application of colours, methods of shading, adding highlights, foreshortening of limbs and features, different methods of treating the volume, expression of mood and movement (*bhāva* and *cetanā*) and classification of painting according to themes. All these and other references in contemporary literature, including the works of Bhāsa, Kālidāsa, Viśākhadatta, Bāṇa and Buddhaghoṣa, the Epics and the Purāṇas, leave no doubt that intellectual ferment of the classical period led to serious and detailed thinking about the theory and technique of painting. It was during this period that the aesthetic cannons of the art of painting were formularized.

Classical Paintings. The actual remains of paintings of the period are, however, few in number. There are faint traces of painting on the walls of the caves at Kānheri (cave XIV, 6th century A.D.), Aurangābād (caves III and VI, 6th century A.D.) and Pitalkhora (*caitya* cave I, 6th century A.D.), all in the Deccan, in the facade of a cave at Keonjhar (6th century A.D.) in the North and in the rock-cut temples at Tirumalaipuram (Digambara Jaina, 7th century A.D.) and Malayadipatti (Vaiṣṇava, A.D. 788–840) both in the South. More substantial remains are to be found in the caves at Bāgh (notably cave IV, *c.* A.D. 500), Ajaṇṭā (caves I, II, XVI, XVII, XIX, 6th and 7th century A.D.) and Bādāmi (cave III, 6th centry A.D.); in a Jaina shrine at Śiṭṭaṇṇa-vāśal (7th centry A.D.), and a Śaiva shrine at Kāñcīpuram (Kailāsanātha temple, 7th century A.D.), both in the South; and in the rock-cave at Sigiri in Ceylon (5th-6th centry A.D.). But whether such paintings are from the North, the Deccan, or the South, whether they are Buddhist, Jaina or Brahmanical in content, the norm can best be viewed at Bāgh, Ajaṇṭā and Sigiri. All wall-paintings of the period, *bhitti-citra* of literary texts, belong to a common denominator, formally and technically differentiated to some extent only by those at Ellora of a somewhat later date, where a new tradition emerges.

Technique and Form. An interesting part of the technique of the paintings is the method of preparation of the ground. The *Viṣṇudharmottara* lays down a complete prescription which it calls *vajralepa;* but it appears from the extant paintings that this prescription was not used anywhere. Powdered rock, clay and cowdung not infrequently mixed with chaff or vegetable fibres, sometimes also with *mudga* decoction or molasses, were made into a pastelike substance which was thoroughly and evenly pressed like plaster on the hard and porous surface of the rock. The plaster was then levelled and polished with a trowel and, when still wet, it was overlaid with a coat of fine white lime wash. The ground thus prepared was generally allowed to dry before any colour was applied. Subsequently, the painted surface was lightly varnished. Indian murals of this period and of later periods as well are accordingly *fresco secco* and not true frescoes or *fresco buono.* The outlines were first boldly drawn in *dhāturāga* or red ochre; the contours were then filled in with red, and overlaid with a very thin monochrome *terra verte* so that the red showed through. While the local colour in different tones was applied, the outline was renewed in brown, deep red or black, with thin or broad shading, to give it an effect of rounded three dimensional volume fully modelled. Indian line aims not at calligraphic fineness but at bold and rounded plasticity. If the modelling quality of the line is potent in varying degrees, the modelling quality of colour is equally valid. The latter was done not only by employing of colour shades and tones but also by laying on high lights, to suggest *natonnata* or *uccāvaca* (high and low surface and depth), in varying planes. The figures are thus made to appear in fully rounded and plastic volumes.

The principal colours used were red ochre (*dhāturāga*), vivid red (*kuṁkuma* or *sindūra*), yellow ochre (*haritāla*), indigo blue, lapis lazuli blue, lampblack (*kajjala*), chalk-white (*khaḍi māṭi*), *terra verte* (*geru māṭī*), and green (orpiment or powdered verdigris, *jaṅgal*). All the colours were locally available except lapis lazuli, which was perhaps imported from Jaipur or from a foreign country. Mixed colours were used, for example grey, on rare occasions. Not all the colours were used every where, nor with the same consistency, which was determined by the theme and local atmosphere. Generally speaking, classical Indian painting does not aim at contrasts of a medley of colours, but attempts at saturating the surface with highly charged and dense colours,*terra verte,* Indian red and earth buff, in countless tones and shades. This charged saturation, fully modelled and shaded, adds to the classic dignity of the paintings.

The theme of the extant paintings at Bāgh and Ajaṇṭā, Bādāmi and Śiṭṭaṇṇavāśal is religious. But in their inner meanings and spirit, and in general direction and atmosphere, nothing could be more secular, courtly and sophisticated. The tendency is towards the expression of mood and unfoldment of charm and their appeal is worldly and aesthetic, that is, limited to sensory experience, and not to spiritual in any way. Only a small fraction remains of what must once have covered the entire flat spaces of the caves at Bāgh and Ajaṇṭā. But even these fragments unmistakably portray a crowded world of gods and semi-divine beings, *apsarās* and *kinnaras,* genii and grotesques, a rich and varied flora, of human pageantry and processions, of gaiety and love, grace and charm, sublimity and coarseness, all bathed in the mellow light of the softness and elegance of a highly intellectual, refined and sophisticated civilization. A dramatic panorama of contemporary life, endowed with the richness of expression of refined emotions and sensibilities of a highly cultured society, is rendered with an unequivocal skill. Yet all this is lifted to a high spiritual level by a lofty detachment along with the intensity of subtle and mystical experience in a direct and broad humanistic context.

