

INDIAN ART AND ARCHITECTURE

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UNIT-I

Pre-Historic Art - Harappan Art: Seals, Sculptures: Stone and Metal - Harappan Architecture: Fortification, Town Plan, Public Buildings - Mauryan Art: Chaityas – Viharas - Stupas - Asokan Pillars

Objectives

- Understand the difference between these structures, their purposes
- Explore the inscriptions, motifs, aspects of these pillars by Emperor Ashoka.

Introduction

This chapter on Indian art and architecture will take you to Introduction the journey of one of the world's oldest and richest civilizations prevalent since the earliest times when human beings were engaged with their creative pursuits for one reason or the other. This is a journey of thousands of years of tangible and intangible heritage of the Indian sub-continent starting from the cave habitats to the oral tradition of Vedas to the writing of Shastras - the text on all possible topics where the wisdom of our ancestors has poured in! Through this chapter, you will have glimpses of different traditions of painting, sculpture and architecture - how these evolved over the years. Some of the traditional knowledge has remained with the people, communities and is still being practiced specially in the pockets of modern India. Some of these timeless traditions are the oral traditions, ironsmiths, potters, weavers, painting on walls, floors and ceilings, bronze cast, etc. which you can even find being practiced in your region.

Early literary texts such as the epics of Ramayana and Mahabharata, Kalidasa's Abhijnanaśakuntalam, Daśakumaracaritam and later on Vatsyayana's Kamasutra etc., refer to art galleries or citratalas in the palaces. The most comprehensive text of Viṣṇudharmottara Purāṇa, deals with the interdependence of dance, music and the visual arts. It is one of the eighteen Upa- purāṇas where chapters are dedicated to the methods and ideals of painting. These texts have helped in passing the traditional knowledge of basics of painting technique and their Appreciation and aesthetics from one generation to the other and one region to another. They also facilitated the ancient artists to transform the technique of murals from using rough and untreated cave walls as painting surfaces to treating them for fresco, before using them to paint. Vastuvidya or silpasastra

or the science of architecture is one of the technical subjects studied in ancient India. In the earliest texts, the word vastu is used for building which included temple construction, town planning, public and private buildings, and later on forts. Atharva veda too has references to different parts of a building. Kautilya's Arthaśāstra deals with town planning, fortifications and other civil structures. Samarāṅgaṇasutradhara, authored by King Bhoja (1010– 55 C.E.), discusses the methods of examination of a site, analysis of the soil, systems of measurement, qualifications of the sthapati (architect) and his assistants, building materials, consecration of the plan followed by the construction of foundation, basal moldings and technical details for each part of the plan, design and elevation. Mayamata (1000 C.E.) and Mānasāra (1300 C.E.), are the two texts having common understanding of the architectural plans and design of the southern style of temple architecture known as draviḍa.

Pre-Historic Art

In the history of art, prehistoric art is all art produced in preliterate, prehistorically cultures beginning somewhere in very late geological history, and generally continuing until that culture either develops writing or other methods of record-keeping, or makes significant contact with another culture that has, and that makes some record of major historical events. At this point ancient art begins, for the older literate cultures. The end-date for what is covered by the term thus varies greatly between different parts of the world.

The earliest human art effects showing evidence of workmanship with a artistic purpose are the subject of some debate. It is clear that such workmanship existed by 40,000 years ago in the Upper Paleolithic era, although it is quite possible that it began earlier. In September 2018, scientists reported the discovery of the earliest known drawing by Homo Sapiens, which is estimated to be 73,000 years old, much earlier than the 43,000 years old artifacts understood to be the earliest known modern human drawings found previously

In 2008 an ochre processing workshop consisting of two toolkits was uncovered in the 100,000-year-old levels at Blombos Cave, South Africa. Arguably, the engraved pieces of ochre found there represent-together with the engraved ostrich egg shells from Diepkloof, Western Cape, South Africa - the earliest forms of abstract representation and conventional design tradition hitherto recorded.

The art of the Upper Paleolithic represents the oldest form of prehistoric art. Figurative art is present in Europe and Southeast Asia, beginning between about 40,000 to 35,000 years ago. Non-figurative cave paintings, consisting of hand stencils, made by blowing pigment over hands pressed against the cave surface, and simple geometric shapes, are somewhat older, at least 40,000 years old, and possibly as old as 64,000 years. The emergence of figurative art has been interpreted as reflecting the emergence of full behavioral modernity, and is part of the defining characteristics separating the Upper Paleolithic from the Middle Paleolithic.

Seals

The stamp seals of the Harappa's, carved in intaglio are masterpieces of art noted for pragmatism. Most of the Urban Harappa sites have reported seals and in fact constitute one of the distinctive traits of the mature phase. Seals and Ceilings are already in thousands and more are pouring in with every new excavation. Although there are variation in shape, size and implementation, the most common are with squares shape, each side measuring around 2 and 3 centimeter with an average thickness of about 50 to 60 millimeter. However, some of seals were rectangular, circular and even cylindrical.

Few circular and cylindrical seals found in Harappa context are unusual. Presence of these seals, especially the cylindrical ones often with Harappa motifs suggest a cultural interaction with Mesopotamian and Persian world whereas; the circular ones are the diagnostic of Gulf area. Despite the fact that mainstream of the seals are made of steatite, there are instances of copper, silver, calcite and even faience also. The process of manufacturing in case of steatite normally involves cutting of steatite (soft soapstone, with the hardness of 1 on Moh's scale, easy to saw, carve and smoothen) into the required size and shape and then the surface was smoothened with some sort of abrasive.

The finest surface was then carved with the help of sharp instrument like burin or chisel and finally a coating of alkaline solution was applied before firing to harden it and also to get a white shining look. The majority of the seals, irrespective of their material, had a convex perforated boss on the reverse, through which a thread could be passed for suspension. Amongst the variety of subjects depicted on seals, it was the so-called 'Unicom' (one homed mythical animal) that outnumbers the rest. In every case of this category, in front of the animal is shown a standard like object, variously interpreted as manger, brazier, incense burner or sacred filter (Mahadevan 1984). The other animals

incorporated are the short-homed bull (bison), Brahmani bull with its characteristic dewlap and hump, buffalo, rhinoceros, tiger, elephant, crocodile, antelope, goat, hare, etc. then there were composite animals and even human and animal combinations. Some seals contain more complex monographic scenes representing mythological or religious depiction (Joshi and Parpola 1987).

The signs of Harappa script on the seal, which were carved either inversely or “intaglio” since they were stamped, assumable stands for the name of the owner, the name of an affiliated organization or the name of the deity. These seals were probably used for trade as an administrative instrument as well as for other functions too. The recent analysis suggests that the number of actual seal impressions (sealing’s) are much less than that of seals, as majority of them are found abraded only at the edges and retain the crisp edge of the carving more or less intact, has led the scholars to the speculation that they were used more as protective amulets and/or identification marks than in administrative and economic life.

The existence of one or two examples of amulets has been reported from Mohenjodaro and even from Bagasra. In these cases, the interior of the seal had been carefully hollowed out to form a compartment, which was formerly closed by a sliding cover fitted into grooves cut at the opening of the socket. This arrangement suggests that something—most probably a magic charm—could be safely kept inside.

It also appears that square stamped seals with animal motifs carried messages that were understandable to different citizens. As totemic symbols, animals depicted on the seals may have been associated with additional traits such as power, cunning, agility, strength, and similar qualities. It is noteworthy that the animals represented are usually male, which may carry a specific symbolic or religious connotation.

Thus now, Harappa seals are treated more in the nature of token of power and prestige rather than mere badges bearing their owners name. If the function of these seals, in which they were supposed to perform, such as, simply restricted to vouching for merchants right on the goods they were stamped on lump of clay of sealed container, there is no reason why so much artistic skill went into their manufacture.

Sculptures

The degree of the works of art in a broad-spectrum and the sculptures in specific, add greatly to our comprehension of ancient cultures and presents an insight into the

minds of the artists, reflecting not only the spirit and atmosphere of a culture but also by giving an indication of social values and religious beliefs in such a pronounced way which is nearly impossible with other material remains. Same thing implies with Harappa culture also. Although, very few sculptures are known so far in the vast corpus of the Harappa material remains, no doubt, these sculptures speak of high standard of craftsmanship achieved by the Harappa's in this sphere of human activity also. Regrettably, in contrast to other aspects of the Harappa studies, sculptural art as an important area of research is yet to attract scholars.

In comparison with Mesopotamian and Egyptian civilizations, Harappa civilization has reported very limited number of stone and bronze sculptures depicting basically human and animal forms. Nevertheless, there is some justification on the whole issue for maintaining a multiplicity of art styles and postulating the roots of the much later historic art of the Indian subcontinent in them. Amid the self-effacing collection, the major specimens are reported from Mohen-jo-Daro and few from Harappa, Chanhudaro, Dholavira and Daimabad. Of these, except the statue of 'Dancing Girl' from Mohen-jo-Daro and Daimabad hoard representing various animals were casted in bronze rest were carved in stone, dominated by male figures.

Among these, the famous one from Mohen-jo-Daro is steatite sculpture popularly known as the 'Priest-King'. It probably represents a person of very high rank, judging from the elaborate clothing and ornaments. Even though the body below the chest is missing, it is 17.5 centimeter in height and the width is 11 centimeter. It has well-combed hair, parted in the middle and dropping behind the neck. Parallel lines in the relief show a well-groomed beard. In contrast, however, the upper lip is clean shaved.

Around the forehead goes a band, which is tied behind and falls back further down from the neck. A circular piece attached to this band on the forehead may probably have some special significance. The eyes are half closed, as if the priest is in meditative pose. The figure wears a shawl like garment; which passes underneath the right arm but goes over the left shoulder. It has a design of trefoils, which were originally filled with red pigment. It has also been noted, when discovered, that one of the eyes had shell inlay. The right upper arm is also decked with an ornament similar to that of the fillet headband. The back of the head is flattened, possibly in order to affix a horned headdress as a symbol of sacred authority. Parole attempts to demonstrate that the garment of the Priest-

King is something called the Tardy, found in the Vedic ritual. The most famous stone sculpture, in terms of Harappa context after the “Priest King” is the small male torso found at Harappa.

This masterpiece is carved from fine-grained red sandstone (jasper), a material that was never used by later sculptors. It is 9.5 cm high with arms and head missing and broken at the legs. Nude figure of this youth with well-built yet supple and sensuous body bear holes for the attachment of the heads and arms, but none are apparent for the legs. Prominent circular indentations, probably made by a tube drill are located on the front of each shoulder probably to affix a garment or for the inlay of the ornaments. The holes for the breast nipples are apparently intended for the inlay. Another interesting sculpture reported from Harappa is made of dark grey stone representing male dancer, confirms the technique of manufacture and general modeling of Harappa style. Again, this 10 cm high torso’s head and arms are missing while legs are partly broken. Though, its individuality lies in its somewhat twisted body with lifted leg, posed as dancer. Holes on the back of the neck were probably intended to hold hair in place suggesting that the figure was almost certainly shown looking down. Marshall’s reconstruction of the pose may not be far off the mark, but does show life and movement and should be placed in the high rank of the Harappa art.

Though, in the midst of the Harappa sculptures, the most beguiling piece of art is probably the bronze statue of nude Dancing Girl from Mohen-jo-Daro. Nearly 11 centimeter in height, the figure is shown standing upright in a relaxed pose with head slightly tilting back. Right leg is somewhat straight whereas the left one is bent at the knee. The right hand posed against the right hip, while the left hand is heavily festooned with bangles, rests on the left knee. From the back of the neck descends a necklace with the pendant dangling between the breasts. Her hair is tied in a bun hanging low on the back of the neck.

The ankles and feet are missing in this sculpture but there is one more bronze sculpture from Mohen-jo-Daro itself, in which limbs are adorned with anklet. Almost every archaeologist considers it as one of the masterpiece of the Harappa art because of the vivacious depiction of various features in this small figurine. Apart from these, few more sculptures, survived in the form of human heads resembles in their facial features with that of Priest King. Most of these human heads are reported from Mohen-jo-Daro.

Another sculpture reported from Mohen-jo- Daro is a seated male figure of which, head is missing. This statue is little over 29 centimeter in height and is made of grey alabaster. In this milieu, it is quite startling that none of the Harappa sites found in India revealed such sculptures except Dholavira from where, recently, seated male figure carved in stone had been reported. Then again, this sculpture is also broken and not much is known in details.

It is quite sphinx-like to not to have sculptural remains of animals in real sense, despite the fact that variety of them, both in the form and kind, are represented in the Harappa seals, terracotta and pottery drawings. Though, few animals found depicted in copper or bronze, gold or silver and stone or faience are in the form of miniature figurines; mostly as ornaments, forming a part of necklace representing sheep, rabbit, monkey, buffalo, squirrel, bull etc., nevertheless, these representations cannot be treated as sculptures. However, the hoard from Daimabad which was discovered accidentally consists of four animal sculptures. Although, these sculptures are of Late Harappa period still considerably fills the fissure. It includes a pair of bull, an elephant, a rhinoceros and a buffalo. All of them are still in excellent state of preservation and has not lost their pristine features.

All four of the sculptures are solid cast and reported to weigh over 60 kg. Of these, the chariot and bulls are remarkable so far their workmanship is concerned. It consists of an elaborate chariot yoked to two bulls and driven by a man standing in a chariot. Though the chariot has some Harappa features, this vehicle has no analogous in the Harappa civilization and stands unique. The elephant is the largest of the three animals in the hoard, which stands on a platform with four brackets beneath, pierced to take axels.

The treatment of the rhinoceros inevitably recalls that of the Harappa seals and provides comparative examples. The same is true to the buffalo and reminds the figures of buffalos, both in terracotta and cast copper or bronze from Mohen-jo-Daro. All these are provided with wheels. Because of the size it gives the impression that it must have been used in the processions. They are in fact the finest of their kind in the whole range of Indian Protohistoric art and might have been created by an extremely skilled sculptor. In terms of quantity or quality the Harappa sculptural remains cannot be compared with the repertoire of either Mesopotamia or Egypt, neither we find variety of expression nor

the range of exploitation of media which both these cultures witnessed. However, an assortment of Harappa sculptures reflect on their own developed art concept. Moreover, if we look carefully at the total assemblage of Harappa sculptures; it reveals that their stylistic tradition was not homogeneous and uniform. One could see a difference in composition, form and technique between the 'Priest King' and 'Dancing girl' found from Mohenjo-daro. On the whole, although, examples of Harappa sculptures are rare, the art tradition of the later Indian subcontinent apparently owes a lot to them. This can be inferred precisely from the modeling of the Harappa torsos, which are reminiscent of the sculptures of the historic period. Apparently, though the Harappa could not produce big works of art on a large scale, they excelled in those of small compass. Their most notable artistic achievement was perhaps in their sealing engravings, especially the animals, which they delineated with powerful realism.

The cult scenes show a refreshing originality, but because of subject matter depiction there was no scope for detailed artistic expression. Though the meaning and use of inscribed seals are still shrouded in mystery, partly because the script still remains under ciphered, but certainly these were used to stamp bales of traded goods and maybe more as tokens of power and prestige besides amulets. Until recently, it was believed that the Harappa civilization along with its spectacular achievements, evolved quite mysteriously and then disappeared suddenly, leaving little or no legacy for later cultures.

However, as new sites have been discovered and previously excavated ones were restudied it became apparent that it disintegrated gradually, leaving the field open for the development of subsequent Proto historic cultures and the second urbanization during the first millennium B.C. In fact, there are significant continuities in subsistence activities, art and architecture, technologies, economic set up, urban organizations and possibly socio-ritual as well as political structures. Even today in the modern cities, towns and villages of the subcontinent one can see the legacy of the Harappa culture reflected in traditional arts and crafts as well as in the layout of houses and settlements.

Arts and Crafts

Many of the sites of the Harappa domain were engaged in craft production activities. They produced tools, beads, bangles, inlay objects, ceramics, seals, toy objects, and house hold utensils etc., using various raw materials. The diversity of stones and other raw materials used by the Harappa include steatite, alabaster, shell, camellia, agate, jasper,

lapis lazuli, copper/bronze, gold, silver, amazonite, crystal, chrysoprase, bloodstone, milky quartz, opal, onyx, plasma, sandstone, chart, granite, chalcedony, feldspar, hornblende, schist and dolerite. The Harappa art reflected in the form of pottery paintings, decoration in the beads, engraving in the seals and sculptural art forms. Due to the uniqueness of Harappa seals and sculptures - figurines, special emphasis is given to them.

Stone Statues

Statues whether in stone, bronze or terracotta found in Harappa sites are not abundant, but refined. The stone statuary found at Harappa and Mohenjodaro are excellent examples of handling three-dimensional volumes. In stone are two male figures - one is a torso in red sandstone and the other is a bust of a bearded man in soapstone - which are extensively discussed. The figure of the bearded man, interpreted as a priest, is draped in a shawl coming under the right arm and covering the left shoulder. This shawl is decorated with trefoil patterns. The eyes are a little elongated, and half-closed as in meditative concentration. The nose is well formed and of medium size; the mouth is of average size with close-cut moustache and a short beard and whiskers; the ears resemble double shells with a hole in the middle. The hair is parted in the middle, and a plain woven fillet is passed round the head. An armlet is worn on the right hand and holes around the neck suggest a necklace.

Bronze Casting

The art of bronze-casting was practiced on a wide scale by the Harappa. Their bronze statues were made using the 'lost wax' technique in which the wax figures were first covered with a coating of clay and allowed to dry. Then the wax was heated and the molten wax was drained out through a tiny hole made in the clay cover. The hollow mould thus created was filled with molten metal which took the original shape of the object. Once the metal cooled, the clay cover was completely removed. In bronze we find human as well as animal figures, the best example of the former being the statue of a girl popularly titled 'Dancing Girl'. Amongst animal figures in bronze the buffalo with its uplifted head, back and sweeping horns and the goat are of artistic merit. Bronze casting was popular at all the major centers of the Indus Valley Civilization. The copper dog and bird of Lothal and the bronze figure of a bull from Kalibangan are in no way inferior to the human figures of copper and bronze from Harappa and Mohenjodaro. Metal casting

appears to be a continuous tradition. The late Harappa and Chalcolithic sites like Fatimabad in Maharashtra yielded excellent examples of metal-cast sculptures. They mainly consist of human and animal figures. It shows how the tradition of figure sculpture continued down the ages.

The Architecture of the Harappa

The manifestation of towns and cities is an urban phenomenon and thus, the first towns and cities were linked with the first urbanization that took place in the fertile valleys of the river Indus, Saraswati and their several tributaries and even in the far off region dominated by the Harappan civilization. However, on the basis of excavation, in many of the Harappa sites, it has been confirmed that these towns and cities grew out of earlier villages that existed in the same locality prior to Pre/Early Harappa period. Before 2600 B.C. sites like, Harappa, Dholavira, Rakhigarhi, Banawali, Kalibangan, Rehman Dheri, Nausharo, Kot Dijian and many more existed in the form of rural Harappa settlements.

Their ideal vocational setups were on the threshold, which led to urbanization. Beginning with quite a small population, they grew in size and density to become larger settlements of the region along the major trade routes. Population growth, strong agriculture base, developed trade and growth of specialized skilled craftsmen favored the growth of towns and cities in the entire Harappa domain. These towns and cities amply fulfilled many of the criteria suggested by the Gordon Childe while defining Urbanization.

Before going into the minutiae of Harappa town planning and layout of the settlements, fortification, gates, streets, drainage network, houses and buildings and water reservoirs, it is relevant to know the nature of its settlement. More than 1500 sites, (including Pre-Harappa, Early-Harappa, Mature-Harappa and Late Harappa) covering the Harappa realm has been classified into three categories i.e. 1. villages or hamlets occupying an area sometimes even less than one hectare and maximum up to ten hectares, 2. Towns between ten to fifty hectares and 3. cities extending in an area of more than fifty hectares. Of these, maximum number of sites is represented by village or hamlets followed by quite a number of towns while metropolitan cities are just five in number. Their ratio is somewhat similar to the distribution pattern of the villages, towns and cities, like the configuration of modern districts within a provincial state.

In the entire Harappa domain, five large cities have been identified as the major urban centers or metropolis. Among these, Mohen-jo-Daro being the largest of all covers an area of more than 200 hectares. Second on the list is Harappa covering an area of more than 150 hectares whereas; Dholavira covers an area almost close to 100 hectares. Ganweriwala and Rakhigarhi measuring almost equal in dimensions occupy an area of more than 80 hectares. According to Kenoyer (1998), Jansen (2002) and Sonawane (2005) Mohen-jo-Daro, Harappa, Ganweriwala and Rakhigarhi are inland centers located far apart from each other approximately 400 km in a zigzag pattern that covers the Indus and Saraswati plain. The fifth, Dholavira, is situated in on a small island called Khadir in the Greater Rann of Kutch in Gujarat connecting Lothal situated further south east on one side and Balakot further on the north west on the other, located approximately 300 km away on the either side.

Quite a good deal of archaeological data, for proper understanding of the Harappa town planning is available now as a result of extensive excavations. Key sites like Dholavira, Lothal and Surkotada in Gujarat, Kalibangan in Rajasthan, Banawali and Rakhigarhi in Haryana, Harappa and Mohen-jo-Daro in Pakistan, all located in diverse environmental and geographic settings has given a slight variation in the planning of the Harappa settlements, within the known Harappan norms.

Fortification,

One of the important aspects of the Harappa town planning is the provision of forts. Archaeological evidences has brought into notice the concept of development of fortification during pre and early Harappa phase, it became more pronounced and standardized during the Mature phase with the emergence of earliest towns and cities, as a measure to safeguard their settlements. The massive fortification walls were in fact solid structures made of proportionately molded bricks set in mud mortar. Successive courses of brick were laid in recessed manner as a result both the faces registered a marked taper, which resulted into the raised wall from a border base to a lofty narrow top forming trapezoidal cross section and often indicating the evidence of clay plastering. On the other hand, in areas where the availability of stones is easy, i.e. Dholavira and Surkotada, both inner and outer faces were provided with stone facing to sustain the strength of susceptible portions. It appears that special care was taken for the construction of the corners, gates and bastions of the fortification. In Harappa, one of the walls around

mound AB, was 14 meter wide at the base and the exterior face of the wall was of baked bricks. Whereas, in Kalibangan the width of the fort wall of the citadel complex varies from 9 to 11 meters. At Dholavira, the basal width of the fort wall of the castle is 11 meter whereas at Banawali, the basal width of the fort walls of the citadel ranges from 5.4 to 7 meter. At Surkotada, the width of the fortification wall of citadel is 7 meter whereas residential annexed is 4.25 meter. At Lothal, despite the fact of a relatively small settlement (covering an area of only twelve hectares) was protected against floods by raising a 13 meter thick wall of mud bricks. However, northern side of the wall (facing the ancient river bed) was armored with baked bricks.

More so, some of the smaller settlements like Bagasra demonstrate more or less the same layout where square bastions were provided on the curves of the inner face instead of outcrops.

However, most of the scholars are of the view that the massive fortifications were for military confrontation, but the non-existence of sudden turns in the walls and the absence of moats to lead enemies into an ambush would have been ill-suited for defence. For that reason, it appears that they were rather created to control the flow of goods in and out of the city. What, on earth, were the precise functions of the fort walls and gates? They demonstrated the high level of architectural skills of the Harappans.

Town Planning

The most noteworthy feature, unheard elsewhere during the second half of the third millennium B.C., is the remarkable town planning of the Harappa Civilization, with a probable margin on either side. Dholavira being the exception with middle town as the extra feature of the settlement, every other small cities and towns of the Harappa Civilization consist of the basic layout of citadel and lower town. Recent excavations have proved that Harappa town planning does not represent a uniform pattern. The evidence from Lothal, Surkotada, Dholavira and Banawali has shown different settlement patterns than that of Mohenjo-Daro, Harappa and Kalibangan.

With the excavation of Mohenjo-Daro, Harappa and Kalibangan, archaeologists earlier had the conception of twin mounds, higher ones located on the west acted as the citadels and lower towns occupying relatively less elevated area situated towards the east. In the absence of large-scale excavation at Rakhigarhi, covering the entire site, the precise plan of the settlement is yet to be known. Based on the evidence of excavations, the majority of

the Harappa cities and towns are composed of a series of walled mounds or sectors oriented in different directions. Harappa and Mohen-jo-Daro both have rectangular mounds on the west and extensive mounds to the north, south and east, whereas the settlement of Kalibangan is confined to two separate mounds, with the citadel on the west represented by a smaller mound and the lower city towards the east marked by a fairly extensive mound.

Citadel was situated over the remains of the preceding occupation to gain eminence over the lower town. On the other hand, Rakhigarhi, though not fully exposed, shows signs of possessing more than two walled residential sectors. However, Dholavira stands apart and shows three divisions within the general enclosing wall consisting of a bipartite citadel (Castle and Bailey), middle town and lower town, which temptingly sound analogous respectively to three different categories of the settlement or buildings. An open space between the citadel and the middle town served as a stadium.

However, most amazing is the layout of gates and provision of larger reservoirs in the drought-prone area of Kutch, integrating the use of two local streams into the overall civic planning. However, despite variations in details, all settlements were well integrated to suit into the landscape under one platform. Unlike the haphazard arrangement of Mesopotamian cities, Harappa settlements followed the same basic plan everywhere.

Mauryan Art

Sixth century BCE marks the beginning of new religious and social movements in the Gangetic Valley in the form of Buddhism and Jainism, which were part of the Shramana tradition. Both religions became popular as they opposed the varna and jati systems of the Hindu religion. Magadha emerged as a powerful kingdom and consolidated its control over the other regions. By the fourth century BCE, the Mauryas established their power and by the third century BCE, a large part of India was under Mauryan control. Asoka emerged as the most powerful king of the Mauryan dynasty who patronized the Buddhist Shramana tradition in the third century BCE. Religious practices had many dimensions and were not confined to just one particular mode of worship. Worship of Yakshas and mother-goddesses were prevalent during that time. So, multiple forms of worship existed. Nevertheless, Buddhism became the most popular social and religious movement. Yaksha worship was very popular before and after the advent of Buddhism and it was assimilated in Buddhism and Jainism.

Sculptures and Rock-cut Architecture

Construction of stupas and viharas as part of monastic establishments became part of the Buddhist tradition. However, in this period, apart from stupas and viharas, stone pillars, rock-cut caves and monumental figure sculptures were carved at several places. The tradition of constructing pillars is very old and it may be observed that erection of pillars was prevalent in the Achaemenian Empire as well. But the Mauryan pillars are different from the Achaemenian pillars. The Mauryan pillars are rock-cut pillars, thus displaying the carver's skills, whereas the Achaemenian pillars are constructed in pieces by a mason.

Stone pillars were erected by Asoka, which have been found in the north Indian part of the Mauryan Empire with inscriptions engraved on them. The top portion of the pillar was carved with capital figures like the bull, the lion, the elephant, etc. All the capital figures are vigorous and carved standing on a square or circular abacus. Abacuses are decorated with stylized lotuses. Some of the existing pillars with capital figures were found at Basarah-Bakhira, Lauriya Nandangarh and Rampurva in Bihar, Sankisa and Sarnath in Uttar Pradesh.

The Mauryan pillar capital found at Sarnath, popularly known as the Lion Capital, is the finest example of Mauryan sculptural tradition. It is also our national emblem. It is carved with considerable care—voluminous roaring lion figures firmly standing on a circular abacus which is carved with the figures of a horse, a bull, a lion and an elephant in vigorous movement, executed with precision, showing considerable mastery in the sculptural techniques. This pillar capital symbolising Dhammachakrapravartana (the first sermon by the Buddha) has become a standard symbol of this great historical event in the life of the Buddha. Monumental images of Yakshas, Yakshinis and animals, pillar columns with capital figures, and rock-cut caves belonging to the third century BCE have been found in different parts of India. It shows the popularity of Yaksha worship and how it became part of figure representation in Buddhist and Jaina religious monuments. Large statues of Yakshas and Yakshinis are found at many places like Patna, Vidisha and Mathura.

These monumental images are mostly in the standing position. One of the distinguishing elements in all these images is their polished surface. The depiction of faces is in full round with pronounced cheeks and physiognomic detail. One of the finest examples is a Yakshi figure from Didarganj, Patna, which is tall and well-built. It shows sensitivity towards depicting the human physique. The image has a polished surface. Terracotta figurines show a very different delineation of the body as compared to the sculptures.

Depiction of a monumental rock-cut elephant at Dhauili in Odisha shows modeling in round with linear rhythm. It also has Ashokan rock-edict. All these examples are remarkable in their execution of figure representation.

The rock-cut cave carved at Barabar Hills near Gaya in Bihar is known as the Lomus Rishi Cave. The façade of the cave is decorated with the semicircular chaitya arch as the entrance. The elephant frieze carved in high relief on the chaitya arch shows considerable movement. The interior hall of this cave is rectangular with a circular chamber at the back. The entrance is located on the side wall of the hall. The cave was donated by Ashoka for the Ajivika sect. The Lomus Rishi Cave is an example of this period. But many Buddhist caves of the subsequent periods were excavated in eastern and western India.

Stupas, Patronage and Spread of Buddhism

Due to the popularity of Buddhism and Jainism, stupas and viharas were constructed on a large scale. However, there are also examples of a few Brahmanical gods in the sculptural representations. It is important to note that the stupas were constructed over the relics of the Buddha at Rajagraha, Vaishali, Vethadipa and Pava in Bihar, Kapilavastu, Allakappa and Ramagrama in Nepal, Kushinagar and Pippalvina in Uttar Pradesh. The textual tradition also mentions construction of various other stupas on the relics of the Buddha at several places including Avanti and Gandhara, which are outside the Gangetic Valley. Stupa, vihara and chaitya are part of Buddhist and Jaina monastic complexes, but the largest number belongs to the Buddhist religion. One of the examples of the structure of a stupa in the third century BCE is at Bairat in Rajasthan.

The Great Stupa at Sanchi was built with bricks during the time of Asoka and later it was covered with stone and many new additions were made. Subsequently, many such stupas were constructed which shows the popularity of Buddhism. From the second century BCE onwards, we get many inscriptional evidences mentioning donors and, at times, their profession. The pattern of patronage has been a very collective one and there are very few examples of royal patronage. Patrons range from lay devotees to gahapatis and kings. Donations by the guilds are also mentioned at several sites. However, there are very few inscriptions mentioning the names of artisans such as Kanha at Pitalkhora and his disciple Balaka at Kondane caves in Maharashtra. Artisans' categories like stone carvers, goldsmiths, stone-polishers, carpenters, etc. are also mentioned in the inscriptions.

Chaityas and Buddhist Doctrine

The rise of two prominent sects, Buddhism and Jainism, in northern India of the 6th century B.C. marked a crucial point in the history of ancient India. Both these nearly contemporary sects followed anti-Brahmana, anti-Vedic, anti-ritualistic, anti-caste, ascetic traditions, which laid more emphasis on moral conduct than the lengthy and expensive Vedic sacrifices of the period. Both appeared in and were confined to the areas of Bihar and Uttar Pradesh or the Ganga Valley in their early period of history. The founders of both the sects, Buddha and Mahavira, were the Kshatriyas from powerful ganasangha clans of the times. Both the sects were patronised largely by the Vaishya or the trading community. Buddha promulgated a doctrine that more or less outlines all the main features of the Shramana movement. He rejected all authority except experience.

According to the Buddhist doctrine, one should experiment for himself and see whether his teaching was true and relevant. Buddhist doctrine states that human life was full of suffering. This suffering was caused by desires, and hence desires were the cause of sufferings. The only way to overcome the suffering was to conquer desire and aim for a life that was sans desires. This could also be stated as the basic principles of Buddhism, the Four Noble Truths: (1) the world is full of suffering, (2) suffering is caused by human desires, (3) renunciation of desire is the path to salvation, and (4) salvation is possible through the Eightfold Path, which comprised of eight principles. The religion was essentially a congregational one. Monastic orders were introduced, where people from all walks of life were accepted.

Though Buddha was initially against the entry of women into asceticism, an order of nuns was established eventually. Monks wandered from place to place, preaching and seeking alms, which gave the religion a missionary flavour. The religion was soon adopted by many important dignitaries of the period as well as a number of common people. The important cities of the region such as Sravasti, Kapilavastu, Lumbini, Kusinagara, Pava, Vaisali and Rajagriha emerged as powerful centers of the sect. However, in the initial phase, the monks and lay disciples were forbidden to travel beyond this region into the paccantima janapada, which was said to be inhabited by milakkhas or barbarians. After the death of Buddha, the religion slowly expanded and spread both in numerical and geographical terms,

though it split into various sub-sects owing to conflicting attitudes and practices of different groups of monks.

Role of Asoka

However, it was under the Mauryan king Asoka that the sect spread to distant lands. Asoka is supposed to be the greatest follower and the first royal patron of the sect. He is believed to have converted to Buddhism after the great war of Kalinga in the eighth regnal year of his reign, when he was filled with remorse at the loss of a number of lives in the fierce battle and turned to Buddhism. He had the moral preaching of Dhamma written on specially built pillars or rocks all over his empire. He appointed dhammamahamatras (religious officers) to go round the country on religious missions. Though a few scholars believe that the Dhamma preached by Asoka with emphasis on moral conduct and tolerance towards all sects was a general ethical teaching rather than Buddhist Dhamma, the similarity between some portions of a few edicts with passages from Pali Buddhist literature and his highly acclaimed position as a patron in the Buddhist literature indicate that he definitely had leanings towards Buddhism.

He is also said to have paid visits to places associated with Buddha such as Bodh Gaya, Lumbini and Sarnath. The presence of his pillars at the last two places points at the Buddhist affiliation of his edicts. He is said to have erected a large number of stupas and Buddhist monasteries, but none are extant today. He also organized the third Buddhist council under the presidency of the famous monk Moggaliputta Tissa at Pataliputra to establish the purity of the Canon. In this council, it was decided to dispatch missionaries to different countries for the propagation of the sect. Consequently, missions were sent to various regions. It is clear that the efforts of Asoka were largely responsible for the spread of Buddhism in distant parts of the country and outside the country.

Viharas

Vihara is a Sanskrit word having context-sensitive meanings that appears in various Vedic texts. It refers to a “distribution, transposition, separation, or arrangement” of words, sacred fires, or sacrificial land in general. Its post-Vedic connotation is more explicitly a type of rest house, temple, or monastery in Indian ascetic traditions, especially for a community of monks. Vihara is the name for a Buddhist renunciate monastery. In early Sanskrit and Pali writings, the word meant any arrangement of space or amenities for dwelling.

In Indian architecture, particularly ancient Indian rock-cut architecture, vihara or vihara hall has a more specific significance. It refers to a central hall with little cells connected to it, sometimes with stone-carved beds. Some have a shrine cell set back from the back wall, with a stupa in early specimens or a Buddha figure later. Ajanta Caves, Aurangabad Caves, Karli Caves and Kanheri Caves are examples of huge sites with multiple viharas. An adjacent chaitya or worship hall was mentioned by others. The vihara was built to provide a rainy-day shelter for monks. The term has become an architectural concept in Buddhism, referring to monks' dwelling quarters with an open public space or courtyard.

Historical Background

The origins of viharas are unknown. For Ajivikas, Buddhists and Jainas, monasteries in the shape of caves date back to centuries before the Common Era. The Maurya Empire influenced the rock-cut architecture found in cave viharas from the second century BCE. Ellora's viharas, which date from 400 AD to the 7th century AD, are the largest of their kind, with three stories. They are both Hinayana and Mahayana Buddhist in origin and contain sculpted figures.

Viharas – Significance

Viharas were monasteries that were built to house monks. Viharas began as temporary shelters for wandering monks during the rainy season, but because of gifts from affluent lay Buddhists, they soon blossomed into centers of scholarship and Buddhist architecture. Many viharas, such as Nalanda, became globally famous, and their Buddhist teachings were spread throughout Asia, especially China and Tibet, where Buddhism thrived. The majority of viharas were built out of brick or cut out of rock. Viharas usually follow a predetermined layout, with a hall dedicated to communal prayer on three sides and a pillared verandah in front, or an open courtyard encircled by a row of cells and a pillared verandah in front. The Hinayana viharas located in these locations have several distinguishing characteristics that set them apart from Mahayana viharas in the same areas.

There are one or more entrances to these halls. Each of the little compartments has one or two stone platforms that serve as beds. Large rectangular courtyards with stone-paved central halls have been discovered during vihara excavations at Nagarjunakonda. The row of tiny and large cells that surround the courtyard reflects monks' quarters and dining halls.

Viharas are the greatest of monasteries, and twenty-five of Ajanta's rock-cut caves are viharas. It features a well-decorated exterior. The portico is supported by pillars with

intricate carvings. Dwarf figures and ornately carved brackets and capitals adorn the square bases of the columns. A square abacus with elaborately carved makara designs sits beneath the capital. The cave's walls and ceilings are covered in artwork. The monks used these cells as their living quarters. These brick monastery buildings were self-contained entities with a chaitya hall or chaitya mandir linked to the main object of worship, the stupa. Ajanta and Ellora are two of the most important Buddhist viharas. Nasik, Karle, Kanheri, Bagh and Badami are some of the cities in Nasik.

Stupas

The word Stupa is mentioned in the Rigveda, Atharvaveda, Vajasaneyi Samhita and Taittiriya Samhita, in the Panchavimsata Brahmana and the Monier-Williams Sanskrit–English Dictionary, which says it is a “knot or tuft of hair, the upper part of the head, crest, top, summit, a heap or pile of earth or bricks, etc.” The Rigveda refers to a stupa raised by King Varuna above the forest in a place having no foundation. The word “estuka” is also used in the same sense in the Rigveda. Probably by then, anything raised on the ground like a heap or pile might have been known as a stupa.

However, the Pali word “thupa” is quite similar to the term “stupa.” Thupa means a conical heap, a pile or a mound, or a conical or bell-shaped shrine containing a relic. The stupa is so linked to Buddhist life that they were not content to erect monuments alone; sculptors represented them on stones, and we find them abundantly represented on panels on the stupa monuments themselves, on the railings or balustrades surrounding it, on cave walls, and in structural and monolithic forms made out of varied materials starting from clay, stone, wood, ivory, metals and terracotta. The study material is abundant and spreads over time and space. The studies of the Mahavastu, Divyavadana and Kriyasamgraha have helped to evolve a chronology of the figurative stupa in India from the second century BCE to the fourth century CE, thus enabling us to step ahead in our knowledge of the indispensable monument of Buddhism. According to M. Sivarammurti, the stupa is regarded as a monument for veneration.

But the stupa seems to be associated with votive, commemorative and offering purposes. Moreover, the stupa was related to ritualistic and commemorative aspects with sectarian affiliation and was bound by aspects of social and economic life. Buddhist texts like the Avadana Satakam, Mahavadana and Stupavadanam mention the commemorative aspects of the stupa. Even the Jaina literature like Raya Pasenaiya Sutta refers to it. Probably in the

later period, due to the deep desire of the common masses to worship the Lord for the sake of salvation, the stupa acquired its votive character as well. Early stupas were devoid of art, but since Ashoka's time, stupa architecture acquired prominence in the socio-cultural life of the country and art began to develop around the stupa structure.

Ashoka Pillars

Ashoka Pillars have a great history like the capital city of Delhi. The history of the Ashoka Pillar is a bit complex because it was considered that during the time period of the Mauryan king Ashoka, there were a huge number of Ashoka pillars throughout northern India, from Allahabad in Uttar Pradesh to Topra in Haryana. It is said that during the third century BCE, a huge number of Ashoka pillars were erected which were made up of two types of stones. Some of them had a spotted red and white appearance, and the other pillars had a sandstone colour. The colour and quality of the pillars changed with the change in location and availability of raw materials. Ashoka pillars have the same pattern all over India, which symbolizes that the craftsmen used for this work were from a single region and they used to cut and carve the structure on their own. They were always round in shape and have four lions on the peak of the pillar. The four lions were placed in four directions—north, south, east and west—which depicted the reign of Ashoka in all directions.

The pillars of Ashoka are a series of columns dispersed throughout the northern Indian subcontinent, erected or at least inscribed with edicts by the Mauryan king Ashoka during his reign in the third century BCE. Originally, there must have been many pillars, but only nineteen survive with inscriptions. Many are preserved in a fragmentary state. Averaging between forty and fifty feet in height and weighing up to fifty tons each, all the pillars were quarried at Chunar, just south of Varanasi, and dragged sometimes hundreds of miles to where they were erected. Ashoka's pillars are basically a series of pillars that are spread all over the northern part of the Indian subcontinent. These pillars were set up during the time Emperor Ashoka reigned in India. Most of the pillars, though damaged to some extent, still stand upright and are protected by the concerned authorities. Out of all the pillars, the most famous is the Ashoka Pillar located at Sarnath.

Most of King Ashoka's pillars have inscriptions of Ashoka's Dhamma or philosophies. The pillar at Sarnath is believed to mark the site where Lord Buddha preached his first sermon. It is said to be placed where Buddha taught Dharma to five monks. The pillar at Sarnath has an edict inscribed on it that reveals information about Ashoka's stand

against divisions of any sort in society. When translated, it says, “No one shall cause division in the order of monks.”

Self-Assessment essay questions

1. Explain the main features and significance of Pre-Historic Art in India.
2. Discuss the themes and techniques of Pre-Historic rock paintings.
3. Describe the artistic features and importance of Harappan seals.
4. Examine the characteristics of Harappan stone sculpture.
5. Discuss the metal sculptures of the Harappan Civilization and their techniques.
6. Explain the purpose and features of fortification in Harappan cities.
7. Describe the town-planning system of the Harappan Civilization.
8. Discuss the major public buildings of Harappan cities and their significance.
9. Explain the architectural features of Mauryan Chaityas and Viharas.
10. Discuss the artistic and symbolic importance of Mauryan stupas and Asokan pillars.

