
Background

Architectural Development in Bangladesh

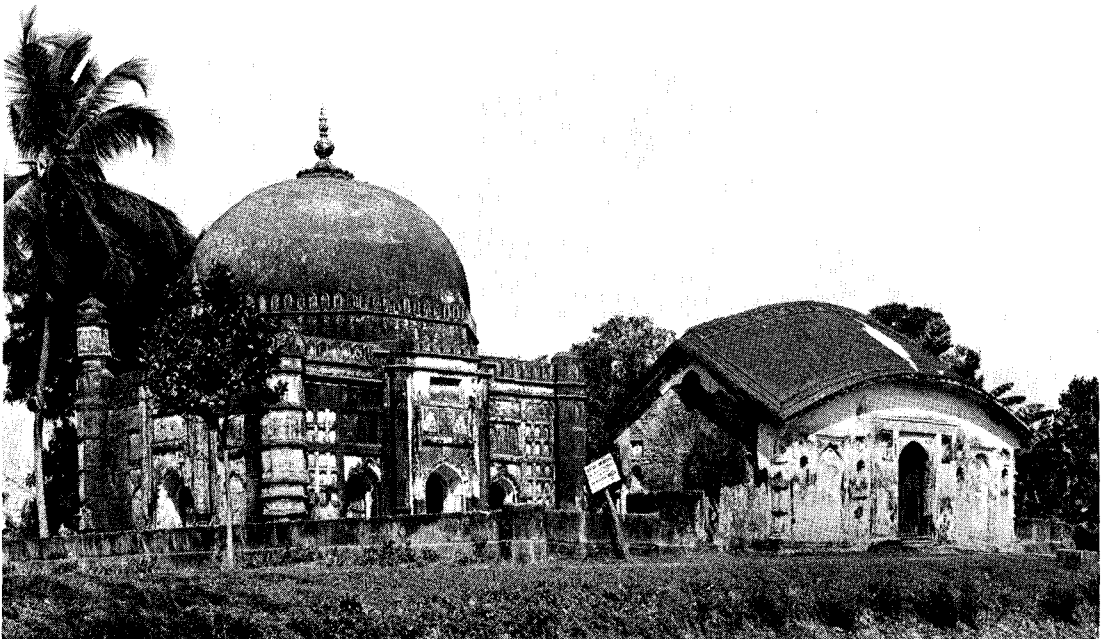
Nazimuddin Ahmed

The peculiar climate and geography of this remote eastern land, more than anything else, have shaped the personality, art, culture, architecture, dress, tradition and the way of life. The land being essentially deltaic and riverine, a rich deposit of alluvium is readily available for the manufacture of brick. This cheap but excellent plastic medium logically encouraged the development of a terracotta art, which, in its variety and richness, can hardly be equalled by any other country in the sub-continent of India. This explains why brickwork has been the building material which dominates the traditional architecture of Bangladesh, often embellished with intricate terracotta art on the surface.

Other pliant indigenous building materials, abundantly available in the region, like timber, bamboo, cane and reed, greatly influenced the



A common rural hut in Bangladesh



Shah Muhammad Mosque (1680), Mymensingh

evolution of a distinctive curvature of the roof and its cornice which when carried across its facade in a series of parallel curves results in the form of a bow. This is the typical architectural style, indigenous to the land, evidently derived from a bamboo framework, adapted to throw off heavy monsoon rain. This characteristic feature, often termed folk-architecture, never rose to classical heights. Nevertheless, the style often transformed into masonry is invested with a freshness and spontaneity, expressive of a rural people keenly aware of the elements of nature affecting their daily life. It is evidently the outcome of ingenious but practical minds.

The pattern of life in this land seems to have remained virtually unaffected over thousands of years. Numerous clusters of villages formed the bed-rock of society, the bulk of which depended on agriculture and cottage industries. The art and architecture of the land was therefore, essentially an expression of an agricultural society who eked out their living from the soil, which profoundly influenced their creations. The rural folk which included a large section of masons, craftsmen and painters, lived a simple life and dwelt in unpretentious mud, bamboo or thatched huts, which in the course of time have completely disappeared. The wealthier urban people, largely depending on the villages, lived, however, a life of pomp and luxury, in substantial mansions and patronised buildings of artistic and religious character. The artistic and architectural development in the country, therefore, can only be studied from the surviving urban settlements and religious edifices.

The religious architecture of the Buddhist-Hindu period may broadly be classified under three main headings: the Stupa, the Vihara and the Temple. The only urban centre, so far partially excavated, is the extensive ruins of Mahasthan, identified with the famous Mauryan (3rd century B.C.) city of Pundranagar. The citadel was heavily fortified by an earthen rampart within which, closely packed dwelling houses of different periods, aligned the irregularly oriented streets.

Most of the pre-Islamic building remains in the country, except for a few groups of laterite and brick-temples of the north Indian *Sikhara* style in Bankura, Burdwan and 24-Parganas in West Bengal — ranging in date between 9th to 12th century — have disappeared in the course of time due to the destructive forces of Nature and Man.