If Bāgh, Ajaṇṭā and Bādāmī represent the classical tradition of the North and the Deccan at its best, Śiṭṭaṇṇavāśal, Kāñcīpuram, Malayadipatti and Tirumalaipuram show the extent of its penetration in the South. The paintings of Śiṭṭaṇṇavāśal (abode of the Jaina *siddhas*) are intimately connected with Jaina theme and symbology; those at the other three centres are Śaiva or Vaiṣṇava in theme and inspiration. Despite the fluidity and amplitude of plastically modelled curves, contours and lines of the classical tradition, the later medieval tradition is already making itself felt in these paintings—flat and abstract surfaces on the one hand and linear and somewhat angular designs on the other.

Early Medieval Paintings. (*a*) *Deccan.* Of a somewhat later date, perhaps belonging to the 10th and 11th centuries A.D. are the remnants of paintings on the ceilings and walls of a number of caves and

temples excavated out of the living rock at Ellora—Kailāsa, Indrasabhā, Gaṅeśa, Laṅkeśvara Daśāvatāra and Dhumar *Leṇas*, Brahmanical and Jaina in religious affiliation. The general composition of these paintings is measured out in rectangular panels with thick flat borders; they have been conceived within the given limits of frames that hold the paintings. Space, therefore, in the sense of Ajaṇṭā does not exist at Ellora. The technique of preparing the ground and the colours used is, however, the same as in Ajaṇṭā. The majority of the figures and their movements belong to the classical tradition, but with considerable thinning down of the consistency of the modelling itself. The other form and stylistic variety is to be seen in a type of figures and clouds mainly linear in treatment and practically without any modelling of the plastic volume. This general thinning down of the roundness of volume and outline and the angularity of composition has been due to what is called the 'medieval' tendency.

(b) *South India* (*c.* A.D. *1100–1300*).

In south of the Deccan remnents of wall-paintings belonging to this period are still found on the walls of the Vijayālaya Coḷeśvara temple at Nārttāmalai in the erstwhile Pudukkoṭṭai State (*c.* A.D. 1100), in the Bṛhadīśvara temple at Thanjāvūr (*c.* A.D. 1100), on the brick-built walls affixed in front of the cave at Tirumalai in North Arcot (*c.* A.D. 1100) and also in the cave (*c.* A.D. 1300–1350), on the walls of the *Saṅgīta-maṇḍapa* at Tiruparuttikunram in Kāñcīpuram (A.D. 1387–88) and the Ucayappa *maṭha* at Anegundi (about the same date). In all these paintings Coḷa physiognomical and stylistic forms are apparent and the classical values of full roundness of volume and subtle plasticity are retained. But at the same time there is also a strongly perceptible lessening of the consistency of colour-modelling and hence a flattening of the surface, despite ample curves and colour tones. There is also a clear tendency towards sharpening of the lines, in the later paintings at any rate.

(c) *Western India* (*c.* A.D. *1100–1300*).

From what we know of the settlements of 'northern' peoples at least from the beginning of the Christian era to about the 8th and 9th centuries A.D. their impact seems to have been strongest in Western India, mainly in Gujarāt and West Rājasthān, and to some extent in West Mālwa as well. In consequence, 'northern' or 'medieval' traits are most marked in the paintings of those regions. The geographical position of Gujarāt and the adjoining regions made them centres of great international trade, whence the arterial routes to the heart of Northern India lay through Mālwa and Rājasthān. The inland trade was mostly in the hands of Jainas who had always been zealous guardians of past traditions and great patrons of religion and art. Their monastic establishments of which the *bhaṇḍāras* or libraries were invariable integrals, especially those of Mārwār on one side and Kāthiāwār on the other, were important centres of artistic activity.

The first thing that holds one's attention in West Indian paintings is that these are invariably manuscript illustrations in miniature, executed on palm-leaf, and later, from about the middle of the 14th century A.D. on paper which was gradually supplanting palm-leaf as writing material. Palm-leaf was not altogether given up till the beginning, at any rate, of the 15th century A.D. A connected sequence of these paintings is available in a large number of manuscripts, both dated and undated, that range from about the beginning of the 12th to about the end of the 15th century. More than four centuries of these manuscript paintings in miniature, despite a common denominator that belongs to the strong' medieval' factor, do not represent one integrated style in a regular process of evolution. The common denominator is easily known by the sharp and pointed lines flatly laid in thin or thick strokes; by the almost flat laying of colours in two-dimensional effect with only the slightest suggestion of modelled plasticity; by the treatment of the eyes, nose and body-joints that are given an accentuated appearance and effect through overall emphasis on sharp pointed angles and lines; by the flat treatment of all decorative and architectural devices; and by certain geometrical decorative designs that are typically 'northern'. West Indian miniature paintings are highly stylized and conventional, cold and mechanical. Technically, however, they are examples of perfect craftsmanship and pure pictorial significance.

(d) *Eastern India and Nepāl* (*c.* A.D. *950–1300*).