UNIT– II

Hinayana Phase of Buddhist Art – Mahayana Phase of Art: Gandhara School of Art – Mathura School of Art-Amaravathi School of Art- Gupta Art and Architecture – Ajanta and Ellora – Jaina Art: Jaina beds – Shravanabelagola.

Objectives

- To understand the early phase of Buddhist art,
- To study the transition from Hinayana to Mahayana art,
- To examine the differences between Hinayana and Mahayana art

There was a split in Buddhism in the Fourth Council during King Kanishka's reign, and two factions emerged: Hinayana and Mahayana Buddhism. Hinayana Buddhism adheres to Buddha's original teachings or the Doctrine of the Elders, rejects idol worship, and seeks individual redemption by self-discipline and meditation. Here we will discuss Hinayana Buddhism. Hinayana Buddhism considers Gautama Buddha as a normal human being who attained Nirvana. The term Hinayana means the "Lesser Vehicle." Around 250 BC, Hinayana Buddhism began to flourish. The school comprises devotees of the Buddha's original teachings. It is a more traditional school that did not believe in the worship of Buddha's idols or images. The followers believe in individual salvation and attempt to achieve it through self-discipline and meditation. Nirvana is the ultimate goal of Hinayana Buddhism. Immeasurable joy in Hinayana Buddhism refers to reveling in the happiness of others without being envious or expecting anything in return. Sthaviravada or Theravada is one of the sub-sects of Hinayana Buddhism.

To communicate with the general public, Hinayana Buddhists employed the Pali language. The Hinayana sect was patronized by Emperor Ashoka. In Sri Lanka, Myanmar, Thailand, Cambodia, and Laos, Hinayana Buddhism is practiced. In Hinayana Buddhism, the ten far-reaching attitudes are generosity, self-discipline, patience, perseverance, being true to one's words, wisdom, renunciation, resolution, love, and equanimity.

Andhra School of Art

Since the Macedonian conquest of the north-western regions of the Indian subcontinent by Alexander the Great, the region comprising portions of modern Afghanistan and Pakistan functioned as cultural and mercantile highways. The region became a virtual melting pot of diverse political and cultural features. After the fall of the Mauryan Empire,

the north-western region was ruled by a number of Indo-Greek rulers. Some of the important Indo-Greek rulers known from literary and numismatic evidence are Diodotus, Euthydemus, Demetrious, Eucratides, Menander, Heliocles, Antalcidas, Amyntas, and Hermaeus.

Political upheaval in Central Asia led to several hordes of nomadic tribes descending into India. The first such wave brought in the Sakas. The Sakas were able to extend their political sway from the north-west into the heartland of India around Mathura and its neighbouring regions. The earliest Saka ruler was Maues. Other Saka rulers of the north-west were Azes I, Azilises, and Azes II. Around the last quarter of the pre-Christian era, during the time of Azes II, the region came under the suzerainty of the Parthians. Important rulers of this line were Vonones and Gondophernes. It was after the destruction of the Parthians that the Kushanas built their empire.

Ancient Geo-Political Units

The geo-political units that were the mainstay of the Saka–Parthian rule in the north-west are generally clubbed under the name Gandhara. However, this is a wrong nomenclature, for the term Gandhara can be applied only to a small geographical area corresponding to modern Taxila in Pakistan. The more proper terminology is the Bactro-Gandhara region, corresponding to the regions of Bactria (modern Balkh in Afghanistan) with its capital of the same name, Kapisa (modern Begram in Afghanistan) with a similarly named capital, and Gandhara. Another important region within this gamut was the Swat Valley in Pakistan, analogous to the ancient kingdom of Uddiyana. This small geo-political region, having been the playing field of numerous West Asian, Central Asian, and South Asian population groups, left its indelible mark in the form of the art tradition of the region, which cumulatively gave rise to the famed Gandhara Art.

Gandhara Art, as we know it today, is an amalgamation of diverse traits drawn from Hellenistic, Indian, West Asiatic (Iranian), and Central Asian tribal elements. For ideological inspiration, it drew from Buddhist, Brahmanical, and Greek–Roman pantheons.

Region of Kapisa

Excavations at the site of Begram, the ancient capital city of Kapisa, yielded a hoard of art objects having diverse affiliations—Hellenistic, Chinese, West Asian, Roman, Alexandrian, and Indian. The hoard, predominantly consisting of secular luxury goods, was found in a room of a ruined building. It comprised plaster casts of metal works datable to the

late Hellenistic period, Syrian glass, Roman and Alexandrian sculptures, lacquer ware from China, and ivory objects of Indian origin.

The building from where the hoard was recovered was destroyed during a raid by Shahpur I, a Sassanid. The date of this event is placed around 241 AD, thus providing a termination date for the objects of the hoard. The extant broken pieces of ivories were originally part of a larger narrative panel, apparently of Buddhist association. Different extant pieces show architectural features such as the torana, similar to the one known from the Great Stupa at Sanchi. Two women lavishly ornamented are depicted standing side by side within the torana pillars. Another broken ivory piece depicts a lady dressed in Indian drapery standing on a crocodile, possibly representing the river goddess Ganga standing on her vahana, the makara.

Another notable antiquity from the Kapisa region is the gold reliquary found at Bimaran in Afghanistan, discovered by Charles Masson. This reliquary was found along with four copper coins of Azes II in mint condition and an inscribed steatite casket. The ruby-studded reliquary depicts two sets of three standing figures, with the central figure being the Buddha flanked by the bearded Brahma in ascetic attire and Indra in princely garb. The Buddha is draped in a monastic robe covering both shoulders, and his right hand displays the abhaya mudra. Two additional figures displaying the anjali mudra are also depicted within pillared arched niches.

Architecture in the Bactro-Gandhara Region

Buddhism entered the north-western region under the missionary zeal of the Mauryan emperor Ashoka. By the time of the ascendancy of the Kushana Empire, the region had become fertile ground for the proliferation of Buddhist art and architecture. While sculptural traditions dominate the extant remains, architectural evidence is limited. One surviving structure is the ruined stupa and vihara at Guldara in Afghanistan, datable to the second century AD. It consists of a high square base with a stupa on top. The entrance is from the east, indicated by a stairway. The base is decorated with niches framed by pilasters and topped by arches. The presence of sockets suggests wooden brackets once supported stucco sculptures. The surface decoration shows an amalgamation of Indian and Hellenistic motifs. The masonry technique follows the Parthian diaper-masonry style. Another important site is Takht-i-Bahi in Pakistan, where excavations revealed a massive complex of courtyards surrounded by cells, stupas, and dwelling units. Three main courtyards were identified,

including a vihara court and a stupa court accessed by steps. Sculptural niches surround these courts, though they are now vacant.

Mathura School of Art

According to the Buddhist text Anguttara Nikaya, Aryavarta was divided into sixteen great states known as the Solasa Mahajanapadas during the sixth century BC. Mathura was the capital of the mahajanapada of Surasena, located on the banks of the Yamuna. Greek writers referred to this region as Souraseni and its capital as Methora. Buddhism reached this region through Avantiputra, a disciple of the Buddha. Panini refers to the Andhakas and Vrishnis of Mathura, while Kautilya's Arthashastra mentions the Vrishnis as a republican sangha. Megasthenes records Mathura as a centre of Krishna worship. The region was also significant for the development of Jainism and indigenous cults such as Yaksha-Yakshi and Naga worship.

Development of the Mathura School of Art

The earliest art objects from Mathura date to the second century BC. These objects reflect Bharhut-style traditions and indicate early artistic development. Under the Kushanas, the Mathura School flourished and gained popularity, with its sculptures found in Central Asia, Taxila, Sanchi, Sarnath, and Sravasti. Workshops influenced by this style existed at Kausambi, Ahichchhatra, and Mahasthangarh. During the Gupta period, Mathura art imbibed classical features, producing colossal standing Buddha images with intricately carved halos. The drapery became diaphanous, the bodies slender, and facial expressions serene, showing both Gandhara and Gupta influences.

Sarnath School of Art

The Sarnath School marked the zenith of Gupta art. Sculptures emphasized spiritual expression balanced with physical beauty. Innovations included hollow terracotta images and rich sculptural decoration. The Sarnath Buddha images, carved from buff sandstone, are characterized by elongated, graceful bodies and transparent drapery. Sarnath, located 13 km northeast of Varanasi, was the site of the Buddha's first sermon, the Dharmachakrapravartana. Ashoka erected stupas and pillars here, including the Lion Capital, now India's national emblem. The site continued to flourish through the Gupta period.

Amravati School of Art

The Buddhist establishment at Amravati near ancient Dhanyakataka flourished under the later Satavahanas from the second century AD. The Great Stupa or Mahachaitya formed

the focal point of the complex. Its foundation is attributed to the Mauryan period, supported by the discovery of a polished Mauryan pillar fragment. The stupa was enclosed by a stone railing and underwent several construction phases. South of the Narmada, Buddhism spread widely, giving rise to a distinctive regional style known as the Amravati School of Art, noted for its narrative reliefs and refined sculptural tradition.

Gupta Arts

Are you willing to understand Gupta Arts? Then this article is for you. Learn about concepts such as the arts of the Gupta Empire, the historical background of Gupta arts, notable examples of Gupta arts, paintings of the Gupta Kingdom, and related themes. Gupta Arts belong to the Gupta Empire, which ruled most of Northern India. The phase of the Gupta Empire extended between 300 and 480 CE. Generally, the Gupta period is considered the Golden Age of India. This period witnessed the arrival of iconic Hindu carved stone deities.

Historical Background of Gupta Arts

The establishment of the Gupta Empire took place in the 4th century A.D. During the Gupta period, art, science, culture, and literature touched greater heights. India witnessed the classical stage of sculpture under the Guptas, and multiple efforts were exerted to establish and refine different art techniques.

Notable Examples of Gupta Art

One of the most famous examples of Gupta art is the Standing Buddha located in Sarnath. The Standing Buddha of Sarnath is one of the most notable masterpieces of Gupta art. The right hand of the Buddha is shown in such a way that it ensures protection. There are a few thin lines on the body, and these lines portray the edges of the outfit, reflecting the delicate treatment of drapery. Another significant example is the Head of Shiva. The terracotta head of Shiva is one of the most popular terracotta sculptures of the Gupta Empire. The sculpture displays matted locks tied in a graceful top knot. Along with the head of Shiva, the head of Parvati is also an eminent example of Gupta terracotta art.

Sculptures of Ganga and Yamuna

Ganga and Yamuna are two sacred rivers of India. The Gupta Empire introduced terracotta sculptures of Ganga and Yamuna. These sculptures are installed on the main steps leading to the Shiva temple situated at Ahichhatra.

Ajanta and Ellora Caves

The Ajanta and Ellora caves are located near Aurangabad in Maharashtra and are considered among the finest examples of ancient rock-cut architecture. The Ajanta–Ellora cave complex contains Buddhist monasteries, Hindu and Jain temples, along with exquisite sculptures, paintings, and murals. These caves are UNESCO World Heritage Sites and attract tourists from all over the world.

Ellora Caves

Ellora is another famous cave architecture site. It is located nearly 100 kilometers from the Ajanta caves in the Sahyadri hills of Maharashtra. The Ellora complex consists of 34 caves, of which 17 are Brahmanical, 12 are Buddhist, and 5 are Jain. These caves were developed by various guilds from Vidarbha, Karnataka, and Tamil Nadu between the 5th and 11th centuries A.D., making them later in date than the Ajanta caves. Ellora is a UNESCO World Heritage Site with cave temples dedicated to Hinduism, Buddhism, and Jainism.

Features of Ellora Caves

In terms of subject matter and architectural styles, the Ellora caves display remarkable diversity. The presence of 17 Hindu caves, 12 Buddhist caves, and 5 Jain caves built in close proximity demonstrates the religious harmony prevalent during this period of Indian history. Some of the most well-known caves include the Vishwakarma Cave, also known as the Carpenter's Cave, which is a Buddhist Chaitya cave where the Buddha is seated in Vyakhyana Mudra with a Bodhi tree carved behind him. The Ravan Ki Khai and the Dashavatar Cave are important Brahmanical caves. The Kailash Temple, dedicated to Lord Shiva and located in Cave No. 16, was carved out of a monolith and includes a courtyard. It was built under the patronage of the Rashtrakuta ruler Krishna I. A remarkable sculpture depicting Ravana shaking Mount Kailash is also found on the walls of this cave, and it is regarded as one of India's greatest sculptural achievements.

Ajanta Caves

Ajanta is a group of rock-cut caves located near Aurangabad in Maharashtra, amidst the Sahyadri ranges along the Waghora River. There are 29 caves in total, of which 25 served as Viharas (monastic residences) and 4 as Chaityas (prayer halls). The caves were constructed between 200 B.C. and 650 A.D.

Features of Ajanta Caves

The Ajanta caves were excavated by Buddhist monks under the patronage of the Vakataka rulers, notably King Harishena. The figures in these caves were painted using fresco techniques and exhibit a high degree of naturalism. The colours used were derived from local plants and minerals. The outlines of the paintings were executed in red, followed by the filling of colours. The absence of blue is a remarkable feature of Ajanta paintings. The paintings mainly depict themes related to Buddhism, including episodes from the life of the Buddha and Jataka tales. Five caves belong to the Hinayana phase of Buddhism, while the remaining twenty-four were constructed during the Mahayana phase. The Ajanta caves are mentioned in the travel accounts of Chinese Buddhist pilgrims Fa-Hien and Hiuen Tsang. Among the most famous sculptures are the Mahaparinirvana of Buddha in Cave No. 26 and the sculpture of the Naga King and his consort in Cave No. 19.

Jain Architecture

Like Hindus, Jains were prolific temple builders, and Jain shrines and pilgrimage sites are found throughout India, except in hilly regions. Bihar contains some of the oldest Jain pilgrimage centres. Ellora and Aihole in the Deccan region have some of the most architecturally significant Jain sites. Deogarh, Khajuraho, Chanderi, and Gwalior are among the best examples of Jain temples in Central India. Karnataka has a long history of Jain sanctuaries, including the famous Gomateshwara statue at Shravanabelagola. The granite statue of Lord Bahubali, measuring eighteen metres (57 feet) in height, is the tallest free-standing monolithic sculpture in the world. Vimal Shah was the architect of the Jain temples at Mount Abu, which are renowned for their intricate ceiling patterns and delicate bracket motifs adorning the domed ceilings.

Shravanabelagola

Shravanabelagola is an important Jain pilgrimage centre in South Karnataka. It is famous for the 18-metre-high statue of Lord Gomateshwara, considered one of the tallest free-standing monolithic statues in the world. The statue was constructed in 981 A.D. by Chamundaraya, a Ganga warrior. Carved out of a single block of granite, it stands atop Vindhyagiri Hill and is visible from a distance of nearly 30 kilometres. Nearly 700 rock-cut steps lead to the statue, offering a close view of this colossal masterpiece. The sculpture reflects immense grace and poise despite its massive scale and symbolizes strength devoid of anger or violence. The surrounding enclosures contain images of all the Jain Tirthankaras.

Mahamasthakabhisheka

One of the most spectacular acts of Jain worship is the Mahamasthakabhisheka ceremony held at Shravanabelagola. Every twelve years, Jain devotees gather to witness this grand head-anointing ceremony of Lord Gomateshwara. From specially erected scaffolding, priests and devotees pour hundreds of pots filled with milk, curd, honey, vermilion, coconut water, turmeric paste, and even gold and precious jewels over the statue's head. The entire statue becomes drenched in vibrant colours, creating a visually stunning and spiritually uplifting spectacle.

Self-Assessment Questions

1. Explain the main features of the Hinayana phase of Buddhist art.
2. Discuss the characteristics of the Mahayana phase of Buddhist art.
3. Examine the Gandhara School of Art and its foreign influences.
4. Describe the distinctive features of the Mathura School of Art.
5. Discuss the artistic significance of the Amaravati School of Art.
6. Examine the chief features of Gupta art and architecture.
7. Describe the artistic and religious importance of the Ajanta caves.
8. Discuss the architectural and sculptural features of the Ellora caves.
9. Explain the concept and significance of Jaina beds in early Jaina art.
10. Discuss the historical and artistic importance of Shravanabelagola.

UNIT– III

Pallava Art: Rock Cut Cave Temples, Monolithic Temples - Structural Temples – Mahabalipuram - Nagara Style of Architecture: Lingaraja Temple (Bhubaneshwar), Sun Temple(Konarak) - Dravida Style of Architecture: Brihadeeswara Temple, Thanjavur – Gangaikondacholapuram – Airavatesvara Temple, Darasuram - Vesara Style of Architecture: Chennakesava Temple(Belur), Hoysaleswara Temple(Halebid).

Objectives

- To understand the architecture and sculptures of Pallava rock-cut cave temples
- To study the monolithic construction techniques
- To explore the features of Dravida architecture

Pallava Dynasty

A part of southern India was ruled by the Pallava Dynasty, an Indian monarchy that lasted from 275 CE to 897 CE. After the Satavahana Dynasty, under whom the Pallavas served as feudatories, was overthrown, the Pallavas rose to prominence. The dynasty attained its greatest power during the reigns of Mahendravarman I (571–630 CE) and Narasimhavarman I (630–668 CE). The Pallavas ruled the Telugu regions and the northern parts of the Tamil region for nearly six hundred years, until the end of the ninth century CE.

The Shore Temple at Mahabalipuram, a UNESCO World Heritage Site, stands as the finest example of Pallava patronage of architecture. The Pallavas laid the foundation for South Indian medieval architecture and left behind magnificent sculptures and temples. They promoted art through the construction of cave temples, monolithic rathas, and structural temples, particularly at Mahabalipuram, where stone carvings depicting legendary themes are found. By developing both rock-cut and structural temple forms, the Pallavas established a lasting architectural tradition.

The Kailasanathar Temple at Kanchipuram, the Shore Temple, and the Pancha Rathas of Mahabalipuram are among the finest specimens of Pallava art and architecture. Akshara is regarded as one of the best sculptors of this period.

Pallava Art and Architecture: Background

The religious revival of the period stimulated interest in architecture. The Pallavas made remarkable contributions to Indian art and architecture and are credited with founding the Dravidian style of South Indian temple architecture. Pallava architecture evolved

progressively from cave temples to monolithic rathas and finally to fully developed structural temples. The Pancha Pandava Rathas, also known as the Five Rathas, at Mamallapuram display five distinct architectural styles carved out of rock. The Kailasanatha Temple at Kanchipuram and the Shore Temple at Mamallapuram are outstanding examples of Pallava structural temples, with the Kailasanatha Temple considered the greatest architectural achievement of the Pallavas. The Pallavas also significantly advanced sculpture, adorning mandapa walls with exquisite carvings. The relief sculpture depicting the “Descent of the Ganges” or the “Penance of Arjuna” at Mamallapuram is regarded as a masterpiece of classical Indian art. Under Pallava patronage, music, dance, and painting flourished, and the paintings at the Sittannavasal caves belong to this period.

Pallava Architecture

Pallava architecture can be divided into two main phases: the Rock-cut Phase and the Structural Phase.

The Rock-cut Phase

The rock-cut phase lasted from about 610 to 668 CE and included the Mahendra group and the Mamalla group of monuments. The monuments built during the reign of Mahendravarman I belong to the Mahendra group. These structures are predominantly pillared halls carved directly into rock faces. These mandapas were modelled after contemporary Jain temples. The cave temples at Mamandur, Pallavaram, and Mandagapattu are notable examples of this group.

The Mamalla group, dating from 630 to 668 CE, introduced free-standing monolithic shrines known as rathas in addition to pillared halls. The Pancha Rathas and the monumental relief of Arjuna’s Penance at Mahabalipuram are outstanding examples of this phase.

The Structural Phase

The structural phase saw the construction of free-standing temples using stone blocks and mortar. This phase includes monuments of the Rajasimha group (690–800 CE) and the Nandivarman group (800–900 CE). The Pallavas experimented extensively during this period, particularly under Rajasimha. The Shore Temple at Mahabalipuram and the Kailasanathar Temple at Kanchipuram, built by Narasimhavarman II (Rajasimha), are the finest examples of this phase. The Vaikunta Perumal Temple at Kanchipuram represents the Nandivarman group. Later architectural marvels such as the Brihadeeswarar Temple at Thanjavur and Gangaikonda Cholapuram were inspired by Pallava architectural models.

Rock-cut Architecture under the Pallava Dynasty

The Pallava period represents the peak of rock-cut architecture, with massive rocks carved into temples of varying sizes and shapes. The front portion of the rock was carved into pillared mandapas, while the rear portion was hollowed out to form the sanctum. Mahendravarman I was a great patron of the arts and constructed many such temples. He also authored a Sanskrit drama titled *Mattavilasa Prahasana*. Initially, rock-cut temples were carved entirely out of living rock, without the use of bricks, metal, or other materials. The introduction of Dwarapalakas, or royal gatekeepers, at temple entrances during this period became a defining feature of later South Indian temples.

Pallava Art

The Pallava kings were ardent patrons of the arts. Their love for music is reflected in inscriptions at Kudumiyamalai and Thirumayam. Musical instruments such as the *Yaazhi*, *Mridangam*, and *Murasu* were popular during this period. Mahendravarman I and Narasimhavarman I were themselves accomplished musicians. Temple sculptures from this era highlight the popularity of dance. Mahendravarman I was known as “Chittirakkarapuli,” and the paintings at Chittannavasal exemplify Pallava painting traditions. Literary works such as *Thatchina Chitram* and the satirical play *Mattavilasa Prahasanam* attest to the flourishing of drama, music, and dance under the Pallavas, contributing greatly to cultural development.

Historical Background of the Pallavas

The Pallavas first appear in the historical record during the third century CE as subordinate rulers under the Satavahanas. By the sixth century, they had consolidated their power in northern Tamil Nadu, extending their influence across the Coromandel coast. Their capitals at Kanchipuram and later Mahabalipuram became vibrant centres of religion, scholarship, and maritime trade. The dynasty’s artistic achievements were deeply intertwined with its political fortunes. Mahendravarman I (600-630 CE), a polymath king and author of the Sanskrit play *Mattavilasa Prahasana*, initiated the first systematic series of rock-cut shrines. His successor Narasimhavarman I (Mamalla, 630- 668 CE) expanded this programme into an ambitious sculptural landscape at Mahabalipuram. Subsequent rulers, notably Paramesvaravarman I and Narasimhavarman II (Rajasimha, 700-728 CE), translated the rock-cut idiom into fully fledged structural temples of dressed stone.

Early Period: Mahendravarman I and the Cave Temples

Mahendravarman I's architectural patronage marks the inception of Pallava rock-cut architecture. His inscriptions proudly proclaim him as "Vichitrachitta," the curiousminded king, and "Gunabhara," the repository of virtues titles that reveal his intellectual and artistic temperament.

Architectural Features

Mahendravarman's caves, such as those at Mandagapattu, Kuranganilmuttam, and Panchapandavamalai, were hewn directly into hill faces without the use of brick or timber. The Mandagapattu Cave Temple (615 CE) contains an inscription declaring it "built without brick, timber, metal or mortar" the earliest explicit manifesto for stone architecture in South India. These early shrines exhibit a simple façade consisting of two or more pillars with lion-based shafts (simha-padas), square pilasters, and a shallow vestibule leading to a sanctum. The interior is austere, devoid of ornate decoration, emphasizing the sanctity of the rock itself.

Iconography and Religious Context

Mahendravarman's reign coincided with an era of religious transition in Tamil Nadu. Although originally associated with Jainism, he embraced Shaivism, possibly influenced by the saint Appar. His temples, however, exhibit an ecumenical spirit, containing shrines for Vishnu and Brahma alongside Shiva. This inclusivity suggests that the Pallava monarch viewed temple architecture as a means to unify diverse sectarian traditions under royal patronage.

Transitional Phase: Narasimhavarman I and the Monolithic Rathas

The reign of Narasimhavarman I, popularly known as Mamalla ("the Great Wrestler"), marks the high tide of Pallava artistic vitality. His projects at Mahabalipuram transformed the rocky coastline into an open-air museum of sculpture.

The Five Rathas (Pancha Rathas)

Perhaps the most iconic creations of this period are the Five Rathas monolithic temples carved from single boulders, each representing a distinct architectural prototype. The Dharmaraja, Bhima, Arjuna, Nakula-Sahadeva, and Draupadi Rathas together illustrate the experimental range of Pallava temple design. These rathas reveal the gradual codification of the Dravidian vimana (superstructure) and mandapa (hall) forms. The Draupadi Ratha, shaped like a thatched-roof hut, echoes early wooden models, while the Dharmaraja Ratha anticipates the multi-storeyed tower of later structural temples.

Sculptural Panels and Reliefs

The Descent of the Ganga (Arjuna's Penance), an immense open-air bas-relief measuring nearly 30 metres by 12 metres, exemplifies the Pallava mastery of narrative composition. Here, celestial beings, ascetics, animals, and divine figures animate a natural fissure in the rock that symbolically represents the river Ganga descending from heaven. The fluidity of line and rhythmic grace of the figures reflect a synthesis of Gupta classicism with Tamil sensibility.

Mature Phase:

Rajasimha and Structural Temples The final phase of Pallava art under Narasimhavarman II (Rajasimha) witnesses the culmination of the transition from monolithic to structural architecture. This stage is represented by monumental temples built from dressed granite blocks, reflecting both technological advancement and theological elaboration.

Kailasanatha Temple, Kanchipuram

The Kailasanatha Temple (700-728 CE) stands as the crown jewel of Pallava art. Built under Rajasimha's patronage, it represents the earliest large-scale structural temple in Tamil Nadu. Its layout comprises a sanctum (garbhagriha) surrounded by a circumambulatory path (pradakshinapatha), enclosed within a high compound wall adorned with subsidiary shrines. The superstructure, or vimana, rises in a pyramidal form of receding storeys, crowned by a domical stupi. The walls are profusely ornamented with niches housing exquisite images of Shiva in multiple forms Somaskanda, Tripurantaka, Bhikshatana, and Nataraja reflecting both theological diversity and sculptural virtuosity.

Shore Temple, Mahabalipuram

The Shore Temple (720 CE) epitomizes the final synthesis of rock-cut and structural principles. Constructed on the seafront, it consists of twin shrines dedicated to Shiva and Vishnu, aligned east-west to face the rising sun. The temple's weathered façade, sculpted reliefs of bulls, and rhythmic tower profiles capture both the spiritual and maritime identity of the Pallavas.

Artistic Techniques and Innovations

The Pallavas pioneered numerous techniques that became standard in South Indian temple building. Their artisans achieved remarkable precision in quarrying, chiselling, and polishing hard granite. The gradual replacement of excavation (subtractive method) with

construction (additive method) indicates a profound technological shift. They also standardized the use of lion-based pillars, kudus (horse-shoe arches), and Dravidian cornices motifs that persisted through later Chola and Vijayanagara temples. The transition from rock-cut prototypes to structural temples reveals a conscious experimentation guided by royal architects (sthapatis) versed in the Silpa Sastra texts.

Religious Symbolism and Cultural Context

Pallava architecture cannot be divorced from its religious milieu. The temples served as material embodiments of Shaiva cosmology, portraying the mountain-temple as a microcosm of the universe. Iconographic programmes at Mahabalipuram, such as the Somaskanda panels, emphasize the familial aspect of Shiva, aligning divine hierarchy with royal authority. The Pallavas also patronized Vaishnava and Shakta shrines, revealing a broad theological inclusiveness. Inscriptions often describe the king as a devotee (bhakta) and temple builder (dharmika), underscoring the fusion of piety and polity. Culturally, these monuments reflect the flowering of Tamil, Sanskritic synthesis Sanskrit inscriptions coexist with early Tamil verses, while artisans from diverse regions collaborated under Pallava patronage, turning Mahabalipuram into a cosmopolitan art centre.

Heritage and Evaluation

The Pallava rock-cut tradition provided the foundational grammar for later Dravidian architecture. The Cholas adopted Pallava principles in the grand temples of Thanjavur and Gangaikondacholapuram, magnifying them on an imperial scale. The Pandyas extended the stylistic vocabulary to Madurai and Tirunelveli, while the Vijayanagara kings revived Pallava motifs in their own granite monuments. Beyond South India, Pallava influence travelled across the Bay of Bengal through maritime trade and cultural exchange. The temple architecture of early Cambodia, Vietnam, and Indonesia bears traces of Pallava idioms, transmitted by artisans and religious envoys along the Coromandel routes.

Archaeological Discoveries and Conservation

Modern archaeological surveys at Mahabalipuram and Kanchipuram have revealed unfinished caves, tool marks, and quarry sites that shed light on ancient construction processes. Excavations by the Archaeological Survey of India (ASI) demonstrate that the site functioned both as a royal port and as an artistic workshop. Conservation challenges persist due to coastal erosion and saline winds affecting the Shore Temple. UNESCO's inclusion of Mahabalipuram as a World Heritage Site in 1984 underscores the need for sustained

preservation through scientific documentation and community engagement.

Mahabalipuram Shore Temple

The Shore Temple complex at Mahabalipuram was constructed by Narasimhavarman II, also known as Rajasimha. This masonry temple complex contains a courtyard lined with Nandi sculptures and faces east towards the sea. The complex consists of three temples. The Vishnu temple, known as the Narapathi Simha Pallava Vishnu shrine, houses a Seshasayi Vishnu image carved partly out of bedrock. The Kshatriyasimha Pallavesvara Temple is dedicated to Shiva and faces the sea, featuring a slender vimana and a fluted granite Shiva linga known as the Dhara Lingam. The Rajasimha Pallavesvara Temple, also dedicated to Shiva, faces west and has a lower spire.

Pancha Rathas

The Pancha Rathas are monolithic, free-standing structures carved out of solid rock. They resemble temple chariots without wheels and were intended to house deities, though no worship was performed in them. Built during the reign of Narasimhavarman I in the 7th century CE, they are the earliest monuments of their kind in India. Named after the Pandava brothers and Draupadi from the Mahabharata, the rathas decrease in size from south to north. Sculpted figures of Airavata the elephant and Nandi add to the grandeur. Interestingly, the finials meant to crown the temple towers were never placed, as construction halted after the death of Narasimhavarman I, leaving the structures incomplete and non-functional as temples.

Nagara Style of Temple Architecture

The Nagara style developed in northern India and is characterised by temples built on stone platforms with steps leading up to them. These temples usually lack elaborate boundary walls and gateways. The garbhagriha lies directly beneath the tallest tower, the shikhara, which is crowned by an amalaka and kalasha. The Kandariya Mahadev Temple in Madhya Pradesh and the Sun Temples at Konark and Modhera are fine examples of this style.

Classification of Nagara Temples

Rekha-Prasad or Latina shikhara is the most basic type, with square bases and inward-curving walls. Valabhi temples are rectangular with barrel-vaulted roofs, such as the Teli Ka Mandir at Gwalior. Phamsana temples have pyramidal roofs and are used in structures like the Jagamohan of the Konark Temple.

Konark Sun Temple

The Konark Sun Temple, built in the 13th century by King Narasimhadeva I of the Eastern Ganga dynasty, is a monumental representation of Surya's chariot, complete with twenty-four intricately carved wheels and stone horses. The name Konark is derived from the Sanskrit words Kona (angle) and Arka (Sun). The temple forms one corner of a sacred triangle with the Jagannath Temple at Puri and the Lingaraja Temple at Bhubaneswar. Konark was an important trading port and religious centre and is frequently mentioned in Hindu texts as a significant place of Sun worship.

Lingaraja Temple

The Lingaraja Temple, located in Bhubaneswar, is the largest and most prominent temple in the city. Dedicated to Harihara, a combined form of Shiva and Vishnu, it represents harmony between Shaivism and Vaishnavism. Built in the Kalinga and Deula architectural styles, the temple comprises four main components: the vimana, jagamohana, natamandira, and bhogamandapa. The temple, constructed by the Somavamsi kings and later enhanced by the Ganga rulers, remains one of the finest examples of Odisha temple architecture.

Lingaraj Temple Architecture

Somvanshi Temple Architecture, a unique form of Kalinga Architecture reflects in all the major structures inside Lingaraj Temple. Typically, Kalinga Architecture was one of the finest old temple architectures of India, visible in Odisha. It is a combination of four different type of structures built on east-west axis, also known as Deula style.

Vimana or Bada Deul, the tallest structure containing the sanctum appears at the back. It also contains the main temple sanctum. Jagamohana or the assembly hall is the second tallest structure appears just before Vimana. Natamandira or the festival hall is slightly shorter in height and shows up in front of Jagamohana. Bhoga-mandapa or the hall of offerings comes right in front of all three structures. Similar Kalinga Architecture is visible both at Lingaraj Temple and Puri Jagannath Temple.

The largest temple of Odisha has a surrounding boundary wall of 520 feet long and 465 feet wide; with 7.5 feet thickness. Temple height is about 55 meters. A huge sandalwood gate at the entrance is another typical Lingaraj temple beauty.

All structures were built with sandstones of darkest shade, another uniqueness of Lingaraj Temple architecture. Visitors can fulfil their desired Lingaraj darshan inside this Garbhagriha.

There are several other smaller shrines appear surrounding the main temple structures. All the deities of these shrines are worshipped on daily basis. Among them temple of Lord Kartikay, Devi Sheetla, Devi Santoshi, Lord Ganesh, Devi Parvathi, and others are also enhancing beauty of the temple complex. Some of these shrines are much older, depicting ancient temple architectures compared to other structures of Lingaraj Temple.

Lord Curzon Mandap

Since only Hindu devotees can enter the temple premises, British Viceroy Lord Curzon ordered the construction of a temple viewing platform. Non-Hindu tourists can leverage the opportunity to visit one of the oldest historical constructions of Odisha from here. It exists at the north gate of the temple and precisely is the best viewing point for non-Hindu tourists. The platform is also known as Curzon Mandap or Lord Curzon viewing tower.

Nagara Architecture – Lingaraja Temple

Lingaraja temple is one of the biggest Hindu temples with its compound measuring 520 X 465 feet. It is an east-facing temple built in Sandstone and laterite. Built in the typical Kalinga Nagara architectural style or Deula style it has all the components of this style. The Vimana or Garbh Griha is the tallest, followed by Jagmohan or the Mandapa, followed by a Natyamandapa or the dancing hall, and finally Bhog Mandapa or the hall of offerings. All of them have roofs in decreasing order of height.

Surrounded by a tall wall or Prakara, the temple is actually a complex of 150 or so small temples. This follows the tradition of having all the Tirthas represented in the local tirtha. This also implies that despite being a royal temple, this temple is a sacred Tirtha. The Temple of Bhagawati is located in the northwest corner of the temple. I remember seeing a lot of ancient Shivalingas in the temples as well as open courtyards for the pilgrims to take a rest.

The Shikhara or the superstructure of the temple is 180 Ft tall, supported by 12 Shardulas. However, what makes it extremely intriguing for temple historians is the fact that it is a profusely carved Shikhara. Literally, every inch of it is carved stone telling many stories.

The entrance to the temple has lions carved on either side giving it the name Simhadwar.

Lingaraja

Lingraja literally means the king of the Linga or a royal Linga. It is a Shiva temple but Shiva here is worshipped as Harihara or the combined form of Vishnu and Shiva. The linga here has a line on it that depicts the coming together of two deities. The same shows in the flag atop the temple that is mounted on a Pinaki bow instead of a trident or a Chakra. Similarly, both Bilva and Tulasi leaves are offered to the deity.

Linga here is an uncarved granite rock about 8 feet in diameter and rising about 8 inches above the ground. It is surrounded by the Black Chlorite rim representing the Yoni. It is also called Tribhubaneshwara – the lord of three worlds. Another name used is Kritibasa. It is believed to be a Swayambhu or self-manifested Lingam, one of the 64 prominent Shiva Kshetras across the country. They say that this lingam appeared only during Dwapar and Kaliyuga. It is also believed that the Bindusagar – the nearby tank is filled by the river that originates below the temple.

Tradition says that Yatra to Jagannath Puri is not complete unless you visit the Ekamra Kshetra first. Even Chaitanya Mahaprabhu followed this tradition before visiting Puri.

Ekamra Kanana

Pauranic tales tell us that Ekamra Kanana or a Mango Orchard here was the favorite of Shiva. He preferred it even to Kashi and shared this with Parvati. Curiosity led Parvati to visit the region and she came here as a Gopika or a cowherd woman. As she was wandering around, she was followed by two asuras called Kriti and Basa. Enamored by her beauty, they proposed marriage to her. Parvati coyly asked them to first lift her on their shoulders. They readily did so, without realizing the divine nature of the Devi. They were crushed under her weight.

Parvati felt thirsty after this incident and that is when Shiva created the Bindusagar lake to quench her thirst. It is said that he invited waters from all the sacred rivers and lakes to come here. Everyone obliged except the Godavari. She was cursed and that curse was removed only after she worshipped Shiva and Parvati.

Bindu Sagar Lake

A pilgrimage in the city indeed begins with a dip in Bindu Sagar Lake. This is especially relevant on days like eclipse or Sankranti. After it, you visit Ananta Vasudeva who is the presiding deity of the region. After worshipping his family members, you finally enter

the great temple of Tribhubaneshwara – the lord of three worlds or the Lingaraja. Brahma Puran describes in detail the practices of this temple.

Temple prasad is given in small cane baskets just like it is given at Jagannath Puri temple. It is not a usual practice to give prasad at Shiva temples but due to the presence of Vishnu, prasad is offered here.

22 different rituals that include Abhisheka with different things like water, milk or Bhang, Artis, and Bhoga are offered throughout the day as is the norm at the temples. These go from waking up the deity in the morning to putting him to sleep at night.

Sun Temple (Konarak)

The temple city of Konark is located towards the eastern part of Orissa state. It is situated at a distance around 65km from the capital city of the state Bhubaneswar and 35km from Puri. The city ranges between 86.08 E longitude and 19.53 N latitude. The city is famous for its monumental representation of sun god. The sun temple at Konark is dedicated to Sun god or Surya. It is an outstanding example of temple architecture of the country for its narrative strength of sculptural embellishment. Legendary poet Rabindranath Tagore said about Konark that, ‘here the language of stone surpasses the language of man’. It is absolutely true, as the experience here could never be described in words. The entire temple has been constructed as Sun god’s chariot with twenty-four wheels and seven horses dragging the temple. Two lions guard the entrance with crushing elephants. It is one of the most famous Brahman sanctuaries of 13th century. The temple is also known as ‘Black Pagoda’ due to its dark color and the ancient sailors of Odisha used it as a navigational landmark. This temple has been declared as a World heritage site by United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1984.

History

The word Konark is derived from the Sanskrit name Konarka. Konarka is a combination of two words i.e ‘Kona’ which means corner and ‘Arka’ means Sun, when these two words are combined it holds the meaning as ‘Sun of the corner’. Thus it was one of the ancient centres for worshipping Sun god in India. The existence of Sun temple is cited in many of the religious texts and Puranas. In Puranas the place is mentioned as Munira or Mundirasvamin, which was later replaced by the name Konarka.

The present temple exhibits the strength and stability of the Ganga Empire as it was built during 13th century by the King Narasimha Dev I of the East Ganga dynasty. It was

built in his royal status and prestige to commemorate his victory over Muslims. The king opted this particular place for the construction of the temple is because Narasimha dev was charmed by the beauty of the Sunrise and the roaring voice of the sea at this place since his childhood. The river Chandrabhaga flowing a mile distance at the north side of the temple was joining the sea. On the bank of this river was the towns flourishing which had its important trades carried out through the sea routes to the foreign countries. And since ancient times two Supreme deities – one mother Earth as Dharitri Maata and the other is Sun god is worshiped. Sun god is regarded as the supreme lord of the world and the chief entity of life giving energy, being the healer of diseases and the bestower of desires. Thus due to the love for this place and the devotion towards Sun god, the King chose to celebrate his triumph on the banks of the Chandrabhaga sea.

However legend says, in honor to Sun god the temple was constructed by Samba, the son of Lord Krishna. And the story goes as, once samba displeased Narada. As a revenge Samba was afflicted with leprosy by the curse. Later when Samba was found innocent he was advised to approach Sun god to cure his disease. Thus he went through the penance of twelve years in Maitreyi forest and after the prescribed period Sun god appeared before him and guided him to recite twenty-one different names of the deity. Next morning while Samba was taking bath in Chandrabhaga he sensed something was getting in contact with his hands. When it was uplifted and examined it was noticed as an image of Sun god standing on a lotus pedestal holding two lotuses in his both the hands. Thus he installed it in the temple which was built by him and worshiped the deity regularly as his disease was cured completely by sun god.

Architecture

The temple is constructed in a stunning design of colossal chariot with twenty-four wheels drawn towards the dawn by seven galloping horses which gives the impression of carrying Sun god across heaven. These seven horses which pulls the temple eastwards represents the days of the week. The main entrance of the temple is the eastern gate where the statues of two lions killing war elephants are installed. Beneath the elephant is a man. Here the statue of lion symbolizes pride and elephant symbolizes money which further displays that these two errors (pride and money) can destroy a human being completely.

The massive structure of the temple has a pyramidal roof made of sandstone that rises 30m in height. It is embellished with highly sophisticated and cultured iconographies that

depict the day-to-day activities of contemporary life. Temple's base is covered with sculptures consisting deities like lord Vishnu, lord Shiva and goddess Shakthi are intricately carved and scenes of life at court. There are some mythical creatures also drawn on the walls that separate these figures by the drawings of birds and animals like snakes, giraffe and elephants. Another uniqueness of this temple is the massive iron beams that are placed in between every two stones. These beams are used to construct the higher floors of the temple. The other exclusivity of this place is, the peak of the main temple was created using 52 tons of magnet. The arrangements of the main magnet and the other magnets in its unique way resulted the main idol of the temple to float in air.

Like many other Indian temples, Konark Sun temple also consists of several well-structured spatial units. The elaborate view of the Sun temple displays the intricately carved audience hall 'Jagamohana' which is towards eastern side of the temple. The roof of Jagamohana hall is made of horizontal tiers grouped in three stages with life-size female sculptures and two stupendous crowning members surmount the whole. In front and farther to the east is the dancing hall 'Nata mandir'. The principal sanctuary of the temple was surmounted by a high tower with a crowning cap called 'Shikara' that was razed in 19th century. The aesthetical and visually overwhelming sculptures depicted on the plinth of the temple in between the wheels are entirely decorated with musicians, dancers and erotic scenes as well. The entrance of the temple is towards the East-West direction which is another notable point here. In addition of more information about the temple is the area of Sun temple at Konark is about 857ft by 540ft.

Just beyond the entrance is a pair of staircase that leads to shrine. The image is beautifully carved in high-quality green chlorite stone that is the masterpiece of Konark. The idol of lord Surya depicted as the Sun god wearing tall riding boots and is accompanied with small figure of Aruna (the charioteer) at the feet of Lord. After climbing down from this place remains the inner sanctum where the deity was originally enshrined.

The temple is constructed in such a way that the first rays of the rising Sun falls directly on the main entrance of the temple through Nata mandir and gets reflected from the diamond that is just located at the center of the idol in the focal sanctum. But these magnets were removed by the Britishers to get the magnetic stone during the colonial period. There are three images of Lord Surya in three different directions of the temple that are accurately positioned at the appropriate track to catch the rays of sun at dawn, noon and evening. Thus

the temple indicates the passage of time that is under the control of Sun god.

The wheels of the temple chariot:

The construction of this temple is a masterpiece of Orissa's medieval architecture. One of the main attractions of this temple is the 24 wheels which are carved around the base of the temple. Each wheel is of about 10 feet in diameter with a set of spokes and elaborate carvings. These wheels are located in both north and south sides of the temple. The specialty of these wheels is, it stands as the symbolic motifs referring to the cycle of all the seasons. The spokes present in the wheel create a sundial and the shadow formed on these wheels helps in calculating the precise time of the day. The eight spokes present in each wheel also represent the eight ideal phases of woman's life. And the twelve pair of wheels denotes the twelve months of the year. There are hunting scenes, military processions and thousands of rampaging elephants that decorates the above and below space of the wheels. There is also a depiction of giraffe towards the south side of the platform that provides information that Konark traded with Africa during 13th century.

The design of the temple is a mixture of abstract and geometric forms that are refreshing to mind and a feast to the eyes. The reason for constructing this temple with such mesmerizing sculptures is a mystery. However according to the localites it is said that when the soldiers won the war and returned with a victory, the king built this temple with such extraordinary erotic sculptures drawn from Kama Sutra which would arouse the victorious soldiers and they could have kids who would become soldiers in future and serve the king. And one of the unique artistic achievements of this temple is, it is constructed over twelve years by 1,200 artisans with the deep commitment of its master builder Bisu Moharana. The architect, Bisu Moharana was such devoted personality who quit his birthplace just to concentrate on the construction of this temple. Later in turn his son involved in the workshop and accomplished the construction which his father was unable to complete

Dravidian Style of Architecture

The temple is enclosed within a compound wall. The gopuram is the entrance gateway located at the centre of the front wall. The vimana refers to the shape of the main temple tower. It is a stepped pyramid that rises geometrically, unlike the Nagara style shikhara which is curving. In the Dravida style, the term shikhara is used for the crowning element at the top of the temple, which is shaped like a stupika or octagonal cupola. At the

entrance to the garbhagriha, there would be sculptures of fierce dvarapalas guarding the temple.

Generally, there is a temple tank within the compound. Subsidiary shrines could be found either within the main tower or beside the main tower. In many temples, the garbhagriha is located in the smallest tower, which is also the oldest. With the passage of time and the rise in the population of the temple-town, additional boundary walls were added. The newest structure would mostly have the tallest gopuram.

For example, in the Sriranganathar Temple at Srirangam, Tiruchirappalli, there are seven concentric rectangular enclosure walls, each having gopurams. The tower at the centre has the garbhagriha. Famous temple towns of Tamil Nadu include Kanchipuram, Thanjavur (Tanjore), Madurai, and Kumbakonam. Between the 8th and 12th centuries, temples were not confined to being religious centres alone but also became administrative centres with large swathes of land under their control.

Dravidian Architecture – Subdivisions of Dravida Style

The Dravida style of architecture is classified into various subdivisions based on the shape of the shrine. Kuta or Caturasra is square-shaped. Shala or Ayatasra is rectangular-shaped. Gaja-prishta or vrittayata, also called elephant-backed, is elliptical in shape. Vritta denotes circular temples, while Ashtasra refers to octagonal structures.

Dravidian Temple Architecture – Shore Temple, Mahabalipuram

The Shore Temple was built during the reign of the Pallava king Narasimhavarman II, also known as Rajasimha (700–728 AD). It has three shrines, consisting of one Shiva shrine facing east, one Shiva shrine facing west, and a middle shrine dedicated to Vishnu in the Anantashayana pose. The presence of three main shrines is unique. It is probable that the shrines were not all built at the same time but were added later. There is evidence of a water reservoir and a gopuram. There are sculptures of Nandi, the bull and mount of Shiva, along the walls of the temple. Several carvings decorate the temple complex, showcasing Pallava artistic excellence.

Dravidian Temple Architecture – Brihadisvara Temple, Tanjore

The Brihadisvara Temple is a Shiva temple, also known as the Rajarajeswara Temple. It was completed around 1009 AD and was built by Rajaraja Chola. It is the largest and tallest of all Indian temples. This Chola temple is larger than any of the previous Pallava, Chalukya, or Pandya structures. More than one hundred temples of the Chola period are

preserved, as many temples were constructed during this era. Its pyramidal, multi-storied vimana rises to a height of nearly seventy metres. There is a monolithic shikhara atop the vimana. The shikhara is a dome-shaped octagonal stupika and features two large elaborately sculptured gopurams. On the shikhara, there are large Nandi images. The kalasha on top of the shikhara measures three metres and eight centimetres in height. There are hundreds of stucco figures on the vimana, many of which may have been added during the Maratha period. The main deity of Shiva is portrayed as a huge lingam set in a double-storied sanctum. The surrounding walls of the sanctum are adorned with painted murals and sculptures depicting mythological stories.

Dravida Style of Architecture: Brihadeeswara Temple, Thanjavur

The Brihadeeswara Temple, located in Thanjavur, Tamil Nadu, is a unique architectural marvel that continues to intrigue visitors and scholars alike. The temple, built by the Chola king Raja Raja Chola I in the 11th century, is renowned for its massive Vimana (tower) which rises to a height of around sixty-six meters (Somasundaram1994:116). What makes the structure particularly fascinating is the widely observed phenomenon that the shadow of the Vimana does not fall on the ground at noon, or it appears minimal and indistinct. This phenomenon has been attributed to the engineering design of the tower, where the base is broad and the structure gradually tapers as it ascends, causing the Shadow to fall in such a way that it becomes virtually invisible during peak sunlight hours. Thus, the geographical location of the temple and its precise orientation play a significant role in this occurrence. While some consider this effect as intentional, reflecting the mastery of Chola architecture, others suggest it is a result of natural positioning. Regardless, shadowless nature of the temple remains a symbol of the scientific architectural skills and astronomical knowledge possessed by the architects of ancient India (Pichard 2002:132). It is a shining example of the grandeur of the Chola dynasty and their deep devotion to art, architecture, and religion. The temple, which is dedicated to Lord Shiva, is now recognized as a UNESCO World Heritage Site.

Historical Significance of Brihadeewara Temple

Constructed during the reign of Raja Raja Chola I, the Brihadeeswara Temple was built to celebrate his military conquests and the glory of the Chola Empire (Figure 1). The Cholas, one of the longest-ruling dynasties in South India, were great patrons of the arts and Brihadeeswara Temple remains as an example of their contribution to temple architecture. It

also holds a treasure trove of inscriptions that provide a rich record of the social, political, and cultural life during the Chola era (Sastri 1955: 213). These inscriptions give us a glimpse into the kingdom's administrative systems, taxation, Village administration, Devadasy system and the incredible patronage of the arts that characterized the Chola period (Subbarayalu 2010:102). The precision and creativity demonstrated in the design of the temple continue to inspire modern architects. It is not just a site of historical importance, but a living monument that celebrates the synthesis of religion, art, and architecture.

The Architectural Edifice

Brihadeeswara Temple is dedicated to Lord Shiva and is one of the finest examples of Dravidian architecture. The temple's Vimana is made from granite. At the very top of the Vimana rests a huge stone weighing about eighty tons, which was placed there using an ancient and ingenious ramp system (Ganapathi 2005:167). It unravels the precision and craftsmanship of the Chola dynasty. The structure's alignment, symmetry, and sculptural details have drawn admiration from architects and historians alike.

One of the temple's most stunning features is the Nandi (the sacred bull and the mount of Lord Shiva), which is housed in the Nandi Mandapa near the entrance. The Nandi is carved out of a single stone and stands at sixteen feet long and thirteen feet high, making it one of the largest monolithic Nandi statues in India. The temple's sanctum sanctorum houses a gigantic Shiva Lingam, which is the primary deity worshipped here.

The outer walls of the temple are adorned with intricate carvings and inscriptions that depict scenes from Hindu mythology, as well as detailed accounts of Raja Raja Chola's reign. This temple reveals the grandeur and sophistication of South Indian temple architecture. Some key features of its architectural style mentioned given below:

Vimana (Tower over the Sanctum):

The temple is crowned with a massive Vimana (Pyramidal tower) that rises to a height of around sixty-six meters (216 feet). It is one of the tallest in South Indian temple architecture (Figure 2). This towering structure is an architectural prodigy of the Chola dynasty and is renowned for its height, intricate design, and engineering brilliance (Murti 1978:94). Its scale and symmetry make it a focal point of the temple, drawing attention to the sanctum (garbhagriha) where the deity resides, which is the primary purpose of the Vimana in traditional Dravidian temple architecture. It is pyramidal in shape, tapering upwards with multiple tiers (storeys), each progressively smaller than the one below. This tapering design

is a common feature in South Indian temple architecture, meant to represent Mount Meru, the mythical mountain in Hindu mythology.

The Vimana features a range of detailed carvings and sculptures of deities, Monks, and mythical creatures that reflect the rich cultural and religious heritage of the Cholas. It replicates the cosmos, with each tier representing different layers of the universe. It also symbolizes the connection between the earthly realm and the divine, guiding worshippers' eyes from the ground upward toward the heavens (Somasundaram 1994: 119). It signifies the power and authority of the Chola rulers, particularly Raja Raja Chola I, who built the temple. The scale and grandeur of the Vimana were intended to reflect the emperor's divine right to rule and his dedication to Lord Shiva. The base of the Vimana is adorned with sculptures of divine guardians and mythological scenes, all with a remarkable degree of precision and depth that testifies to the architectural and engineering mastery of the Cholas.

Engineering Manifestation of Granite Construction:

The temple is made entirely of granite, an impressive feat given the limited technology at the time and the size of the stones used. The Vimana is made entirely of granite, even though the region around Thanjavur does not have significant granite deposits. This means that the granite had to be transported from distant locations, showcasing the engineering prowess and resources of the Chola Empire. Accuracy in cutting, shaping, and assembling such heavy stone blocks without modern machinery reflects to the architectural genius of that time (Dhaky 2020: 310). The Vimana is capped with a massive dome, known as the Kumbam, which is a bulbous structure at the top (Figure 3). This dome is carved out of a single block of granite and weighs approximately eighty tons. The process of placing this dome at top of the tower was a significant engineering feat for its time. The placement of the dome is particularly impressive, and Historians mentioned that the use of a long-inclined ramp extending over approximate six kilometres to slowly hoist the heavy stone to the top of the Vimana, demonstrating the engineering skills of the Chola architects. (Ganapathi 2005: 170). This would have required a massive workforce and remarkable coordination. Although close to the Kaveri River, the temple's precise location and layout, with slightly raised foundations, protect it from potential flooding. The raised layout was strategically planned to ensure that the structure could withstand seasonal changes and monsoonal rains. The precision in construction has allowed the Vimana to stand for over a thousand years, surviving earthquakes and natural wear and tear.

Sculptural Detailing and Chola Frescoes:

The pillars, walls, and ceilings of Brihadeeswara Temple are adorned with detailed carvings, each narrating mythological stories, royal conquests, and celestial beings. These carvings are incredibly fine and display scenes from Hindu pantheon, particularly stories related to Lord Shiva, the temple's primary deity. The temple features numerous sculptures of Hindu gods and goddesses, each represented with distinct attributes and gestures. The most significant figure is that of Nataraja, a form of Shiva performing the cosmic dance, beautifully captured with precision and dynamism. Other deities like Parvati, Ganesha, and Vishnu are also represented in various forms around the temple. The walls display a series of dancing figures and warriors in dynamic postures, each with distinct body language and facial expressions. These figures not only showcase artistic excellence but also provide insight into the cultural life and aesthetics of the Chola period. Inside, the walls are adorned with frescoes and murals that depict various scenes from Hindu mythology and historical events, highlighting the artistic contributions of the Cholas (Figure 4). The temple is adorned with carvings and sculptures of deities, mythological figures, and motifs, indicating the advanced craftsmanship of the Chola period.

Massive Gopurams (Gateways):

Although the Vimana is the most prominent structure, the temple complex also includes elaborately decorated Gopurams at the entrance. The Gopurams at Brihadeeswara temple serve both aesthetic and symbolic functions (Figure 5). The main Gopuram at the entrance is smaller than the Vimana, which is unusual compared to other South Indian temples where Gopurams are typically the tallest structures. This design directs focus towards the Vimana, which is the highlight of the temple's architecture. This Gopuram is adorned with complex carvings, featuring scenes from Vedic mythology, images of deities, and floral designs, typical of Chola artistry. The temple has an additional inner Gopuram that leads further into the complex. This second gateway enhances the sense of entering progressively sacred spaces within the temple. Like the main Gopuram, the inner gateway also features detailed carvings of fictitious scenes, including stories associated with Lord Shiva, as well as images of protective deities and decorative motifs. These sculptures reflect the artistic expertise of the Chola period. The Gopurams at Brihadeeswara Temple, especially the outermost ones, show influences from later additions and renovations (Ganapathi 2005:173). Although originally built by Raja Raja Chola I, some parts of the temple were

expanded or refurbished by subsequent dynasties like the Nayaks and Marathas, who added to the sculptural detailing and decorations.

The temple's entrance and main sanctum area feature Yali sculptures—mythical creatures that are part lion, part elephant. These sculptures serve both decorative and protective purposes, representing the temple's defense from negative forces. The Yalis are finely carved, showing an impressive attention to detail, including textured skin and expressive facial features. The sculptural details at Brihadeeswara Temple are aesthetically remarkable and serve as a repository of cultural, historical, and religious symbolism, embodying the grandeur and spiritual devotion of the Chola rulers.

The Nandi Sculpture:

One of the most iconic sculptures at Brihadeeswara Temple is the massive monolithic Nandi (the sacred bull and vehicle of Shiva) seated at the entrance (Figure 6). Carved from a single stone, this Nandi statue is approximately six meters in length and 3.7 meters in height, making it an architectural splendour in India. This Nandi faces the sanctum, creating a visual alignment that enhances the temple's sacred geometry.

Shadowless Phenomenon and Its Interpretations

The Vimana of the Brihadeeswara Temple never casts a shadow on the ground at noon. The engineering behind the temple is as remarkable as its artistic accomplishments. Despite the massive scale of the structure, the temple's design ensures that the Vimana casts no shadow on the ground at noon (Sastri 1955: 216). This has amazed visitors for centuries, with many questioning whether it is an optical illusion, an engineering marvel, or a result of astronomical calculations. There are many reasons for this phenomenon.

Architectural Design and Tapering Structure of the Vimana

The temple's design and the precise angle of the Vimana may be such that the shadow falls directly below the structure at noon, effectively making it 'shadowless' to an external observer. The temple follows a highly symmetrical and axial plan, with the main sanctum (garbhagriha) at the centre. Each section, from the outer walls to the inner sanctum, is carefully measured and proportioned, which reflects an advanced understanding of geometry and architecture (Dhaky 2020: 319). The design focuses on verticality, leading the eye upward to the towering vimana. The design of the Vimana is such that during certain times of the day, particularly at noon, its shadow does not fall outside the temple's base.

The Chola architects who designed the temple were highly skilled in understanding

geometry and celestial patterns. They likely incorporated their knowledge of how the sun's rays fall at different times of the day and year into the temple's design to create this unique effect. This unique architectural feature adds to its fascinate and grandeur. This architectural feature causes the shadow to shrink as the sun reaches its zenith (Ganapathi 2005: 172). When the sun is directly overhead, especially around noon, the shadow of the tower falls within the base of the temple itself, making it less noticeable or 'shadowless. The Vimana tapers inward as it ascends, potentially dispersing sunlight in a way that minimizes the shadow visible on the ground. This clever use of geometry could contribute to the illusion of shadow lessness.

Gangaikonda Cholapuram Temple

Thanjavur, a beautiful city in the state of Tamil Nadu, is an important centre of art, culture, and architecture. The city served as the capital of the Chola dynasty for nearly 250 years. Gangaikonda Cholapuram Temple in Thanjavur stands as a magnificent example of Chola architectural brilliance.

History of Gangaikonda Cholapuram Temple

The Gangaikonda Cholapuram Temple was built by the Chola king Rajendra Chola in the 11th century. Rajendra Chola was the son and successor of Rajaraja Chola. This grand temple stands alongside another important temple of Thanjavur, the Brihadisvara Temple. During the Chola conquests in North India, King Rajendra Chola brought water from the River Ganges in a golden pot and consecrated the Cholaganga reservoir. After this event, he earned the title "Gangaikondan," meaning the one who brought water from the Ganges. This inspired the king to build a temple grander than the Brihadisvara Temple. The construction took place between 1020 and 1029 AD and required nine years to complete.

Architecture of Gangaikonda Cholapuram Temple

The Gangaikonda Cholapuram Temple houses the largest Shiva lingam in South India. The sanctum sanctorum touches the four-metre-high lingam. The sanctum is encircled by two walls to provide privacy for the royal family during worship. The main entrance of the temple is decorated with images of Goddess Saraswati. The influence of Chalukyan architecture is evident in the icons of Suryapita and Navagrahas. The temple has a nine-storeyed vimana rising to a height of 185 feet. The structure is similar to the Brihadisvara Temple but is noted for its refined carvings. The walls and ceilings are adorned with

sculptures made entirely of granite. The most notable sculptures include those of Ganesha, dancing Nataraja, Goddess Saraswati, Shiva-Parvati, and Ardhanarishvara.

History of the Airavatesvara Temple, Darasuram

According to legend, Sage Durvasa cursed Airavata, the white elephant of Lord Indra, causing it to lose its colour. Airavata prayed to Lord Shiva at Darasuram and was instructed to bathe in the temple tank, which restored his white colour. Hence, the Shiva lingam came to be known as Airavatesvara. The present Airavatesvara Temple was built in 1166 CE by Rajaraja Chola II. It was the last of the three Great Living Chola Temples, following the Brihadisvara Temple at Thanjavur and the Gangaikonda Cholapuram Temple.

Architecture of the Airavatesvara Temple

The temple follows the Dravidian style of architecture but emphasises intricate carvings rather than monumental size. It rises to a height of eighty feet and has a five-storeyed vimana. The temple was constructed using a traditional interlocking stone system, enabling it to withstand natural forces. The structure is often described as “poetry in stone” due to the richness of its carvings.

Nandi Mandapa of Airavatesvara Temple

The Nandi Mandapam is reached by descending a few steps. Unlike the elaborate Nandi pavilion at Thanjavur, this shrine is simpler and smaller. This difference may be attributed to later additions made by the Nayaka rulers at Thanjavur.

Airavatesvara Temple

As one enters the Airavatesvara temple at Darasuram (pi. XI), one finds a large gopura, the upper portion of which is completely lost but the form of which may be imagined from the complete second (inner) gopura. The larger prakara-wall all around the temple, decorated with couchant bulls at intervals, is in continuation of the second gopura. Supporting the gopura are pillars in a row, which have some fine carvings of lovely apsaras, Sivagana and other motifs. Beyond the gopura is a large balipitha with beautiful lotus-petal decorations. Towards one side of it, just behind the large Nandi, is a quaint standing dwarf Siva-gana blowing a conch, which, together with the bull, is a fine artistic product. Long narrow strips of frieze, with a whole series of miniature figures dancing in lovely poses with musical accompaniment, provide, even as one enters, the key-note of the decoration in this temple nitya-vinoda, perpetual entertainment.

On either side at the entrance are small balustrades, intended to flank steps (now

missing), with beautiful makara-decoration on their outer side. The makara with a floriated tail, short legs and curled-up snout and a pair of dwarf gana-riders on it forms a lovely decoration. At the entrance the visitor is greeted by a beautiful mandapa with a number of pillars, to be approached through an extension of it towards the south, with flights of steps on the east and west. The balustrades for these steps are nicely decorated on the outer side with a long curling trunk issuing out a lion-head; a similar second one runs parallel to the trunk of an elephant, lost in the open jaws of a makara whose floriated tail is curled up, to balance the complete design. The elephant is beautifully decorated and has on its back dwarf gams viz., the sarikha and padmanidhis. The eight outer pillars of the mandapa are supported by squatting yatis with their trunks curled up and with pronounced abaci. The lotus-petal decoration below has prominent petal-tips. The capital, as in the other pillars in the mandapa, has the beginning of the Wfofoz-decoration, which, in the late Chola and Vijayanagara periods, develops into the lotus-decoration. Each of the four inner pillars is divided into sections, three oblong and two polygonal. The decoration which later develops into the naga-bandha is just present, and, as in other early Chola structures, is only a decorative pattern of the double-geese. The rectangular portions of the pillars are decorated with small panels illustrating mythological stories, such as the attack of Manmatha, the penance of Parvati, the prayer of the gods for a son of Siva, the birth of Kumara, Siva's marriage, his fight with the asuras, etc. On four pillars which lead on to the extension of the mandapa, short inscriptions are repeated, describing it as svasti sri-Raja-gambhiraṃ tiru-mandapam. If the elephants on the sides of the balustrades of the steps mentioned above are lovely specimens, there are equally lovely galloping horses, one on either side of the mandapa extension immediately beside the flight of steps, with a huge wheel carved behind it, which gives the mandapa the semblance of a chariot. The front of the base of this mandapa-extension is decorated at the bottom with panels showing: Siva fighting the Tripuras from the chariot and as Kalantaka repelling Yama for protecting the son of Mrikandu whom he had blessed with a long life; Siva burning Kama who dared attack him with his flowery bow and arrow even while his lovely queens, including Rati, and other gods pray for his being spared; and the destruction of Daksha's sacrifice by Virabhadra. Above this, in five niches at intervals, are Agni, Indra, Brahma, Vishnu and Vayu, all standing with hands in the attitude of reverence to Siva. It may be noted that the original plan of the flight of steps east of the mandapa has been completely spoilt by later renovations, and the symmetry, which no doubt originally existed,

is now lost.

The main mandapa is in continuation of the mukhamandapa of the main shrine and is covered completely on the northern side at the extreme ends of the eastern and southern sides, providing on the outer face of the wall as in other portions of the temple, the usual pattern of niches with pilasters in between. The same pattern of alternating niche and pilaster with a main niche for every pair of subsidiary niches is found on the outer walls of the second mandapa, which is a completely closed one, all the pillars being inside. The main mandapa is decorated with a pair of dwarf yakshas guarding padma and fankha-nidhis in niches on either side on the east. These figures, like all the other special forms of deities in the niches, are of fine-grained black basalt, distinguished from the granite used in the entire structure. The pillars of the first (main) mandapa contain beautiful patterns of decorative creepers so arranged that in the circular medallions created therein are figures dancing in diverse poses, musicians and sometimes forms of deities such as Gangadhara and Tripurantaka. These figures adorn panels arranged in tiers of niches and solas on the sides of other pillars. Even where the pillars have purely decorative patterns, there are figures, mostly in dance-poses or playing musical instruments, introduced very deftly into them.

The ceiling shows square and rectangular patterns, bands of which are all filled with decorative designs. Almost all the central medallions contain similar dance and musical groups. The pillar-capitals here have the precursor of the bodhika-type, the ornamental precursor of the naga-bandha being also present.

As we enter the next mandapa, which leads on to the ardha-mandapa and the main shrine, there are in niches Devi with lotus, and ratna-kalafa (pot filled with gems) and Nandikesvara standing with hands in adoration on one side and saint Kannappa and seated Sarasvati on the other. It should be noted that the openings of the main mandapa have been bricked up here and there in modern times for converting portions into rooms and the centre of the northern side has been improvised into a cell for Devi; the chauri-holding dvapalikas (pi. XIII A), fixed on either side of the doorway, also improvised, are lovely and belong to the same period as the other fine sculptures arranged in the niches of the main temple itself. The pillars in the mandapa adjoining the main one, which leads on to the main shrine, are somewhat simpler, notwithstanding their being polygonal and with flowerpetal decoration at intervals and corbels, which recall the Chalukya type.

The mukha-mandapa, approached by long flights of steps from the north and south,

marks the end of the mandapas and the beginning of the main shrine. Here there is a couchant Nandi smaller than the one at the start of the main mandapa. The dvapa-palas of the main shrine are depicted as furious and with huge clubs; they have four hands in the threatening attitude (tarjani), bear tusks and carry trisula on their bound-up hair decorated with the lion-head design. The garland-decoration of their yajnopavita again recalls Chalukya influence.

A six-headed Kumara standing to the left of the entrance of the main cell is a fine sculpture. The walls of the mandapa and the main shrine contain niches, some of which still possess exquisite specimens of early Chola sculpture; the other niches either have no image or have poor modern substitutes in brick-and-plaster. Of the noteworthy Chola specimens are: a fine Ardhanarisvara, unique of its kind, with three faces and eight arms; a four-armed Nagaraja having snake-hoods over his head and hands joined in adoration; Agastya, the dwarf sage, seated with one of his hands in the teaching attitude and the other carrying a water-vessel; another seated sage carrying the rosary and manuscript; dancing Martanda-Bhairava or Aghora-Virabhadra with four hands, three heads and a terrible countenance; Siva as Sarabha destroying Narasimha (in a niche to which a small mandapa, reached by a flight of steps, is provided); standing Ganesa; Dakshina-murti attended by sages seated under a banyan tree and expounding the highest truth; Lingodbhava Siva, issuing from a flaming pillar, Brahma and Vishnu unable to reach the top and bottom, adoring the linga; Brahma; eight-armed Durga on the severed head of buffalo; seated Devi as Bhuvanesvari carrying pasa and axikusa, in two of her hands, the other two being in abhaya and varada; Siva as Tripurantaka, carrying the axe, deer, bow and arrow; multi-armed Gajantaka destroying a demon in the guise of an elephant and dancing against the spread-out hide of the animal in the bhujangatrasta pose, Devi shrinking away from him in fear; Bhairava with six arms standing with his dog behind him; a sage carrying a water-vessel and teaching two disciples; and Mahesa-murti seated with three heads and four arms carrying the spear, axe, rosary and water vessel. All these sculptures, made of polished black basalt, are of exquisite workmanship.

In describing the sides of the main shrine, it should be mentioned that the lower half of the base is of the same type all over including the mandapas. The lowest series of panels above the lotus-petal decoration is divided by decorative bands and in them are ydlis, couchant or rearing, in pairs or single, women dancing to the accompaniment of music, dwarf ganas in queer poses, dancing, playing a drum, blowing a conch, carrying the chauri or

holding their hands in wonder, often in the company of a bull. Above this is a long frieze, which is again repeated a little below the niches. There are miniature decorative carvings a little below the second row of frieze above it and immediately below the niches. In the main shrine the carving below the niche depicts scenes illustrating stories of Saivite saints, some of which have labels in Tamil.¹ Separating these scenes there are miniature carvings of dancing figures and Siva or Devi in different attitudes.

On the outer walls, on either side of the niches, are also carved fine figures corresponding to those enshrined in the niches, simulating the tradition of the earlier temples at Thanjavur and Gangaikondacholapuram. Thus, Ganesa's niche is flanked by bhutaganas, dwarf attendants, carrying offerings with the deity's vehicle, the mouse; the niche of Dakshina-murti is flanked by exquisitely-carved figures of rishis, which are, however, hidden by a later brick structure. The niches of the main temple are three in number. The central one, larger than the flanking ones, has a double-pillar decoration on its either side. It has a top fashioned as a said, while the tops of the niches on either side illustrate the Aśoka-pattern. The double-pillar decorations between these have the lion-headed kudu for their top. Between the niches and the double-pillar decorations, all of which project forward, there are kumbha-panjara decorations against the main wall itself. Above the niches, near the caves, there is a whole row of dwarf-ganas, dancing, playing musical instruments or otherwise merry. Against the roof here and there are kudus. Gaping bhuta-heads serve as gargoyles for discharging water from the roof. The kudu-pavilion- and said-patterns are repeated in the different tiers of the vimana.

All around the main shrine is a broad strip, 3*66 m wide, paved with granite slabs, and a low wall, 25*40 cm high, of the same material, the latter beautifully carved with the lotus-pattern and Nandis seated in between. This beautiful row of Nandis is unfortunately mutilated everywhere. The existence of outlets for water at intervals shows that it was intended to be a sort of a pleasant water-receptacle to give the idea of a pool surrounding the temple in spring and keep the atmosphere cool in summer. A number of circular rings with low rims, carved out of stone, appear to have been lamps.

The gargoyle for discharging water from the main cell is on the north. It is long, has a dip and double course, is decorated with two lion-head motifs, one at the source and the other where it starts the lower course at the point of the dip, and discharges water into a large well-carved water-reservoir with the figures of dancing ganas on the sides. The gomukha is

supported at the base by a caryatid dwarfgana, as in the gargoyle in the temple at Thanjavur (though the figure here is standing), by a rearingyali and again by triple ganas at the end.

In the vicinity of the main temple near this garṇ goyle is the shrine of Chandikesvara, similar to the one at Thanjavur.

The inner side of the entire prakdra, surrounding the large paved coutryard, has a beautiful series of mtfn(/0jta-decoration, which, in the main, is one long row of pillar-cloister with cells at intervals for deities, some of which have disappeared. At the four corners the cloister has been enlarged and embellished into mandapas, approached by steps decorated with balustrades, showing interesting motifs as a ferocious lion pouncing on an elephant with curled-up trunk lost in the mouth of a 3 makara and with its sides covered up at the points where a niche or trellis-window is added as decoration (pi. XII). The base, as usual, has fine panels showing scenes of dance, jugglery tricks, themes of sculptural pun and so forth. All these points are best observed in the mandapa towards the north-west. Towards the north-west there is a similar mandapa, but lacking the trellis-work. Here the pillars are well-decorated with dance-figures; the ceiling also is profusely covered with beautiful panels and medalṇ lions filed with danseuses and musical figures.

The top of this mandapa is decorated with laidroof suggesting Nataraja's sabhd; this is the ndtya-mandapa ofthe temple—a fact clearly borne out by not only the sculptures on the pillars and ceiling but also by a carving on the base of Vishnu playing the drum in front of the mandapa. Though now in a bad state of preṇ servation, this must have been the place where originally the Nataraja bronze should have been housed. To the east, beyond this, is the yaga-sala, and further on is the representation of a king and queen, in addition to figures of deities. The two portrait-statues are probably intended to represent either Virarajendra or Rajaraja II, either of whom was responsible for this temple, and his queen.

In the cloistered hall to the west of the naija-mandapa there is a remarkable group oflarge carvings in the round, representing Siva as Kankala-murti (pi. XIII B), a number ofrishipatnis, the wives ofsages ofDarukavana who attended on Siva and were astonished at his beauty. The garments of one of the women in a pair (pi. XIV) are slipping off and the other has a finger on her lips indicative of wonder, Gtf/w-dwarfs are playing the drum or sounding a gong in quaint and picturesque attitudes. Kankala-murti himselfis calm and serene and fondles a deer with one of his hands, while a dwarfattendant carries his begging bowl. Ofthe women, some carry ladles for offering food to the divine begger. The

composition is one of the great masterpieces of Chola art. There are also carvings of Manmatha and Rati on a chariot and Kannappa-nayanar, the saintly hunter.

Beyond this are one hundred and eight Sivacharyas (Saiva saints) in a row fixed in the wall, with their names and short descriptions incised below each. To the south a large portion of the pillared cloister has tumbled down.

In the roof of the niches, all along the wall of the mandapa to the north, there are representations of rishis, which, together with similar figures in the niches, point to the element of peace and tranquillity, as opposed to the heroic element which is the key-note of sculpture in the temples at Thanjavur and Gangaikondacholapuram. The long series of stories from the Siva-purana and Siva devotees portrayed here also suggest the same. When we remember that this was the period when the stories of the Saiva kings and the sacred Devdram hymns were collected together, we can understand the purpose of this. It is not unlikely that the name Darasuram has something to do with Daruka-vana, especially when we consider the magnificent group of sculptures representing Kankala and the rishi-patnis described above.

The linga of the temple is known as RajarajaSvaram-tidayar, and the story goes that the temple was erected by Rajaraja himself to satisfy a cowherdess who made a gift of the huge stone used as the sikhara of the large temple at Thanjavur in accordance with her wishes that there should be a temple in her village.

Adjacent to this is the shrine of Devi, which is contemporary with the main temple. The balustrade decoration of the aisle with riders on either side as we enter the shrine are fine works of art. Some lattice-window carvings are also worthy of note. The gargoyle, which presents a dwarf-gana in quaint pose both to receive and disgorge the water from the cell, is interesting even in its mutilated state. The niches of the outer walls of the shrine contain forms of Devi. The tiny dance-figures in the lattice-windows and the rctfgtf-decoration are remarkable.

The profuse occurrence of dance and musical scenes and of figures in various dance-poses cannot but attract the attention of the visitor. The Chola period was one of great patronage and encouragement for dance and music, and when we remember that the gopuras at Chidambaram, of slightly later date, have a number of dance-figures to illustrate the various sthanas and karanas of Bharata's Natya-sastra, we can understand the reason for this exuberance of natya-figures in the embellishment of the temple.

The narration of stories of the Saiva saints, with depictions of temples, ponds or rivers full of fish, shells and other aquatic animals and, in one case, a crocodile, along with the frequent figures of kings with royal paraphernalia, such as peacock-feather parasol, sages and Brahmanas with umbrellas in their hands and similar themes strongly recall the corresponding scenes of an earlier date at Borobudur and Prambanan in Indonesia. In fact, even the lions in the lowermost panels of the base of the main shrine remind us strongly of their counterparts at Prambanan. This is not at all surprising, as the intercourse between the Eastern Archipelago and India was considerable in the Chola period, most of these islands being under Chola sway for at least some time. The decorative elements, specially the creeper-patterns providing medallions for dance-figures on the pillars and some of the pillar-capitals recall their Rashtrakuta and Chalukya counterparts. This is easily accounted for by the constant Chola, Rashtrakuta and Chalukya inroads into the territories of one another. A dvapala figure, which was originally in the Darasuram temple but has now been removed to the Thajavur temple, is of Chalukya workmanship and contains an inscription on its pedestal in early Chola letters, mentioning that it was brought by the Chola king as a war-trophy after the sack of Kalyanapura, the capital of the Western Chalukyas.

Vesara Style of Architecture

The Vesara style of architecture flourished in the Deccan region of India. Also known as the hybrid style, it combines features of both Nagara and Dravida styles. The Chalukya and Hoysala rulers patronised this style, influenced by the geographical and political conditions of Karnataka.

Main Features of Vesara Style

The Vesara style emphasises the vimana and mandapa. The ground plan is usually star-shaped or stellate. A distinctive feature is the open ambulatory passageway. Temples are built on an unraised platform or jagati. Pillars, doorways, and ceilings are richly decorated with intricate carvings. Famous examples include the Kailasanatha Temple at Ellora, Chennakesava Temple, Virupaksha Temple, and Ladkhan Temple.

Chennakesava Temple (Belur)

uilt in the heart of the picturesque town of Belur, the Chennakeshava temple stands as a breathtaking testament to the architectural brilliance of the Hoysala Empire. This exquisite masterpiece is a captivating combination of detailed carvings, motifs, and sculptures that leave visitors spellbound. Stepping inside, you are enveloped in an atmosphere of reverence

and awe. The magnificent central shrine houses a beautifully carved image of Lord Chennakesava, an avatar of Lord Vishnu. Each pillar and each sculpture is a testament to the skill and dedication of the Hoysala artisans, who transformed stone into living works of art. Read this blog till the end to know more about this beautiful temple.

The Chennakesava temple, also known as the Keshava, Kesava, or Vijayanarayana temple, is a remarkable Hindu temple in Hassan district of Karnataka. Commissioned by King Vishnuvardhana of the Hoysala Empire in 1117 CE, this magnificent temple was built on the banks of the Yagachi River, the capital of the Hoysala Empire. The construction of this grand temple spanned an impressive 103 years across three generations of the Hoysala rulers. Dedicated to Vishnu, the temple's name, Chennakesava translates to "handsome Kesava," which is one of the names of the Hindu god. Since its inception, the Chennakeshava temple Belur has remained an active place of worship and a significant pilgrimage site for Vaishnavites.

The temple's artwork vividly depicts scenes from secular life in the 12th century, including dancers, musicians, and pictorial narratives from Hindu epics like the Ramayana, Mahabharata, and Puranas, adorning numerous friezes. While primarily a Vaishnava temple, the Chennakesava temple reverentially incorporates elements from Shaivism and Shaktism and even includes images of a Jina from Jainism and the Buddha from Buddhism. This reflects the diverse religious and cultural perspectives of 12th-century South India under Hoysala's rule. This inclusivity of beliefs and cultures makes the temple a fascinating destination if you are interested in Indian heritage.

Chennakeshava Temple History

Sri Chennakeshava temple stands as a masterpiece of Hoysala architecture and a testament to the artistic, cultural, and theological perspectives of 12th-century South India. A brief timeline of its development is as follows:

- **Commissioned by King Vishnuvardhana**

Hoysala King Vishnuvardhana ascended to power in 1110 CE. In 1117 CE, he built the Chennakeshava temple on the banks of the Yagachi River in Belur, an early Hoysala capital.

- **Built by Three Generations**

The temple, which was built over three generations and took an impressive 103 years to complete, reflects the rising luxury, political power, and deep spiritual dedication to Sri Vaishnavism.

Vishnuvardhana's descendants completed the Hoysaleswara Temple in 1150 CE and other temples, such as the Chennakesava Temple in Somanathapura, in 1258 CE. These temples are located about 200 kilometres apart. The Hoysalas employed renowned architects and artisans who developed a new architectural tradition, the Karnata Dravida.

Chennakeshava Temple: Structure and Architecture

Sri Chennakeshava temple is a masterpiece of Hoysala architecture. Its structure and design are as follows:

1. Ekakuta Vimana Design

The Chennakeshava temple Belur is designed in the Ekakuta Vimana style, which is characterised by a single shrine. This shrine is square, with each side measuring 10.5 meters. A significant feature of the temple is a large vestibule that connects the shrine to the mandapa, or hall, which is one of the main attractions of the temple. The mandapa is expansive, consisting of 60 bays, and is adorned with intricate carvings and sculptures, showcasing the exquisite craftsmanship of the period.

2. Star-Shaped Structure

The main temple of the Chennakeshava complex is a star-shaped structure that stands on a raised platform known as Jagati. This temple comprises three main parts. The first is the Garbhagriha, or Inner Sanctum, which houses the deity Chennakeshava. The second component is the Sukanasi, or Vestibule, which connects the sanctum and the mandapa. Lastly, the Navranga Mandapa, a hall beautifully decorated with captivating artwork, adds to the temple's grandeur.

3. Superstructure (Vimana)

The original superstructure, or tower that was situated on top of the vimana (the main temple structure) of the Chennakeshava Temple is unfortunately no longer present. It is believed that in the past, this superstructure was constructed using brick and mortar. It was likely supported by wooden structures and covered with copper sheets gilded with gold. This historical detail adds to the rich heritage and grandeur of the temple.

Hoysaleswara Temple (Halebid).

The Hoysalas rose to prominence after the decline of the Cholas and Pandyas. Their capital was centred around Mysore. Important temples are located at Belur, Halebidu, and Somnathapuram. These temples follow the Vesara style and are built on a stellate or star-shaped plan. Soapstone was used as the primary material, allowing for intricate carvings. The Hoysaleswara Temple at Halebidu, built in 1150 AD, is made of dark schist stone and is dedicated to Lord Nataraja. It is a double temple with large mandapas and a Nandi pavilion in front of each shrine. Though the main tower collapsed, miniature models indicate its original form. The carvings are exceptionally detailed.

Introduction

Man's life depends upon and is conditioned by all that surrounds him viz. inanimate, mineral and animate, aquatic, vegetative animal and gaseous life. It is therefore, man's duty constantly to remind himself in individual and collective life of the environment and the ecology. Such veneration is no animistic primitive fear, it is wisdom contained in language of myth and symbol. This efficacy lies in the capacity of multiple interpretation at the biological function, societal, philosophical and religious levels. The pivot, around which Indian myths move is ecological balance. Developments in Indian sciences especially mathematics, chemistry, biology owe their systems to this holistic world view of ecological balance. Indian architecture, sculpture and painting is the most effective, aesthetically pleasing symbolically loaded message totally contemporary and valid statement of the ecology and concern (Vatsyayan 1995:142- 147). One of the finest examples of the aforementioned theme depicted in Indian sculptures is at the Hoysaleswara temple, Halebid, built under the Hoysala patronage. The sculpture identified depicts Krishna in Gokula, playing his flute (Fig. 1). The primary dimension of understanding the sculpture is of the literary tradition. The portrayal of the theme is according to Srimad Bhagavatha Mahapurana (Srimad Bhagavatha Mahapurana 2003, Ch XXI, V:1-20). According to the text, the sculpture depicts Krishna playing the flute and the onlookers captivated by the vibration of the sound from the flute. Even river Yamuna being desirous of embracing the lotus feet of Krishna after hearing the transcendental vibration of his flute broke her fierce waves to flow very nicely with lotus flowers in her hands, just to present Mukunda with deep feeling (Bhaktivedanta Swami 1996). Each animal acquires its own symbolism and by the fourth Century AD, they develop into a systematised pantheon closely related to the world of humans and celestials.