Specimens of painting datable earlier than the period of Pāla culture have not yet been found anywhere in Eastern India or Nepāl. Extant specimens of early paintings in Eastern India, up to the 13th century A.D. at any rate, are illustrations on palm-leaf and paper manuscripts, and on their wooden covers. These illuminations are almost all, with a few exceptions, of Vajrayāna Buddhist inspiration. The miniatures do not represent a separate style of book-illustration; they are, in fact, mural paintings in reduced dimensions, and can in no way be compared with the truly characteristic phase of book-illustration that constitutes a fascinating chapter in the history of painting in Persia, China, Medieval Europe and late Medieval India. Nor have they anything to do with folk-painting; on the other hand, they reveal an already developed form and technique intimately linked with an art practice which must have existed in the form of large wall-paintings or manuscript illustrations that continued uninterrupted the earlier tradition of Bāgh and Ajaṇṭā. The colours used are orpiment yellow, white, indigo blue, Indian ink-black or *kajjala,* cinnabar red and green which appers to be a mixture of orpiment and indigo, unlike the green of Ajaṇṭā. All these colours are used in different shades. Tonality of colours is practically unknown, but highlights are given by the application of white. Compositionally, these illuminations follow certain well-known schematic principles of balance.

With the help of dated manuscripts, it is possible to arrange these miniatures in a rough chronological sequence—this, however, will hardly show any stylistic evolution. Formally and psychologically the miniatures are conventional, and inevitably betray a traditional outlook. Stylistically, they are painted equivalents of the contemporary plastic art of the Pālas and the Senas, both in outer form and inner meaning; the painter simulated the plastically modelled mass of the sculptor by means of colours applied with varying degrees of thinness or consistency, as also with the help of linear inflexions. The best specimens of this tradition can be seen in the illuminations of two *Prajñāpāramitā* manuscripts executed in the 5th and 6th years of king Mahipāla, the *Gaṇḍavyūha* manuscripts in the possession of S. Roerich, and another *Prajñāpāramitā* manuscript dated, Nepālese era 191, in the Asiatic Society, Calcutta.

East Indian manuscripts refer to the regnal years of the Pāla kings, but those from Nepāl are invariably dated in the Nepālese era. Nepālese paintings comprise not only manuscript-illustrations but also *prabhās* or painted banners and painted wooden manuscript-covers; dated and illuminated manuscripts are known from the 11th century and dated banners from the 16th, though painted Nepālese banners ascribed to the 9th and succeeding centuries were discovered at Tun-huang. The best examples of manuscript paintings are preserved in the libraries of the Cambridge University, the Asiatic Society, Calcutta, and the Bir Library, Kâtmāndu.

D. DANCE, DRAMA AND MUSIC

Dance. The *Ṛg-Veda* mentions dance (*nṛti*) and danseuse (*nṛtu*) and compares the brilliant dawn (*Uṣas*) to a bright-attired danseuse. In the Brāhmaṇas, *Jaiminīya* and *Kauṣītaki,* dance and music are mentioned together. The Epics are full of references to dances on earth and heaven. It is from Bharata's *Nāṭya Śāstra* (2nd century B.C.—2nd century A.D.) that we have full technical knowledge of the art. From this earliest available text on the arts of drama, dance and music, we learn that there were two styles of dance, the forceful manly type called *Tāṇḍava* promulgated by Śiva and the graceful feminine type, *Lāsya,* associated with Pārvatī. The former comprised one hundred and eight poses called *Karaṇas,* built into sequences called *Aṅgahāras. Lāsya,* having soft and graceful movements, is described by Bharata as an interpretative dance in which ten or twelve detached love-motifs are set. It is from *Lāsya* that the classical solo dance and the South Indian nautch (*Bharata Nāṭyam*) were directly derived. A full story composed for dance and gesture-interpretation by a single danseuse also came into vogue. Dance in which there were only beautiful movements was called *nṛtta* and that which had an emotional theme to be mimed was called *nṛtya.* There were several designs executed in the

graceful *Lāsya* to be done by groups of ladies called *Latā* (creeper), *Śṛṅkhalā* (chain) and other patterns (*Piṇḍībandhas*). From poems, prose works and plays, we come to know of the dances that were popular e.g. *Carcarī,* the spring dance, the *Kanduka-nṛtta* or ball-dance, *Chalika, Cillimārga,* and *Yoginīvalayanartana.* In course of time, as the art spread over the country, several new poses and movements as developed in different regions were assimilated. *Karaṇas, Sthānas, Cārīs* (movements of legs) as also *Utplutis, Bhrāmarīs* (jumps and wheeling movements) were added under the caption *Deśī. Deśī-lāsya* with its several new motifs and modes of performance and points of appeal became far more elaborate than the old *Lāsya. Rāsa* and *Hallīsa,* associated with Kṛṣṇa and the Gopīs, *Goṇḍalī* of the hunters of Mahārāshtra codified by Someśvara of Kalyāṇa, and the Śaivite *Peraṇī* are the more prominent among these new dances. New dance-drama types arose in which the elements of song and drama predominated. The great vogue and richness of this art are reflected in the visual arts of these centuries.