Most Indian sculpture is structured to comprehend the world of aquatic plant, animal and human life. Each is an aspect of the other, superficially they appear as decoration, yet at a deeper level, the aquatic, vegetative and animal elements represent aspects of human psyche. Metamorphosis and transmutation is logical and traditional. This rich abundance of nature, its manifold creations and organic coherence, logically culminates in the universal fertility theme known to all ancient religions (Vatsyayan 1995: 147). To quote an example, Krishna is depicted in the sculpture standing on an inverted lotus. It is the most important vegetative form born in water, connected to the mythical centre of the earth through its stem, and always above the water, its leaf the symbol of untainted purity, its flower blossoming with fragrance. Physically the lotus is a typical ecological statement of the processes of nature. Symbolically it assumes the greatest importance in Indian myths art and ritual. The metaphor of the lotus leaf, the lotus flower and stem permeates Indian literature in practically all languages. If the motif of the lotus was excluded from Indian mantra, tantra, yantra, poetry, prose, music, dance, sculpture, monumental as the free standing pillars with inverted lotus or relief as the magnificent panels in Sanchi or Indian paintings, the Indian heritage would be impoverished beyond recognition.

Nature around seen and enjoyed in the most ethical manner by hermits and saints as they observed living in the open and surrounded by life in one form or other, mobile or immovable, listening to mute or inarticulate distinct in the murmur of leaves, cooing and mooing of birds and animals and in the evolved speech of fellow being, they found their own approach to life, around into the utmost affectionate terms, personified even night and day, enjoyed and blessed the earth and stream as a mother, the mountains and hills as an elder protecting parent, the trees and animals themselves as companions of life.

The reflection of the literary texts in the sculpture allows one to identify the representation of plants, animals and people of different hierarchy in that region. Krishna is depicted as the core focus of nature and life. The rest of the animate and inanimate objects takes its inspiration and psychological support from this core substance of life. This depiction reflects the significance of man-environment relationship. The sculpture is a depiction of an ecosystem where one can observe a community of living organisms in conjunction with the non-living components of their environment, interacting as a system.

Ethology is concerned with the evolutionary significance of animal behaviour in its natural environment. Ethology focuses on behaviour processes across species rather than

focusing on the behaviours of one group (Saxena 2013: 1). In this sculpture one can understand the tenants of Human Ethology focusing on the evolutionary and adaptative significance of human behaviour with special reference to Krishna. This depiction leads to the understanding of the theories of socio-biology, evolutionary psychology and attachment theories. The theoretical orientation leads towards the understanding of the non-cognitive behaviour that includes compassion and apathy that is influenced by the behaviour of Krishna influenced by the non verbal attribute, the melody of the flute.

The Natyashastra is the most ancient text that deals with the theoretical aspects of theatre. It throws a flood of light on the method of a drama to be staged or conducted with the correct synchronization of all constituent elements to invoke the right responses aesthetically in the audience. The Natyashastra deals with both interpretative, that deals with sentiments and the non-interpretative, that deals with the aspects devoid of sentiments that can be identified in the dance sculptures

The select sculpture (Fig. 1) plays a very important role in understanding the aharya (dress and costume) of the people. This sculptural representation can be taken as an index sculpture to analyze the rest of the sculptures, as there is a homogenous representation of all the living entities at different levels. With special reference to different characters, this sculpture helps in understanding an individual character based on their treatment. In this sculpture Krishna is seen playing his flute and the women depicted are represented as being attracted towards it and are seen dancing. Here they are not attracted towards Krishna but towards his music. Therefore, just considering the aspect that women shown are attracted, it cannot be said that this is a sculpture based on sringara rasa. Apart from the dancers being attracted, the whole village seems to be attracted towards the music of Krishna. Krishna as an instrumentalist becomes the main theme and it is thus classified as a sculpture more related to music and musical instruments. The subject is Krishna's flute. The following is the analysis of the sculpture:

Rasa and Bhava

The sculpture of Krishna (Fig. 1) depicts adbhuta rasa with vismaya as sthayi bhava. In this sculpture, it is interesting to note that the huge audience comprising of all levels of animal beings surround Krishna. The act mesmerizes the on lookers and evokes adbhuta rasa in them. This is the vibhava identified. The anubhava depicted is the motionlessness of the animals as well as people around Krishna. The complimentary psychological states that may

arise due to the act will be weeping with joy, inactivity due to involvement.

Sthanaka

Though this is a male representation, the sthanaka is not according to purusha sthanaka, as mentioned in Natyashastra. The text specifies that stri sthanaka is done not only by female but also by male, therefore, the position of the feet in the sculpture is said to be depicted in ashvakranta stri sthanaka. According to deshi sthanaka, the position is said to be in vaishnava.

Aharya

The aharya is said to be in alamkara mode. In alamkara, the ornaments worn are said to be of aavedhya, bandhaniya, prakshepya and aropya type. The deity is wearing a crown. The ears are decorated with kundala. The ornaments of the neck (kanthabhushanam) are muktavali and sutra. The fingers are decorated with the kataka and angulimudra type of ornaments. The ornaments of the wrist are ruchika and culika. The ornament above the elbow (kupara) is angada and keyura. Trisara type of ornament decorates the chest. Talaka is the only type of ornament adorning the waist. Though Krishna is a male deity, his ankles are decorated. The ankle ornaments seen are of kataka and kinkini type. Though he is represented in Gokula form, he adorned with a crown. The crown he is wearing is that of the parshvagata type. According to the text, there is the representation of sanjiva of the catuspada type of animals in the sculptural panel. Animals are seen getting attracted towards the melodious music that is coming from Krishna's flute. The animals seen are cows, deer, and mongoose (?), dog or a four legged carnivorous animal. However, it is not possible to recognize a single elephant in the panel (Fig. 1a). The representation of weapons is absent.

Musical Instruments and Related

The musical instrument in Krishana's hand is that of the sushira vadya type. The sushira vadya used is vamsa (Ghosh 2005, Vol. 2, Ch. XXVIII, V: 1-2, 11-27, 42-23). It is the music coming from this instrument played by Krishna that is attracting animals as well as people towards him.

Naada Yoga

The sculpture of Krishna analysed (Fig. 1) is a perfect example to understand the nuances of naada yoga. Naada yoga is a composite word, comprising Naada and Yoga. Yoga is derived from the root word yuj, which means to unite with the self. When the iccha shakti- the great will, jnana shakti- The knowledge, and kriya shakti- the power of actions, are united

and are in harmony, it is yoga. In other words, the union of body, mind and spirit, in absolute harmony, resulting in oneness with the self is yoga. According to Patanjali, who stated that yoga chitta vrutti nirodaha, can be translated as ‘yoga is that which locks the movement of mind and thought.

Austerities, the study of scriptures and self surrender constitute the yoga of purification action, which is referred to as kriya yoga. By constantly engaging oneself in the practice of yoga, the self –controlled yogi disentangles from all material contemplation and achieves the highest stage of transcendental happiness. To be aware of one’s position in relation to God, that is, known that soul is part and parcel of the supreme god, is called realization and that is the goal of jnana yoga. By an enquiry into what is real and unreal, eternal or ephemeral, one can control the wandering mind and get rid of the rajasik and tamasik tendencies. Naada yoga is one such path of kriya yoga where sound and its manifestations lead a man to destiny of supreme bliss. Naada means the cosmic sound, the deep humming sound like the drone. It is a force of nature and an instrument of god. Etymologically, naada is the sound that is produced by the vibrations of anything. Sound or shabda is a form of energy and the source of knowledge. It is elevated as the divine sound, otherwise known as shabda brahman. The compact mass of energy that resides in shabda is called bindu and that which resides in naada is called naada bindu. Naada yoga is the union of human soul to the supreme soul through the path of naada. It may be an outward expression of aahata naada yoga where the mind gets involved with music heralded by the ears or may be an inward journey of anahata naada yoga, where naada is experienced in isolation of sensory organs. The science of sound involves not only becoming aware of audible frequencies, but also frequencies that are inaudible to the ears.

Ancient Indian texts refer to the metaphysics of the science of sound. Shabda or sound is classified into sphota, the bursting sound; naada, the movement, the drone and the force that makes the sound blossom; anaahata, the sound when struck or of unbeaten origin, which is in a latent form within, which is explained as one’s own sound vibrations close to self, and heard by yogis and seers; aahata, the audible sound that is created by the striking of two surfaces, heard by all humans and animals that is within the decibel and frequency range. Naada thus is a classification of sound. It is the pleasant flow of sound which is perceived by the auditory apparatus, and interpreted by the brain. Sound is the source of all knowledge, for which reason it is called shabda brahma. The music of both ahata and anahata uplifts the

soul, to unite with the supreme bliss. The process involved in focussing the mind and channelizing it to the world of music is called naada yoga.

The vina of Sarasvati, the flute of Krishna (Fig. 1), and the damaru naada of Shiva are the symbolic sounds which are source of revelation to naada yogis. The flute of lord Krishna is symbolic of the sound of the soul, (as the vital forces does not undergo the manipulation by the larynx) which is the source of all revelation to the yogis, to whom it was revealed from within. There are ten inner sounds a naada yogi experiences with anahat naada before merging with the naada of Om. These stages are compared to natural sounds like twittering of insects, sparrows, humming of a bee, flow of running water, whistle of the wind, the roaring of the sea, (waves have a rhythm in their sound vibration) and finally the sound of thunder.

The manifestation of sound is four, from the highest to the lowest sound frequencies. When the four physical manifestations of sound or naada are correlated with the psyche of awareness levels, indicating oneness with naada it is elevated as naada yoga. Para is the transcendent sound beyond the comprehension of senses. It is the pure energy and un-manifested sound. The stage of para is indicative of the mind listening to the distant divine sound of paravani to which one's mind is attracted. This indicates the stage of concentration to hear the paravani as focus is always cultivated. Pashyanti stage is followed by concentration on paravani, a visualization of sound like hearing music in dreams. This occurs when all external sounds disappear and a ringing sound of cosmic origin is heard. Madhyama is the intermediate stage, a mental sound, where mind and intellect are in combined activity. The mind is first tuned to naada and it moves to explore the melody of music. This stage is depicted through the involvement with the stringed instrument. The second stage is the involvement in rhythm, where the intellect guides. It is the stage absorbing the laya or rhythm which is expressed through the involvement with various types of percussion instruments. This is observed to the left of Krishna among the common mass (Fig. 1 and 1a). This is a stage of anahata chakra, through ahata naada (Swami 2004: 26-28). Vaikhari is the fourth stage where the sound frequencies are lower and hence audible, modified heard and felt through senses. It is an evolved stage of speech where one can observe artists engrossed in singing in the sculpture. It is a phase of sangita where they are involved with melody (vadya like flute) and rhythm (tala). Singing is evolved from speech in the stages of naada yoga

When the four stages of naada yoga are compared to the movement of kundalini shakti of awareness, it can be viewed as paravani stage-muladhara and svadhisthana chakra; pashyanti stage-manipura chakra; madhyama stage-anahata chakra; vaikhari stage-vishudha chakra. Contemplation of anahata naada- ajna chakra, leads to union with the supreme soul-sahasrara chakra. The second stage is the involvement of rhythm, where the intellect guides. It is the stage absorbing the laya or rhythm which is expressed through the involvement with various types of percussion instruments. This also is a stage of anahata chakra, through anahata naada. There are many graceful dancing postures where the grace of body movement unites with the rhythm (tala) and depicted as graceful rhythmic dance movements. The rhythm that is understood is shown in the foot tapping to the rhythm. Madhyama is the third stage of naada, for which the heart is the seat. Madhyama means middle in sanskrit, and according to the stages of naada yoga awareness, it can be compared to the gentle graceful movement of the sound emerging from the stringed or wind instrument as seen in Krishna's flute (Fig. 1). This sculpture showing Krishna engrossed in playing the flute probably indicate the state of Madhyama. It is an unexpressed state of sound (an expression of sound as voice occurs in the next stage), which is not totally involved and hence indicated as instrumental music where only melody is heard and not the words. The frequency of madhyama stage is in an audible stage to normal ears and hence categorized as the first stage of gross sound.

Self-Assessment Questions

1. Discuss the main features of Pallava rock-cut cave temples.
2. Examine the architectural significance of Pallava monolithic temples.
3. Describe the importance of structural temples at Mahabalipuram.
4. Explain the chief features of the Nagara style of architecture with reference to the Lingaraja Temple, Bhubaneswar.
5. Discuss the architectural grandeur of the Sun Temple at Konarak.
6. Examine the salient features of Dravida style of architecture with reference to the Brihadeeswara Temple, Thanjavur.
7. Describe the architectural importance of the Gangaikonda Cholapuram Temple.
8. Discuss the artistic features of the Airavatesvara Temple, Darasuram.
9. Explain the distinctive characteristics of the Vesara style of architecture.
10. Compare the architectural features of the Chennakesava Temple, Belur **and** Hoysaleswara Temple, Halebid.

Unit–IV

Islamic Art: Five Pillars of Islam, Mosques, Mausoleums, Palace complexes, Gardens - Quawwat-ul- Islam Mosque – Qutub Minar –Mughal Artand Architecture: Humayun’s Tomb –Fatehpur Sikri, - Red Fort- TajMahal - Mughal Paintings.

Objectives

- To understand the architectural style and construction of the Qutub Minar.
- To analyse the architectural features and artistic elements
- To understand the techniques of Mughal miniature paintings.

Islamic Art

Islamic Art is a modern concept created by art historians in the nineteenth century to categorize and study the material first produced under Islamic peoples who emerged from Arabia in the seventh century. Today, Islamic art describes all the arts that were produced in lands where Islam was the dominant religion or the religion of those who ruled. Unlike the terms Christian, Jewish, and Buddhist art, which refer only to the religious art of those faiths, Islamic art is not used merely to describe religious art or architecture but applies to all art forms produced in the Islamic world.

Thus, Islamic art refers not only to works created by Muslim artists, artisans, and architects or for Muslim patrons. It also encompasses works created by Muslim artists for patrons of any faith, including Christians, Jews, or Hindus, and works created by Jews, Christians, and others living in Islamic lands for patrons, whether Muslim or otherwise.

One of the most famous monuments of Islamic art is the Taj Mahal, a royal mausoleum located in Agra, India. Although Hinduism is the majority religion in India, Muslim rulers—most notably the Mughals—dominated large areas of modern-day India for centuries. As a result, India possesses a vast and rich tradition of Islamic art and architecture.

Early Islamic Art and Architecture

Islamic art encompasses the visual arts produced from the seventh century onward by culturally Islamic populations. It reflects the beliefs, traditions, and aesthetics of societies shaped by Islam while incorporating influences from various regions and cultures.

Islam

Islam is a monotheistic and Abrahamic religion articulated by the Qur’an, a book considered by its followers to be the verbatim word of God (Allah), and by the teachings of Muhammad, who is regarded as the last prophet of God. A follower of Islam is known as a

Muslim. Most Muslims belong to one of two denominations: Sunni, who constitute approximately 75–90 percent, and Shia, who make up about 10–20 percent. The essential religious concepts and practices of Islam include the Five Pillars of Islam, which form the foundation of Muslim faith and practice. These are Shahadah, the confession of faith; Salat, worship in the form of prayer; Sawm during the month of Ramadan, which involves fasting; Zakat, the practice of charitable giving; and Hajj, the pilgrimage to Mecca that every Muslim is expected to undertake at least once in a lifetime if able.

Muhammad, the Prophet of Islam, was born in Mecca, the holiest city for Muslims. He was a charismatic preacher who was eventually forced to migrate from Mecca to Medina, where he continued his teachings. His house in Medina, consisting of a walled courtyard and a porch supported by columns of palm trunks, is considered the prototype for early mosque architecture. Another sacred structure is the Kaaba, meaning “cube” in Arabic. It is a square structure in Mecca draped in an ornamental covering. According to Islamic tradition, it was built by the prophet Abraham (Ibrahim) and his son Ismail. When Muhammad returned to Mecca in 629–630 CE, he re-sanctified the Kaaba and the Black Stone, making it the focal point of the Hajj pilgrimage.

Islamic Art: Scope and Characteristics

Islamic art encompasses the visual arts produced from the seventh century onward by both Muslims and non-Muslims living within territories ruled or influenced by Islamic culture. It is difficult to define precisely because it spans more than 1,400 years and covers a vast geographical area. Islamic art is not limited to a specific religion, place, time, or medium. Instead, it includes a wide range of artistic forms such as architecture, calligraphy, painting, glass, ceramics, textiles, and metalwork. Islamic art is not restricted to religious expression but includes secular works reflecting the cultural life of Islamic societies. Islamic religious art differs significantly from Christian religious art traditions. Because figural representations are generally discouraged in religious contexts, calligraphy and geometric decoration take on special importance. Calligraphic inscriptions, especially from the Qur'an, play a central role in Islamic art, combining religious devotion with aesthetic beauty.

Islamic architecture, including mosques and palatial gardens symbolizing paradise, is imbued with religious significance. Although figurative painting exists in Islamic art, it is usually found in secular settings such as palace walls or illustrated manuscripts. Other religious objects such as mosque lamps, carpets, woodwork, and tiles often display the same

artistic styles as secular art but with more prominent religious inscriptions. Islamic art was influenced by Greek, Roman, early Christian, and Byzantine traditions, as well as by the Sassanian art of pre-Islamic Persia. Central Asian styles entered Islamic art through nomadic movements, while Chinese influences shaped Islamic pottery, textiles, and painting.

Themes of Islamic Art

Islamic art frequently employs repeating decorative elements such as stylized geometric, floral, and vegetal designs arranged in continuous patterns known as arabesques. These designs are often interpreted as symbols of the infinite, indivisible, and transcendent nature of God. Some scholars believe that artists intentionally introduced minor imperfections into repeating patterns as an expression of humility, acknowledging that only God can create perfection. While Islamic art generally avoids human and animal figures in religious contexts due to concerns about idolatry, such representations appear in secular art across different Islamic periods. Calligraphy and ornamentation remain the dominant forms of artistic expression.

Islamic Architecture

Islamic architecture encompasses a wide range of religious and secular styles, with the mosque serving as its principal architectural form. A recognizable Islamic architectural style emerged soon after the time of Muhammad, combining Roman building techniques with adaptations from Sassanian and Byzantine traditions.

Islamic Art: Five Pillars

All practicing Muslims accept belief in the ‘Six Articles of Faith’ and are obliged to follow the ‘Five Pillars.’ They are:

1. Muslim profession of faith or shahada.
2. Ritual Prayer or salah.
3. Obligatory Charity or zakah.
4. Fasting or sawm.
5. Pilgrimage or hajj.

The First Pillar

Muslim Profession of Faith

The Shahada is the Muslim profession of faith and the first of the ‘Five Pillars’ of Islam. The word shahada in Arabic means ‘testimony.’ The shahada is to testify to two things:

(a) Nothing deserves worship except God (Allah).

(b) Muhammad is the Messenger of God (Allah).

A Muslim is simply one who bears witness and testifies that “nothing deserves worship except God and Muhammad is the messenger of God.” One becomes a Muslim by making this simple declaration.

It must be recited by every Muslim at least once in a lifetime with a full understanding of its meaning and with an assent of the heart. Muslims say this when they wake up in the morning, and before they go to sleep at night. It is repeated five times in the call to prayer in every mosque. A person who utters the shahada as their last words in this life has been promised Paradise.

Many people ignorant of Islam have misconceived notions about the Allah, used by Muslims to denote God. Allah is the proper name for God in Arabic, just as "Elah", or often "Elohim", is the proper name for God in Aramaic mentioned in the Old Testament. Allah is also His personal name in Islam, as "YHWH" is His personal name in Judaism. However, rather than the specific Hebrew denotation of "YHWH" as "He Who Is", in Arabic Allah denotes the aspect of being “The One True Deity worthy of all worship”. Arabic speaking Jews and Christians also refer to the Supreme Being as Allah.

(a) Nothing deserves worship except God (Allah).

The first part of this testimony states that God has the exclusive right to be worshipped inwardly and outwardly, by one’s heart and limbs. In Islamic doctrine, not only can no one be worshipped apart from Him, absolutely no one else can be worshipped along with Him. He has no partners or associates in worship. Worship, in its comprehensive sense and all its aspects, is for Him alone. God’s right to be worshipped is the essential meaning of Islam’s testimony of faith: Lā ‘ilāha ‘illā llāh. A person becomes Muslim by testifying to the divine right to worship. It is the crux of 4 Islamic belief in God, even all of Islam. It is considered the central message of all prophets and messengers sent by God - the message of Abraham, Isaac, Ishmael, Moses, the Hebrew prophets, Jesus, and Muhammad, may the mercy and blessings of God be upon them. For instance, Moses declared:

“Hear, O Israel The Lord our God is one Lord.” (Deuteronomy 6:4)

Jesus repeated the same message 1500 years later when he said:

“The first of all the commandments is, “Hear, O Israel; the Lord our God is one Lord.” (Mark 12:29)

...and reminded Satan:

“Away from me, Satan! For it is written: Worship the Lord your God, and serve Him only.” (Matthew 4:10)

Finally, the call of Muhammad, some 600 years after Jesus, reverberated across the hills of Mecca, ‘And your God is One God: there is no god but He.’ (Quran 2:163). They all declared clearly:

But by a mere verbal profession alone, one does not become a complete Muslim. To become a complete Muslim one has to fully carry out in practice the instruction given by Prophet Muhammad as ordained by God. This brings us to the second part of the testimony.

(b) Muhammad is the Messenger of God (Allah).

Muhammad was born in Mecca in Arabia in the year 570 CE. His ancestry goes back to Ishmael, a son of Prophet Abraham. The second part of the confession of faith asserts that he is not only a prophet but also a messenger of God, a higher role also played by Moses and Jesus before him. Like all prophets before him, he was a human being, but chosen by God to convey His message to all humanity rather than one tribe or nation from among the many that exist. For Muslims, Muhammad brought the last and final revelation. In accepting Muhammad as the “last of the prophets,” they believe that his prophecy confirms and completes all of the revealed messages, beginning with that of Adam. In addition, Muhammad serves as the preeminent role model through his life example. The believer’s effort to follow Muhammad’s example reflects the emphasis of Islam on practice and action.

The Second Pillar of Islam:

The Prayer

Salah is the daily ritual prayer enjoined upon all Muslims as one of the five Pillars of Islam. It is performed five times a day by all Muslims. Salah is a precise worship, different from praying on the inspiration of the moment. Muslims pray or, perhaps more correctly, worship five times throughout the day:

- Between first light and sunrise.
- After the sun has passed the middle of the sky.
- Between mid-afternoon and sunset.
- Between sunset and the last light of the day.
- Between darkness and midnight.

Abdullahi Haji-Mohamed kneels during evening prayers while waiting for fares at

Cleveland Hopkins International Airport, May 4, 2005. (AP Photo/ The Plain Dealer, Gus Chan)

Each prayer may take at least 5 minutes, but it may be lengthened as a person wishes. Muslims can pray in any clean environment, alone or together, in a mosque or at home, at work or on the road, indoors or out. Under special circumstances, such as illness, journey, or war, certain allowances in the prayers are given to make their offering easy. Abdullahi Haji-Mohamed kneels during evening prayers while waiting for fares at Cleveland Hopkins International Airport, May 4, 2005. (AP Photo/The Plain Dealer, Gus Chan) Each prayer may take at least 5 minutes, but it may be lengthened as a person wishes. Muslims can pray in any clean environment, alone or together, in a mosque or at home, at work or on the road, indoors or out. Under special circumstances, such as illness, journey, or war, certain allowances in the prayers are given to make their offering easy.

Having specific times each day to be close to God helps Muslims remain aware of the importance of their faith, and the role it plays in every part of life. Muslims start their day by 7 cleaning themselves and then standing before their Lord in prayer. The prayers consist of recitations from the Quran in Arabic and a sequence of movements: standing, bowing, prostrating, and sitting. All recitations and movements express submission, humility, and homage to God. The various postures Muslims assume during their prayers capture the spirit of submission; the words remind them of their commitments to God. The prayer also reminds one of belief in the Day of Judgment and of the fact that one has to appear before his or her Creator and give an account of their entire life. This is how a Muslim starts their day. In the course of the day, Muslims dissociate themselves from their worldly engagements for a few moments and stand before God. This brings to mind once again the real purpose of life.

These prayers serve as a constant reminder throughout the day to help keep believers mindful of God in the daily stress of work, family, and distractions of life. Prayer strengthens faith, dependence on God, and puts daily life within the perspective of life to come after death and the last judgment. As they prepare to pray, Muslims face Mecca, the holy city that houses the Kaaba (the ancient place of worship built by Abraham and his son Ishmael). At the end of the prayer, the shahada (testimony of faith) is recited, and the greeting of peace, "Peace be upon all of you and the mercy and blessings of God," is repeated twice.

Though individual performance of salah is permissible, collective worship in the mosque has special merit and Muslims are encouraged to perform certain salah with others.

With their faces turned in the direction of the Kaaba in Mecca, the worshipers align themselves in parallel rows behind the imam, or prayer leader, who directs them as they execute the physical postures coupled with Quran recitations. In many Muslim countries, the “call to prayer,” or ‘Adhan,’ echo out across the rooftops. Aided by a megaphone the muezzin calls out:

- Allahu Akbar (God is the greatest),
- Allahu Akbar (God is the greatest),
- Allahu Akbar (God is the greatest),
- Allahu Akbar (God is the greatest),
- Ash-hadu an-laa ilaaha ill-Allah (I witness that none deserves worship except God).
- Ash-hadu an-laa ilaaha ill-Allah (I witness that none deserves worship except God).
- Ash-hadu anna Muhammad-ar-Rasool-ullah (I witness that Muhammad is the messenger of God).
- Ash-hadu anna Muhammad-ar-Rasool-ullah (I witness that Muhammad is the messenger of God).
- ❖ Hayya ‘alas-Salah (Come to prayer!)
- ❖ Hayya ‘alas-Salah (Come to prayer!)
- ❖ Hayya ‘alal-Falah (Come to prosperity!)
- ❖ Hayya ‘alal-Falah (Come to prosperity!)
- ❖ Allahu Akbar (God is the greatest), Allahu Akbar (God is the greatest),
- ❖ La ilaaha ill-Allah (None deserves worship except God).

Friday is the weekly day of communal worship in Islam. The weekly convened Friday Prayer is the most important service. The Friday Prayer is marked by the following features:

- It falls in the same time as the noon prayer which it replaces.
- It must be performed in a congregation led by a prayer leader, an ‘Imam.’ It can not be offered individually. Muslims in the West try to arrange their schedules to allow them time to attend the prayer.
- Rather than a day of rest like the Sabbath, Friday is a day of devotion and extra worship. A Muslim is allowed normal work on Friday as on any other day of the week. They may proceed with their usual activities, but they must break for the Friday prayer. After the worship is over, they can resume their mundane activities.
- Typically, the Friday Prayer is performed in a mosque, if available. Sometimes, due

to unavailability of a mosque, it may be offered at a rented facility, park, etc.

- When the time for prayer comes, the Adhan is pronounced. The Imam then stands facing the audience and delivers his sermon (known as khutba in Arabic), an essential part of the service of which its attendance is required. While the Imam is talking, everyone present listens to the sermon quietly till the end. Most Imams in the West will deliver the sermon in English, but some deliver it in Arabic. Those who deliver it in Arabic usually deliver a short speech in the local language before the service.

- There are two sermons delivered, one distinguished from the other by a brief sitting of the Imam. The sermon is commenced with words of praise of God and prayers of blessing for Prophet Muhammad, may the mercy and blessings of God be upon him.

- After the sermon, the prayer is offered under the leadership of the Imam who recites the Fatiha and the other Quranic passage in an audible voice.

When this is done, the prayer is completed. Special, large congregational prayers, which include a sermon, are also offered at late morning on the two days of festivity. One of them is immediately following the month of fasting, Ramadan, and the other after the pilgrimage, or hajj. Although not religiously mandated, individual devotional prayers, especially during the night, are emphasized and are a common practice among pious Muslims.

The Third Pillar of Islam: Compulsory Charity

Charity is not just recommended by Islam, it is required of every financially stable Muslim. Giving charity to those who deserve it is part of Muslim character and one of the Five Pillars of Islamic practice. Zakat is viewed as “compulsory charity”; it is an obligation for those who have received their wealth from God to respond to those members of the community in need. Devoid of sentiments of universal love, some people know only to hoard wealth and to add to it by lending it out on interest. Islam’s teachings are the very antithesis of this attitude. Islam encourages the sharing of wealth with others and helps people to stand on their own and become productive members of the society.

In Arabic it is known as zakat which literally means “purification”, because zakat is considered to purify one’s heart of greed. Love of wealth is natural and it takes firm belief in God for a person to part with some of his wealth. Zakat must be paid on different categories of property — gold, silver, money; livestock; agricultural produce; and business commodities — and is payable each year after one year’s possession. It requires an annual

contribution of 2.5 percent of an individual's wealth and assets.

Like prayer, which is both an individual and communal responsibility, zakat expresses a Muslim's worship of and thanksgiving to God by supporting those in need. In Islam, the true owner of things is not man, but God. Acquisition of wealth for its own sake, or so that it may increase a man's worth, is condemned. Mere acquisition of wealth counts for nothing in the sight of God. It does not give man any merit in this life or in the hereafter. Islam teaches that people should acquire wealth with the intention of spending it on their own needs and the needs of others.

“‘Man’, said the Prophet, ‘says: My wealth! My wealth!’ Have you not any wealth except that which you give as alms and thus preserve, wear and tatter, eat and use up?”

The whole concept of wealth is considered in Islam as a gift from God. God, who provided it to the person, made a portion of it for the poor, so the poor have a right over one's wealth. Zakat reminds Muslims that everything they have belongs to God. People are given their wealth as a trust from God, and zakat is intended to free Muslims from the love of money. The money paid in zakat is not something God needs or receives. He is above any type of dependency. God, in His boundless mercy, promises rewards for helping those in need with one basic condition that zakat be paid in the name of God; one should not expect or demand any worldly gains from the beneficiaries nor aim at making one's name as a philanthropist. The feelings of a beneficiary should not be hurt by making him feel inferior or reminding him of the assistance.

Money given as zakat can only be used for certain specific things. Islamic Law stipulates that alms are to be used to support the poor and the needy, to free slaves and debtors, as specifically mentioned in the Quran (9:60). Zakat, which developed fourteen hundred years ago, functions as a form of social security in a Muslim society. Money given as zakat can only be used for certain specific things. Islamic Law stipulates that alms are to be used to support the poor and the needy, to free slaves and debtors, as specifically mentioned in the Quran (9:60). Zakat, which developed fourteen hundred years ago, functions as a form of social security in a Muslim society.

Neither Jewish nor Christian scriptures praise slave manumission by raising it to worship. Indeed, Islam is unique in world religions in requiring the faithful to financially help slaves win their freedom and has raised the manumission of a slave to an act of worship - if it is done to please God.

Under the caliphates, the collection and expenditure of zakat was a function of the state. In the contemporary Muslim world, it has been left up to the individual, except in some countries in which the state fulfills that role to some degree. Most Muslims in the West disperse zakat through Islamic charities, mosques, or directly giving to the poor. Money is not collected during religious services or via collection plates, but some mosques keep a drop box for those who wish it to distribute zakat on their behalf. Unlike the zakat, Giving other forms of charity in private, even in secret, is considered better, in order to keep one's intention purely for the God.

Apart from zakat, the Quran and Hadeeth (sayings and actions of the Prophet Muhammad, may the mercy and blessings of God be upon him) also stress sadaqah, or voluntary almsgiving, which is intended for the needy. The Quran emphasizes feeding the hungry, clothing the naked, helping those who are in need, and the more one helps, the more God helps the person, and the more one gives, the more God gives the person. One feels he is taking care of others and God is taking care of him.

The Fourth Pillar of Islam: The Fast of Ramadan

Fasting is not unique to the Muslims. It has been practiced for centuries in connection with religious ceremonies by Christians, Jews, Confucianists, Hindus, Taoists, and Jains. God mentions this fact in the Quran:

“O you who believe, fasting is prescribed for you as it was prescribed for those before you, that you may develop Godconsciousness.” (Quran 2:183).

Some Native American societies fasted to avert catastrophe or to serve as penance for sin. Native North Americans held tribal fasts to avert threatening disasters. The Native Americans of Mexico and the Incas of Peru observed penitential fasts to appease their gods. Past nations of the Old World, such as the Assyrians and the Babylonians, observed fasting as a form of penance. Jews observe fasting as a form of penitence and purification annually on the Day of Atonement or Yom Kippur. On this day neither food nor drink is permitted.

Early Christians associated fasting with penitence and purification. During the first two centuries of its existence, the Christian church established fasting as a voluntary preparation for receiving the sacraments of Holy Communion and baptism and for the ordination of priests. Later, these fasts were made obligatory, as others days were subsequently added. In the 6th century, the Lenten fast was expanded to 40 days, on each of which only one meal was permitted. After the Reformation, fasting was retained by most

Protestant churches and was made optional in some cases. Stricter Protestants, however, condemned not only the festivals of the church, but its traditional fasts as well.

In the Roman Catholic Church, fasting may involve partial abstinence from food and drink or total abstinence. The Roman Catholic days of fasting are Ash Wednesday and Good Friday. In the United States, fasting is observed mostly by Episcopalians and Lutherans among Protestants, by Orthodox and Conservative Jews, and by Roman Catholics.

Fasting took another form in the West: the hunger strike, a form of fasting, which in modern times has become a political weapon after being popularized by Mohandas Gandhi, leader of the struggle for India's freedom, who undertook fasts to compel his followers to obey his precept of nonviolence.

Islam is the only religion that has retained the outward and spiritual dimensions of fasting throughout centuries. Selfish motives and desires of the base self alienate a man from his Creator. The most unruly human emotions are pride, avarice, gluttony, lust, envy, and anger. These emotions by their nature are not easy to control, thus a person must strive hard to discipline them. Muslims fast to purify their soul, it puts a bridle on the most uncontrolled, savage human emotions. People have gone to two extremes with regard to them. Some let these emotions steer their life which lead to barbarism among the ancients, and crass materialism of consumer cultures in modern times. Others tried to deprive themselves completely of these human traits, which in turn led to monasticism.

The fourth Pillar of Islam, the Fast of Ramadan, occurs once each year during the 9th lunar month, the month of Ramadan, the ninth month of the Islamic calendar in which:

“...the Quran was sent down as a guidance for the people.” (Quran 2:185)

God in His infinite mercy has exempt the ill, travelers, and others who are unable from fasting Ramadan.

Fasting helps Muslims develop self-control, gain a better understanding of God's gifts and greater compassion towards the deprived. Fasting in Islam involves abstaining from all bodily pleasures between dawn and sunset. Not only is food forbidden, but also any sexual activity. All things which are regarded as prohibited is even more so in this month, due to its sacredness.. Each and every moment during the fast, a person suppresses their passions and desires in loving obedience to God. This consciousness of duty and the spirit of patience helps in strengthening our faith. Fasting helps a person gain self-control. A person who abstains from permissible things like food and drink is likely to feel conscious of his sins. A

heightened sense of spirituality helps break the habits of lying, staring with lust at the opposite sex, gossiping, and wasting time. Staying hungry and thirsty for just a day's portion makes one feel the misery of the 800 million who go hungry or the one in ten households in the US, for example, that are living with hunger or are at risk of hunger. After all, why would anyone care about starvation if one has never felt its pangs oneself? One can see why Ramadan is also a month of charity and giving.

At dusk, the fast is broken with a light meal popularly referred to as iftaar. Families and friends share a special late evening meal together, often including special foods and sweets served only at 17 this time of the year. Many go to the mosque for the evening prayer, followed by special prayers recited only during Ramadan. Some will recite the entire Quran as a special act of piety, and public recitations of the Quran can be heard throughout the evening. Families rise before dawn to take their first meal of the day, which sustains them until sunset. Near the end of Ramadan Muslims commemorate the "Night of Power" when the Quran was revealed. The month of Ramadan ends with one of the two major Islamic celebrations, the Feast of the Breaking of the Fast, called Eid al-Fitr. On this day, Muslims joyfully celebrate the completion of Ramadan and customarily distribute gifts to children. Muslims are also obliged to help the poor join in the spirit of relaxation and enjoyment by distributing zakat-ul-fitr, a special and obligatory act of charity in the form of staple foodstuff, in order that all may enjoy the general euphoria of the day.

The Fifth Pillar of Islam: The Pilgrimage (Hajj)

The Hajj (pilgrimage to Mecca) is the fifth of the fundamental Muslim practices and institutions known as the five pillars of Islam. Pilgrimage is not undertaken in Islam to the shrines of saints, to monasteries for help from holy men, or to sights where miracles are supposed to have occurred, even though we may see many Muslims do this. Pilgrimage is made to the Kaaba, found in the sacred city of Mecca in Saudia, the 'House of God,' whose sanctity rests in that the Prophet Abraham built it for the worship of God. God rewarded him by attributing the House to himself, in essence honoring it, and by making it the devotional epicenter which all Muslims face when offering the prayers (salah). The rites of pilgrimage are performed today exactly as did by Abraham, and after him by Prophet Muhammad, may God praise them.

Pilgrimage is viewed as a particularly meritorious activity. Pilgrimage serves as a penance - the ultimate forgiveness for sins, devotion, and intense spirituality. The pilgrimage

to Mecca, the most sacred city in Islam, is required of all physically and financially able Muslims once in their life. The pilgrimage rite begins a few months after Ramadan, on the 8th day of the last month of the Islamic year of Dhul-Hijjah, and ends on the 13th day. Mecca is the center towards which the Muslims converge once a year, meet and refresh in themselves the faith that all Muslims are equal and deserve the love and sympathy of others, irrespective of their race or ethnic origin. The racial harmony fostered by Hajj is perhaps best captured by Malcolm X on his historic pilgrimage:

‘Every one of the thousands at the airport, about to leave for Jeddah, was dressed this way. You could be a king or a peasant and no one would know. Some powerful personages, who were discreetly pointed out to me, had on the same thing I had on. Once thus dressed, we all had begun intermittently calling out “Labbayka! (Allahumma) Labbayka!” (At your service, O Lord!) Packed in the plane were white, black, brown, red, and yellow people, blue eyes and blond hair, and my kinky red hair - all together, brothers! All honoring the same God, all in turn giving equal honor to each other .

That is when I first began to reappraise the ‘white man’. It was when I first began to perceive that ‘white man’, as commonly used, means complexion only secondarily; primarily it described attitudes and actions. In America, ‘white man’ meant specific attitudes and actions toward the black man, and toward all other non-white men. But in the Muslim world, I had seen that men with white complexions were more genuinely brotherly than anyone else had ever been. That morning was the start of a radical alteration in my whole outlook about ‘white’ men.

There were tens of thousands of pilgrims, from all over the world. They were of all colors, from blue-eyed blonds to blackskinned Africans. But we were all participating in the same ritual displaying a spirit of unity and brotherhood that my experiences in America had led me to believe never could exist between the white and the non-white... America needs to understand Islam, because this is the one religion that erases from its society the race problem. Throughout my travels in the Muslim world, I have met, talked to, and even eaten with people who in America would have been considered white - but the ‘white’ attitude was removed from their minds by the religion of Islam. I have never before seen sincere and true brotherhood practiced by all colors together, irrespective of their color.”

Thus the pilgrimage unites the Muslims of the world into one international fraternity. More than two million persons perform the Hajj each year, and the rite serves as a unifying

force in Islam by bringing followers of diverse backgrounds together in worship. In some Muslim societies, once a believer has made the pilgrimage, he is often labeled with the title ‘hajji’ ; this, however, is a cultural, rather than religious custom. Finally, the Hajj is a manifestation of the belief in the unity of God - all the pilgrims worship and obey the commands of the One God.

At certain stations on the caravan routes to Mecca, or when the pilgrim passes the point nearest to those stations, the pilgrim enters the state of purity known as ihram. In this state, the certain ‘normal’ actions of the day and night become impermissible for the pilgrims, such as covering the head, clipping the fingernails, and wearing normal clothing in regards to men. Males remove their clothing and don the garments specific to this state of ihram, two white seamless sheets that are wrapped around the body. All this increases the reverence and sanctity of the pilgrimage, the city of Mecca, and month of Dhul-Hijjah. There are 5 stations, one on the coastal plains northwest of Mecca towards Egypt and one south towards Yemen, while three lie north or eastwards towards Medina, Iraq and al-Najd. The simple garb signifies the equality of all humanity in God’s sight, and the removal of all worldly affections. After entering the state of ihram, the pilgrim proceeds to Mecca and awaits the start of the Hajj. On the 7th of Dhu alHijjah the pilgrim is reminded of his duties, and at the commence of the ritual, which takes place between the 8th and the 12th days of the month, the pilgrim visits the holy places outside Mecca - Arafah, Muzdalifah, and Minaa - and sacrifices an animal in commemoration of Abraham’s sacrifice. The pilgrim then shortens or shaves their head, and, after throwing seven stones at specific pillars at Minaa on three or four successive days, and heads for the central mosque where he walks seven times around the sacred sanctuary, or Kaaba, in the Great Mosque, and ambulates, walking and running, seven times between the two small hills of Mt. Safaa and Mt. Marwah. Discussing the historical or spiritual significance of each rite is beyond the scope of this introductory article.

Apart from Hajj, the “minor pilgrimage” or umrah is undertaken by Muslims during the rest of the year. Performing the umrah does not fulfill the obligation of Hajj. It is similar to the major and obligatory Islamic pilgrimage (hajj), and pilgrims have the choice of performing the umrah separately or in combination with the Hajj. As in the Hajj, the pilgrim begins the umrah by assuming the state of ihram. They enter Mecca and circle the sacred shrine of the Kaaba seven times. He may then touch the Black Stone, if he can, pray behind

the Maqam Ibrahim, drink the holy water of the Zamzam spring. The ambulation between the hills of Safa and Marwah seven times and the shortening or shaving of the head complete the umrah.