Drama. Indigenous tradition as well as modern research trace the origin of Indian drama in the Vedas. In the Vedic sacrifices, with specific dress and directions, action accompanies the recital of texts; also in rites like the purchase of *Soma,* action once performed is reproduced. In the epic *Rāmāyaṇa* we hear of drama troupes of women (*vadhu-nāṭaka saṅghas*). At the time of Paṇini (500 B.C.) two sage-writers, Śilālin and Kṛśāśva, codified the art of the actors into *Naṭa Sūtras.* Kauṭilya's *Arthaśāstra* (*c.* 4th century B.C.) mentions musicians, dancers and dramatic shows, and we already hear of the poet-minister Subandhu writing a play, as a series of Act within an Act and intertwining a Mauryan court intrigue with the Udayana-Vāsavadattā romance. The next epoch is perhaps that of the great Bhāsa who wrote plays based on the stories of Udayana, the *Rāmāyaṇa* and the *Mahābhārata,* the *Svapnavāsavadattā* being his masterpiece. In the 2nd century B.C. Patañjali's *Mahābhāṣya* refers to several aspects of the drama, the actors, the women, the music, the stage, *Rāsa* and the performances called *Kaṁsavadha* and *Balibandha.* With Bhāsa, two other writers, Saumilla and Kaviputra, are remembered as ancient masters of the theatre, but no plays of theirs have survived. In the 1st century B.C. or A.D., Aśvaghoṣa, the Mahāyāna Buddhist, wrote a philosophical play on the Buddha, with some of the characters as abstract concepts, and fragments of this play *Sāriputraprakaraṇa* have been unearthed from Central Asia.

The text of Bharata's *Nāṭya Śāstra* took its present form between 2nd century B.C. and 2nd century A.D. Here we have a complete treatise on the theatre in all its departments: the origin and nature of drama, construction of the playhouse (rectangular, square and triangular types), the dance, the sentiments, physical actions in respect of different limbs, languages, rhetoric and text, speaking of the text on the stage, regional manners, styles of action, types of drama, construction of plot, make-up and stage

property, production and appreciation, and music. As envisaged by Bharata, ancient Indian drama was produced with music and miming. The evocating of sentiments in the spectators' hearts was considered the chief aim of the play. Tragic elements and pathos (*karuṇā*) were recognized, but tragedy in the Greek manner was absent, a fact which shows that Indian drama had an indigenous growth and did not come under Greek impact. Bharata describes ten varieties of plays and one derivative type, the heroic *nāṭaka* and the social *prakaraṇa* are the most perfect among them, the *nāṭikā* being a derivative. The farce, amorous monologue and others are shorter and less perfect forms. The most brilliant examples of heroic *nāṭaka* are the *Abhijñāna Śākuntala* and the *Vikramorvaśīya* of Kālidāsa (assigned to 4th century A.D.); the *nāṭikā* is illustrated by the same poet's *Mālavikāgnimitra*. The foremost example of the social *Prakaraṇa* and indeed a unique creation of the Sanskrit stage is the *Mṛcchakaṭika* of King Śūdraka of uncertain date and identity. King Harṣavardhana (7th century A.D.), besides writing two *nāṭikās* on the Udayana romance, created a stir in the world of drama with his Buddhistic *Nāgānanda*. By introducing the hero's self-sacrifice he paved the way for the recognition of the sentiment of quietude and resignation (*śānta*) as a fit emotion (*rasa*) for a play. That one of his plays, *Ratnāvalī*, was very popular is seen from frequent citation of it in works of dramaturgy and from a description of its production in the *Kuṭṭanīmata* of Dāmodaragupta (8th century A.D.). Bhavabhūti (*c.* A.D. 700) of the court of Yaśovarman of Kannauj, himself a dramatist, excelled in the presentation of pathos in his *Uttararāmacarita* and made bold experiments in his social play *Mālatīmādhava*. Viśākhadatta, scion of a royal house (*c.* A.D. 800), liked historical and political themes and produced two unique plays, the *Mudrārākṣasa* on Cāṇakya and Candragupta and the *Devīcandragupta*, not yet recovered, on Candragupta Vikramāditya II. Another lost social play of great merit is the *Puṣpadūṣitaka*. Many plays were written on the basis of the *Mahābhārata*, but of these the only surviving one is the *Veṇīsaṁhāra* of Bhaṭṭa Nārāyaṇa (before A.D. 800). In the South, King Mahendravikrama Pallava of Kāñcī (7th century) wrote two *prahasanas* (farces), *Mattavilāsa* and the famous *Bhagavadajjuka*. Of the amorous monologue class (*Bhāṇa*), we have four excellent specimens belonging to this period by Śūdraka, Vararuci, Īśvaradatta and Śyāmilaka. The philosophical play, of which we saw an early attempt in Aśvaghoṣa's work, was taken up in Kashmīr by the logician Jayanta Bhaṭṭa (10th century A.D.) in his *Āgamāḍambara* or *Ṣaṇmatanāṭaka*. Versatile Rājaśekhara (*c.* A.D. 900) attempted a whole drama in Prākṛt. A definite genre of allegorical plays, presenting different schools of philosophy and religion with abstract concepts as characters, was begun in the *Prabodhacandrodaya* of Kṛṣṇamiśra (11th century A.D.).

The ten older types of play described by Bharata were called *Rūpaka*.

From early times, there grew up different kinds of stage performances in which the text took a musical form and the presentation was through song and dance. Such types came to be recognized, perhaps by the most important post-Bharata writer Kohala, as *Uparūpaka* and these were more popular in theme and production; in fact, they stand midway between the classical stage and the stage of the spoken languages. Some of them are pure dances e.g., *Hallīsaka* and *Rāsaka*. Those that took more of the drama-form are *Prekṣaṇaka, Ḍombī, Prasthāna, Śilpaka* (*Ṣiḍgaka*), *Bhāṇaka* and *Śrīgadita*. Many of these are seen in Abhinavagupta's commentary on the *Nāṭya Śāstra* and Bhoja gives a full description of all these in his *Śṛṅgāra Prakāśa*.