Early Mosques

Historically, mosques served not only as places of worship but also as community gathering spaces. Early mosques were inspired by the house of Muhammad in Medina. One of the best-preserved examples of early mosque architecture is the Great Mosque of Kairouan in Tunisia, founded in 670 CE. It features all the essential components of early mosques, including a minaret, a large courtyard surrounded by porticos, and a hypostyle prayer hall. The dome of the mihrab in this mosque is considered the prototype for later mosques in the western Islamic world.

Great Mosque of Cordoba

After the Umayyad dynasty was overthrown by the Abbasids in 748–750 CE, members of the Umayyad family fled to the Iberian Peninsula, where they established a new dynasty. Caliph Abd al-Rahman began construction of the Great Mosque of Cordoba around 786 CE. The mosque is renowned for its horseshoe-shaped arches, which were adapted from existing Visigothic structures. Its mihrab is richly decorated with Byzantine mosaics brought from Constantinople. During this period, Muslims, Christians, and Jews lived together in relative harmony until the Christian Reconquista culminated in 1492.

Ottoman Mosques

Ottoman mosque architecture emerged in Bursa and Edirne during the 14th and 15th centuries, drawing from Seljuk, Byzantine, Persian, and Mamluk traditions. Byzantine architecture, particularly the Hagia Sophia, strongly influenced Ottoman mosque design. Ottoman architecture reached its peak in the 16th century under architects like Sinan, who perfected large domed interiors and harmonious spatial arrangements. Famous examples include the Blue Mosque in Istanbul.

Safavid Architecture

Architecture flourished under the Safavid dynasty, especially during the reign of Shah Abbas I. Isfahan became a center of monumental architecture, featuring gardens, palaces such as Ali Qapu, grand bazaars, and imperial mosques that represent the height of Safavid artistic achievement.

Islamic Glass

During the Middle Ages, Islamic luxury glass was among the finest in Eurasia and was widely exported. Islamic glassmakers inherited traditions from Roman and Sassanian craftsmen. Between the 8th and 11th centuries, surface decoration techniques such as wheel-cutting and relief carving were prominent. Later, luxury glass production shifted to Egypt and Syria.

Lustre Painting

Lustre painting originated in Egypt during the 8th century and involved the application of metallic pigments to glass. Other decorative techniques included the use of colored glass threads, gilding, enameling, and painted designs. Some of the finest examples of Islamic glasswork are mosque lamps donated by rulers and wealthy patrons.

Islamic Book Painting

Manuscript painting in the late medieval Islamic world reached its height in Persia, Syria, Iraq, and the Ottoman Empire. Book painting in the late medieval Islamic world reached its height in Persia, Syria, Iraq, and the Ottoman Empire. The art form blossomed across the different regions and was inspired by a range of cultural reference points. The evolution of book painting first began in the 13th century, when the Mongols, under the leadership of Genghis Khan, swept through the Islamic world. Upon the death of Genghis Khan, his empire was divided among his sons and dynasties formed: the Yuan in China, the Ilkhanids in Iran, and the Golden Horde in northern Iran and southern Russia.

Miniatures

The tradition of the Persian miniature (a small painting on paper) developed during this period, and it strongly influenced the Ottoman miniature of Turkey and the Mughal miniature in India. Because illuminated manuscripts were an art of the court and not seen in public, constraints on the depiction of the human figure were much more relaxed, and the human form is represented with frequency within this medium. Influence from the Byzantine visual vocabulary (blue and gold coloring, angelic and victorious motifs, symbology of drapery) was combined with Mongol facial types seen in 12th-century book frontispieces. Chinese influences in Islamic book painting include the early adoption of the vertical format natural to a book. Motifs such as peonies, clouds, dragons, and phoenixes were adapted from China as well, and incorporated into manuscript illumination.

The largest commissions of illustrated books were usually classics of Persian poetry, such as the *Shahnameh*. Under the rule of the Safavids in Iran (1501 to 1786), the art of manuscript illumination achieved new heights. The most noteworthy example of this is the *Shahnameh* of Shah Tahmasp, an immense copy of Ferdowsi's epic poem that contains more than 250 paintings.

Islam and the Textile Arts

The textile arts refer to the production of arts and crafts that use plant, animal, or synthetic fibers to create objects. These objects can be for everyday use, or they can be decorative and luxury items. The production and trade of textiles pre-date Islam and had long been important to Middle Eastern cultures and cities, many of which flourished due to the Silk Road. When the Islamic dynasties formed and grew more powerful, they gained control over textile production in the region, which was arguably the most important craft of the era. The most important textile produced in Medieval and Early Modern Islamic Empires was the carpet.

The Ottoman Empire and Carpet Production

The art of carpet weaving was particularly important in the Ottoman Empire. The Ottoman state was founded by Turkish tribes in northwestern Anatolia in 1299 and became an empire in 1453 after the momentous conquest of Constantinople. Stretching across Asia, Europe, and Africa, the Empire was vast and long-lived, lasting until 1922 when the monarchy was abolished in Turkey. Within the Ottoman Empire, carpets were immensely valued as decorative furnishings and for their practical value. They were used not just on floors but also as wall and door hangings, where they provided additional insulation.

These intricately knotted carpets were made of silk, or a combination of silk and cotton, and were often rich in religious and other symbolism. Hereke silk carpets, which were made in the coastal town of Hereke, were the most valued of the Ottoman carpets because of their fine weave. The Hereke carpets were typically used to furnish royal palaces.

Persian Carpets

The Iranian Safavid Empire (1501–1786) is distinguished from the Mughal and Ottoman dynasties by the Shia faith of its shahs, which was the majority Islamic denomination in Persia. Safavid art contributed to several aesthetic traditions, particularly to the textile arts. In the sixteenth century, carpet weaving evolved from a nomadic and peasant craft to a well-executed industry that used specialized design and manufacturing techniques

on quality fibers such as silk. The carpets of Ardabil, for example, were commissioned to commemorate the Safavid dynasty and are now considered to be the best examples of classical Persian weaving, particularly for their use of graphical perspective.

Textiles became a large export, and Persian weaving became one of the most popular imported goods of Europe. Islamic carpets were a luxury item in Europe, and there are several examples of European Renaissance paintings that document the presence of Islamic textiles in European homes during that time.

Mausoleums, Palace Complexes

The Mughals were a Muslim dynasty of Turkic-Mongol origin that ruled most of the northern Indian subcontinent from the early 10th AH/ 16th CE to the mid-12th AH/ 18th CE century, after which it continued to exist as a considerably reduced and increasingly powerless entity until the mid-13th AH/ 19th CE century. At the height of their power in the 11th AH/ 17th CE century, the Mughals were in command of most of the subcontinent. “The Mughal dynasty was notable for its more than two centuries of effective rule over much of India, for the ability of its rulers, who through seven generations maintained a record of unusual talent, and for its administrative organization. A further distinction was the attempt of the Mughals, who were Muslims, to integrate Hindus and Muslims into a united Indian state.”

The Mughal state was founded by Babur (d. 937 AH/ 1530 CE) who claimed descent from Timur (d. 808 AH/ 1405 CE) — the conqueror of West, South and Central Asia and founder of Timurid dynasty — on his father’s side, and from Genghis Khan (d. 625 AH/ 1227 CE) – the founder of the Mongol Empire — on his mother’s side. Babur’s rule and that of his son’s, Humayun (d. 964 AH/ 1556 CE), are generally regarded as transitional and preparatory for the Mughal golden age which featured four exceptionally talented emperors with diversified and even somewhat contrasting personalities, dispositions and interests. The four emperors were Humayun’s son Akbar (d. 1014 AH /1605 CE), Akbar’s son Jahangir (d. 1037 AH /1627 CE), Jahangir’s son Shah Jahan (d. 1077 AH /1666 CE), and the latter’s son Aurangzeb (d. 1119 AH/1707 CE). The reigns of the four emperors marked the cultural and civilizational zenith of the Mughal rule during which some enduring aspects were added to the already vast, rich and multihued profile of Islamic cultural and civilizational legacies, above all in the spheres of administrative organization, traditions, way of life, art and architecture.

It was towards the end of emperor Aurangzeb's reign, that the Mughal Empire began to disintegrate, a process which was considerably accelerated in the years after his death when "successor states" came into existence. Emperor Aurangzeb's harsh treatment of Hindus and the reversal of the liberal religious policies of his predecessors, particularly those of Akbar's, have been cited as principal reasons for the crumbling of the empire. The empire had become far too large and unwieldy, and Aurangzeb did not have enough trustworthy men at his command to be able to manage the more far-flung parts of the empire. Many of his political appointees broke loose and declared themselves independent. Moreover, the system of political alliances established by Akbar Aurangzeb allowed to go to seed. "Shortly after the death of Aurangzeb, the Mughal Empire ceased to be an effective force in the political life of India, but it was not until 1274-75 AH/ 1857-58 CE, when the Indian Rebellion was crushed and the emperor Bahadur Shah (d. 1279 AH/ 1862 CE) was put on trial for sedition and treason, that the Mughal Empire was formally rendered extinct."

The culture and civilization of the Mughals, especially their art and architecture aspects, were an amalgam of more than a few dominant factors and features. The most significant were pure Islamic, Persian, Turkish, Mongol and Indian influences. The Mughal state was the arena in which Mongol traditions of rule and empire, and the high culture of Iran and Central Asia long patronized by Mongol and Timurid rulers, came to be united with the wealth and the talents of South Asian peoples. "The outcome was an extraordinary period of power and patronage in which Persianate high culture was brought to a new peak. Thus, India for seventeenth-century Europe was a vision of riches; the word Mughal to this day is loaded with a sense of power; and the Taj Mahal is arguably the most admired building of the past four centuries."

In connection with funerary architecture, the Mughals, by and large, inherited the legacies and followed in the footsteps of earlier, or their contemporary, Muslim dynasties and empires, such as Samanids (261 AH/874 CE – 390 AH/999 CE), Hamdanids (277 AH/890 CE – 399 AH/1008 CE), Buyids (320 AH/932 CE – 454 AH/1062 CE), Fatimids (297 AH/909 CE – 567 AH/1171 CE), Ayyubids (567 AH/ 1171 CE – 742 AH/ 1341 CE), Mamluks (648 AH/ 1250 CE – 923 AH/ 1517 CE), Saljuqs (4th-7th AH / 10th-13th CE century), Osmanlis (699 AH/ 1299 CE – 1342 AH/ 1923 CE) and Safavids (907 AH/ 1501 CE – 1149 AH/ 1736 CE). The Mughals infused those legacies and prevailing trends with their own moral fiber, eventually creating and molding the funerary architecture of theirs in

the image of their socio-political, religious, cultural and historical traditions and viewpoints. Not only their funerary architecture, but also all aspects of the Mughals' art and architecture appeared to be rather stately, monumental, elitist and somewhat private.

Moreover, the Indian subcontinent territories which were controlled by the Mughals proved somewhat an easy hunting ground for various religious adventurers and many people were rather susceptible to their doctrinal promotional calls with architecturally memorializing and glorifying certain deceased persons accounting for one of more prominent dimensions of such ventures. The Mughal sovereigns, when all is said and done, were at once the instigators and casualties in the whole scheme of things. The Mughal territories – or at least, most of them — with both their rulers and peoples, were such because they represented some of those not long ago conquered distant lands where the process of total Islamization was a rigid and slow one, and where neither Arabic was prevalent nor the religious knowledge common, which could help the people to distinguish aberration and innovation from the right path and impart an understanding of the true faith. In addition, those were the territories whence a traveler for the Hajj (annual pilgrimage to Makkah) or for receiving higher religious education, which could greatly boost the people's understanding and practicing of the true Islamic message, was bound to encounter great difficulties. In those lands, Muslim minorities likewise were socially integrated with predominantly indigenous inhabitants but who were firmly wedded to their superstitious beliefs and un-Islamic customs.

As a result, the Mughals produced a number of monumental royal mausoleums rarely paralleled in magnitude, elegance and cost. Most of them were imperial funerary complexes that incorporated huge and exquisite gardens with all the necessary facilities and provisions. Occasionally, mosques featured too, as integral parts of the complexes but always physically separated from the mausoleums. Apart from the royal funerary multiplexes which were built for most emperors, there were also many other imposing tombs and mausoleums which were built for some other state dignitaries, royal family members, and even some scholars and religious — albeit mostly Sufi — leaders and saints. Most of those monuments housed more than one person.

When Babur, the first Mughal emperor, died, although the nascent Mughal state was at that point in desperate need of legitimacy assertion, no major dynastic monument was conceived to commemorate his passing. It was marked, instead, by the orthodox burial Babur is said to have requested before his death. No building was thus erected over his grave. He is

commonly thought to have been first buried in Agra; however, his remains were later moved to Kabul in Afghanistan. Over the next century, his grave was frequently visited by his descendants. Babur's modest grave stood in a burial-garden that comprised a marble enclosure as well as a small marble mosque. Quite a few significant embellishments inside the burial-garden, albeit without affecting the unpretentious form of the emperor's grave, were contributed by two subsequent Mughal emperors, Jahangir and Shah Jahan. Babur is said to have requested out of piety and out of his high aesthetic tastes that he be buried in a garden. By his own desire, his body was carried to Kabul and was buried there in "the sweetest spot" on a hill-side, amidst beloved surroundings, a cool-running stream and sweet-smelling flowers. Babur's insatiable craving for stylishly designed and landscaped gardens is well-documented in his "Babur-Nama".

Babur was succeeded by his son Humayun. But a great segment of the latter emperor's reign was constantly marred by political instability as a result of which in 947 AH/ 1540 CE he lost Mughal territories to, and was exiled from India by, the Pashtun noble, Sher Shah Suri. However, with Persian aid, Humayun regained those territories 15 years later, prompting an important change in Mughal court culture whereby central Asian origins of the dynasty became overshadowed by the influences of Persian art, architecture, language and literature. He recaptured Delhi in 963 AH/ 1555 CE only to die in a freak accident the following year. It follows that emperor Humayun was so engrossed in securing and consolidating the fragile and vulnerable regime that he did not have a chance to plan his own burial. Besides, he died relatively young, aged 48, in an accident while descending the staircase from his library. Humayun's body was at first interred in one of his palaces in Delhi, but afterwards was moved to Sirhind in the Punjab, where his son and the next emperor, Akbar, paid homage to the curtain-shrouded coffin in 966 AH/ 1558 CE. In 970 AH/ 1562 CE, when emperor Akbar's grip on power became reasonably secure, he ordered work to commence on a tomb for his father in Delhi. The tomb was fully completed in 979 AH/ 1571 CE. Humayun's remains returned to Delhi several years before the completion of the tomb.

However, some believe that it was Humayun's first wife, Haji Begum, who commissioned the tomb, in which case it could be that both Haji Begum and her son, Akbar, teamed up for the project. It is impossible to imagine that Humayun's wife alone would embark on an enterprise of such significance, seeing through its construction over a period of

eight years, without active and official involvement of Akbar in his capacity as both son and current emperor. Glenn D. Lowry concludes that such were the project's grandeur, cost and complexity of certain formal decisions that only one person could have built it: Akbar. Besides, during much of the time when the tomb was under construction, Haji Begum was in Makkah performing hajj or pilgrimage.

Humayun's tomb is the first to mark the grave of a Mughal emperor. It is known as the first example of the monumental scale that would characterize the largest part of subsequent Mughal royal funerary architecture. The overall plan and architectural features of the tomb are described as follows: "The tomb design is attributed to Sayyid Muhammad and his father, Mirak Sayyid Ghiyath, Persian architects and poets active in the Timurid and later the Mughal courts. The tomb is situated south of the Purana Qila, on the eastern edge of Delhi. It is set in the center of a garden in the classical Mughal charbagh pattern. A high wall surrounds the garden on three sides, the fourth side being bounded by what was once the bank of the river Jamna, which has since been diverted. The garden is divided into four parts by two bisecting water channels with paved walkways (khiyabans), which terminate at two gates: a main one in the southern wall, and a smaller one in the western wall. The tomb sits at the center of a plinth, about 21 feet (7m) high. The top of its central dome reaches 140 feet from the ground. The dome is double-layered; the outer layer supports the white marble exterior facing, while the inner one defines the cavernous interior volume. The rest of the tomb is clad in red sandstone, with white marble ornamentation. A large iwan, a high arch, punctuates the center of each facade, and is set back slightly. Together with the other arches and openings, this effect creates a varied and complex impression of depth at each facade. Detailed ornamentation in three colors of stone adds to the richness of the surfaces. The plan of the main tomb building is intricate. It is a square 'nine-fold plan', where eight two-storied vaulted chambers radiate from the central, double-height domed chamber. The chambers of each level are interconnected by straight and diagonal passages. In Humayun's tomb, each of the main chambers has in turn eight more, smaller chambers radiating from it. The symmetrical ground plan contains 124 vaulted chambers in all. The sarcophagus of Humayun is found in the central domed chamber, the head pointing south, and facing east according to Islamic practice. The vaulted chambers also contain sarcophagi that were added later. The sex of each occupant is marked by a simple carved symbol: a box of writing instruments indicates a male, and a writing slate indicates a female. The sarcophagi are not otherwise

inscribed, but among them are known to be those containing the wives of Humayun, and several later Mughal emperors and princes.”

Following emperor Humayun’s death, his son Akbar ascended the Mughal throne in Delhi at the tender age of thirteen. Akbar, by all accounts, was the greatest of the Mughal emperors. He was an extremely capable ruler. He reestablished and consolidated the Mughal Empire, having administered it for fifty years. He is most appreciated for having a liberal outlook on all faiths and beliefs. During his era, culture and art reached a zenith. Although he might have been illiterate, or perhaps dyslexic, he was taught scholarly subjects for a time. He displayed a great love of literature and had all the books which came into his possession read out to him from cover to cover. Consequently, his library contained an enormous number of books on a plethora of subjects and branches of learning. Undeniably, Akbar’s court was a true center of culture and erudition. “The political, administrative, and military structures that he created to govern the empire were the chief factor behind its continued survival for another century and a half. At Akbar’s death in 1014 AH/ 1605 CE the empire extended from Afghanistan to the Bay of Bengal and southward to Gujarat and the northern Deccan.”

Some people suggest that the construction of Akbar’s tomb commenced during his lifetime and was completed during the reign of his son and new emperor, Jahangir. However, there is no concrete evidence that he either planned or started construction of his own tomb in the Agra suburb of Sikandra before he died. In the “Akbar-Nama”, it has only been recorded that “the sacred garden known as Bihishtabad was fixed upon as his resting place and the earthly mould was committed to the earth”. Recorded references to the tomb are mostly from Jahangir’s rule. They mention his discontent with the initial progress on the mausoleum and outline his active involvement in its design, modification and embellishment. It is said, for example, that, at first, the Akbar’s royal tomb was constructed in such an inappropriate way that when new emperor Jahangir, who was absent from Agra during the construction process quelling a rebellion, saw it he immediately ordered its destruction. He remarked that it did not come up yet to his idea of what the tomb ought to be. A new more “appropriate” tomb was later conceived and built.

Akbar’s funerary complex is described as a “square in plan and aligned on the cardinal axis, with the tomb at its center and four gates, one along each wall. Based on a charbagh, or walled square garden composition much like his father Humayun’s tomb, the

tomb of Akbar has a tall sandstone gate clad with ornate marble inlay carvings and inscriptions. It consists of a colossal arched niche flanked on either side by double-stacked balconies. Surmounting the gate pavilion are four towering white marble minarets, one at each corner. Its inscriptions were written and designed by Abd al-Haqq Shirazi (later known as Amanat Khan), famed calligrapher of Mughal monuments including Taj Mahal. While the inscriptions on the north elevation facing the tomb eulogize the deceased emperor, those above the entrance praise Jahangir, the patron of the tomb. Beyond the lofty gate lies the charbagh divided into quadrants by watercourses designed to evoke the rivers of paradise. Hence, the mausoleum itself is physically and metaphorically located at the center of a heavenly garden, Behistan. A paved causeway leads from the gate to the mausoleum. It is a five-tiered structure much like a truncated pyramid enveloped by low galleries. The domed and vaulted galleries are a hundred and five meters long serving as a large square plinth for the four square stories located at their center, each of which steps in as the structure rises. The gallery space is rhythmically arranged with massive pillars supporting arches roughly 6.7 meters apart. The central bay of each side is marked by a high pishtaq surmounted by a rectangular chhatri, or roof kiosks. Only the southern pishtaq gives access to the burial chamber, a small square room at the end of long corridor at the heart of the building domed at eighteen meters. Of the vaulted bays behind the four pishtaqs, the southern one is the most elaborate in ornamentation. The burial chamber also houses the tombs of the emperor's daughters, Shahrul Nisha Begam and Aram Bano. Outside, the second story has an arcaded verandah on each side, which is composed of twenty three bays. The arcades are repeated on the subsequent floors forming peripheral walkways at each level and chhatris at the corners. The top floor has no superstructure but consists on an open terrace enclosed with marble screen parapets. This five-tiered structure with its pillared terraces and numerous chhatris also bears a striking resemblance to the Panch Mahal at Fatehpur Sikri."

We will see later that the royal funerary architecture of the Mughals followed no strict established behavioral patterns, nor was there a complete logical evolutionary process, or a growth. However, having been built of red sandstone, with the exception of the four towering minarets over its lofty gate, the fifth tier of the tomb proper and most of the domes and vaults of its chhatris, which were built of white marble, the tomb-complex of Akbar marked what could be loosely and in no cast-iron terms described as the beginning of a transitional phase from red sandstone to white marble in the funerary architecture of the Mughals. That phase

was later completed with the creation of the tomb of I'timad al-Dawlah (the pillar of the state) by emperor Jahangir's wife for her late parents, and it reached its apogee with the construction of the Taj Mahal by emperor Shah Jahan. That said – to go off the point a bit — one may wonder where the tomb of Jahangir, Akbar's son, fits in this development or transition paradigm, because it was built by Shah Jahan, Akbar's grandson, and approximately 10 years after the tomb of I'timad al-Dawlah had been completed, and yet it was built of red sandstone using, just like almost all Mughal buildings, intermittent floral and geometric marble inlay for mainly ornamental and adornment ends. The answer lies in the fact that — as pointed out earlier — Mughal royal funerary architecture, when all's said and done, did not conform to any rigid and logical evolutionary fashion, so raising that query might not be considered necessary after all. What's more, the dome-less tomb of Jahangir needed to be quite atypical and fitted, in the sense that it had to incorporate both Islamic orthodoxy and the quintessence of Mughal grandiosity and pomp characterized by Shah Jahan more than anyone else, on account of Jahangir having reportedly willed that no structure should be raised over his grave. Jahangir's will and preference could also be construed as calling for a qualified funerary architecture restraint and moderation, while the overall appearance of his tomb signified Shah Jahan's ingenious response to, and an attempt to comply with, his father's conformist call.

When Akbar died, the Mughal imperial reign passed into the hands of his eldest son Jahangir who due to his greed and impatience for power just six years earlier revolted against his father. Some even accuse Jahangir of poisoning Akbar. Although he was defeated, Jahangir still succeeded his father as emperor in 1014 AH/ 1605 CE. However, following what was emerging as a Mughal political pattern, the first year of the new emperor's reign saw yet another rebellion which was organized by Jahangir's eldest son, Khusraw. The rebellion was a short-lived affair, having been quickly crushed. Nonetheless, just like his father, emperor Jahangir was an excellent and shrewd administrator. Most of his rule was characterized by political stability, racial tolerance, a strong economy and notable cultural achievements.

Even though Jahangir built an imperial tomb for his late father, emperor Akbar, there is no mention of how exactly and where he himself wished to be buried. The earliest reference is provided in relation to his son and next emperor, Shah Jahan, who built a royal tomb for his late father. Jahangir is reported to have generally willed that there should be no

structure erected over his grave. His tomb, which was inaugurated in about 1037 AH/ 1627 CE, the year Jahangir died, and was completed in about 1047 AH/ 1637 CE, ten years after his son Shah Jahan's enthronement, thus had to combine "open-air orthodoxy with the fundamentals of Mughal monumentality". It cost thirty percent less than Akbar's tomb, even though the latter was constructed much earlier. "The tomb of Jahangir is located in Shahdara, a suburb of Lahore to the northwest of the city. The area had been a favorite spot of Jahangir and his wife Nur Jahan when they resided in Lahore, and the area was commonly used as a point of departure for travels to and from Kashmir and Lahore. When Jahangir died in 1037 AH/ 1627 CE he may have initially been buried in Shahdara in one of its many gardens...The tomb occupies a vast quadrangle measuring approximately 500 meters to a side and is subdivided into four chahar baghs (four-part gardens). A fountain occupies the center of each of the chahar baghs and the avenues in between, creating a ring of 8 fountains around the central tomb...The mausoleum itself is square in plan and about 80 meters a side. Except for the four corner minarets the layout is entirely horizontal with a flat roof covering the whole of the structure...At Jahangir's tomb, a compromise of sorts was arrived at by raising a roof over the cenotaph but not constructing any monumental embellishments such as domes. This design was apparently not very popular as it was replicated only once for the tomb of Nur Jahan, Jahangir's wife, at her tomb garden also in Shahdara...At the center of the mausoleum is an octagonal tomb chamber about 8 meters in diameter. It is connected to the outside of the tomb by four hallways facing the four cardinal directions. The cenotaph at the center is carved from a single slab of white marble and decorated with pietra dura inlays of the 99 attributes of God. At its foot is an inscription in Persian recording that 'This is the illuminated grave of His Majesty, the Asylum of Pardon, Nooruddin Muhammad Jahangir Padshah 1037 AH (1627 CE)'."

Thus, emperor Shah Jahan, reputed to have had the most refined of the tastes in the arts and architecture, was the only celebrated Mughal emperor who managed to build monumental royal mausoleums both for his father, whom he had succeeded, and for his self. What is more, he is even reported to have added a marble enclosure to the unassuming grave of emperor Babur in Kabul, as well as a mosque to the burial-garden where Babur's grave was located, as pointed out earlier. The period of Shah Jahan's reign is generally regarded as the golden age of Mughal architecture. He possessed an almost insatiable passion for building in consequence of which many splendid monuments, such as mosques, mausoleums,

governmental buildings, palaces, gardens, etc., were created. Shah Jahan's reign was also a period of great literary activity, and the arts of painting and calligraphy were not neglected. His court was one of great pomp and splendor, and his collection of jewels was probably the most magnificent in the world.

The superb mausoleum in which Shah Jahan's body rests is the Taj Mahal, the masterpiece of his reign, which, however, was first erected in memory of Shah Jahan's favorite of his three queens, Mumtaz Mahal, the mother of Aurangzeb who succeeded Shah Jahan as emperor. This mausoleum complex immortalizes Mumtaz Mahal who died in childbirth in 1041 AH/ 1631 CE, after having been the emperor's inseparable companion since their marriage in 1021 AH/ 1612 CE. The building's name, Taj Mahal, is a derivation of the Empress's name. Building commenced about 1042 AH/ 1632 CE. More than 20,000 workers were employed from India, Persia, the Ottoman empire and Europe to complete the mausoleum itself by about 1048-1049 AH/ 1638–39 CE. The adjunct buildings that include a mosque as well were finished by 1053 AH/ 1643 CE, and decoration work continued until at least 1057 AH/ 1647 CE. In total, construction of the 42-acre (17-hectare) complex spanned 22 years. In 1068 AH/ 1657 CE, approximately 10 years subsequent to the total completion of the Taj Mahal, Shah Jahan fell ill, precipitating a struggle for succession between his four sons. The victor, Aurangzeb, declared himself emperor in 1069 AH/ 1658 CE and strictly confined Shah Jahan in the fort at Agra until his death in 1077 AH/ 1666 CE. Following his death, Princess Jahanara Begum Sahib, Shah Jahan's eldest daughter who nursed him most in his dotage, planned a state funeral to include a procession with her father's body carried by eminent nobles followed by the notable citizens of Agra and officials scattering coins for the poor and needy. Aurangzeb, the new emperor and most conformist and austere of all, refused, washing his body in accordance with Islamic rites, taking his sandalwood coffin by river to the Taj Mahal and interred him next to the body of his beloved wife Mumtaz Mahal.

The Taj Mahal funerary complex is described in Encyclopedia Britannica Academic Edition as follows: "Resting in the middle of a wide plinth 23 feet (7 meters) high, the mausoleum proper is of whitemarble that reflects hues according to the intensity of sunlight or moonlight. It has four nearly identical facades, each with a wide central arch rising to 108 feet (33 meters) and chamfered (slanted) corners incorporating smaller arches. The majestic central dome, which reaches a height of 240 feet (73 meters) at the tip of its finial, is surrounded by four lesser domes. The acoustics inside the main dome cause the single note of

a flute to reverberate five times. The interior of the mausoleum is organized around an octagonal marble chamber ornamented with low-relief carvings and semiprecious stones (pietra dura); therein are the cenotaphs of Mumtaz Maḥal and Shah Jahan. These false tombs are enclosed by a finely wrought filigree marble screen. Beneath the tombs, at garden level, lie the true sarcophagi. Standing gracefully apart from the central building, at each of the four corners of the square plinth, are elegant minarets. Flanking the mausoleum near the northwestern and northeastern edges of the garden, respectively, are two symmetrically identical buildings — the mosque, which faces east, and its jawab, which faces west and provides aesthetic balance. Built of red Sikrisandstone with marble-necked domes and architraves, they contrast in both color and texture with the mausoleum's white marble. The garden is set out along classical Mughal lines — a square quartered by long watercourses (pools) — with walking paths, fountains, and ornamental trees. Enclosed by the walls and structures of the complex, it provides a striking approach to the mausoleum, which can be seen reflected in the garden's central pools. Two notable decorative features are repeated throughout the complex: pietra dura and Arabic calligraphy. As embodied in the Mughal craft, pietra dura (Italian: 'hard stone') incorporates the inlay of semiprecious stones of various colors, including lapis lazuli, jade, crystal, turquoise, and amethyst, in highly formalized and intertwining geometric and floral designs. The colors serve to moderate the dazzling expanse of the white Makrana marble. Under the direction of Amanat Khan al-Shirazi, Qur'anic verses were inscribed across numerous sections of the Taj Mahal in calligraphy, central to Islamic artistic tradition. One of the inscriptions in the sandstone gateway is known as Daybreak (89:28–30) and invites the faithful to enter paradise. Calligraphy also encircles the soaring arched entrances to the mausoleum proper. To ensure a uniform appearance from the vantage point of the terrace, the lettering increases in size according to its relative height and distance from the viewer."

Following the enthronement of the new emperor, Aurangzeb, things in the state started to change dramatically. His policies in relation to religious toleration, which for the most part were different from those of his predecessors, remain a very controversial aspect of his reign. Nonetheless, he was recognized as a strong and effective ruler, and his reign lasted for 49 years, from 1069 AH/ 1658 CE to 1119 AH/ 1707 CE. With his death the great period of the Mughal Empire came to a close, and central control of the Indian sub-continent waned rapidly. He was pious and wanted to integrate more vigorously and more systematically the

Qur'anic injunctions into all life spheres including the lives of the ruling elite. The art and architecture sectors were affected too. He is alleged to have placed a ban upon the fine arts as being contrary to the values and commandments of the Qur'an and Prophet Muhammad's traditions, and dismissed from his court all but orthodox Muslim craftsmen. This resulted, as the allegation goes, in the rapid decline of aesthetic taste that set in with his accession.

Towards the end of his life, Aurangzeb's devoutness and orthodoxy increased even more. However, the signs of what was to come were on display from the very beginning. By 1078-1079 AH/ 1667-68 CE, only about ten years subsequent to his coronation, he memorized the entire Qur'an, an endeavor that took him seven years. That is to say, he embarked on that arduous noble mission in about the third year of his rule. He also by his own hand wrote out the Qur'an a number of times.[30] Additionally, Aurangzeb is said to have been fond of moderate Sufism. At the same time, he was against religious innovations (bid'ah) associated with various Sufi establishments. Although he did not like making pilgrimage to Sufi shrines, he nevertheless visited a Sufi's shrine at Ajmer and even went to a living holy man or a saint. He at one point issued a decree stating that visiting graves is contrary to the Islamic Shari'ah. Likewise, he was interested in Sufi master Jalaluddin al-Rumi's poetry which moved him to tears, yet he disliked Hafiz and had his Diwan (writings) banned due to frequent mention of wine. He showed sympathy with music, yet he discouraged it and fired the musicians at the court.

Finally, when he died and as an expression of his deep devotion to his beliefs and principles, Aurangzeb was buried in a modest open-air sepulcher in the courtyard of the tomb of a Sufi sheikh and saint in the city of Khuldabad. That was exactly what he had willed. The simple sepulcher had been built by the emperor in his own lifetime. "The red stone platform over his grave, not exceeding three yards in length, two and half yards in breadth, and a few fingers in height, has a cavity in the middle. It has been filled with earth, in which fragrant herbs have been planted." However, it has been stated that, originally, the tomb consisted only of a wooden slab with a Persian inscription on it: "No marble sheets should shield me from the sky as I lie there one with the earth."

Quwwat-ul-Islam Mosque (built 1192–1316)

Quwwat-ul-Islam was sponsored by Qutb-ud-din Aibak, founder of the Mamluk dynasty. Born a slave in Turkey, Qutb rose to prominence as a general during Muhammed Ghori's invasion of India in the 1180s. After Muhammed's assassination in 1206, Qutb seized

the throne and crowned himself Sultan of the Mamluk dynasty, often disparagingly called the “Slave Dynasty” after Qutb's origins. Although the dynasty lasted for only a few centuries, Muslim rule in India endured up to the British occupation in 1858. Qutb was a fanatical Muslim. When his garrison occupied Delhi under the command of Muhammed Ghari in 1192, he ordered the destruction of twenty-seven Hindu and Jain temples to furnish building materials for the construction of Delhi's first mosque. Quwwat-ul-Islam, the “Glory of Islam,” was hastily erected by the young amir, who conscripted an army of local craftsmen, presumably Hindus, to assemble the structure.

The Hindu stone masons repurposed columns from the destroyed temples, but adapting them to use in a mosque proved problematic given Islam's injunction against the use of images in temples. The masons were forced to plaster over the highly sculpted Hindu columns and presumably cover them with geometric designs. However, after centuries of neglect, the plaster has fallen away, revealing the original Hindu carvings. The Quwwat-ul-Islam is best known for its tower of victory, celebrating the Muslim conquest of India. It is built of red sandstone, gray quartz, and white marble, but is probably inspired by the iron “Pillar of the Law” that stands on the site. Built in the Mauryan dynasty in the 6th century, it is the only piece of the temple that stands in its original location. Qutb built around it when he constructed the mosque. Although made of iron, it has resisted rust for over 1,500 years, evidence of the Mauryans’ superb metallurgical skills.

Expansion of the mosque continued after the death of Qutb. His son-in-law Altamash (or Iltutmish) extended the original prayer hall screen by three more arches. By the time of Altamash, the Mamluk Empire had stabilized enough that the Sultan could replace most of his conscripted Hindu masons with Islamic ones. This explains why the arches added under Altamash are stylistically more Islamic than the ones erected under Qutb's rule. Just to the west of the expanded mosque, Altamash built his own tomb, the first to be erected for the Delhi Sultanate. Despite the presence of Muslim craftsmen, the tomb is mostly Hindu in design, if not in execution. Much of the superstructure and most of the walls are built of pillaged building material. Altamash's body was laid to rest in a subterranean chamber beneath the tomb. The decline of Quwwat-ul-Islam began during the rule of Ala-ud-din (1296–1316), known to the West as “Aladdin.” Ala-ud-din at first seemed inclined to patronize the mosque, even adding an enormous new courtyard wall and erecting the base of a huge new minar (tower). However, Ala-ud-din’s dreams were so grand that he decided to

abandon the Lal Kot (Delhi) capital and move to nearby Siri, whereupon Quwwat-ul-Islam lost its pre-eminence.

Quwwat-ul-Islam Mosque: Architectural Features

The technique, as well as the architectural features of the Quwwat-ul-Islam Mosque, resembles the pattern or structure of other monuments that were built by the same ruler, such as the Ajmer Mosque and Adhai Din ka Jhopra. It is strongly believed that the entire Qutub Minar complex was established after demolishing Sanskrit schools as well as temples found at the spot. To construct the Quwwat-ul-Islam Mosque, the destruction of twenty-seven Jain as well as Hindu temples was carried out. Along with it, the mosque was initially built with grey quartz, red sandstone, and white marble.

There you can find enormous stone-made screens which stand perfectly in front of the prayer hall. The information about the Quwwat-ul-Islam Mosque includes two smaller arches along with a central dome, which is shaped like an S-like composition. After that, a large stone screen was built ahead of the prayer hall, which is accompanied by arches and is S-shaped. Along with this, another example of Islamic and Hindu fusion is the prayer hall, which is C-shaped and consists of a central arch, which is approximately 6.15 m in height. The prayer hall is further ornamented with out-of-the-box decorations which reflect the excellent work finished by the architects. Quwwat-ul-Islam Mosque is an exultant example of Indo-Islamic architecture. The dimensions of the mosque include a grand prayer hall and a central courtyard located on the west side of the Quwwat-ul-Islam Mosque. Along with it, you can find huge arcades made of grey stone plus a total number of bays around the Quwwat-ul-Islam Mosque.

Qutub Minar

MINAR:

Manar or manara, the Arabic words meaning either "place of fire" (nar or "place of light" nur. Minaret is one of the popular symbols of Islam both politically and spiritually. Although the minaret is one of the most distinctive architectural features of a mosque, philologists noted that many mosques, including many in North Africa, were built without minarets at all; furthermore, in contrast to the mihrab or minbar, the minaret is rarely mentioned in Arabic literature. It is the oldest form in Islamic architecture according to Muslim tradition, the call to prayer was invented, in reaction to the Jewish use of the horn and the Christian use of the wooden clacker to summon worshippers.

Minaret is a type of tower typically built into or adjacent to mosques. Minarets serve multiple purposes. While they provide a visual focal point, they are generally used for the Muslim call to prayer (adhan). The basic form of a minaret includes a base, shaft, a cap and head. They are generally a tall spire with a conical or onion-shaped crown. The early Muslim community of Medina gave the call to prayer from the roof of the house of Muhammad, which doubled as a place for prayer.

In the early 9th century, the first minarets were placed opposite the qibla wall. Oftentimes, this placement was not beneficial in reaching the community for the call to prayer. They served as a reminder that the region was Islamic and helped to distinguish mosques from the surrounding architecture. In addition to providing a visual cue to a Muslim community, the other function is to provide a vantage point from which the call to prayer, or adhan, is made. The call to prayer is issued five times each day: dawn, noon, mid-afternoon, sunset, and night. In most modern mosques, the adhān is called from the musallah (prayer hall) via microphone to a speaker system on the minaret.

The basic form of minarets consists of four parts: a base, a shaft, a cap and a head. Minarets may be conical (tapering), square, cylindrical, or polygonal (faceted). Stairs circle the shaft in a counterclockwise fashion, providing necessary structural support to the highly elongated shaft. The gallery is a balcony that encircles the upper sections from which the muezzin may give the call to prayer. It is covered by a roof-like canopy and adorned with ornamentation, such as decorative brick and tile work, cornices, arches and inscriptions, with the transition from the shaft to the gallery typically displaying muqarnas.

The earliest mosques(See our earlier Paper on Medinaha Architecture on academia.edu) lacked minarets, and the call to prayer was often performed from smaller tower structures. The first known minarets appear in the early 9th century under Abbasid rule, and were not widely used until the 11th century. These early minaret forms were originally placed in the middle of the wall opposite the qibla 5 wall. These towers were built across the empire in a height to width ratio of 3:1. The oldest minaret is the Great Mosque of Kairouan in Tunisia and it is consequently the oldest minaret still standing. The construction of the Great Mosque of Kairouan dates to the year 836. The mosque is constituted by three levels of decreasing widths that reach 31.5 meters tall. Minarets have had various forms (in general round, squared, spiral or octagonal) in light of their architectural function. Minarets are built out of any material that is readily available, and often changes from region to region.

The number of minarets by mosques is not fixed, originally one minaret would accompany each mosque, then the builder could construct several more. The Qutub Minar is a Minaret and symbolizes one of the earlier examples of Indo-Islamic Architecture.

The term 'Qutub Minar' is derived from Arabic which means 'pole' or 'axis'. The infrastructure of Qutub Minar was established in AD 1199 as one of the earliest sites built by the Delhi Sultans. This building was a commemoration of a great victory; Muhammad Ghorī (founder of Muslim rule in India) had triumphed over the Rajput dynasty at bringing bringing Islamic rule to India. He defeated Delhi's last Hindu ruler. His general Qutb-ud-Din Aibak became the first Islamic ruler of north India, and the construction of the first Islamic building (Qutub Minar) began. Though it was not to be completed within his lifetime.

Qutub Mina Height & Architecture

The magnificent Qutub Minar has a height of 73 meters. It has a base diameter of 14.3 meters which narrows down to 2.7 meters at the top. The structure also includes a spiral staircase of 379 steps. There are many other historical edifices around the minaret which, together with the main tower, form the Qutub Minar Complex.

It is widely believed that the tower, which displays early Afghan architectural style, was built taking inspiration from the Minaret of Jam in Afghanistan. Each of the five distinct stories of the minaret is adorned with a projecting balcony supported by intricately designed brackets. While the first three stories are built in pale red sandstone, the fourth one is purely made of marble, and the fifth one is a mix of marble and sandstone. The architectural styles from the base to the top also differ, thanks to the many rulers who constructed it part by part.

There are bands of inscriptions on different sections of Qutub Minar that narrate its history. Carved verses adorn the inside of the tower.