All these varieties, *Rūpaka* as well as *Uparūpaka,* were produced on the stage—this is known from references in the *Kāmasūtra* and *Kuṭṭanīmata* which speak of itinerant actor-troupes, and from Act IV of the *Vikramorvaśīya* that has come down to us. Further, Śāradātanaya in his *Bhāvaprakāśa* specifically states that he had seen the actual production of all the varieties.

After Bharata and Kohala, many theorists wrote on dramaturgy–Mātṛgupta of Kashmīr (*c.* 6th century A.D.), the Buddhist Rāhula and a succession of commentators on Bharata culminating in Abhinavagupta. Many noteworthy aesthetic theories were also evolved, mainly in Kashmīr, with regard to the stage-reality and spectators' experience and enjoyment. Among these, the *Sādhāraṇīkaraṇa* or universalization of *Bhaṭṭa Nāyaka*, the *Sahṛdaya* (the spectator becoming attuned in the heart to the poet) and *Hṛdayaviśrānti* (aesthetic repose of the heart of the spectator) of Abhinavagupta may be mentioned. The most handy and popular text on dramaturgy was the *Daśarūpaka* of Dhanañjaya with the gloss *Avaloka* of his brother Dhanika, written in Mālwa (10th century A.D.). King Bhoja propounded a new and significant, though less known, theory of artistic appeal and culture in his *Śṛṅgāra Prakāśa*.

Music. There are numerous references to music in the Vedas, *Ṛg* and *Yajus,* the Brāhmaṇas and the Upaniṣads. Two kinds of flutes, two other wind instruments, five kinds of drums, five types of stringed instruments including the hundred-stringed *vāṇa*, and cymbals as well as their players are mentioned. The *vīṇā* whose parts are named in the *Aitareya Āraṇyaka,* was played in the *Aśvamedha* sacrifice, and in the *Mahāvrata* ceremony a lute and drum were played. The *Jaiminīya Brāhmaṇa* speaks of dance and music (*nṛta-gīta*) jointly; and the *Kauṣītaki Brāhmaṇa* puts dance and vocal and instrumental music together as 'art' (*śilpa*). Most important of all was the sacred singing that formed an intrinsic part of all sacrifices. This was the task of a special priest called *Udgātṛ* and the hymns of the *Ṛg-Veda,* ordinarily recited to three accents, were sung by him in a musical manner; such hymns constitute the *Sāma-Veda. Sāman* means music; an equally ancient name for *Sāman*-singers is *Talavakāras,* meaning "music-

makers". At first, the *Sāman* recital had only three notes; gradually the fourth and the fifth came to be employed, and occasionally the sixth and the seventh notes too appeared. When sung, numerous meaningless syllables called *stobhas* were added in between the words and their syllables to eke out the melodies. The *Sāman*-scale as given in the *Nārada Śikṣā* was a descending one starting with the *madhyama* note. The Brāhmaṇas and the Upaniṣads speak of the great spiritual efficacy of *Sāman*-singing. All later music developed from the *Sāman;* in composition and actual singing there are indeed several links between *Sāman* and later music. The science of music called the *Gāndharva Veda* is an *Upaveda* of the *Sāma-Veda.* Corresponding to the *Sāman* hymns, there grew up a body of quasi-sacred songs ascribed to Brahmā and as invariable in their music notation as the *Sāman,* these, *Aparānta, Ullopya, Madraka, Oveṇaka,* etc., are mentioned in *Yājñavalkya Smṛti* too as aids to spiritual effort.

Minstrels called *Sūta* and *Māgadha,* itinerant as well as attached to royal courts, preserved heroic rhapsodies, ballads and epics which they sang to the *vīṇā* as is borne out by passages in the *Rāmāyaṇa;* they were in demand at sacrificial sessions.

The earliest treatise on music that has come down to us is Bharata's *Nāṭya Śāstra,* which has absorbed portions of the earlier texts of Sadāśiva and Brahma. Bharata's main concern is drama, and since its technique includes dance and music, he deals with music in six chapters. He first speaks of the fundamentals of music and then of the use of vocal and instrumental music in dramatic performances. He dwells on the seven *svaras* or notes, the twenty-two *śrutis* or microtonal interervals and an experimental method of deducing them and their demonstration on two *vīṇās,* and eighteen melodic modes called *jātis,* seven from each of the two *grāmas, Saḍja* and *Madhyama,* and two mixed ones. Then he deals with music compositions called *Dhruva* as used in drama, their metrics and symbolism and appropriateness of melodies for sentiments and situations, rhythm and instrumentation to accompany and accentuate the movement and action of actors. Elaborate instrumental music, such as one sees surviving today in Java and Bali and called *nirgitavādya,* was a characteristic of old Indian drama.

The texts that came after Bharata, like that of Kohala, are not available with the exception of a fragment of Dattila's work. This stage was marked by a gradual departure from the old school or style known as *Mārga* and *Gāndharva.* Already when Bharata wrote, one of the *Grāmas,* the *Gāndhāra Grāma,* had fallen into disuse. The *Mārga* was slowly giving way to *Deśī.* The chief elements of this change are that one of the two *Grāmas* mentioned by Bharata, the *Madhyama,* became obsolete, and the *jātis* gave place to the more specific melodic modes called *rāgas*—a momentous change which has since remained the main characteristic of Indian music. These *rāgas* were recognized, named on the basis of diverse

factors, classified and defined. Several of them bear the names of the regions of the country over which the major culture spread, taking in course of its expansion many local elements. All this material which grew considerably was dealt with by Mataṅga in a treatise bearing the significant title *Bṛhaddeśī*.