Mughal Architecture is the type of Indo-Islamic architecture developed by the Mughals in the 16th, 17th and 18th centuries throughout the ever-changing extent of their empire in the Indian subcontinent. It developed the styles of earlier Muslim dynasties in India as an amalgam of Islamic, Persian, Turkish and Indian architecture. Mughal buildings have a uniform pattern of structure and character, including large bulbous domes, slender minarets at the corners, massive halls, large vaulted gateways, and delicate ornamentation. Examples of the style can be found in modern-day India, Afghanistan, Bangladesh, and Pakistan. But the Qutub is an earlier manifestation of design and Architecture.

The Mughal dynasty was established after the victory of Babur at Panipat in 1526. During his five-year reign, Babur took considerable interest in erecting buildings, though few have survived. His grandson Akbar built widely, and the style developed vigorously during his reign. Among his accomplishments were Agra Fort, the fort-city of Fatehpur Sikri, and the Buland Darwaza. Akbar's son Jahangir commissioned the Shalimar Gardens in Kashmir.

Mughal architecture reached its zenith during the reign of Shah Jahan, who constructed Taj Mahal, the Jama Masjid, the Shalimar Gardens of Lahore, the Wazir Khan Mosque, and who renovated the Lahore Fort. The last of the great Mughal architects was Aurangzeb, who built the Badshahi Mosque.

Architecture of the Qutub Minar

His general Qutb-ud-Din Aibak became the first Islamic ruler of north India, and the construction of the first Islamic building (Qutub Minar) began. Though it was not to be completed within his lifetime. The construction of Qutub Minar took 28 years to complete; the first storey was constructed under Qutb-ud-Din Aibak, though the remainder of the storeys were constructed by his successors. Restoration works/additions were also made in 12th century, 14th century and 19th century due to natural disasters, so the different architectural styles from the time of Aibak to Tughlak are clearly visible in the Qutub Minar. The minaret also has epitaphs in Arabic and Nagari ciphers in different places depicting the history of the monument. Since it was commissioned as a monument constructed as a sign of victory and establishment of Muslim rule, it was to be a grand work of Indo-Islamic architecture and design. The exterior walls of Qutub Minar reveal its history of construction, with chiseled Parsi-Arabic and Nagari character carvings. The inscriptions clearly describe the motive, way, the time taken and every minute detail about this monument.

History

Qutubuddin Aibak, founder of the Delhi Sultanate, started construction of the Qutub Minar's first storey around 1199. In 1220, Aibak's successor and son-in-law Shamsuddin Iltutmish completed a further three storeys. In 1369, a lightning strike destroyed the top storey. Firoz Shah Tughlaq replaced the damaged storey, and added one more. Sher Shah Suri also added an entrance to this tower while he was ruling and Humayun was in exile. Inscriptions record that 27 Hindu and Jain temples were torn down, and used for the creation of the mosque. The pillars of the temples were reused and the original images plastered over.

Over time, the plaster has fallen revealing the original Hindu carvings. A photograph of the site, taken by Dr John Murray in 1858 and in possession of the British Library currently, is captioned as Rao Petarah's Temple.

Qutb Minar was established along with Quwwat-ul-Islam Mosque around 1192. The mosque complex is one of the earliest that survives in the Indian subcontinent. The minaret is named after Qutb-ud-din Aibak, or Qutbuddin Bakhtiar Kaki, a Sufi saint. Its ground storey was built over the ruins of the Lal Kot, the citadel of Dhillika. Aibak's successor Iltutmish added three more storeys. The Minar is surrounded by several historically significant monuments of Qutb complex. The nearby pillared cupola known as "Smith's Folly" is a remnant of the tower's 19th century restoration, which included an ill-advised attempt to add some more storeys. The ancient Hindu IRON PILLAR is also not far from the complex. It is one of the most outstanding elements highlighting ancient India's achievements in metallurgy. The most astonishing fact is that the pillar is made of iron and has stood tall for 1,600 years without rusting.

Structure & Architecture

Parso-Arabic and Nagari in different sections of the Qutb Minar reveal the history of its construction, and the later restorations and repairs by Firoz Shah Tughluq (1351–89) and Sikandar Lodi. (1489– 1990).The tower has five superposed, stories. The lowest three comprise fluted cylindrical shafts or columns of pale red sandstone, separated by flanges and by storeyed balconies, carried on Muqarnas corbels. The fourth column is of marble, and is relatively plain. The fifth is of marble and sandstone. The flanges are a darker red sandstone throughout, and are engraved with Quranic texts and decorative elements. The whole tower contains a spiral staircase of 379 steps. At the foot of the tower is the Quwat ul Islam Mosque. The minar tilts just over 65 cm from the vertical, which is considered to be within safe limits. Qutub Minar was an inspiration and prototype for many minarets and towers built. The Chand Minar and Mini Qutub Minar bear resemblance to the Qutb Minar and inspired from it.

From the intricate carvings, can be note noted an aura of Afghanistan pattern, blended with local artistic conventions having garlands and lotus borders. Fortunately, renovations of the minaret throughout time have maintained the original charm of the building.Each of the five different storeys has a projected balcony that circles the Minar (backed by stone brackets). The first three storeys are made with red sandstone while the remaining were

constructed using marble and sandstone. If you look closely the cylindrical shaft has inscriptions of the Quran.

A Mosque lies at the foot of Qutub Minar which is a special site in itself; a beautiful blend of IndoIslamic architecture that showcases how the Mughal Empire (1562) influenced Indian culture. Mughal Rulers had a fascination with art and sculptures, so one can find a lot of detailed and decorative elements inside; each with their own story to tell.

The Qutub Minar is part of a larger complex, and the Qutub Complex is regarded as one of the most famous arrays of historical monuments in Delhi. Beyond Qutub Minar, its highlights include the Alai Darwaza (the first example of the true arch and dome), and Quwwat-ul-Islam Mosque, which was the first mosque built in Delhi, and a surviving example of Ghurids architecture in the Indian subcontinent. Qutub complex consists of a mosque and two minarets enclosed within a series of cloistered precincts. This rectangular complex measures about 235 m (north-south) by 155 m (east-west) along the exterior. It was entered via four monumental gates along the north, east and south walls, of which only the southern gate (Alai Darwaza) remains. The mosque, known as the Qutb or Quwwat ul Islam Mosque, occupies the southwest corner of the complex. It consists of rectangular enclosures, all the later work of Aybak's successors. The Qutb Minar (minaret) stands in the south eastern part of this enclosure. The unfinished Alai Minar (minaret) stands in the north eastern part of the complex. A tall screen wall with pointed archways runs along the western edge of the precinct, creating a qibla wall for the prayer spaces. In addition to these elements, the complex also contains several smaller buildings: the Tomb of Iltutmish, Ala-al-Din Khalji's madrasa, and the Imam Zamin Mosque.

Calligraphy

The word 'calligraphy' is derived from the Greek word 'Kallos' meaning beauty, and 'graphe' meaning writing. The literal meaning of calligraphy as 'beautiful writing' is a bit shallow transliteration of the Arabic word 'Khatt' which is derived from three components – 'line', 'design' and 'construction'. Islamic calligraphy is strongly associated with the reproduction of chapters or verses from the Quran. Since figurative art is prohibited on the suspicion of idolatry it was and still is the main medium for artistic expression, because the representation of human forms was considered a Christian iconography.

By the time Delhi became the farthest outpost in the Islamic empire, the Saracenic art forms had already been developed in the Middle-East. With the Indian conquest by the

Turks, a new template for architectural vocabulary was created by consciously incorporating both Hindu and Islamic elements, which is now known as Indo-Saracenic architecture. Confluence of different architectural styles had been attempted before during the mainly Turkic, Delhi Sultanate and Mughal periods. Turkic and Mughal conquest in the Indian subcontinent, introduced new concepts in the already rich architecture of India. The prevailing style of architecture was trabeate, employing pillars, beams and lintels. The Turkic invaders brought in the arcuate style of construction, with its arches and beams, which flourished under Mughal and Taluqdar patronage and by incorporating elements of Indian architecture, especially Rajasthani temple architecture.

Local influences also lead to different 'orders' of the Indo-Islamic style. After the disintegration of the Turkic Delhi Sultanate, rulers of individual states established their own rule and hence their own architectural styles, which was heavily influenced by local styles. Examples of these are the 'Bengal' and the 'Gujarat' schools. Motifs such as chhajja (A sunshade or eave laid on cantilever brackets fixed into and projecting from the walls), corbel brackets with richly carved pendentive decorations (described as stalactite pendentives), balconies, kiosks or chhatris and minars (tall towers) were characteristic of the Mughal architecture style, which was to become a lasting legacy of the nearly four hundred years of the Mughal rule. The Qutb Complex was built in three distinct phases. The first construction was done by Qutbuddin Aibak from 1191 to 1200. The area was then enlarged by his successor, Iltutmish, until 1230. The last phase of expansion was by Allauddin Khilji during his reign from 1296 until 1315 AD. These structures are the earliest Islamic architecture in India and offer an insight into the culture's unique building style. Although there had been similar conquests by Arabic tribes in Sindh since 8th Century AD, there are hardly any monuments left behind to refer to and compare.

Inscriptions:

Inscriptions were commonly incised on stone, marble, metal, terracotta, or wood (though this last material has hardly ever survived, except in Egypt). In Egypt and Mesopotamia hard stones were frequently used for the purpose, and the inscriptions are therefore well preserved and easy to read. In Greece the favourite material, especially in Athens, was white marble, which takes an admirably clear lettering, but is liable to weathering of the surface if exposed, and to wear if rebuilt into pavements or similar structures. Many other kinds of stone, both hard and soft, were often used, especially

crystalline limestones, which do not easily take a smooth surface, and which, therefore, are often difficult to decipher, owing to accidental marks or roughness of the material.

The metal most commonly used for inscriptions was bronze: flat tablets of this were often made for affixing to the walls of temples and other buildings. Occasionally such tablets were made of silver or gold; and inscriptions were often incised on vessels made of any of these metals. Inscriptions on metal were nearly always incised, not cast. An important class of inscriptions are the legends on coins; these were struck from the die. (cf. numismatics.) Clay was very extensively used for inscriptions in Mesopotamia and in Crete. In this case the symbols were incised or impressed on specially prepared tablets when the clay was soft, and it was subsequently hardened by fire. In Greece, many inscriptions on vases were painted before firing, in that case often having reference to the scenes represented, or incised after firing; potsherds (ostraka) were often used as a cheap writing material. Inscriptions were also often impressed from a mould upon wet clay before firing, in the case of tiles, amphora handles, etc., and in these cases often supply valuable information as to the buildings to which they belong or the place from which they took their origin.

The tools used for making inscriptions varied with the material; most of them were some kind of chisel, usually with a square blade; early inscriptions were sometimes made on hard rock by successive blows with a punch or pointed hammer. Sometimes a circular punch was used for O or a letter of which O formed a part. The position or place of inscriptions depends greatly upon their purpose or intention. When they have a direct relation to the sculptures, reliefs or paintings with which they are associated, they often form a kind of pattern to fill the background or vacant spaces between the figures; but sometimes, especially in Mesopotamian statues or reliefs, they are cut right across the figures without any regard to the artistic effect. In late Greek or Roman work it is usual to cut any inscription relative to a statue or relief upon the basis on which this is mounted; but short inscriptions such as dedications or artists' signatures are often placed in some inconspicuous position upon the work itself. In the case of painted vases, the inscriptions relative to the subject represented are usually painted; but dedications and other inscriptions are often incised after the vase has been fired.

In case of the Qutub-an inscription on the inner lintel of its eastern gateway reads, "The materials of 27 temples, on each of which 2,000,000 Deliwals (ancient currency) had been spent, were used in (the construction of) this mosque." In this construction overhaul,

one must admire how the local craftsmen had skilfully assembled pieces of fallen temples to meet the new demand by stacking them to achieve a common height, re-using corbelled domes of temples, smoothing or chiselling off sculptured figures or turning them inwards. No wonder that the naskh characters on Aibak's great screens, inscribed by local Rajput craftsmen by copying the strange alien letters from their new masters, look less authentic than the similar inscriptions on Iltutmish's great screen extensions. This was because, as soon as mass immigration of skilled workmen would have commenced from Persia, the motifs became more and more accurate. With the passage of time, as the Qutb Complex was extended, we see less of Hindu elements and more of the Saracenic influences. Newer architectural experimentations that involved designers picking and choosing fewer local elements while dropping or rejecting others. Therefore, there is no better place than the Qutb Complex at Delhi to study how the first hesitant steps were attempted by the Turk masters, who were initially totally dependent upon local artisans to carve out their songs on stone, and how they developed a new style over the time.

The entire complex was built in three phases overlapping each other in the shape of nested rectangles, most of which are already gone and can only be conjectured. As we walk past the Mughal-era scalloped gateways at the entrance and turn left to enter the mosque, we must be aware that perhaps two more gateways would have stood in our way before we could reach the eastern entrance to the oldest mosque in Delhi.

The monument is full of inscriptions which are partially gone and even those remaining are not fully legible. It was Syed Ahmed Khan, who helped with the translations; as a young man, he seated himself in a basket on a rope-swing and hung it from Qutb Minar's balconies in order to record its inscriptions. He did this prior to 1847, when he published his book *Asaaar-usSanaadeed* or "Delhi's Remains." Sir Syed, as he was called later, founded the Mohammadan Anglo Oriental College that would become Aligarh Muslim University in 1921. The English translations of the inscriptions were published in 1922 by Zafar Hasan of ASI in his 'List of Muhammadan and Hindu Monuments- Vol 3', and in J.A. Page's 1926 ASI publication of 'A Historical Memoir on the Qutb: Delhi.'

The arched doorway of the Gateway of the Mosque in the complex gives the first example of such an amalgamation of Indo-Saracenic architecture. Built into the heavy low lintels under the arched gateway, stands out a plaque with a line written in curiously sharp and angular Arabic fonts. Its striking characteristics are the long strokes, shooting out from

the line of text below. This is a typical Kufi script that is named after a place in Southern Iraq called Kufa where it originated.

The Arabic inscriptions in the entire Qutb complex are either verses from Quran, eulogies written for the king, or records of historical events. The brief line in Arabic – whose few last words on the left have disappeared – must have been the only instruction from a Turk overlord to a group of local artisans to reproduce on stone and beautify the rest of the space around it as per their own creativity. The translation of the line reads:

The panels below it are equally interesting and highlight how the Hindu sculptors reverted back to their temple art practised over the ages to beautify the empty space around the line written in Kufi calligraphy. At the centre of the panel below the Arabic script, we see a fierce looking face. This is called a 'Kirti Mukh' and used in Hindu temples and even homes to ward off evil. In the panel below the Kirti Mukh, we see a row of flower garlands with temple bells hanging in between. Surprisingly, this Hindu motif must have looked adorable to the Turks, because this was one of the very few Hindu styles that was repeatedly used throughout later constructions, including the Qutb Minar and Alai Darwaza. At the top of the doorway sits a curiously conical dome. From its inside, it can be seen as a series of concentric rings of progressively lesser diameter stacked on top of each other till the gap is closed. It is obvious that an attempt to build a dome was made without the skills to make a true arch or true dome that requires a keystone. There are several of these types of conical low domes created from temple spire design with corbelling architecture. "The shallow corbelled domes (were) taken bodily from some wrecked Hindu shrine," says J.A. Page in his ASI memoir in 1926. In fact, the absence of keystone in the pointed arches of the gigantic mihrab screens must have been the reason for their collapse, even if we discount man made destructions over nine hundred years.

Screens

These are profusely decorated majestic screens that once stood as entrance to the prayer hall behind them shows a similar study of merging styles. The naturalistic imagery of plants and flowers must have been chosen to invoke a sense of purity and devotion because sacred texts were historically associated with perfume, rose-water, saffron, and the likes. The panels in between the calligraphic bands represent a scroll-like pattern and is a common representation for Goddess Ganga. The wavelike pattern next to it similarly represent River Yamuna. Ganga and Yamuna are often depicted along with their mounts, or vahanas, in

temples. The mount for Ganga is a hybrid animal called Makara with a body of a crocodile and the tail of a fish. The repeating serpentine pattern on the panel represents the tail of Makara. The waves on the next panel represent River Yamuna. Both Ganga and Yamuna are often depicted together at the left and right of temple doorways and are considered auspicious and good-luck charms. Together they define the boundary which the devotee must cross in order to enter the religious space. Both of the two rivers are considered very sacred and bathing in river Ganga is believed to wash away all the sins. So, in this medieval architecture, we see an attempt was being made to accommodate and merge different imagery for a syncretic idea of India.

Calligraphy on the bands of Qutb Minar highlights yet another phase of architectural progression. Tower construction commenced with Aibak, “the Commander of the Army... of the Sultan Muizzu-d-din Muhammad Ghori,” and Aibak completed the first level of the tower. Iltutmish built an additional two stories and began a fourth, and the remainder of the fourth and fifth stories were built by Firozshah Tughluq, the prolific builder king.

The main features of Qutb Minar are the calligraphic bands encircling its plain, fluted exterior in naskh characters and the unique stalactite decoration under its balconies. The stalactite feature was introduced for the first time in India on the Qutb Minar, but its origins are largely unknown. Contemporary designs exist in Cairo, Algiers, and elsewhere, but the origin and development of this Saracenic architectural form seems to have been perfected elsewhere a few decades earlier because the mature “honeycomb” designs could not have appeared at different places at the same time. One wonders whether the design could be from the city of Ghazni, where the prototype of the Qutb Minar is believed to have been first erected, however, any such possible links is beyond proof, as the city was totally destroyed in 1155 AD.

The tower’s decoration is almost entirely Saracenic in theme except the rows of flower garlands and hanging temple bells. Also, a row of flowers, each encased in small discs has two levels of eight petals, as if suggesting spokes in the chakra or rotating wheels of time. The bands of the majestic tower have mostly Quranic inscriptions and a few historic references to the builders who commissioned the tower. Although many of these stones have been rearranged without consideration to the correct order, it is quite easy to find the word ‘Allah’ written in bold Arabic letters in a few places.

Calligraphy has no right or wrong interpretations- No two strokes of the same character by a calligrapher are the same in meaning. Grids are often created by repeating a single letter to make abstract patterns that appeal differently to observers. So, whatever is interpreted, depends on how that person views the pattern. In those times, it was very contemporary to incorporate abstract designs on monuments, whereas now they are considered more traditional.

Even the pierced stone screen at the entrance of Alai Darwaza can be perceived differently. These types of jaali works made with repeated geometric patterns are very common in monuments. While the endless repetition is said to represent the Infinite, without beginning or end, signifying the God, there are other interpretations as well. Here, the pattern is based on a six-pointed star surrounded by six hexagons. However, if the observer focuses not on the empty spaces but on the latticed frame, each of these holes can be interpreted as dots implemented in various forms. The tiny dot has profound significance in Islamic philosophy; a dot represents the Unity of Knowledge in an infinitely compact state. Imam Ali, the cousin and son-in-law of the Prophet said, “Knowledge is but a point. It is the ignorant who increased it. I am that point.”

Qutub as a Hexagram

The hexagram is the symbol of supreme unity of matter and spirit within ourselves. For example, we can take a blank sheet of paper and use it to represent “nothing.” When we draw a shape with a coloured paintbrush, the shape is something that has manifested out of the “nothingness” of the pure plain paper and we can say that the shape was always there inside the paper, only invisible to us. Only the true unison or balance of our consciousness with its counterpart of matter within our-self represents the fulfilment of attaining God, because we are just the manifestations of God & the Supreme Energy lives within each of us. Before ending, let us revisit the concept of the point or ‘dot.’ In order for the dimensionless spirit to manifest itself in the universe, it needs a point of departure. A point is dimensionless and has not yet departed from the ‘nothingness,’ but is required for the manifestation of life.

The last symbol in the same building is worth deeper observation. The tops of the square building’s three horse-shoe shaped arched doorways are decorated with six-pointed stars on either side. While the origin of the six-pointed star remains unknown, it has multiple meanings in almost all religions, signifying that the symbol is beyond any particular religion

and contains a message that is universal in meaning. The symbol is also said to represent the combination of basic elements: the upward triangle denotes Fire whereas the downward pointing triangle symbolises its elemental opposite, the Water. Air is also denoted by an upward triangle, but with the horizontal line through its centre, like the letter 'A.' Its opposite element Earth is a downward pointing triangle but with the horizontal line at its centre. The combination of Air and Earth again gives rise to a six-pointed star. When all four elements are simultaneously represented, it makes a double hexagram. The two triangles of the hexagram are also contained in the 'damru' or the drum in the hand of Lord Shiva, signifying the eternal cycle of creation and destruction. If we allow a smoothening of its edges, we can see the 'infinity' symbol consisting of the two triangles.

An equilateral triangle is the most stable of forms, as all its angles are equidistant from each other with no force between its components. It is the geometric representation of the 'Triple Three or 333' – the Trinity of God, as it embodies the three elements as 'Creator,' the 'Creation,' and the 'realisation that both are one and the same.' The hexagram is like a simultaneous representation of a centrifugal and centripetal force: both require each other. Like yin and yang, the two triangles represent the duality of nature: the complementary forces of the Law of Spirit, or Life, and the Law of Matter, or Resistance.

The Law of Spirit is selflessness while the Law of Matter is inward-looking. In the whole cosmic creation, only the human being is able to consciously balance the two Laws: the human body is matter while the consciousness is Spirit. Like the two overlapping triangles supremely in balance, the human being is the bridge between the two worlds. The two are complementary. Without the resistance of matter, the spirit cannot manifest itself. Without the body of the man, life cannot exist. Without the gravitational resistance of the earth, nothing can stand firm on it and the inert matter becomes a living body only when the Divine Spirit clothes itself in it. In those early days of architectural experimentation, building motifs were never considered either 'Hindu' or 'Islamic' in character; they simply were art forms and that is why we find such a composite design evolving with time.

Mughal Architecture

Mughal architecture refers to the Indo-Islamic architecture built by the Mughal emperors in the 16th, 17th, and 18th centuries across the Indian subcontinent as their empire grew and transformed. It derived from preceding Muslim rulers' styles of architecture in India, as well as Iranian and Central Asian architectural legacies, especially Timurid

architecture. During the reign of Akbar (1556–1605), it also assimilated and synthesised ideas from broader Indian architecture. Large bulbous domes, thin minarets at corners, vast halls, large arched doorways, and exquisite ornamentation are all hallmarks of Mughal architecture that can be found in modern-day Afghanistan, Bangladesh, India, and Pakistan.

About Mughal Architecture

The Mughal Empire was created after Babur's victory at Panipat in 1526. During his five-year rule, Babur was a keen builder, yet few of his structures have survived. Akbar, his grandson, built much, and the style flourished under his rule. Agra Fort, Fatehpur Sikri Fort City, and the Buland Darwaza were among his achievements. The Shalimar Gardens in Kashmir were commissioned by Akbar's son Jahangir. During the reign of Emperor Shah Jahan, who built the Taj Mahal, the Jama Masjid, the Shalimar Gardens of Lahore, the Wazir Khan Mosque, and reconstructed the Lahore Fort, Mughal architecture achieved its pinnacle. Aurangzeb, the last of the great Mughal architects, designed the Badshahi Mosque, Bibi Ka Maqbara, and Moti Masjid, among other structures.

Features of Mughal Architecture

Hindu, Persian, and Islamic influences are combined in Mughal architecture. Large bulbous onion domes, frequently flanked by four smaller domes, are a typical feature of many structures. White marble as well as red sandstone are used. Pachin Kari ornamental work and jali latticed screens are examples of exquisite ornamentation workmanship. On all four sides, magnificent buildings are encircled by gardens. Mosques with huge courtyards are very popular. Calligraphic inscriptions in Persian and Arabic containing Qur'anic verses are used. The main building is approached via a series of large gateways. On two or four sides, there are iwans. Decorative chhatris are used. Jalis and jharokhas are used. Mughal architecture influenced later Indian styles of architecture such as the British Raj's Indo-Saracenic style, the Rajput style, as well as the Sikh style.

Mughal Monuments: Akbar – Agra Fort

In Agra, Uttar Pradesh, the Agra Fort is a World Heritage Site. Between 1565 and 1574, Akbar constructed the majority of the Agra Fort. The fort's architecture demonstrates the liberal use of Rajput designing and building techniques. The Jahangiri Mahal, constructed for Jahangir and his family, the Moti Masjid, as well as the Meena Bazaars, are among the fort's most prominent structures. The Jahangiri Mahal is a magnificent edifice with a courtyard and double-storeyed halls and rooms surrounding it.

Great White Mosque, Islamia College, Peshawar

A magnificent white mosque, surrounded by beautiful green grass, stands in the centre of historic Islamia College, Peshawar, reminding us of its more than a century of architectural splendour and spiritual glory. The mosque's design, which combines Mughal and British elements, acts as a reminder of Muslim architecture. After the Mughal-era Mahabat Khan Mosque, this magnificent mosque has now become Peshawar's second most major tourist attraction.

Humayun's Tomb

Humayun's mausoleum is a tomb in Delhi, India, of the Mughal Emperor Humayun. Empress Begum, also referred to as Haji Begum, Humayun's first wife and primary consort, commissioned the monument in 1569–70 and had it planned by Persian architects Mirak Mirza Ghiyas and his son, Sayyid Muhammad. This was the Indian subcontinent's earliest garden tomb. It is frequently regarded as the first fully developed specimen of Mughal architecture.

Fatehpur Sikri

The building of Fatehpur Sikri, Akbar's capital city close to Agra, at a commercial and Jain pilgrimage centre, was his finest architectural feat. The fortified city's construction began in 1569 and was finished in 1574. It housed several of the most exquisite ecclesiastical and secular structures, all of which testified to the Emperor's goal of social, political, and religious unity. The large Jama Masjid and the modest Tomb of Salim Chisti were the most important religious structures. In 1576, Akbar constructed the Buland Darwaza, popularly referred to as the Gate of Magnificence, to celebrate his triumph over Gujarat and the Deccan. It stands at a height of 40 metres and a distance of 50 metres from the ground. The structure's entire height is approximately 54 metres above ground level.

The Haramsara, Fatehpur Sikri's regal seraglio, was where the royal women resided. A row of cloisters separates the entrance to the Haramsara from the Khwabgah side. As per Abul Fazl, the harem in Ain-i-Akbari was secured by older and active ladies on the inside, eunuchs on the outside, and loyal Rajput soldiers at a respectable distance. The biggest palace in the Fatehpur Sikri seraglio, Jodha Bai's Palace, is joined to the minor haramsara districts. The main entrance is two storeys high, jutting out from the front to form a porch that leads to a recessed entry with a balcony. A quadrangle is encircled by rooms on the inside. A range of Hindu sculptural designs adorn the columns of the chambers.

Tomb of Salim Chisti

Salim Chisti's Tomb, built between 1580 and 1581, is regarded as one of India's greatest specimens of Mughal architecture. The tomb is a square marble room with a verandah that was built in 1571 at the corner of the mosque compound. The cenotaph is surrounded by an elegantly crafted lattice screen. Salim Chisti (1478–1572), a descendant of Khwaja Moinuddin Chishti of Ajmer, was buried in a grotto on the ridge near Sikri. The mausoleum was built by Akbar as a tribute to the Sufi saint who predicted the birth of his son.

Jahangir Begum Shahi Mosque

The Begum Shahi Mosque is a mosque in the fortified city of Lahore, Pakistan, dating from the early seventeenth century. The mosque was erected in tribute to Mughal Emperor Jahangir's mother during 1611 and 1614, and it is Lahore's oldest surviving instance of a Mughal-era mosque. The mosque would subsequently influence the bigger Wazir Khan Mosque, which was built a few decades later.

Tomb of I'timād-ud-Daulah

The mausoleum of I'timād-ud-Daulah is a tomb in Agra, Uttar Pradesh, India. The mausoleum of I'timād-ud-Daulah is commonly referred to as a "jewel box" and is often called the "Bachcha Taj." It is thought to be a precursor of the Taj Mahal.

Shah Jahan – Taj Mahal

The Taj Mahal, a UNESCO World Heritage Site, was erected in remembrance of King Shah Jahan's favourite wife Mumtaz Mahal between 1630 and 1649. It took 22 years to build and cost 32 million rupees, using 22,000 people and 1,000 elephants. It is a massive white marble construction with symmetrical architecture, including an iwan (an arch-shaped gateway) capped by a huge dome and finial situated on a square base. The Taj Mahal is an integrated complex of structures, with the white domed marble mausoleum being its most significant component. Entrusted to a board of architects by Emperor Shah Jahan, the construction of the Taj Complex began about 1631 AD. The principal mausoleum was completed in 1648 AD by employing thousands of artisans and craftsmen, whereas the outlying buildings and gardens were finished five years later in 1653 AD.

The Taj, the ultimate expression of love, speaks volumes of indulgence coming from an overflowing treasury and political security of that era, and much more by way of finesse in the art and science of architecture. Herringbone inlays define the space between many of

the adjoining elements. White inlays are used in sandstone buildings, and dark or black inlays on the white marbles. Mortared areas of the marble buildings have been stained or painted in a contrasting colour, creating geometric patterns of considerable complexity. Floors and walkways use contrasting tiles or blocks in tessellation patterns. The inlay stones are of yellow marble, jasper, and jade, polished and levelled to the surface of the walls.

Hindu Precedents

Indo-Islamic architecture incorporated and reinterpreted many of the traditions, forms, and symbolism of both indigenous Hindu architecture and predominant Islamic architecture ever since the era of the Delhi Sultanate (1192 AD–1451 AD). During the Mughal Empire, the extent varied according to the prevailing political climate—scant with Babur and extensive with Akbar—but they ruled a land dominated by non-Muslims, and most buildings were built with Hindu craftsmen and labour under the direction of Muslim artists and architects. The vegetative tracery, inlay work, and most obviously the lotus dome and finial of the Taj Mahal are all testament to this synthesis.

Architects and Craftsmen

The exquisite and highly skilled inlay work was developed by Mughal lapidarists from techniques taught to them by Italian craftsmen employed at court. The look of European herbals—books illustrating botanical species—was adapted and refined in Mughal inlay work. History obscures precisely who designed the Taj Mahal. In the Islamic world at that time, the credit for a building design was usually given to its patron rather than its architects. From the evidence of contemporary sources, it is clear that a team of architects were responsible for the design and supervision of the works, but they are mentioned infrequently. A labour force of about twenty thousand workers was recruited from across northern India. Sculptors from Bukhara, calligraphers from Syria and Persia, inlayers from southern India, stone cutters from Baluchistan, a specialist in building turrets, and another who carved only marble flowers were part of the thirty-seven men who formed the creative unit.

Wazir Khan Mosque

The Wazir Khan Masjid was begun in 1634 and finished in 1642 during the reign of Mughal Emperor Shah Jahan. The Wazir Khan Mosque is famed for its complex faience tile work, recognized as kashi-kari, as well as its internal panels that are almost totally covered in elaborate Mughal-era murals. It is regarded as the most ornately adorned Mughal-era

mosque. Since 2009, the Aga Khan Trust for Culture and the Government of Punjab have been working together to restore the mosque.

Shalimar Gardens

It is a Mughal garden compound in Lahore, the capital of Pakistan's Punjab region. The gardens were built during the height of the Mughal Empire's architectural and aesthetic splendour. The gardens were started in 1641 and finished in 1642, under the reign of Emperor Shah Jahan. The Shalimar Gardens were designated as a UNESCO World Heritage Site in 1981 because they exemplify Mughal garden design at its pinnacle.

Shah Jahan Mosque

The Shah Jahan Masjid is the main mosque in the Pakistani city of Thatta, which is located in the Sindh province. Shah Jahan commissioned the mosque and presented it to the city as a gesture of his thanks. Its design is primarily influenced by Central Asian Timurid architecture, which was popularised during Shah Jahan's wars in Balkh and Samarkand. The mosque is known for having the most magnificent exhibition of tile work in South Asia, as well as geometrical brick work, a stylistic element uncommon in Mughal-period mosques.

Shahi Hammam

The Shahi Hammam is a Persian-style bathhouse that was constructed in Lahore, Pakistan, under Emperor Shah Jahan's reign in 1635 C.E. It was constructed by Ilam-ud-din Ansari, the Mughal court's top physician, also known as Wazir Khan. The baths were constructed as a waqf, or endowment, for the Wazir Khan Mosque's upkeep.

Aurangzeb – Badshahi Mosque

The sixth Mughal Emperor Aurangzeb built the Badshahi Masjid in Lahore, Pakistan. It was built between 1671 and 1673, and at the time of its completion, it was the world's biggest mosque. It is Pakistan's third-largest masjid and the world's seventh-largest masjid. The mosque is the final of a sequence of red sandstone congregational mosques next to the Lahore Fort. The walls' red sandstone contrasts with the domes' white marble and the delicate intarsia ornamentation. The architectural plan of Aurangzeb's mosque is identical to that of his predecessor, Shah Jahan, who built the Jama Masjid in Delhi, except that it is much bigger. It is also used as an idgah. A hundred thousand attendees may be housed in the courtyard, which covers 276,000 square feet, while 10,000 can be hosted inside the masjid. The minarets stand at a height of 196 feet (60 metres). The mosque is among the most well-known Mughal monuments, but it was severely damaged during Maharaja Ranjit Singh's

rule. The Badshahi Mosque was added to the provisional list of UNESCO World Heritage Sites in 1993 by the Pakistani government.

Bibi Ka Maqbara

King Aurangzeb constructed Bibi Ka Maqbara in Aurangabad, Maharashtra, in the late seventeenth century as a loving monument to his first spouse, Dilras Bano Begum. According to other stories, it was afterwards taken care of by Azam Shah, Aurangzeb's son. It was conceived by Ata-Ullah, the son of Ahmed Lahori, the Taj Mahal's chief designer, and is a duplicate of the Taj Mahal.

Mughal Gardens

Mughal gardens are Islamic-style gardens established by the Mughals. Persian gardens inspired this design. They are constructed in a char bagh architecture, which is a quadrilateral garden plan based on the Qur'an's four gardens of Paradise. This style is meant to depict an earthly paradise in which humans live in perfect harmony with all other aspects of nature. The quadrilateral garden is separated into four smaller sections by walkways or flowing water. Within the fortified enclosures, rectilinear layouts are used extensively. Inside the gardens, one can find ponds, fountains, and canals, among other features.

Bagh-e-Babur in Kabul, Mehtab Bagh near the Taj Mahal, gardens at Humayun's Tomb, Shalimar Gardens in Lahore, Wah Gardens in Wah, Khusro Bagh in Prayagraj, and Pinjore Gardens in Haryana are examples of Mughal gardens. The Pari Mahal, Nishat Bagh, Shalimar Bagh, Chashme Shahi, Verinag Garden, and Achabal Gardens, all in Jammu and Kashmir, are also on the provisional list of UNESCO World Heritage Sites in India.

Taj Mahal

The Taj Mahal is built on the banks of the River Yamuna and is surrounded by a beautiful garden. Mughal Emperor Shah Jahan constructed it for the commemoration of his wife Mumtaz Mahal. The construction was started in 1631, and in 1643 the construction of the main building was completed. The construction of the whole complex was completed in 1653. Mumtaz Mahal is buried in the Taj Mahal.

History says that more than 22,000 men from India and Central Asia worked together to complete the monument. The artisans included masons, stone cutters, dome builders, painters, carvers, and others.

Mumtaz Mahal

Mumtaz Mahal was the beloved wife of Shah Jahan. Her real name was Arjumand Banu Begum. She was given the title of Mumtaz Mahal by Shah Jahan due to her beauty and character. She was the daughter of Abdul Hasan Asaf Khan and was married to Shah Jahan in 1612, though the engagement was organised in 1607. The palace given to Mumtaz Mahal was named Khas Mahal, whose decoration was very sophisticated in comparison to the palaces of the other wives of Shah Jahan.

Mumtaz Mahal was the wife whom Shah Jahan trusted very much. She went with him on many campaigns. She also enjoyed elephant fights and other such entertainments. She was the mother of fourteen children and died in Burhanpur while giving birth to her fourteenth child. Shah Jahan mourned for his wife for a year, due to which his hair turned white and his back bent. Previously, her body was buried in Burhanpur, but in 1631 it was brought to Agra and again buried in a small building.

Taj Mahal – Architecture

The Taj is constructed on the banks of the River Yamuna, and it is said that more than 22,000 workers were involved in the construction. Artisans and materials from all over India came for its construction. The Taj is a combination of Islamic, Persian, and Indian architecture. Other structures included in the Taj complex are the garden, mosque, main gateway, and tomb.

The Taj Mahal is constructed over an area of 42 acres. The main building stands on a platform having a height of 50 metres. The four minarets have a height of 137 feet each, while the height of the tomb is 58 metres. There is a mosque in the west and a naqqar khana or guest house in the east. The mosque and the guest house are made of red sandstone. There is a garden covering an area of 580 metres by 300 metres. The construction of the garden is of Islamic style. It is well-watered and green.

Gateway of the Taj

The main gateway of the Taj Mahal is 30 metres high, and its construction was completed in 1648. The topmost part of the gateway includes chhatris. The gateway is decorated with verses of the Holy Qur'an. The door of the gateway is made of silver with letters engraved on it. After entering the gateway, there is a courtyard. In the Mughal period, during and after the reign of Shah Jahan, a huge amount of charity was given on the death anniversary of Mumtaz Mahal. The poor were also given food on that day.

Mosque

There is a mosque on the west side of the Taj Mahal that faces the holy city of Mecca. Historians believe that the mosque was constructed by Isa Muhammad. There are two small arches on both sides of the mosque and a portal on its exterior known as an iwan. The three domes and four kiosks are coated with marble. The interiors of the mosque are well designed, as 569 prayer mats have been designed on the floor, and the walls are engraved with the names of Allah and verses from the Holy Qur'an.

There is a mihrab in the mosque that indicates the direction of Mecca. Along with it, there is a minbar from where a maulana delivers his speech. The minbar has three steps that lead to a flat platform on which the maulana sits and delivers the speech. There is a stone of the size of 19 feet by 6.5 feet that denotes the temporary grave of Mumtaz Mahal. There is a pool in front of the mosque where Muslims perform ablution before prayers. The floor of the mosque consists of 539 prayer carpets made of black marble. The name of Allah and verses of the Holy Qur'an are also inscribed on the walls. There are two towers, one in the north and the other in the south.

Mausoleum

After crossing the garden, people reach the tomb, which covers an area of 95 square metres. People can enter the tomb through a double staircase. There are four minarets, each of 137 feet. They are made in such a way that they will not fall on the main tomb during a mishap or a natural calamity. One letter is engraved on each minaret, and on combining them we get the name Ar-Rahman, which is one of the many names of Allah. There is a central chamber having four rooms below it for the graves of other family members. Aurangzeb replaced the original screen with an octagonal screen made of marble and precious stones.

Tomb

The tomb of the Taj Mahal is one of the beauties of the monument. The dome has a circumference of 110 yards and a height of 107 yards. The tomb is based on Islamic structure, which symbolises the unification of heaven and earth. The square on which the tomb stands symbolises the universe. In total, the whole dome symbolises the throne of Allah, as it is supported by pillars at four corners, which symbolise the flow of grace. The tomb also includes verses from the Holy Qur'an. The tomb is well furnished with carpets, lamps, silver doors, and other decorative elements.

Mughal Bridges

During the time of Mughal Emperor Akbar, the Shahi Bridge in Jaunpur was built. The Shahi Bridge was built by Munim Khan in the years 1568–69 under the orders of Mughal Emperor Akbar. The bridge took four years to build. Afzal Ali, an Afghan architect, developed it.

Mughal Painting

The Mughal style of miniature painting was responsible for the amalgamation of indigenous themes and styles along with Persian and later European themes and styles. The arts of this period reflect a synthesis of foreign influences and indigenous flavour. The peak of Mughal painting presented a highly sophisticated blend of Islamic, Hindu, and European visual culture and aesthetics. Given this diverse yet inclusive nature, the affluence of the artworks produced in India during this period surpasses the conventional and indigenous Indian and Iranian painting of that time. The significance of this style lies in the purpose and efforts of its patrons and the unmatched skill of its artists.

In the Mughal courts, arts became more formalised, as there were workshops and many artists were brought from Iran, which resulted in a harmonious blend of Indo-Iranian styles, especially during its early years. This celebrated eminence in Mughal art was possible only due to its distinctive character of assimilating and engaging artists of both Indian and Iranian origins, who contributed towards making and further elevating the artistic paradigm of the Mughal style. The tradition of art and painting had rich historical roots in India, about which we have already learned in previous chapters. The celebrated Mughal idiom that developed on Indian soil should be understood as a consequence of interaction of various schools, including the pre-Mughal and contemporaneous art schools of India and Persia. Thus, the Mughal style did not grow in a vacuum. It was nurtured by direct interaction with other art forms and schools that already existed. The indigenous Indian and Mughal painting styles coexisted and assimilated influences and various native talents in different ways.

Self-Assessment Questions

1. Explain the **Five Pillars of Islam** and their influence on Islamic art and architecture.
2. Discuss the **architectural features of mosques** in Islamic art.
3. Describe the significance of **mausoleums and palace complexes** in Islamic architecture.
4. Examine the role of **gardens** in Islamic architectural tradition.
5. Discuss the historical and architectural importance of the **Quwwat-ul-Islam Mosque**.
6. Explain the architectural features and symbolism of the **Qutub Minar**.
7. Examine the architectural significance of **Humayun's Tomb** in Mughal architecture.
8. Discuss the planning and architectural features of **Fatehpur Sikri**.
9. Analyse the architectural grandeur of the **Red Fort** and the **Taj Mahal**.
10. Discuss the themes and stylistic features of **Mughal paintings**.

UNIT– V

Colonial Architecture: Forts: St. George Fort, Chennai –Indo-Saracenic Architecture: Chatrapati Shivaji Terminal, Mumbai – Victoria Memorial, Kolkata – Amir Mahal and Senate House, University of Madras, Chennai.