This vast *rāga*-material was classified on the well-known linguistic analogy of Sanskrit, and primary, secondary and tertiary Prākṛts and called *Bhāṣā, Antarabhāṣā* and *Vibhāṣā,* under a particular old *Grāma-rāga.* A large number of new music compositions also arose, and from poetry and drama we know that songs were composed in the Prākṛt languages. Mataṅga mentions composition-varieties in Lāṭa, Gaṇḍa Karṇāṭa, Āndhra and Drāviḍa languages. Numerous works, some by eponymous sage and god authors and others by historical writers including the Buddhist Rāhula are known to have belonged to this period, but we have only fragments from them by way of quotations. Some of the Purāṇas too, *Vāyu, Mārkaṇḍeya* and *Viṣṇudharmottara* dealt with music. A succession of commentators on Bharata's *Nāṭya Śāstra* arose, chiefly in Kashmīr, but the work of Abhinavagupta (A.D. 993–1050) alone is extant. His *Abhinavabhāratī* is a mine of information. Following Abhinavagupta, Nānyadeva (12th century A.D.) of the Karnāṭaka dynasty of Mithilā wrote his exhaustive exposition of Bharata's work, the *Bharata Bhāṣya,* in which the *Svara*-notations of old *Mārga* songs set in ancient *jātis* have been preserved. Two other important writers, among many who wrote on music, were King Bhoja of Dhārā (A.D. 1010–1055) and King Someśvara of Kalyāṇa; both of them gave the technical terms of music in a new musical vernacular called *Bhāṇḍīka-bhāṣā,* and these became later the accepted musical terminology all over the country. By this time a larger volume of regional artistic contribution was taken into the fold of the art. Bhoja's work is yet to be recovered; Someśvara's is the thesaurus compiled by him in A.D. 1131 called *Mānasollāsa* or *Abhilaṣitārthacintāmaṇi*–it contains a precious section on music and dance. From the *Abhinavabhāratī* it is known that there were long song-poems which were intended to be sung in one or more *rāgas* and were called *Rāga-kāvya.* In the last quarter of the 12th century A.D. under Lakṣmaṇasena of the Sena dynasty flourished Jayadeva of Kendubilva in Orissa (according to some scholars the village was situated in Bengal)—who produced the most brilliant *Rāga-kāvya,* the *Gīta Govinda,* each song of which was set in a *rāga.* Composed on the theme of the love of Rādhā and Kṛṣṇa, *Gīta Govinda* became a basic work for music and dance, and the countless imitations of it that began to appear bear testimony to its extraordinary appeal. Down to far-off Kerala, music, dance and dance-drama forms were inspired by Jayadeva's monumental creation. Tamil music has a number of terminology and concepts, parallel to what is found in Sanskrit works and yet with differences. The basic melody was called *Paṇ* and there were five *Paṇs* for the five geographical divisions

of the land. From these *Paṇs* seven *Pālais* or *Mūrcchanās* were derived, and from the latter twenty-one *tirams* or *rāgas*. The old basic Tamil scale may be identified with the modern South Indian *Harikambhoji Mela*. Several musical instruments, stringed and percussive are mentioned in Tamil literature; of the latter, the *Yāl*, an open harp, was the most important—it had many varieties. In the 7th century A.D., at Kuḍumiyāmalai (near Pudukkoṭṭai), king Mahendravikrama Pallava left a music inscription with notations for playing on the *Parivādinī-vīṇā;* and here one harks back to the Sanskrit texts. In the same Pallava age arose the Śaivite Nāyanārs and the Vaiṣṇavite Āḻvrās whose psalms were all set to music; the Śaivite psalms known as the Tevāram are still sung widely, though from time to time their melodies were equated with those current in the period. The oldest of them belonging to the period of this survey show melodies or *Paṇs* with Tamil as well as Sanskrit names; in lexicons, however, we have a still older and purely Tamil set of *Paṇ*-names. In the *Saṅgīta Ratnākara* of Śāraṅgadeva (beginning of the 13th century A.D.), the melodies of the Tevāram are referred to in a general way. Durng the Coḷa times, endowments and arrangements were made for their recital in temples, a practice which has continued to this day.

E. CRAFTS

India, with a rich cultural heritage, is well known for her deep-rooted tradition in arts and crafts. The rich and significant forms India achieved show how closely integrated with life and how expressive of a way of living crafts can be. That they have survived many vicissitudes is due to the fact that the craftsmen functioned as a vital part of the corporate village community. The system gave security, without which the artisans could not have developed their crafts and worked out age-old forms; countless recapitulations gave them a skill in virtue of which they could produce the most abstract without any conscious effort.

Many of the art forms were the result of deep spiritual experience. In a particular area, however, there might have been a key design which unlocked the secrets of other designs. Myths and legends prevalent among the people had a meaningful influence on the crafts. They stimulated intensity that resulted in distortions and exaggerations and the use of strongly contrasting colours. Even today an urban potter can make a tiger without any story element, but a tiger for the country folk must have some associations with a legend or rite. The votive cow found in the deer-rattle, recently discovered at Harinārāyanpur in West Bengal (now preserved in the Asutosh Museum of Calcutta University) may be of prehistoric origin; but this for similar form is still preserved in terracotta votive offerings made in parts of India. Here is an example of

how significant forms have survived in the craft through the centuries.