Objectives

- To compare architectural styles of colonial structures.
- To study key features of colonial architecture such as arches, domes.
- To understand the layout and defensive features of colonial forts in India.

Introduction

Fort St. George, situated on the Coromandel Coast of India, holds a unique place in Indian history as the first English fort built in the country. Its significance transcends military and commercial purposes, acting as a symbol of the British East India Company's foothold in India. The fort played a vital role in shaping the political, economic, and social history of colonial India. Located in present-day Chennai, Tamil Nadu, Fort St. George was established in 1644 and served as the origin point for the colonial city of Madras (now Chennai). Over the centuries, the fort became not only a crucial commercial hub but also a center of political power that influenced the region's history.

The history of Fort St. George is deeply intertwined with that of British colonization in India. As a strategic base, it provided the British with access to trade routes, helped them establish diplomatic relationships with local rulers, and enabled them to spread their influence across South India. It also became the administrative center of the British in the region and laid the foundation for the eventual expansion of British control over large parts of the Indian subcontinent. This paper explores the history, development, and impact of Fort St. George, examining its architectural features, role in various historical events, and influence on the colonial and post-colonial histories of India.

Origins of Fort St. George

The Early Days of the East India Company

The British East India Company, founded in 1600 by royal charter under Queen Elizabeth I, initially focused on establishing a monopoly over the lucrative spice trade with the East Indies. However, competition with the Portuguese, Dutch, and French led the company to seek more stable and fortified trading posts. In 1608, the company established its first factory in Surat, Gujarat, but it was not until 1639 that the British acquired land on the

Coromandel Coast to establish a permanent base.

The Coromandel Coast was an attractive location for the British due to its proximity to various trading routes and the presence of local weavers producing fine textiles. Francis Day, a representative of the East India Company, successfully negotiated with the local Nayak rulers to acquire a strip of land. In return, the Nayaks were promised protection from rival European powers, particularly the Portuguese and Dutch. With the land acquired, the British set about constructing Fort St. George, named after England's patron saint, in 1644.

The Construction of Fort St. George

The construction of Fort St. George marked a turning point in British aspirations in India. Initially designed as a small fortification to protect British traders and their goods, it gradually evolved into a more substantial military structure capable of withstanding attacks from European rivals and local powers. The fort's location on the coast made it ideal for maritime trade, while its strong walls offered protection against potential aggressors.

The fort's initial structure included a few barracks for soldiers, warehouses for goods, and a trading post. Over time, the British expanded the fort to include administrative buildings, a church (St. Mary's Church, which is the oldest Anglican church in India), and residential quarters for the British officials and traders. The surrounding area, known as White Town, housed the British settlers, while the nearby Black Town was inhabited by Indian merchants, artisans, and laborers who worked for the British. The fort's construction signaled the beginning of Madras as a colonial city. The area around the fort grew rapidly as traders, soldiers, and settlers from various parts of India and Europe flocked to the burgeoning town. Over the next few decades, Madras expanded into a thriving commercial center, thanks to its strategic location and the British-controlled trade in textiles, spices, and other goods.

Fort St. George in the Seventeenth Century

Conflict and Diplomacy

Throughout the seventeenth century, Fort St. George was not just a center of trade but also a site of diplomatic and military conflict. The British were not the only European power vying for dominance in India; the Portuguese, Dutch, and French also had interests in the region. The British were particularly wary of the Dutch, who had established themselves in nearby Pulicat and were keen to dominate the spice trade. The fort's strategic location made it a target for European rivals, but the British were able to defend it through a combination of

military strength and diplomacy. In 1674, the French launched an attack on the fort, but the British successfully repelled the assault. The fort's military capabilities were further strengthened in the following years, with the construction of additional defenses and the establishment of a standing garrison.

Diplomatically, the British used Fort St. George as a base to negotiate with local rulers. The Nayaks of the region, who had granted the British the land for the fort, were relatively weak compared to other Indian powers, and the British were able to establish favorable terms for trade and military protection. The fort also became a hub for British diplomacy with other European powers and Indian rulers, who sought to establish alliances or trade agreements with the British.

The Growth of Madras

The success of Fort St. George as a trading post and military base contributed to the rapid growth of Madras in the seventeenth century. The town surrounding the fort became a bustling center of commerce, attracting merchants from across India and Europe. The British East India Company established a monopoly over the export of textiles from the region, which were highly prized in European markets. The fort also became a key point for the import of European goods into India. The British administration in Madras expanded alongside the town's growth. Fort St. George became the headquarters of the British East India Company in South India, and the company's officials wielded considerable power over the region's trade and politics. The fort also served as a base for the British navy, which patrolled the coast and protected British shipping routes. By the end of the seventeenth century, Fort St. George had firmly established itself as a key British stronghold in India. The town of Madras had grown into a major commercial center, and the British had built strong relationships with local rulers and European powers. The fort's success set the stage for the British to expand their influence further across India in the following centuries.

Fort St. George in the Eighteenth Century

The Carnatic Wars

The eighteenth century was a period of intense conflict in South India, as various European powers and Indian rulers vied for control over the region. The Carnatic Wars, fought between the British, the French, and their respective allies, had a significant impact on the history of Fort St. George. The First Carnatic War (1746-1748) saw the French East India Company launch an attack on Fort St. George as part of a broader conflict between Britain

and France during the War of Austrian Succession. In 1746, the French, under the command of Admiral La Bourdonnais, successfully captured Madras and Fort St. George. The British were forced to surrender the fort, but the French held it only for a short period before returning it to the British as part of the Treaty of Aix-la-Chapelle in 1748.

The Second Carnatic War (1749-1754) was fought between rival Indian factions, with the British and French supporting different claimants to the throne of the Carnatic region. Fort St. George served as the British headquarters during this conflict, and the British were able to successfully defend the fort against French attacks. The war ended with the Treaty of Pondicherry, which restored a temporary peace between the British and the French in South India. The Third Carnatic War (1756-1763) was part of the global Seven Years' War between Britain and France. Fort St. George played a crucial role in this conflict, as the British used it as a base to launch military operations against French forces in India. The British were ultimately victorious in the war, and the Treaty of Paris in 1763 confirmed British dominance in South India. The French were forced to cede their territories in India, and Fort St. George became the undisputed center of British power in the region.

The Growth of British Power

The Carnatic Wars marked the beginning of a new era in the history of Fort St. George. With the defeat of the French, the British East India Company emerged as the dominant European power in South India. Fort St. George became the administrative and military headquarters of the British in the region, and the British expanded their control over the surrounding territories. The fort also played a key role in the expansion of British influence across the Indian subcontinent. The British used Fort St. George as a base for their military operations during the Anglo-Mysore Wars (1767- 1799), which were fought against the powerful Kingdom of Mysore under the leadership of Sultan Hyder Ali and his son Tipu Sultan. The British eventually defeated Mysore in 1799, further consolidating their control over South India.

The success of the British in these conflicts was due in part to the strategic location and strong defenses of Fort St. George. The fort's position on the coast allowed the British to receive reinforcements and supplies from Europe, while its formidable walls provided protection against enemy attacks. The British also made improvements to the fort's defenses during this period, including the construction of new bastions and the reinforcement of existing structures.

Fort St. George in the Nineteenth Century

The Establishment of British Rule

By the beginning of the nineteenth century, Fort St. George had become the center of British administration in South India. Following the defeat of the French and the Kingdom of Mysore, the British East India Company expanded its control over the region, and Madras became the capital of the newly established Madras Presidency. Fort St. George served as the administrative headquarters of the Madras Presidency, and the British built several new buildings within the fort to accommodate their growing bureaucracy. These included the Government House, where the Governor of Madras resided, and the Secretariat, which housed the offices of the British administration. The fort also played a key role in the British military presence in India. The British maintained a large garrison at Fort St. George, which was responsible for defending the Madras Presidency and supporting British military operations in other parts of India. The fort's strategic location on the coast allowed the British to project their power across the Indian Ocean and maintain control over important trade routes.

The Indian Rebellion of 1857

The Indian Rebellion of 1857, also known as the Sepoy Mutiny, was a major uprising against British rule in India. While the rebellion was centered in northern India, it had a significant impact on the history of Fort St. George and the Madras Presidency. During the rebellion, Fort St. George remained under British control, and the British used it as a base to send reinforcements to northern India. The fort's garrison played a key role in suppressing the rebellion, and British forces from Madras were instrumental in recapturing Delhi and other key cities. The rebellion marked a turning point in the history of British rule in India. In the aftermath of the rebellion, the British government took direct control of India from the East India Company, and Fort St. George became the headquarters of the British administration in South India under the new British Raj.

Fort St. George in the Twentieth Century

The Indian Independence Movement

The early twentieth century saw the rise of the Indian independence movement, which sought to end British rule in India. Fort St. George played a role in this movement, as it was the site of several important events related to the struggle for independence. In 1920,

Mahatma Gandhi visited Madras and gave a speech at Fort St. George, calling for non-violent resistance to British rule. The fort also became a center of political activity during the Indian National Congress's campaigns for independence, and several prominent Indian leaders were imprisoned in the fort's jail during this period.

Despite the growing pressure for independence, Fort St. George remained an important symbol of British power in India until the end of British rule in 1947. After India gained independence, the fort was taken over by the Indian government and became the headquarters of the Tamil Nadu state government.

The Legacy of Fort St. George

Today, Fort St. George stands as a testament to the complex history of British colonization in India. The fort has been preserved as a historical monument and is home to several important institutions, including the Tamil Nadu Legislative Assembly and the Fort Museum, which houses a collection of artifacts related to the history of the fort and the British presence in India. The fort's architecture reflects its long history, with buildings from different periods of British rule coexisting within its walls. St. Mary's Church, the oldest Anglican church in India, still stands within the fort, as do the Government House and the Secretariat. The fort's walls, bastions, and gates are a reminder of its military past, while the surrounding city of Chennai continues to thrive as a major commercial and cultural center.

Indo-Saracenic Architecture

“Indigenous ethnic Architecture” The Indo-Saracenic Revival (also known as Indo-Gothic, Mughal-Gothic, Neo-Mughal, Hindu-Gothic) was an Architectural style movement by British Architects in the late 19th century in British India. It drew elements from native IndoIslamic and Indian Architecture and combined it with the Gothic revival and Neo-Classical styles favored in Victorian Britain. Saracenic was a term used by the Ancient Romans to refer to a people who lived in desert areas in and around the Roman Province of Arabia and who were distinguished as Arabs.

. The Emergence of Indo-Saracenic Style The prevailing style of Architecture was Trabeate employing pillars, beams and lintels.

The Turkic invaders brought in the Arcuate style of Construction with its Arches and Beams, which flourished under Mughal patronage and by incorporating elements of Indian architecture especially Rajasthan Temple architecture (chattris). Indian touch gave rise to new architecture of IndoSaracenic style of Architecture. The hybrid combined diverse

architectural elements of Hindu and Mughal with cusped arches, domes, spires, tracery, minarets and stained glass, in a wonderful manner. The buildings built in India by Indo-Saracenic style of architecture were built according to advanced British structural engineering standards of the 1800's including infrastructures of iron, steel and poured concrete. These type of buildings were employed with domes, pointed arch, vaulted roofs, pinnacles, minarets, pierced open arcade and open pavilions. It is an indispensable overview to one of civilizations most resplendent artistic traditions.

Tradition Created: Indo-Saracenic Architecture

Under the Raj A distinctive style of Indian architecture commonly known as the 'Indo-Saracenic' – came of age. It has been fashionable for British attempts to imitate in their buildings the traditional architectural styles of India. Yet these British buildings still tell us much about how the British shaped India's conception of its past, and how they turned India's architectural heritage to the service of the Raj. Much British building in India harked back to Western classical models, for the 'eternal principles' and ordered beauty' of these buildings embodied, as Herbert Baker argued, 'eminently the qualities of law, order, and good government' which the British held out to their Indian subjects. But the British sought as well to place themselves in the line of the great Indian empires of the past, and so, during the later decades of the 19th century, set about creating a style of building Indian in appearance, but Western in function.

British emerged a composite architectural style fitted for modern building. As precedent and justification for this 'reconstruction' of Indian architecture, the British looked back to the work of the Mughal and other medieval Indian builders. The architecture of those centuries they saw as a blend of Hindu and of Muslim elements; hence most appropriately called 'Indo-Saracenic'.

Architecture as a Symbol of Power

Turbulent Islamic culture erupting into the ancient world of the Hindus and Jains was like an Earthquake. The antagonism was fundamental: Hinduism venerates a thousand Gods; whereas the message of the Quran is strictly monotheistic and the facades of Hindu temples are covered with images celebrating the Gods of a protean pantheon, while Muslims inspired the Ten Commandments had established an iconic form of worship that rejected all images.

HINDU ARCHITECTURE, with its temples hollowed out of cliffs or built of worked stone, is based on Traditional techniques derived from Timber construction: piers and lintels

are combined with corbelling. MUSLIM ARCHITECTURE, on the other hand is based on arches, vaults built up of shaped Voussoirs and domes on squinches. The introduction of these features into India initiated a technological revolution.

12th Century- INDO-MUSLIM ART PERSIAN BUILDERS- Masters in the Art of brickwork, made use of four-centered arches and of domes. Persian influence is detectable between 12th to 15th centuries. The most characteristic element of Persian Architecture was the courtyard-plan mosque nor is the four-iwan scheme is nowhere seen. The iwan with its pointed vault posed too many problems for Hindu stone masons. Brick was replaced by Ashlar, in the use of which local builders excelled. Only the Arch and Vault which had initially defeated became widespread. After the throne of Akbar in the mid 15th century,

“A time of chaos” of rich creativity saw a profound revitalization of the form and aesthetic principles of Islamic Art This melded style reached its height in 17th century Bijapur, if not even earlier, in the fifteenth-century Pathankindoms of Gaur and Mandu. The buildings of this era, as contrasted with the ornate structures of later rulers, were, in their view, 'more restrained and flexible', simple yet dignified, eminently suited both to decorative elaboration and modern needs.

Secular Style

India emerged in terms of scale and of its stylistic features- SECULAR Palace of JodhBai- Traditional Indian structural techniques are used with piers supporting lintels, braced by brackets and the carved decoration is similar to that of Hindu and Jain temples. All expresses Akbar's desire to marry the innovations of Islam with the ancestral customs of India. 16th century- ThirmalaiNayakar Palace built of Indo-Saracenic style with Arcaded Octagon wholly constructed of bricks and mortar supported by giant 12m tall round pillars.

17th 18th centuries – British redesign of Fort St.George, Colonial Architecture spread by Nawabs exhibited institutional, civic and utilitarian buildings such as Post offices, railway stations, rest houses and Government buildings. 19th century- Indo-Saracenic had become almost universally accepted as the appropriate style for substantial public building in India. Even in the far south, in Madras, buildings as diverse in character as the Moore Market (1898) and the Victoria Memorial Art Gallery (1906) conformed faithfully to its canons of taste.

During the first decade of the 20th century, however, architectural fashions were beginning to change. So too was the political environment in which building took place.

Curzon's vice-royalty (1898-1905) foreshadowed the change. Despite his commitment to the preservation of India's architectural heritage, Curzon never conceived that an Indian style could convey the spirit of British Imperialism. From the outset he insisted that the soaring monument he planned to commemorate Queen Victoria's reign must be in a European style. 'What I shall want', he wrote, 'will be a simple, severe, but noble Italian or Palladian building'.

He brushed aside the objections of critics, including the Governors of Madras and the United Provinces, and personally supervised the Architect (Sir William Emerson) he hired to design Calcutta's Victoria Memorial Hall. In Europe too classical styles were sweeping back into public favour. As Lutyens wrote in 1903, a decade before his appointment to New Delhi 'In architecture Palladio is the game!!... To the average man it is dry bones, but under the hands of a Wren it glows and the stiff materials become as plastic clay.' New Delhi, the new capital constructed after 1912, Indo-Saracenic architecture still left its mark on the face of India. A vast array of buildings – government, princely and commercial alike – remain to testify to its hold for nearly half a century over the Indian subcontinent. In the process the Indo-Saracenic builders reshaped India's view of its architectural heritage.

The Indo-Saracenic style gained further impetus from its close association with the Gothic. Though the two had of course a wholly different origin, they shared an exuberant surface decoration, arched gateways and other features; and these provided sufficient superficial similarity so that the taste for the one style reinforced the acceptability of the other. Indeed it was not uncommon to refer to the Indo-Saracenic as 'Eastern pointed or Gothic'. Nor were buildings which joined Gothic and 'Oriental' features at all rare. In Bombay and Madras especially, the predominant style for government and commercial offices was, as one critic described the Bombay Victoria Terminus, 'a free treatment of Venetian Gothic with an Oriental'.

Characteristics

Indo-Saracenic designs were introduced by British imperialist colonizers, promoting their own sense of “rightful self-glorification”. Public and Government buildings were often rendered on an intentionally grand scale, reflecting and promoting a notion of an unassailable and invincible British Empire.

- Onion (bulbous) domes
- Overhanging eaves

- Pointed arches, cusped arches, or scalloped arches
- Vaulted roofs
- Domed kiosks
- Many miniature domes
- Domed chhatris
- Pinnacles
- Towers or minarets
- Harem windows
- Open pavilions or pavilions with Bangala roofs
- Pierced open arcading

Chief proponents of this style of architecture were these: Robert Fellowes Chisholm, Charles Mant, Henry Irwin, William Emerson, George Wittet and Frederick Stevens, along with numerous other skilled professionals and artisans throughout Europe and the Americas. Structures built in Indo-Saracenic style in India and in certain nearby countries were predominately grand public edifices, such as clock towers and courthouses. Indo-saracenic architecture found its way into public buildings of all sorts such as railway stations, banks and insurance buildings, educational institutions, clubs and museums .

Emphasised

Examples Chepauk Palace in Chennai designed by Paul Benfield is said to be the first Indo-Saracenic building in India. Outstanding examples are spread across the country - Muir college at Allahabad, Napier Museum at Thiruvananthapuram, the Post Office, Prince of Wales Museum, University Hall and Library, Gateway of India in Mumbai, M.S. University, Lakshmi Vilas Palace at Baroda, the Central Railway Station, Law courts, Victoria Public Hall, Museum and University Senate House in Chennai, the Palaces at Mysore and Bangalore.

Chepauk Palace in Chennai

Chepauk Palace in Chennai designed by Paul Benfield is said to be the first Indo-Saracenic building in India, referred to as licentious "eclectic" incorporating elements and motifs of Hindu and Islamic precedents. It was the official residence of the Nawab of Arcot from 1768 to 1855.

Mysore Palace, Mysore (Karnataka) India

The Mysore Palace (also known as the (Amba Vilas Palace) is a palace situated in the

city of Mysore in southern India. It is the official residence of the Wodeyars - the erstwhile royal family of Mysore, and also houses two durbar halls (ceremonial meeting hall of the royal court). The architectural style of the palace is commonly described as Indo-Saracenic, and blends together Hindu, Muslim, Rajput, and Gothic styles of architecture. It is a three-storied stone structure, with marble domes and a 145 ft five-storied tower. The palace is surrounded by a large garden. It is designed by British architect, Henry Irwin.

Gateway of India

The Gateway of India is a monument built during the British Raj in Mumbai (formerly Bombay), India. Built in Indo-Saracenic style, the foundation stone for the Gateway of India was laid on 31 March 1911. The final design of George Wittet was sanctioned in 1914 and the construction of the monument was completed in 1924.

Victoria Memorial in Calcutta

The Victoria Memorial, officially the Victoria Memorial Hall, is a memorial building dedicated to Victoria, currently serves as a museum and a tourist attraction. The memorial was designed by Sir William Emerson using Indo-Saracenic style, incorporating Mughal elements in the structure.

Brihanmumbai Municipal Corporation

The Brihanmumbai Municipal Corporation (BMC), also known as the Municipal Corporation of Greater Mumbai (MCGM) or the Bruhan Mumbai Mahanagar Palika, is the civic body that governs the city of Mumbai and is India's richest municipal organization. Built in the Indo Saracenic style of architecture, the BMC is the largest civic organization in the country.

Government Museum, Chennai

Government Museum, established in 1851, is located in Egmore, Chennai known as the Madras Museum. Many of the buildings within the Museum campus are over 100 years old. Built in Indo-Saracenic style, it houses rare works of artists such as Raja Ravi Varma.

Madras High Court

The building of the High Court, an exquisite example of Indo-Saracenic style of architecture, was built in 1892 with the design prepared by J.W. Brassington and later under the guidance of the famed architect Henry Irwin, who completed it with the assistance of J.H. Stephens.

Chatrapati Shivaji Terminal, Mumbai

Colonial buildings in India were statements of power and control expressed through their architecture and decoration. Chhatrapati Shivaji Terminus, Mumbai (CST), formerly Victoria Terminus (VT), Bombay was such a building. Early railway stations in India were strictly functional and austere, few more so than Lahore, built more like a fort than a station to house troops only years after the events of 1857. Built only 30 years later CST, Fig. 1, was a jewel, more elaborate even than London's St Pancras, designed to dazzle and impress. Indians built it, though, supervised its construction and undertook much of its decorative sculpture. Sixteen carvings in shallow relief on the western façade depict Indians, each in a different headgear, representing the diversity of Bombay's inhabitants that it served.

Greatly admired at the time of building CST was celebrated in a 1996 publication, *A City Icon*, published by the Central Railway, successor to the GIPR, to celebrate its centenary. Unequivocally it states that 'An icon of colonial power has now been transformed into a place that is associated with the comings and goings of ordinary life'. Modern Bombay, often described as the powerhouse of modern India, could not function without the massive flow of commuters passing daily through CST, mingling with 'tiffin' carriers delivering lunch packs for office workers and the city's poor, rolling up their bedding each morning after sleeping on the floor of the cavernous station.

Absorbed into the cultural life of the city of which it has always been a part, and fully naturalised, visitors still ponder over its massive presence, great dome, open loggias, gargoyles and stained glass. It has been described as an oriental St Pancras² and as the central building of the entire British Empire³ and is now designated as a World Heritage Site by UNESCO. Christopher London in *Bombay Gothic* calls it the preeminent railway station of the Orient. Yet despite more than a passing similarity in appearance, both were grander and more impressive than railway functional requirements demanded. There were critical political and cultural differences in the conditions that gave rise to the two termini.

This dissertation seeks to validate the assertion of Jan Morris and other critics that CST was the central and most important building of the British Empire. The historian of Indian railways, Ian Kerr, believes that 'Railway stations were built to signify. But they signified what?' He says 'In short CST was built to represent a set of attitudes, beliefs and relationships: an attitude of British superiority increasingly measured by machines; beliefs in the progressive and civilising power of the railways; relationships anchored in the fact of colonial rule to which compliance was fostered by grand buildings like CST'⁶. This study

seeks to show in more detail how and why this assertion of imperial power was embodied in the form and decoration of CST.

An obvious comparison is with the civic buildings that were the focus of great attention in England's fast growing industrial cities; the pre-eminent were more likely to be town halls, law courts or art galleries, rather than railway stations. In Manchester and Leeds the most dominant buildings were the town halls, in Liverpool St George's Hall and in Birmingham the City Hall and Art Gallery. In London St Pancras Station, raised high above Euston Road, dominated its immediate surroundings but was remote from the seats of power in Whitehall, the City and West End. In India the railway station was arguably more central to the assertion of power through buildings. We analyse those factors that might in particular have made CST different. These include the unique political, strategic and economic role of railways in late nineteenth century India, particularly in the context of empire and Bombay's emergence as a dominant gateway and port city.

Architecture, Artwork and Aesthetics

Underpinning the claim that CST was the most important building of empire, and its continuing appeal in India, is the enduring quality of its art and architecture. In this chapter we investigate nineteenth century architectural theory and aesthetics, describe Bombay's architectural development and CST itself and discuss attitudes to Indian styles, their synthesis and incorporation in colonial buildings and the practical, moral and cultural issues that this raised. Our analysis will seek primarily to address the following questions. What were the critical aesthetic characteristics of CST that made it such a seminal and enduring edifice? What was particularly Indian about it and how did these attributes accord with contemporary Indian aesthetics? How did the decoration relate to the structure and how might it have been understood?

Aesthetics, Gothic Theory and Criticism

Victorian Gothic developed from a largely church style in the early nineteenth century to embrace public buildings by the mid century. Theorists, including Pugin and Ruskin, sought to articulate the attributes and meaning of this new Gothic, drawing on a rich medieval past, but innovative, modern and relevant in an age of massive commercial development. Romanticism, eclecticism and the picturesque were important influences in a discourse that sought relationships between content, form and decoration in commercial buildings. Gothic became the architecture of democracy, continuity and learning, as seen in

the Houses of Parliament, 1833 and college buildings in Oxford and Cambridge, and in Bombay of empire.

Augustus Welby Pugin, of French origin, worked as an architect in England, notably at the rebuilt Houses of Parliament; his influential views were principally expressed in *Contrasts* published in 1836-1841 and *True Principles*, 1841. Pugin, despite a preference for a glorious past over an industrialised present, was surprisingly modern in saying ‘that the greatest test of Architectural beauty is the fitness of the design to the purpose for which it is intended, and that the style of a building should so correspond with its use that the spectator may at once perceive the purpose for which it was erected’¹⁰⁰. He argued also that without vastness of dimensions it is impossible to produce a grand and imposing effect in architecture adding that ‘One of the great arts of architecture is to render a building more vast and lofty in appearance than it is in reality’¹⁰¹. He saw the size of the human figure as a critical measure in determining scale and proportions and believed even the smallest detail should have meaning¹⁰². Despite a strongly expressed preference for Gothic, on theological as well as practical grounds, Pugin also admired Pagan works that reflected climate, customs and religion citing motifs, in Egyptian Temples, that expressed the emblems and philosophy of that nation¹⁰³. Enthusiasm for the middle ages had been aroused and encouraged by Romanticism through the works of novelists, poets and Pre-Raphaelite artists.

Ruskin provided a theoretical basis for the nineteenth century Gothic revival and defined appropriate styles and motifs for commercial buildings. He greatly influenced the leading architects of the day, carrying on a lively and sometimes acrimonious correspondence with many; these included men like George Gilbert Scott and Burges, who were to influence colonial architects in India. Ruskin was not a trained architect; a gifted amateur artist he drew on a love of history and literature and an innate understanding of nature and landscape. For him a building was an act of expression, not a lifeless artefact, and he placed emphasis on texture and colour as a practising artist might. He developed romantic theory and the concept of the sympathetic imagination, readily absorbing the concepts of the sublime and picturesque from the writings of Gilpin, Uvedale Price, the Lakeland poets and from his own wandering and sketching in the Lakes; he believed buildings should be sensitive to their surroundings. His analyses of existing buildings and love of nature led him to reject classicism with its fixed rules and proportions in favour of a more organic Gothic that was capable of reflecting human emotion. A number of great neo-classical buildings had

only recently been completed in London when Ruskin published his *Seven Lamps of Architecture*, 1849 and *Stones of Venice*, 1851, demonstrating the seismic shift in taste that he helped to achieve.

Attempts to reconcile a Gothic style with progress, and so justify its use in modern buildings, had become urgent by the mid-century. Critics argued that beauty alone did not justify a style that was in essence medieval and so inappropriate for a modern age. The best modern architects, such as Scott, Burges and Street, favoured a modern Gothic drawing on continental European styles for inspiration and rejected copying in favour of innovation. In this they were following Ruskin, who had expressed a preference for Pisan Romanesque, Tuscan and Venetian Gothic in its purest form and England's Decorated style. Scott had met Ruskin in 1846 and visited Venice after reading *The Seven Lamps* and *The Stones of Venice*; he had previously visited Belgium and France in 1844-7, admiring particularly the cloth halls of Flanders and northern French cathedrals. Scott liked the urbanity, colour and richness of materials in Venetian Gothic but saw structural integrity as paramount and a need to absorb Venetian elements with caution and sympathy. An admirer also of the English Decorated style he would fashion a style appropriate to his age. He synthesised his views on elements and motifs in *Remarks on Secular and Domestic Architecture, Present and Future*.

Similarly G E Street, architect of the Law Courts, 1874-82, Fig. 5, in the Strand, favoured a more restrained French rather than Italian Gothic. Alfred Waterhouse had attracted Ruskin's praise with his Manchester Assize Courts, 1859 and Town Hall, 1868-77, Fig. 6, and while admiring the attributes of Italian styles he was concerned that too much colour would outshine the architecture; his Manchester buildings are striking but restrained in their use of polychrome. He sought to emphasise, as Street had, the shared medieval roots of Gothic and English law and Manchester's sharing of the tradition of Europe's merchant cities, so strongly evoked in the cloth and guild halls of northern Europe. Waterhouse shared with Scott and Street a willingness to plunder European styles for what was fitting in the great public and commercial buildings of merchant cities. Ruskin shared Street and Waterhouse's concern to avoid brazen polychrome and attacked vulgar excesses in architecture, as seen in strident commercial buildings then emerging, believing that taste was a matter of morality rather than of fashion. He was not alone; William Morris, despite or because of a sincere belief in medieval values, and Philip Webb saw much in the Gothic Revival that was vulgar and overblown.

Ruskin's concept of visual content provides a theoretical basis for viewing architecture. Massiveness was a quality he praised 'Mass of everything, of bulk, of light or darkness of colour.....solid stone, broad sunshine, starless shade' attaching much importance to shadow moving across a building. He believed 'a building should convey a sense of the quantity and weight of its materials. Its wall should be thick and its doors and windows recessed so that this thickness will be dramatised'. In summoning the sublime he was equating the mass of a building with that of a mountain; what mattered was not size itself but the psychological perception of size. English building's frequent want of shadow he believed resulted from an absence of deep recesses and bold projections. Ruskin preferred bold surface decoration, geometrical plate tracery, to linear Gothic and deplored a plain wall.

His belief that without decoration a building was not architecture, has attracted much debate, but at the time most Victorian architects saw ornament as essential. He praised use of precious materials, urged the need to concentrate ornament rather than to spread it thinly throughout a structure and demanded readability. That is to say an ornament must be capable of being seen and understood, by viewers, from various viewpoints, from a distance and close up. He favoured use of natural coloured stone in the framing of windows, arches and in arcades but also in providing horizontal bands to strengthen or decorate brick surfaces. Whereas Cole, Owen Jones, and those associated with the South Kensington Museum, looked to art history in arguing that colour should define and express structure Ruskin looked to nature saying 'never paint a column in vertical lines, but cross it

Ruskin progressively moved away in later life from a preoccupation with style and visual content to a concern with the nature of work. He sought to answer eternal questions that had been addressed, from the ancient Greek times to William Morris, including the degree of freedom to be given carvers, while still arguing that architects set strict limits. He believed that 'free' sculptors with their minor imperfections displayed the quality of life and subtle variation as compared with the monotony of machine-made works. His praise of naturalism in depicting natural forms was strongly opposed by the South Kensington group, who argued that ornament should be conventionalised; Ruskin did though concede that on occasions some abstraction might be needed but not to the extent of extinguishing grace and vitality. Street, like Ruskin, admired and applauded naturalism but stopped short of full endorsement, deploring excessive naturalism. He favoured the conventionalised idealisation of nature rather than conventionalising of nature itself.

We now look at Indian architectural styles. While Victorian Gothic was hugely important in Bombay, Indian styles in hybrid forms were widely used in colonial buildings elsewhere in India and became more influential in Bombay after CST in the eightennineties. Centuries of conflict and evolution had led to a synthesis of styles as conquerors and conquered appropriate features of the other in ensuring alternating domination and acceptance. Syncretism had long existed in religion and philosophy and unsurprisingly it found architectural form and expression first in religious and later in secular buildings.

Indian Styles in Colonial Buildings

What is or was Indian architecture? We define it, as that undertaken in the subcontinent before British colonial rule and by Indians during British rule, either in areas not then colonised or independently of colonial influences. Architecture undertaken by colonial architects in Indian styles is discussed later in this chapter. Indian architecture is usually classified according to the religious group undertaking it: Buddhist, Hindu, Jain and Islamic, although we use these terms they are not mutually exclusive or discrete, as a mingling of styles occurred as a result of conquest and other factors. British knowledge of Indian styles arose through research and travel. Ferguson had greatly increased awareness of the different Indian styles through his detailed research, classification of monuments and publications, particularly in his *History of Indian and Eastern Architecture*. Photographs were widely available, after 1850, and locally based architects were increasingly able to travel, as the railway system grew across the sub-continent from the eighteen fifties onwards. Chronologically the various styles occurred in the order described but apart from a mingling of styles there were regional influences determined by local religious affiliations and politics, so that there was no uniform style for the subcontinent at any one time, any more than there was in Europe.

Buddhist art was naturalistic, narrative, charged with symbolism and spatial; it comprised cave complexes, with galleries of rock cut sculpture and temples. Temple complexes, greatly admired by Ferguson, included three principal architectural elements carefully arranged in communal space with a strong feeling of symmetry. These were the stupa, vihara and caitya; a stupa, a domelike structure on a shallow drum only, was generally placed at or near the centre of a complex. It was usually heavily sculptured, that at Sanchi had four sandstone gateways and a narrative frieze around the drum and was charged with cosmological symbolism; narrative sculpture and painting, janatas, consisted of stories of the

life of the Buddha in animal and human forms and paradigms of a pilgrims journey to an enlightenment. Monasticism was a critical ingredient, shared with Christianity, but structures and layout were different. A vihara of one or two storeys provided simple cells for monks and priests arranged around a central meeting hall. The caitya was used for congregational worship, with a replica stupa at the end of the prayer hall, and was richly decorated. Unsurprisingly, Buddhism and its architecture found favour with Ferguson and western scholars; the naturalistic beauty was much admired and its association with Hellenistic influence, arising in the foot steps of Alexander, uncovered at Gandhara, in present day Pakistan, in 1830 along with structures that employed classical features like the orders.

Western scholars and officials found by contrast Hinduism and its architecture strange and sometimes repugnant. The multiplicity of Hindu gods, a rigid caste system and practices considered barbaric offended and contradicted western liberal ideas. Syncretism in Hindu art was both religious and artistic; Brahminism progressively assimilated other gods and practices including features of Buddhist worship into a broad and far from uniform pantheon. A central image in a temple, that might be either abstract or ugly, revealing the otherness of a divinity, was strange to the western mind. The ideology of progress was foreign to the Hindu, together with an indifference to history, time and chronology. We see this in ornament, so beloved of the Hindu, be it floral, foliate or geometric and in their approach to narrative art, giving emphasis to the story-teller, protagonists and the way events unfold in time and space, as in. The sequential mode, with framing, is readily understood but other modes are more ambiguous, for example, continuous narrative, with an absence of framing, where one scene runs into another, with an absence of temporal sequence and mono-scenic narratives, where a dominant scene evokes a whole story. Narrative art is to be found throughout temple complexes decorating friezes, columns, pillars and other facets.

The temple as a place of worship was of prime importance in Hindu architecture, and literally a dwelling place of deities it organised space differently from Buddhist structures, to reflect personal rather than communal worship and a strict ritualism; they comprised a series of structures largely symmetrical and square in overall layout. Ferguson distinguished between northern and southern Hindu architecture judging the latter inferior, the work of non-Aryan Dravidians, a people of lower intellect. While Dravidian temples gave the greatest emphasis to large gateway towers gopuras, as in Fig. 8, leading to a sanctuary and pillared hall in the north a tall central tower, a shikra usually curvilinear in form, was built above the

sanctuary. Ferguson had universal rules of architecture, which were offended by an architectural complex that placed the tallest buildings on its extremities rather than in the centre. He, and Lord Napier, Governor of Madras and an enthusiast for Indian styles, considered south Indian temples a jumble of elements at best judged picturesque. However, subsequent reappraisal in the early twentieth century judged the Hindu temple differently, as representing the cosmos with a symbolic significance beyond place for sheltering images of a deity and constructions devised by Ferguson and others.

The first Islamic architecture in India, described as Indo-Afghan, had absorbed Greek philosophy, Roman architecture and the Persian concept of empire. Buildings included citadels, symbols of power, mosques with their minarets also expressing dominance and tombs; important motifs were the arch, vault and dome. The dome, with origins stretching back to the Parthenon, was not an Islamic invention but they took it as their own, blending, adapting and perfecting. Decoration was generally abstract and geometric, figurative art being considered contrary to the Koran. Examples included perforated screens or jalis, both admired for their beauty and practicality, allowing ventilation into buildings. Islamic art and architecture reached its zenith under the Moghuls; conquerors like the British after them, they used architecture to make a political statement and display imperial power using rich polychrome materials. Their achievements include urban planning and a synthesis of styles used politically to underline power but also more practically to draw on the skills of Indian workmen. Europeans found Islamic architecture and theology more appealing than that of Hindus, with its monotheism and a sharing of a pre-Christian past. Many Indians readily embraced a creed that preached egalitarianism and an escape from a caste-ridden society.

Western scholars studied Indian religions and ancient monuments, classifying what they saw and found; inevitably qualitative judgements were conditioned by European views, attitudes and prejudices. Ferguson and Alexander Cunningham admired Indian architecture for its innate qualities, and the depth of their scholarship still informs discussion today, but they and other scholars subscribed to a theory of decline and linked architectural form with ethnicity in ways now thought culturally unacceptable. They believed that early Buddhist monuments, dating from second century, BC, were a high point from which decline followed accompanied by a loss of moral compass, as Hinduism progressively eclipsed Buddhism. A brief recovery occurred, they believed, in the Gandharan period, in which Greek influences had been introduced, many scholars using classical art as a benchmark of quality to measure

others against.

There was no uniform official view on how to appropriate Indian architecture for colonial buildings, although attempts were made to fashion one. Some saw the merits of using indigenous styles as turning principally on climate, the skills and attributes of local workmen and availability of materials and cost. They were aware of the high rainfall concentrated in a few months, high temperatures with little cloud cover outside the wet season and the need for ventilation, making use of a western breeze, coming directly of the sea, in Bombay. Verandas, double corridors and central courtyards restricted direct sunlight without reducing ventilation. Thick walls were seen as a further means of restricting heat transfer and overcoming tendencies of local workmen to skimp, using rough stone and debris in wall cavities unless well supervised. Some architects like Emerson criticised their oriental lethargy, while others praised their qualities for dedicated application; however most agreed that Indian workmen were well practised in building in Indian styles and local materials and this was an important factor in choice of styles

Sir George Birdwood was not alone in praising the quality of Indian design while deploring Indian sculpture on both aesthetic and moral grounds. A dichotomy between fine and industrial arts that had long existed in Britain and Western Europe privileged the first over the latter in an aesthetic and social hierarchy. Fine arts were appreciated for their adherence to the Renaissance principles of naturalism and illusionism, whereas these qualities were not sought in industrial art or design. Fine art was also considered a suitable pass-time for gentlemen while the latter was the province of artisans. These distinctions were at the root of contradictions in art education policy in Britain and India throughout the latter half of the nineteenth century. In Britain William Morris and in India E B Havell were to argue for a unified approach to aesthetic appreciation and art education.

The Architecture of Bombay

Sir Bartle Frere, in seeking to modernise and transform the city, as governor, 1862-67, through removal of the fort and ramparts was freeing space for a spectacular ensemble of public buildings. A Ramparts Removal Committee, charged with providing guidelines for development and construction, included James Trubshawe, architectural secretary to the government, and T R Smith, who had argued for European styles, was also responsible for defining appropriate styles of architecture. Financing was achieved through imperial grants, city taxes and profits from reclamation schemes. The Afghan Memorial Church, 1847-58 had

been the first Gothic building in the city and the start of George Gilbert Scott's influence. Scott's design was judged too expensive and elaborate and the final design was by Conybeare in an Early English Gothic style. This involvement of British architects was to continue with Scott's designs for the university and Burges' for the JJ School of Art, 1866; the last says the art historian Joseph Crook was 'greatly influential on architectural designs in Victorian Bombay'. The style was 13th century French Gothic but with a dome surmounting a central tower and Mughul jalis to increase ventilation.

The principal public buildings were arranged along the elliptical axis of the old fort walls facing generally west towards the maidans, still largely grassed and undeveloped, and the sea, allowing ventilation from sea breezes. In this area was the General Post Office and High Court along with commercial buildings and banks. Another important group of buildings lay further north with CST the closest to the old walls; these included the JJ School of Art, Elphinstone High School, Crawford Market and the Bombay Municipal Corporation (BMC) opposite CST. Most of these buildings were on or close to DN Road, which after following the old walls as far as CST turned north to the Crawford Market. Across the maidan were the BCCI offices, designed by Stevens, close to Churchgate station. The broad city layout is shown in Bombay's principal Gothic buildings were constructed from 1866 to a little beyond 1900; this mirrored the period in Britain when many High Victorian public buildings were built. Bombay Gothic was a far from uniform style, combining Victorian and continental European features and motifs, designed to accommodate the vagaries of climate, draw on local skills, availability of local materials and reflect the aspirations and complexities of a colonial mercantile city. In India public architects were employed by PWD, an organisation criticised at the time for its lack of creativity but Bombay's buildings were as successful individually and collectively as those in Liverpool or Manchester.

The Secretariat, 1867-74, the first significant Gothic building, faced west like CST, with arcades of polychromatic stonework stretching its full-length and open to the sea breezes. On four floors the long building, designed by General Henry St Clair Wilkins, had a central tower some 170 feet in height rising above a large cantilevered staircase. The university buildings, 1868-80, Convocation Hall, Library, and Rajabai Tower, face Back Bay and are on the axis of the old walls, a dominant situation. They are described as the most scholarly and most artistically successful example of Gothic Revival architecture in Bombay. Financed by prominent Parsi and Jain philanthropists initial designs were provided by Scott,

with symbolic references to the trans-formative roles of universities and to ancient examples in Europe. They are partly in a thirteenth century French style with Venetian arcading, of great delicacy, on the upper floor of Library is closely modelled on the Ducal Palace, Venice. Like CST there are references to India, with sculptures of nature, exotic birds and animals along with sculptures of the 'castes' of western India.

The Rajabai tower, 280 feet in height, adjoins the two-storey library and has pointed arch openings in its base, providing a porte-cochere for the library. It is of seven storeys and is crowned by a spire above a clock; the design said to be based on an unbuilt design for a campanile in Florence by Giotto with its slender appearance is more French Gothic than Italian with tall narrow two-light windows. Below the spire is an octagonal lantern with unusually tall windows; the overall composition has features in common with the great dome of CST. The library's delicate appearance is increased by 'the juxtaposition and interplay of surfaces'. The base of the tower is in rough brilliantly coloured Kurla while the library façade is smoothly cut Porbandar stone. This façade comprises arcades on two floors providing deep verandas behind a screen and balustrade; Venetian in appearance it has been compared with the arcades in the 14-15th century Palazzo Ducale in Venice. At either end are spiral staircases topped by conical roofs. The reading room has a 32 feet high ceiling and is lit by large stone windows with bar tracery in an Early English style.

The Convocation Hall is rectangular with an apse at one end and porte-cochere at the other, and designed to seat a thousand people; it uses Gothic forms and similar materials to the tower and library. There are pinnacles above slender paired openings at its four corners and a rose window is placed above the porte-cochere immediately above a blind arcade giving an ecclesiastical appearance. These buildings are likely to have influenced Stevens significantly, introducing him to Scott's work some years before he visited England and displaying form and decorative sculpture in French and Italian styles. Capitals, canopies, decorative sculpture and the friezes will have impressed along with constructional polychromy, screens and balustrades in the arcades. They are also important for the sculptural work undertaken by Indians and generosity of the Indian benefactors imbued with a desire to assist in transforming the city and improving opportunities for Indians.

Many of the features and motifs that we find in CST were to be found in the major public buildings that preceded it. Most were symmetrical in layout and large, with gabled facades, resembling a pediment, central towers or cupolas placed above a central staircase,

usually cantilevered from the walls. Elevated figurative sculptures adorned the principal elevations, for example Justice and Mercy at the High Court. Arcades of various designs, well detailed and mostly Italian, were provided to increase ventilation, with friezes, string courses and balustrades emphasising horizontality; variation was provided by changing arch design, materials and the line of buildings through recession and projection. Free use of polychrome materials in arches and stone facings was more Pisan and Florentine than Venetian in appearance. Delicate tracery was provided in abundance, for example, above the High Court library balcony and in the university buildings. Statues abounded, of colonial figures, benefactors with many from art and literature; Homer and Shakespeare adorn capitals in the university library, free standing statues of prominent figures, elaborate gargoyles, with free use of crocketing and corbelled heads represent the tribes of India.

An important feature of decoration generally was the extensive use made of local sculptors. Art education began in 1857 at the Elphinstone Institution, until construction of the JJ School, for which Burges had submitted his brilliant IndoSaracenic design. Sir Jamsetjee Jeejeebhoy, renowned for his public benefaction, had given R100,00 to found a school, that would restore, reform and maintain the ancient crafts of India, teaching drawing, painting, design, ornamental pottery, metal and wood carving. The organising committee for the school included Conybeare and the sculptor John Lockwood Kipling and was drawn from the organisers of the impressive Indian Pavilion at the London 1851 exhibition. Indian craftsmen worked on the sculpture of the Secretariat and university buildings under Ramchander Muccond, a brilliant sculptor who carved the capitals at Elphinstone College, and Kipling, who undertook the sculptural relief at the Crawford Market and plaques depicting Indian river goddesses and native birds for a fountain in the market courtyard

Chhatrapati Shivaji Terminus (CST)

George Frederick Stevens was born on 11th May 1847 in Bath and in 1862 was articled to Charles Davis, Superintendent of Works to the Corporation of Bath, for five years. In 1867 he passed a competitive examination at the India Office and was appointed Assistant Engineer in the Public Works Department at Bombay under General Fuller, the Government Architect. He received a number of promotions and became Government Examiner to the JJ School of Art, of which John Griffiths was principal, in 1876; he designed buildings for the Bombay Exhibition, with Griffiths with whom he would continue to collaborate, in 1869 and 1886. He received a number of Gold and Silver medals from the Sassoon Mechanics'

Institute for his exhibition and other work.

Stevens services were requested by the GIPR in 1877 as engineer for construction and design of a railway station at Bori Bunder, subsequently to become VT and then CST but he fell ill in 1878 and spent most of the year in Britain, being formally appointed only on 1 October 1879. The design was exhibited at the Royal Academy in 1881 along with Axel Haig's brilliant watercolour. On completion he was made a Fellow of Bombay University as a mark of appreciation. In 1879 during construction he had resigned from the PWD in order to work directly for the GIPR and subsequently set up his own practice in 1888. In 1884 he had been made a Government member of the Municipal Corporation and in 1887 a member of the Commission for the further extension of Bombay. He was awarded the Order of Companion of the Indian Empire (CIE). He designed, apart from CST, the Royal Alfred Sailors' Home, BBICI railway offices at Church Gate, the BMC building, Fig. 14, opposite CST and Chartered Bank offices in Bombay and buildings in other Indian cities. These buildings are briefly described and discussed in the description of CST. Stevens died in 1900 and was buried at Sewri cemetery.

The GIPR was one of India's foremost railways, largely of broad gauge, joining up the three great presidency cities of Calcutta, Madras and Bombay, with the latter at its apex, with CST, its company head office and principal workshops. Almost forty years before the completion of CST, Lord Dalhousie, Governor-General 1848-56, had issued his famous minute that was the catalyst that launched India's huge and transformative railway system. He was to say 'Great tracts of territory are teeming with produce, which we cannot transport but also he had emphasised how much public order would be improved if troops could be readily and hastily moved across the country, prescient in view of the impending Bengal Rebellion, better known as the Indian Mutiny, 1857.

The GIPR had been established in England in 1845, with Robert Stephenson as consulting engineer; the BBICI had soon followed. The Bombay Committee of the GIPR included prominent merchants, amongst them were leading Parsis including Jamshedji Jijibhai and the influential Hindu leader, Jagannath Shankarshet; their portrait sculptures appear in roundels on CST. The first trains ran as far as Thana in November 1851, with the official opening on 16 April 1853. Two days later Sir Jamsetjee Jeejeebhoy hired a special train for his family, emphasising the commitment of Indians to the enterprise. Almost ten years later, in 1862, the opening of routes over the Ghats, see was completed, providing

access to the Deccan plateau. By 1879 mileage had reached 1,287 and overall capital expenditure for the year was £23.3m (R22,81,2731). There were four passenger classes in 1882; first and second accounted for only 11% of passenger revenue¹⁵⁴ falling to 10% in 1894 while 3rd class was the backbone of the system. Fares per mile were: first class, 18 pies second, 9 pies and fourth 2.5 pies¹⁵⁶. Bell says GOI sought high fares to maximise revenue and so reduce payments under the guarantee arrangement. The average speed of passenger trains was only 23 mph as late as 1917. The GIPR was one of the last major railways to pass into full state ownership on 1st July 1900 but the old company continued to work the line for a further 25 years.

The location of CST was determined by the availability of a large site in a prominent central location. Railways were not barred from the city centre, as in London and other cities. The first railway had used a modest station at Bori Bunder, close to the fort, and initially ran as far as the foot of the Ghats at Thana. The Mody Bay reclamation in 1857 had provided some 250 acres of reclaimed land, of which 100 acres had been passed to the GIPR. This enabled relocation of access tracks, subsequent port development and much enlarged the area around Bori Bunder. Exchanges of land were undertaken between GIPR, which gave up land at Wadi Bunder where it had previously a goods `station, the municipality and Bombay Government¹⁵⁸. CST enjoyed a dominant situation at the junction of Hornby and Cruikshank Roads, opposite City Hall and was directly connected to Apollo Bunder, site of the present Gate of India, a triumphal arch designed by Lutyens and completed in 1926, so providing a symbolic and ceremonial route for an arriving visitor or dignitary. Visitors arriving in Bombay in the nineteenth century arrived at Apollo Bunder on a tender, ocean liners being moored in the bay.

The CST head building is a dense, elaborate and much ornamented structure, its footprint being 370 by 230 feet. Pugin had argued that vastness of dimensions was necessary to produce a grand and imposing effect, saying that ‘One of the great arts of architecture is to render a building more vast and lofty in appearance than it is in reality’¹⁶¹. Ruskin had also praised massiveness, ‘Mass of everything, of bulk, of light or darkness of colour.....solid stone, broad sunshine, starless shade’ attaching much importance to shadow moving across a building. He believed ‘a building should convey a sense of the quantity and weight of its materials. Its wall should be thick and its doors and windows recessed so that this thickness will be dramatised’. Here he was summoning the sublime and equating the mass of a building

with that of a mountain; what mattered was not size itself but the psychological perception of size.

CST was three storeys high throughout, exceeded only by towers, gables, spires and domes; other Gothic buildings were taller and significantly longer. The High Court, 1871-8 had no less than six floors, was 562 feet long with an overall height of 174 feet; it had a solid square gabled central tower¹⁶³. CST is symmetrical, with identical wings around a small central garden in contrast to St Pancras Station and the High Court in London, which are strongly asymmetric. St Pancras sweeps across and around an elevated site resembling a medieval Flemish cloth hall. CST, and its neighbour the BMC building, are more closely integrated into the streetscape than St Pancras or many other Bombay buildings, placing increased emphasis on the need for open arcades, rather than glazed windows on outer facades, to achieve adequate ventilation.

Indians, apart from those accustomed to western architecture, may have found CST intimidating, impressive, perhaps, but certainly strange, inhabiting a world apart. Buddhist and Hindu buildings were generally of a religious nature, relatively small and dispersed, sometimes symbolically arranged. Layout was intricate, based on established spatial relationships and buildings of varying heights occupied an open site. Hindu gate towers, gopuras were tall certainly but relatively slender, and being placed on the edges of temple compounds, did not provide the concentrated massing of the city's new buildings, anymore than the curvilinear towers placed above central sanctuaries in northern India did. Muslim architecture, more closely resembling European architecture, placed greater emphasis on massing but applications were limited because few commercial buildings were undertaken in that style, until the arrival of Europeans who adapted and transformed it. Citadels, though, were tall for practical reasons and demanded respect; the caravanserai, although found mostly in Muslim lands outside India, was large but generally low in profile.

The main office and station block comprised three sides of a rectangle; on the fourth was a courtyard with small garden, behind which was the main façade. Platforms and facilities for third and fourth-class passengers were situated alongside Hornby Road. The principal facades faced west and south; the north side faced the platforms and the east side abutted other railway building and was and is largely unseen by passengers or passers by. On the west two wings ran either side of the courtyard garden with similar facades facing Hornby Road, each resembling a cathedral transept façade with gable, elevated rose window,

five portals in the form of a port-cochere, flanked by low towers with spires and spire-lets. The central and principal façade was also gabled, resembling a classical pediment, surmounted by a large octagonal dome; on the south side there was a long façade alongside Cruikshank Road. While spires and spire-lets soared skyward, emphasising the vertical, the long verandas that stretched right round the building, from the northwest wing to south façade, provided a strong horizontal focus, as the eyes move across and around the building. Was this a richly textured Baronial Castle from fairyland or a sublime yet animated tapestry replete in its mastery?

There are and were six principal designs of arcade, arranged on three levels, separating the various towers and buttresses and constituting a critical element in façade composition and design. There are common features to all, arches, capitals supported by shafts, friezes, rich decoration of spandrels and tympanums and balustrades at the foot of each arcade and at the base of the roof gable. The upper storey arcades use a relatively narrow round arch with capitals supported by a single shaft above a balustrade; tympanums have patterned decoration. On the middle or second floor a two-centred pointed arch with ogee-shaped hood moulds, and of significantly greater dimensions, is provided similarly supported by a capital and single shaft; these arches are generally about twice the width of the round arches above. The lower floor uses arches of broadly similar appearance and size but without the ogee framing. The arrangement of arcades on the two wing facades and the central section of the main south façade comprise two further designs.

CST's facades are sufficiently varied in arcade design, fenestration and decoration to avoid monotony, with recessing and projection used to break up large surfaces, the more necessary in a symmetrical building. Arcade design is Italian, with free use of polychrome materials, but not particularly Venetian, with little of the dense tracery to be found at the Ducal and other palaces. Ruskin admired variation in arcades as much as in ornament, his analyses revealing that dimensions of arcades in the Ducal Palace, and in successful church facades varied sufficiently in dimensions, for the eye to detect subtle differences between and within arcades. I am not aware that comparable analysis has been carried out at CST but its appearance suggests that the variation, Ruskin so admired, is absent but compensated by imaginative design and motif variation of a complex but uniform nature.

The dome is octagonal with eight prominent dovetailed ribs and projecting crockets, of 40 feet span, and strongly buttressed. The interior is entirely open exposing the ribs

supported on corbels and springing from a beautifully foliated cornice. The drum is pierced by eight stained glass bi-partite windows, topped by a sex-partite rose; overall the composition is Gothic and secular. It has been described as giving CST the appearance of a capitol building in a mercantile city. Interestingly the design was significantly altered after Axel Haig's watercolour, Figure 18, said to date from the last year of construction; the gables above the large bipartite windows were removed and the smaller lower windows integrated more closely with the upper, by a sharing of shafts and mouldings, but offset by the depth of mouldings and use of bar tracery. The dome does not have the oriental feel of Steven's later domes at the BMC building and Churchgate. It is relatively small when compared with the ribbed dome at Florence Cathedral, of 130 feet diameter and 185 feet in height, and St Paul's in London. Possible sources are the Rajabai tower at the university, with narrower crocketed octagonal lantern with steep gables similar to those in Haig's watercolour, and Tom Tower at Christ Church, Oxford, designed by Christopher Wren, 1681-2, broadly of similar dimensions but at a lower elevation, placed above a gateway and flanked by a two-storey building; Tom Tower is square with a relatively deep octagonal lantern beneath a ogee-shaped dome. The CST dome is successful, I believe, because of its beautiful Italian Gothic design, with rounded arched apertures and use of natural stone without polychrome, but above all its proportion in relation to the overall structure is perfect, something Stevens does not achieve with the BMC building, where the principal dome is too tall in relation to the main structure and other lesser projections.

CST has often been compared with St Pancras, widely thought to have inspired Stevens during his study tour in England. Here was a railway station in Gothic yet innovative, a symbol of modernity yet aesthetically pleasing, capturing the confidence of the age. The long winding and asymmetric façade facing Euston Road was dignified, powerful and rich if constrained, in its red brick. It dominated its surroundings through its elevation, as well as its architecture, in a way that the compact street-level site at CST did not allow. The huge rectangular tower at St Pancras, Fig. 21, with French gable and Mansard roof, above the station entrance and clock tower at the east end, square with projecting corbelled upper storey, turreted with spire-lets, did not find a parallel at CST but is not unlike the central towers in other Bombay buildings. CST had five square and smaller towers, with turrets, finials and spires, two each on either side of the wings and the last at the east end of the south façade. At St Pancras the two large towers dominate, whereas the towers at CST are

integrated into the structure and it is the dome that is dominant. Stevens was seemingly not attracted by the Dutch gables or dormer windows but by the façade at the west end, giving access to the hotel from Euston Road and by the detailing particularly the interior of the hotel, on which Scott had lavished much attention. The west end hotel façade may have influenced the compositionally fairly similar wing facades of CST. Both share corner towers with turrets and spire-lets and grandly decorated portals, porte-cocheres at CST.

A stylistic breakpoint seems to have come, between a relatively pure Bombay-version of Italian Gothic and a more Indian version, around the time that CST was building. Steven's two largest, and most successful of his later buildings, the BMC and BBCI buildings, are significantly more Indian than CST. Why was this so and what makes them more Indian? A ready answer is their domes, more plentiful, larger and more oriental. Stevens was not unaware of the Indo-Saracenic architecture of Madras and other cities and had himself used such styles. There appear to have been two predominant influences at play: the powerful and persistent arguments of Kipling and Frederick Salmon Growse of the ICS that Indian design was appropriate for objects and architecture on Indian soil, arguments that were rooted as much in aesthetics as in the politics surrounding the revival of ancient Indian crafts and Chisholm's design for the BMC building. Chisholm won the competition in 1883, with an Indo-Saracenic design, but subsequently the result was set aside and Stevens was commissioned instead. While Stevens rejected so overtly an Indian design he was to incorporate Indian features in his BMC and BBCI designs that had been absent from his earlier Bombay buildings. This suggests that Chisholm's design was considered a step too far at the time but seems to have brought about a recognition that more Indian-ness was desirable.

Victoria Memorial Hall

The Victoria Memorial Hall was erected in Calcutta, the then capital of British India, to commemorate Queen Victoria. The project was conceived by Lord Curzon, Viceroy of India from 1899 to 1905, who intended it to be a period museum in memory of the queen with particular emphasis on Indo-British history. Built on a 57-acre land and designed by Sir William Emerson (the then President of the Royal Institute of British Architecture), the splendour of the Memorial is evident in its architecture, which is predominantly Italian Renaissance in character, blended with nuances of Orientalism. Widely hailed as the finest specimen of Indo-British architecture in India, and often referred to as the 'Taj of the Raj,'

the Victoria Memorial Hall had its foundation stone laid by the Prince of Wales in January 1906 and formally opened to the public in 1921. It was declared an institution of National importance by the Government of India Act of 1935. Today, the Victoria Memorial Hall is considered to be one of the best examples of a unique paradigm of the visual arts where four diverse fields of arts – architecture, sculpture, painting and gardening come together.

As a museum, the Victoria Memorial Hall's collection has 28,394 artefact's displayed Periodically in nine galleries that encapsulate the history of our nation extending over three centuries beginning from 1650 A.D. The collection includes paintings in oil and water colour, sketches and drawings, aquatints, lithographs, photographs, rare books and manuscripts, stamps and postal stationery, coins and medals, arms and armour, sculptures, costumes, personal relics and other miscellaneous archival documents.

The highlight of the museum is a unique collection of paintings by major European artists of the eighteenth and nineteenth centuries, such as Johann Zoffany, Joshua Reynolds, William Hodges, George Chinnery, Robert Holmes, Thomas Hickey, Tilly Kettle, Baltazar Solvyns, Charles D'Oyly, Emily Eden, John Fleming and Samuel Davis. It is a repository of the largest number of paintings by the famous uncle and nephew pair of artists, Thomas and William Daniell. In the collection of the Memorial is the third largest painting on a single canvas, the Russian artist Vassili Verestchagin's The State Procession of the Prince of Wales into Jaipur in 1876. Other important and interesting artefact's in the collection of the Memorial include historic illustrated Persian manuscripts like the Mughal Emperor Aurangzeb's hand-written Quran, the Persian translation of the tale of Nala and Damayanti by Abul Faiz Faizi, Dara Shikoh's translation of the Upanishads, a manuscript copy of the Ain-i-Akbari, Kalighat paintings, Iranian paintings of the Qajar school, Tipu Sultan's personal war diary, cannons and cannon balls used in the battle of Plassey, Maharaja Ranjit Singh's personal sword, and Tatya Tope's overcoat. In the recent years the collection has been further enriched by the acquisition, on enduring loan from Rabindra Bharati Society, of nearly 5,000 paintings of the Bengal School of Art, especially many prominent works of Abanindranath Tagore, Gaganendranath Tagore, Jamini Roy and others.

A large number of artefact's from the invaluable collections of the Memorial are on display. They are suitably placed in various galleries.

The galleries include :

The Royal Gallery (currently closed for renovation)

Entrance Hall

Portrait Gallery

The Queen's Hall

The Prince Hall

National Leaders' Gallery (currently closed for renovation)

Indian Schools of Art (currently closed for renovation)

Calcutta Gallery Durbar Hall

The VMH archive has rare collections, e.g. Justice John Hyde's manuscript diary and legal notes, early colonial documents on Calcutta and Bengal in the 18th and 19th centuries, land records in Urdu and Persian, a number of old Supreme Court records, as well as the personal memorabilia of historical personalities – both Indian and British – and miscellaneous other records that constitute an invaluable source material for scholars working on Indo-British history from the 18th to the 20th century.

First, the manner in which the memory of Queen Victoria was to be honoured in India arose from the Viceroy's personal initiative. Despite the inclusive "us" of his exhortation, this proposal followed no process of consultation with leaders of society, no courteous calls for suggestions from the floor: it was presented as the most natural and logical response to public grief.

In the days which followed, some recalcitrant members of his audience doubted his wisdom. They questioned whether resources should be so focused on one national, all-India memorial at the expense of many regional ones; and some argued that a well-endowed charity would be a more fitting and useful tribute than a magnificent building. Curzon was obliged to hold a second meeting in which he doused such critics in a torrent of patrician eloquence. With typical despatch he had got in first and so he could characterize all alternative views as merely obstructive. Opposition was never entirely extinguished: even after the building was begun critics continued to query details of the plan. Recalling this period after the event, Curzon revealed that he had not been untouched - lesser minds pained him - but he was never deflected from his aim.

Curzon's introductory remark also reveals that from the outset he conceived the memorial as a physical embodiment of a history lesson. It was to be expressly didactic in purpose, to proclaim the achievements of the past. He pursued this theme in his speech at the second meeting, where he envisaged the projected building as "a standing record of our

wonderful history, a visible monument of Indian glories, and an illustration, more eloquent than any spoken address or printed page, of the lessons of public patriotism and civic duty.

He argued that the emphasis should be placed on recent centuries, including those of British rule, but he was adamant that the approach must not be partisan: the intention was to commemorate "notable events and remarkable men, both Indian and European", in a sort of national Valhalla. He listed among potential candidates for inclusion some Indian rulers of the past - motivated in part, perhaps, by a wish to stimulate further what he had already acknowledged as the generous flow of financial contributions to the project from their successors.

His even-handedness extended to the point where "I should not hesitate for a moment to include those who have fought against the British, provided that their memories are not sullied with dishonour or crime". From his cautious elucidation, it appears that the definition of dishonour much depended on distance: Nana Sahib (whose infamous behaviour at Kanpur had occurred during the reign of the Queen being honoured) was deemed selfevidently unfit, whilst Tipu Sultan (for all the venom that he had inspired a century before) was apparently now ripe for rehabilitation. Even so, in proposing him, Curzon referred to an admirable painting of the Death of Tipu - educationally it seems, more satisfactory than any image of him alive.

A third aspect of the project established from the outset was its sheer visibility. The history lesson was not to be "spoken" or "printed" but seen: visitors would find history "before their eyes". Curzon had a sense of the desired impressiveness of the building before he had developed firm ideas about what activities, if any, it was intended to accommodate. There was no great collection urgently needing to be housed; on the contrary, Curzon had to argue that it would not be impossible to assemble one. The internal operations were a secondary matter; the first function of the building was visual..

Power and Style

In the emphasis thus placed on symbolism, the Victoria Memorial was not without precedent in the architecture of the British Raj. Many of the earliest colonial buildings were admittedly somewhat utilitarian. The Writers' Building in Calcutta (as originally built in 1780) was typical of such structures, ineptly designed by engineers who were more concerned to satisfy needs than to create effects. By about 1800, however, there was a greater consciousness that architecture could exert great political force; given sufficient resources, a

building could serve as an impressive sign of the colonial presence.

The vast new Government House built in Calcutta for Lord Wellesley between 1799 and 1802, though obviously fulfilling the primary purpose of housing the Governor-General, also inaugurated a new architectural policy along these lines. It was swiftly followed by the extensive rebuilding of the Government House in Madras and the construction of grandiose palaces for the British Residents in important Indian states such as Lucknow and Hyderabad. Whatever connoisseurs might think of their architectural merits, all these palaces, built or rebuilt between 1800 and 1806, are avowedly pretentious. Of course there were among the Directors of the East India Company some who had an eye chiefly on profits and who doubted the need for such lavish display. They were the target of the sarcasm of the aristocratic traveller Lord Valentia:

"They ought to remember that India is a country of splendour, of extravagance, and of outward appearances: that the Head of a mighty empire ought to conform himself to the prejudices of the country he rules over.... In short, I wish India to be ruled from a palace, not from a counting house; with the ideas of a Prince, not those of a retail dealer in muslins and indigo."

Significantly, this well-known passage forms part of a wide-ranging defence by Valentia of Wellesley's administrative policies in Bengal. The particular policy represented by his Government House furnished an important model for the Victoria Memorial a century later. A further connection between the two buildings rests in Curzon. The design of Government House, by the architect Charles Wyatt, had been based on the plans prepared by James Paine for Kedleston Hall in Derbyshire in 1760; coincidentally this was Curzon's ancestral home, so that the house in Calcutta held a special significance for him. Curzon explicitly associated his second home with the memorial he commissioned by including both in his book on the viceroys and their houses.

The new British palaces of the early nineteenth century were all built in the Classical style then prevalent in Britain. While this could only enhance their role as emblems of power, by setting them apart from the local architecture, there is no evidence that style was a consideration uppermost in the minds of their builders. Around 1800 the question of style was not yet a major issue. Such was the dominance of Classicism over British taste at that time, that there was no thought of seeking alternatives.

As the century progressed, however, that dominance was eroded in India as in Britain.

The first challenge came from the new enthusiasm for the Gothic. Calcutta's Palladian calm was disturbed by the early, elegant Gothic of William Forbes' design for St Paul's Cathedral (1839), and completely shattered by the riotous, Puginian Gothic of Alexander Granville's High Court (1872). By the time the latter was built, questions of architectural style were high matters of state, with the inception of what has come to be called the Indo-Saracenic movement: the attempt to develop a new architectural style, based on Islamic and Indian sources, to present a distinctive imagery for the Raj. In fact Calcutta was comparatively unscathed by the Indo-Saracenic fashion, which flourished in Madras and later in Bombay; but everywhere now the choice of style was a paramount issue. It was described by the architect Roger Smith as "the ultimate question, and the most purely architectural question of all".

After the turn of the century, what some perceived as the success of the Indo-Saracenic movement fuelled the protracted debate over which style should be adopted for the principal buildings of the new capital in Delhi. In the event, as is well known, Edwin Lutyens and Herbert Baker incorporated some Indian details, but the underlying order and dominant aesthetic of their designs are Classical. With its Classical emphasis, New Delhi could be seen as marking a return to Georgian Calcutta, to the original style of the older capital; it also forms part of a Classical revival flourishing throughout the British Empire in the early twentieth century. In all of this, New Delhi was prefigured by the Victoria Memorial Hall, conceived a decade earlier.

"In Calcutta - a city of European origin and construction - where all the main buildings had been erected in a quasi-classical or Palladian style, and which possessed no indigenous architectural type of its own - it was impossible to erect a building in any native style. A Moghul building... would have been ridiculous in the commercial and official capital of India, and quite unsuited for the Memorial of a British Sovereign. A Hindu Fabric would have been profoundly ill adapted for the purposes of an exhibition. It was self-evident that a structure in some variety of the classical or Renaissance style was essential, and that a European architect must be employed.

The Architects

The architect entrusted with the design was William Emerson. A pupil of William Burges, Emerson had first visited India almost forty years before. His early works in the subcontinent included the famous Crawford Markets in Bombay (1865) and the splendid but

incomplete All Saints Cathedral in Allahabad (1869-93). In these and some other early projects, Emerson experimented with medieval Gothic styles, in the manner of his teacher. But the design of his other great work in Allahabad, Muir College (1873), is more widely eclectic. Drawing on 7 Venetian, Egyptian, and Deccani sources, this was one of the first essays in the Indo-Saracenic movement. Like the contemporary Senate House in Madras by RF. Chisholm, it is a colourful and extravagant building, combining forms from the Islamic architecture of various regions with a European structure. Moving from British India to the princely state of Bhavnagar in Gujarat, Emerson continued in a similar vein with the Takhtsingji Hospital (1879-93) and the Palace (1894-95). Here, at the request of his patron, he introduced forms derived from Hindu architecture, such as corbelled arches.

As well as a practitioner, Emerson became a spokesman for the movement. In 1873, he challenged Roger Smith's call for the exclusive use of Western styles, commending as an alternative model the approach of India's previous Muslim rulers: the adaptation of indigenous architectural traditions. In 1884 he defended his own current work before the Royal Institute of British Architects (RIBA). He quoted with approval the views of Chisholm, one of the movement's pioneers. Though he did not fully share Chisholm's confidence in the abilities of Indian master-masons, he was in full agreement about the most desirable policy for official buildings in India:

"Buildings erected under the British Raj for any purpose connected with the natives, whether for administration, education, or charity should show a distinctive British character, at the same time adopting the details and feeling of the native architecture... in fact, following the principle of the Mahomedans, who seized upon the art indigenous to the countries conquered, adapting it to suit their own ideas and needs."

This was scarcely the Classical purist Curzon was seeking. But in 1899 Emerson had become President of the RIBA, and this high office, coupled with his experience of working in India, qualified him for the job. When appointing him, Curzon was swift to invite him to submit designs "in the Italian Renaissance style".

Now based in England and approaching sixty, Emerson was clearly going to need an assistant, to supervise the construction of the building on site. The man appointed for this role was Vincent Esch. A generation younger than Emerson, Esch had like him gone out to India at the start of his career: in 1899 he was appointed Assistant Engineer to the Bengal-Nagpur Railway, a job which gave him much practical experience in large-scale construction

and costings. In the New Year of 1902, Emerson engaged him to prepare a sketch of his original design for the Victoria Memorial and - anxious to avoid any involvement of the Public Works Department - urged the Viceroy to put him in charge of the plan's implementation. More cautious, perhaps, Curzon seems to have tested Esch out with a couple of minor commissions. He employed him to design a Circuit House, bombarding him with advice to adopt the "simple old Italian style". At the same time, Esch prepared designs for the temporary Exhibition Building for the Delhi Durbar of 1903. In this case consistent with his general plans for the Durbar, Curzon required something in the Mughal style, and he was pleased to find Esch compliant.

Even so, the appointment was not immediate. Building operations on the Memorial were slow to get started, and had not properly begun by the time Curzon left India at the end of 1905. They were then subject to further delays as his successors had less enthusiasm for this inherited scheme, and lengthy tests had to be made on the foundations. Meanwhile, the real break in Esch's career came in 1907 when he won the competition to design the Bengal Club, a prestigious building on a conspicuous site on Chowringhee. At the same time, he was concluding his service with the Bengal-Nagpur Railway by designing their new head office at Garden Reach. These two projects won him a reputation for capable design and efficient management, and launched him in private practice. By the time the construction of the Memorial began in earnest, in 1910, Esch had established himself as Calcutta's leading architect. He was then formally appointed the project's Superintending Architect.

In that capacity, Esch saw the project through to its eventual completion in 1921 (a task for which he was awarded the CVO). This period was his busiest decade - as well as fulfilling this demanding role, he was inundated with commissions for designs of his own. His major clients in Calcutta included the Allahabad Bank, the Royal Calcutta Turf Club, and Duncan Brothers. From 1914 to 1921, furthermore, he was also employed by the Nizam of Hyderabad, in an extensive reconstruction of the Nizam's capital. Esch designed numerous large public buildings in Hyderabad, including the Railway Station, the High Court, the City High School and the Osmania Hospital.

Most of his buildings in Calcutta reveal a commitment to Classical styles. Though some are built largely of concrete, elegant Ionic columns dominate their facades. The Bengal-Nagpur Railway Office is a partial exception, since some Indian details embellish the exterior, though even here the central focus (and one of Esch's finest conceptions) is the

grand, Classical staircase. V4ren working in Hyderabad, on the other hand, he joined the ranks of the Indo-Saracenic, producing for the Nizam a series of pastiches of the Islamic architecture of the Deccan. Taken together, his buildings in the city constitute one of the most extensive Indo-Saracenic projects in the subcontinent, comparable to developments in Madras or Bombay. Much later, discussing these buildings in a lecture to the India Society in 1942, he praised the beauty of Islamic design and the skill of Indian craftsmen, and sought to demonstrate the applicability of both to modern buildings. His comments echo the rhetoric of the Indo-Saracenic pioneers.¹¹ Curzon and Calcutta may have sought to make Esch a Classicist, but on occasion he was as susceptible as Emerson to the inspiration of Indian architecture. How would these two between them implement Curzon's scheme?

The Memorial Appears

Obediently, Emerson produced a design which is predominantly Classical; the Memorial is a confident essay in English Baroque. It does not, however, represent a complete abandonment of his own earlier prescription for such buildings, so much as a different emphasis in its application. The Indian details are still present, though now somewhat furtive. In the upper storey of the exterior, there are Indian corbels in the frieze of the entablature and jalis in the arches; and the domes of the corner towers have a characteristically Mughal shape. This much Curzon let pass.

Like many others, too, he could not help comparing the Memorial with the Taj Mahal. There is a certain resemblance which, more than the details mentioned, lends the building a pervasive Indian character. It arises, first, from the material. From the very start, even before he expressed his views on its style, Curzon insisted that the Memorial should be built of white marble, and in the event the stone was brought from the same quarries in Makrana, Rajasthan, that supplied ShahJahan.¹³ There is also a correspondence in the forms: the great dome, clustered with four subsidiary, octagonal domed chattris, the high portals, the terrace, and the domed corner towers.¹⁴ There is even some correspondence in the function: like ShahJahan, Curzon conceived the building as a memorial to an Empress and as a powerful visual statement. This linking of the Mughal and British periods is sustained by the collection of exhibits within; and it is typical of the self presentation of the late Raj, of which Curzon's Delhi Durbar and the whole Indo-Saracenic movement are further examples. In this context, the echo of the Taj Mahal need not have been an effect deliberately sought by the architect; but it is evident that Emerson greatly admired the Mughal masterpiece - a youthful

lecture on it which he delivered to the RIBA in 1870 was a sustained panegyric.

Origins and Construction of Amir Mahal

Amir Mahal is among Chennai's most significant heritage buildings (Live Chennai). Its origins are intertwined with the Nawabs of Arcot, a prominent Muslim royal family who shaped the region's political and cultural fabric during the 18th and 19th centuries. Initially, the Nawabs resided in Chepauk Palace, but after the British East India Company acquired their ancestral home in the mid-19th century (Navrang India), they were allotted Amir Mahal in 1855. The structure, first built in 1798 for British administration, was redesigned in 1876 by Robert Chisholm, embracing the Indo-Saracenic style that now defines its majestic presence.

Architectural Highlights

Style and Influences

Amir Mahal exemplifies Indo-Saracenic architecture, characterized by Mughal-inspired domes, Islamic arches, and European columns. Chisholm's redesign incorporated traditional Indian courtyards, grand arched gateways, and ornamental detailing, making the palace a landmark in Chennai's architectural heritage (Travel Guide Inc; Travel India).

Layout and Features

The palace is organized around a central courtyard, with lush gardens and interconnected halls. Its façade boasts a combination of red brick and white plaster, adorned with intricate stucco work, lattice screens (jali), and chhatris. Iconic domes and minarets crown the structure, creating a distinctive silhouette against the city skyline. Interiors feature high ceilings, carved woodwork, marble floors, stained-glass windows, and period furnishings. A private mosque within the complex highlights the religious and cultural heritage of the Arcot family.

The Nawabs of Arcot and Their Legacy

The Nawabs of Arcot were influential rulers of the Carnatic region under the Nizam of Hyderabad, shaping southern Indian history from the late 17th to the 19th century (New Indian Express). After losing political power to the British in 1855, the Nawabs retained significant social and religious influence. Amir Mahal became the family's official residence and a symbol of their enduring legacy. Today, the palace remains home to the Prince of Arcot, Nawab Mohammed Abdul Ali, who upholds the tradition of interfaith harmony and community engagement (Wikipedia).

Historical Events and Notable Visitors

Amir Mahal has hosted a range of historic gatherings, diplomatic meetings, and religious celebrations. Eminent personalities such as Mahatma Gandhi, Jawaharlal Nehru, and Dr. Rajendra Prasad have visited the palace. The Nawab family's commitment to social unity is reflected in events like the 1991 visit of the Kanchi Sankaracharya, symbolizing Chennai's pluralistic ethos. The palace is also known for its culinary heritage, particularly Nawabi biryani, a favorite among dignitaries and celebrities (South First).

Preservation and Heritage Status

Recognized as a heritage building by local authorities, Amir Mahal benefits from ongoing conservation efforts focused on preserving its original features, including decorative plasterwork, wooden carvings, and historic furnishings (Live Chennai). The palace's continued role as an *active royal residence has helped maintain its authenticity and prevented the wear associated with mass tourism.*

Senate House, Chennai

Robert Chisholm was a distinguished nineteenth-century British architect and is widely regarded as one of the pioneering figures of the Indo-Saracenic style of architecture in India. In the early phase of his career, Chisholm designed buildings primarily in the Renaissance and Gothic architectural styles, reflecting prevailing European tastes of the colonial period. However, his architectural vision underwent a significant transformation when he began to incorporate Indian and Islamic elements into his designs. This transition became evident with the construction of the Public Works Department (PWD) buildings at Chepauk Palace in 1871, where Chisholm successfully blended Indian motifs with Western construction techniques. This shift marked his lasting contribution to the evolution of Indo-Saracenic architecture in South India.

In 1864, the Government of Madras issued an advertisement inviting architectural designs for the construction of a new Senate House for the University of Madras. Robert Chisholm submitted a design that was eventually selected for its grandeur, functionality, and innovative architectural expression. The construction of the Senate House commenced in April 1874 and was completed in 1879. Before the construction of the building, the site housed a saluting battery, which was later removed to accommodate the new structure. Prior to the completion of the Senate House, official university convocations were conducted at the

Banqueting Hall, now known as Rajaji Hall, highlighting the growing institutional needs of the university.

The Senate House has played a significant role not only in academic life but also in the cultural and political history of the Madras Presidency. Notably, the first annual conference of the Madras Music Season was held in the Senate House in 1929, marking an important milestone in the cultural heritage of Tamil Nadu. Furthermore, between 14 July and 21 December 1937, the building served as the meeting place for the legislature of the Madras Presidency, underscoring its importance as a center of governance during the colonial period.

Architecturally, the Senate House stands as a remarkable example of the Indo-Saracenic style, enriched with several Byzantine architectural elements. The structure is renowned for its monumental scale, harmonious proportions, and aesthetic elegance. The Great Hall of the Senate House is particularly noteworthy for its immense height and spaciousness and is widely regarded as one of the finest halls of its kind in India. The hall reflects a careful balance between structural strength and decorative richness, creating an atmosphere of dignity and grandeur.

The interior of the Senate House is distinguished by its exceptional artistic detailing. It features stained-glass windows that filter light into the hall in vibrant hues, enhancing the visual appeal of the space. The walls and ceilings are adorned with rare fresco paintings, intricate murals, and beautifully painted panels, many of which depict allegorical themes and symbolic motifs. These artistic elements not only enhance the aesthetic value of the building but also reflect the fusion of Western artistic traditions with Indian decorative sensibilities.

In conclusion, the Senate House designed by Robert Chisholm stands as a monumental achievement in colonial architecture, representing the successful synthesis of European and Indian architectural traditions. Its historical importance, architectural excellence, and artistic richness make it one of the most significant landmarks of Indo-Saracenic architecture in India and a lasting symbol of Madras's academic, cultural, and political heritage.

The first ever demand for higher education in Madras Presidency was voiced forth in a public address to The Right Honourable Lord John Elphinstone G.C.H., Governor of Madras signed by 70,000 native inhabitants when the Governor in Council was contemplating "some effective and liberal measures for the establishment of an improved

system of national education". This public petition which was presented by the then Advocate General, Mr. George Norton on 11.11.1839 pressed the need for an English College in the city of Madras. Following this, Lord Elphinstone evolved a plan for the establishment of a Central Collegiate Institution or a 'University'. This University had twin Departments (1) High School for the cultivation of English literature, regional language, philosophy and science, (2) College providing instruction in the higher branches of literature, philosophy and science.

The University Board was constituted in January 1840 with Mr. George Norton as its President. This was the precursor to the present day Presidency College, Chennai. However, a systematic educational policy for India was formulated only after 14 years through the historic Dispatch of 1854 (Sir Charles Wood's Education Dispatch), which pointed out the rationale for "creating a properly articulated system of education from the primary school to the University". The Dispatch recommended the establishment in the Universities of Professorships "for the purposes of the delivery of lectures in various branches of learning including vernacular as well as classical languages". As a sequel, the University of Madras, organised on the model of London University, was incorporated on 5 September 1857 by an Act of the Legislative Council of India.

The University of Madras progressed and expanded throughout the nineteenth century to span the whole of South India and subsequently gave birth to and nourished most of the Universities viz., Mysore University (1916), Osmania University (1918), Andhra University (1926), Annamalai University (1929), Travancore University (1937) presently Kerala University, Sri Venkateswara University (1954), Madurai Kamaraj University (1966), Bharathidasan University (1982), Bharathiar University (1982), Tamil Nadu Agricultural University (1971), Anna University (1978), Tamil University (1981), Mother Teresa University (1984), Tamil Nadu Dr.M.G.R.Medical University (1989), Tamil Nadu Veterinary Sciences University (1990), Periyar University (1997) and the Tamil Nadu Dr.Ambedkar Law University (1997). The National Assessment and Accreditation Council has conferred the "Five Star Status" to the University of Madras. It has also been given the status of "University with Potential for Excellence" by the University Grants Commission (UGC).

Self-Assessment Questions

1. Discuss the historical and architectural significance of **Fort St. George, Chennai**.
2. Examine the defensive features and layout of **colonial forts in India** with reference to Fort St. George.
3. Explain the origin and chief features of **Indo-Saracenic architecture**.
4. Discuss the architectural importance of **Chhatrapati Shivaji Terminal, Mumbai**.
5. Describe the artistic and architectural features of the **Victoria Memorial, Kolkata**.
6. Examine the Indo-Saracenic elements of **Amir Mahal, Chennai**.
7. Discuss the architectural significance of the **Senate House, University of Madras**.
8. Compare **colonial fort architecture** with **Indo-Saracenic architecture** in India.
9. Analyse the European and Indian influences in **Indo-Saracenic buildings**.
10. Assess the contribution of **Indo-Saracenic architecture** to India's colonial architectural heritage.