Dolls and Toys. A toy made by a village woman in India even today is essentially timeless. It has the impress of an age-long type which persists through periodic variations. A distinction must be drawn between hand-modelled and mould-made terracottas. Toys modelled by hand on the same theme can produce no exact replica, though their close primitive form may give an impression of uniformity. On the other hand, the moulded ones conform to patterns which are numerous and of which a large number of copies can be made. Sometimes the head is from a mould, while the lower portion is made on the wheel. The original mould is hand-made and carried from generation to generation in a potter's family. The variety and number of moulded terracottas are astonishng and the different purposes they serve are endless. It is in them that regional and time variations are most marked, new elements entering the old patterns and enriching them in many striking ways. Colour has been used to animate the figures since time immemorial; the artist's power of observation and true sense of colouring have always helped him to lend vitality to his creation.

Indian dolls and toys sometimes open up a world which knows no frontiers. They show striking affinities with certain types found in Egypt and Crete and even in centres of the Maya civilization. Flinders Petric points out that in a workman's quarter at Memphis there are Indian-type terracottas of women and of a seated Kubera. D.H. Gordon says that a linking of all the terracottas of the Hellenistic period from Eastern Mediterranean to Bengal is necessary. Sometimes the link between a particular doll and and a story, which is lost in this country, may be traced to other lands to which our folk-tales seem to have travelled in ancient times. In Japan, *Daruma* (*Dharma*) dolls are dedicated to Yakusi, the Buddhist God of medicine, and the *Guruma* type has something in common with an ancient Japanese toy known as *Buriburi.* The *Guruma* toy traces its origin to an old and celebrated legend of Umi-satī and Yama-satī.

Textiles. A study of ancient literature shows that Indian textiles enjoyed undisputed supremacy all over the civilized world for nearly 2,000 years. The *Ṛg-Veda* speaks of *hiraṇyadrāpi* or shining gold woven cloak in describing Varuṇa and uses the words *varmeva syutam* like a quilted jacket, in its reference to Agni as a protector of his votaries. The *Mahābhārata* mentions *maṇicīra,* probably a fabric with pearl-woven borders, and Pāli works refer to the *kaseyvaka* of Vārānasi, worth a hundred thousand silver pieces.

The numerous spindle whorls and bronze needles discovered at Mohenjo-daro testify to the wide popularity of the art of weaving and embroidery in ancient India; the fragments of cotton reveal traces of a purple dye, thought to be madder. Vegetable and stone-dyes were widely used since ancient times. The chief vegetable-dyes were indigo, chayroot, lac, turmeric and safflower. The *Śilparatna* describes the methods of preparing with various ingredients, mixed colours such as autumnal green, the colour

of elephant, and those of *vakula* fruit, fire and water. At first the basic colours alone were used. One still finds the use of these colours in the textiles produced by the Ādivāsīs. A greater grasp over the use of colours came with the development of dyes from minerals and the discovery of mordant. Tie-dying (*bāndhanā*) of textiles was also in vogue in ancient times and has been referred to in the *Mānasollāsa.*

Block printing of textiles is also an ancient art in India. It was certainly known in the days about which the Greek scholar Arrian wrote and probably in the days of the *Mahābhārata* as well. The most well-known of ancient printed textiles were the calicoes of Massalia, modern Masulipatam. The beauty of designs and colour and the fastness of the dyes made the ancient printed textiles of India popular all over the contemporary world, they served as the proto-types of most of the prints and chintzes familiar in Europe in the later days.

Embroidery was another ancient technique of textile designing in India. Though no example of embroidery work earlier than the 16th century A.D. has survived, there is ample evidence that it was quite popular in remote antiquity. Ancient and medieval sculptures, especially those representing goddesses, clearly prove this. The figures are shown wearing dresses fully embroidered in beautiful designs. The embroidery of Sind in modern times appears to have been greatly influenced by the neighbouring areas of Punjab and Kutch. It is highly probable that this prticular art was current in these regions from very early times. The Greek author of the *Periplus of the Erythraean Sea* mentions the export of embroidered cloth from several parts of Western India.

Bengal has long been a centre of rich embroidery work. The most famous of the embroideries of Bengal is the *Kānthā,* the multi-coloured quilt. Medieval folk-tales of Bengal often contain references to women skilfully plying the art of embroidery on the cloth quilts. But this art has nowhere been carried to such perfection as in Kashmīr. The woollen embroideries on Kashmīr shawls are held in great esteem everywhere. The designs on the earlier shawls were all woven. Presumably, this industry was in vogue here from early times.

Embroidery was practised in other parts of the country as well, for instance in Madras and Uttar Pradesh. The *cikan* work of Uttar Pradesh is famous for its delicate workmanship. The *kasutis* of Karnāṭaka and the Chamba *rumāla* are attractive. The embroidered *mekhalās* of Assam preserve a tradition which goes back to a legendary past. There is no reason to doubt that these are modern survivals of the art practised over a long period.

Indian craftsmen also mastered from ancient times the art of creating beautiful designs on the loom. The brocades are today the most gorgeous and highly ornamented of all Indian textiles. The designs were produced by threads of different colours and materials, skilfully interwoven. Pure

silk brocades are now known as *amrus* and those with a mixture of silk and cotton, as *himrus*. The most famous in legend and history are the *kinkhābs* or woven flowers, veritable cloths of gold. Gold wire was lavishly used in the ancient days to work out delicate patterns on *kinkhābs,* manufactured mainly in Vārānasi. Even today Vārānasi brocades are world famous. Other centres of brocades are Hyderābād, Gujarāt and Madras. The art of brocade weaving has survived the ravages of time and various types are produced in large quantities.

Jewellery. Of the many cultural traditions maintained by the people of India from time immemorial none is so strongly rooted as the habit of wearing ornaments of various kinds. Indian jewellery can be historically traced back to the period of the Indus Valley civilization when gold and semi-precious stones were in use for necklace, anklet and ear-rings. The close of the Vedic period witnessed the introduction of pearls in the making of jewellery. The unbroken continuity of the trend is further corroborated by archaeological and literary evidence of later dates; exacavated materials from Rupār, Taxila and so many other places; references in the Epics, Kauṭilya's *Arthaśāstra,* Bharatamuni's treatise on drama; and accounts left by Megasthenes, Arrian and others. Ornaments worn by the people are an inheritance from ancient times and have changed little with the passage of time. The ancient and medieval sculptures, mostly of the divine images, testify to the numerous types and varieties of ornaments that were in use in those older times.

Metal Craft. The knowledge of metallurgy was old and widespread in India. Metallic vessels were known in the *Ṛg*-Vedic period and subsequently, in the classical and medieval periods, copper, brass, bronze, gold and silver objects were in universal use. Two of the most interesting remains of the Gupta period, the Mehrauli inscribed iron pillar (in Delhi) and the Sultānganj bronze Buddha, bear testimony to the expert knowledg of contemporary Indians in metallurgy. Many passages can be cited from ancient texts, since the Vedic age down to the time of the later *Śilpaśāstras,* and they prove that Indians were masters in the art of metal casting. Copper is still considered to be the purest of all metals; and until recently ritual objects were entirely made of this metal. Nowadays, however, brass is preferred for domestic purposes and vessels of this metal are also used in religious ceremonies. As it is difficult to keep brass clean and polished, an alloy (*kāṁsya*) came into common use, it is bell-metal or white brass made of copper and tin, mixed in the proportion of about 7 : 2. Brass is an alloy compound of copper and zinc in the proportion of 5 : 3, or 5 : 4, but this may vary from place to place. Medieval literature proves that the use of this metal compound was known from a fairly early period.

Brass and copper images and articles are manufactured by means of the *cire-perdue* (lost wax) process (*madhūcchiṣṭa-vidhāna*). The *cire-perdue* process in which the metal images of deities were cast is graphi-

cally described in the first *prakaraṇa* of the *Abhilaṣitārthacintāmaṇi,* also known as *Mānasollāsa,* usually ascribed to the Western Cālukya king Someśvara. This is one of the earliest and best accounts of the manufacturing process of such metal images. Utensils for secular and ritual uses were also made in metal.

Wood-work. According to tradition, the worker in wood is called a *Sūtradhāra* or one who holds the string. Wood-workers are frequently mentioned in the *Ṛg-Veda* and subsequent literature, particularly the Jātakas. The *Bṛhat Saṁhitā* and other treaties on *Śilpaśāstra* give full directions with regard to the time and the manner of felling trees, the seasoning of the wood and the manufacture of various articles from wood. The tree is to be felled only when the sap has dried up. Trees growing on burial places and burning grounds or on consecrated lands are considered unsuitable for the manufacture of images and of domestic and ritual objects. To all intents and purposes, the same traditional principles are observed by the local wood-workers of today. That wood-carving was one of the major crafts of ancient India is fully proved by literary and archaeological data. The *Bhaviṣya Purāṇa* after stating the names of various materials to be used for making images goes on to describe in detail the process of carving them out of wood which was most commonly employed for this purpose. There is a further notable fact that the early stone monuments like those of at Bhārhut bear unmistakable evidence that the stone masons responsible for their construction were nurtured in the wood-carvers' tradition.

Temple chariots and palanquins of South India in which images of gods and goddesses are carried in procession on sacred festivals, are elaborate works of art covered all over with mythological carvings. Similar designs are characteristic of thrones. Some of the best *jālī* carvings in wood are executed in Kashmīr and Lucknow.

Ivory-Craft. One of the earliest references to ivory-carving is to be found in the donative inscription engraved on a gateway pillar of the great *stūpa* at Sāñcī. It records that the pillar was the gift of the ivory-carvers of Vidiśā. The craft was well established as far back as the time of the Greek and Roman contacts. The products have been one of the major items of export of the land. Beautifully carved ivory caskets from India found their way to medieval Europe much earlier than the 16th century A.D. One of the earliest Indian ivory pieces, representing a mother goddess, was found among ruins of the ancient city of Pompeii in Italy; it is now in the Naples Museum. The early ivory carvings found in the course of excavations at Begram (ancient Kapiśa) in Afghānistān show distinct Indian features and technique. The Naples Museum-ivory piece is probably pre-Christian in point of date, while the Begram pieces belong to the early centuries of the Christian era. These ivory objects prove that the Indian ivory-carvers' art was much appreciated in foreign countries.

Pottery. The chief earthenware used by the common people are cooking, eating and drinking vessels. Dolls, toys and artificial fruits, fishes, animals, whistles and other small objects are frequently made of clay. The industry is a very ancient one and is now confined to a class of people called *Kumbhakāras*. The custom of throwing usuable pots away and obtaining new ones instead on prescribed occasions prevails in the country and this has kept up the continuity of tradition and the prosperity of the pottery industry. That this industy was flourishing in India from the proto-historic period is proved by the discovery of various types of pottery fragments, painted, unpainted and polished, in the Indus Valley and other early sites. Such is the importance of these discoveries that different culture sequences have been determined on the basis of these pottery-finds. Much value was attached in ancient times to the potter and his art, and literary references in this context are ample.