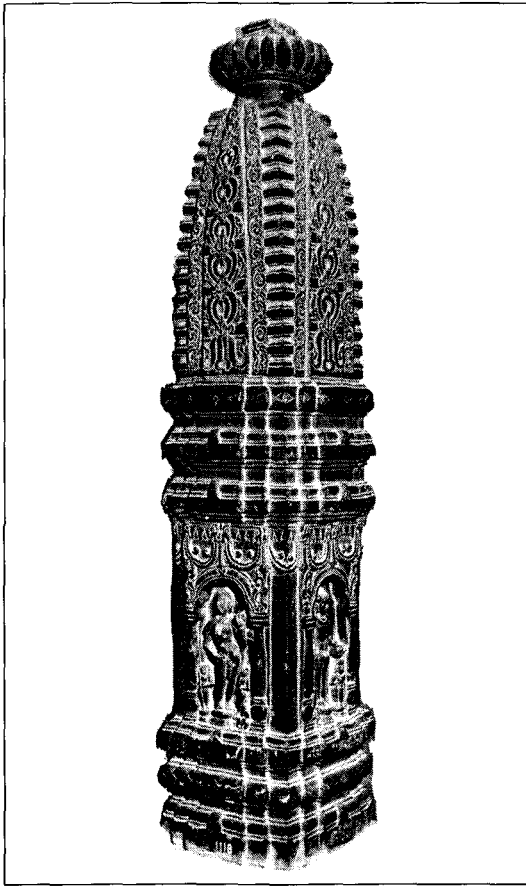
The practice of erecting a *stupa* or a funerary mound over the mortal remains of the Buddha or his disciples appear to be pre-Buddhist in origin but the cult of *stupa* was greatly popularised by the Mauryan emperor Asoka, who erected a large number of these imposing edifices in various parts of his vast empire. The earlier simple form of it was globular with a slightly hemispherical dome which was the original form of

the great stupas at Sanchi, Bharhut, Dharmarajika and Nagarjunikonda. In the course of time this simple form gave way to a tendency towards elongation and height. At the same time its various component parts also underwent additions and alterations and eventually the whole composition assumed a spiral shape, in which the original hemispherical dome lost its dominating effect. Few stupas exposed so far, in Bangladesh belong to this later stage of evolution.

Similarly the irregularly laid out simple monasteries of the early days, consisting of only garden-retreats for the monks during the rainy season, later developed into massively planned, systematic and independent structures under royal patronage. All monastic establishments exposed so far in Bangladesh belong to this late phase of development such as the Pajarpur Vihara, and the monasteries in Comilla, Dinajpur and Bogra, all erected between the 8th and 12th centuries. All these massively built self-contained monasteries resemble defensive fortresses rather than religious and education centres. The most spectacular of these is the 'Mahavihara' at Paharpur, erected in the 8th century by King Dharmapala. It is the largest single Vihara south of the Himalayas.

The extreme rarity of surviving early temples in Bangladesh makes it difficult to follow the various forms which evolved in the country. An idea of their general features can, however, be obtained by examining a few illustrated old manuscripts and reliefs on stone sculptures where the deity is often shown installed in a temple whose outline is carved around the divine figure. Together with these, a few groups of temples — ranging in date between the 9th and 12th centuries, still surviving in Bankura, Burdwan and 24-Parganas in West Bengal, convey an idea of their architectural form. From these it is evident that most of the early temples in Bangladesh belonged to the North Indian *Nagara* style. The first and possibly its earlier type, originating in the 5th century known as *Pida-deul*, consisted of a gradually diminishing roof composed of a series of horizontal tiers with a recess between the two tiers. No such example of this variety survives here today. The other variety, known as *Sikhara* or *Rekha* is distinguished by a lofty curvilinear tower, covering the cube of the sanctum. This later variety appears to have originated as an offshoot of the virile early Orissan style illustrated in the Bankura, Burdwan and 24-Parganas groups in West Bengal. Besides the above two types, a great variety of combinations and elaborations of the two, were later developed in the medieval period.

The few early temple remains discovered in excavation inside and outside the citadel of Mahasthan such as the Govinda Bhita temple, Bairagi Bhita temple and the imposing Lakhindarar Medth, have only their substructure preserved, the



Stone monolithic column

superstructure of all these have disappeared, which makes it difficult to place them in any of the above categories. The high podium of all these temples are built on a series of graded terraces around a high central shaft which is buttressed by innumerable blind cells, packed with compacted earth, resembling a honeycomb. This was, no doubt, intended to strengthen the foundation of a massive and lofty superstructure. The most spectacular of its kind, built in the 8th century, is the lofty Buddhist temple at Paharpur. Its tapering mass of three receding terraces rests on a ground plan which is laid out in the form of a gigantic cross. An imposing staircase facing the only entrance on the north, leads up to a corridor which runs all round the structure and communicates with the four large prayer chambers, placed at each of the cardinal faces of the four projected arms of the cross. These four supplementary prayer chambers are presumed to have contained four colossal bronze images of the Buddha, one of which has very recently been salvaged in excavation in a mutilated condition. This outsize torso of the bronze Buddha, broken below the navel, is over four feet high and, no doubt, represents the largest metal icon, in Eastern India when complete. Its exceptionally delicate modelling of the limbs, refined facial treatment and the diaphanous drapery, reminiscent of the Sarnath tradition, easily ranks it as a product of the ripest artistic creation of the Varendra foundry. The base of this stupendous cruciform shrine with projecting re-entrant angles between the arms, is richly decorated with unbroken bands of terracotta and stone sculptures. This singularly striking architecture, introduced for the first time at Paharpur on a grand scale, profoundly



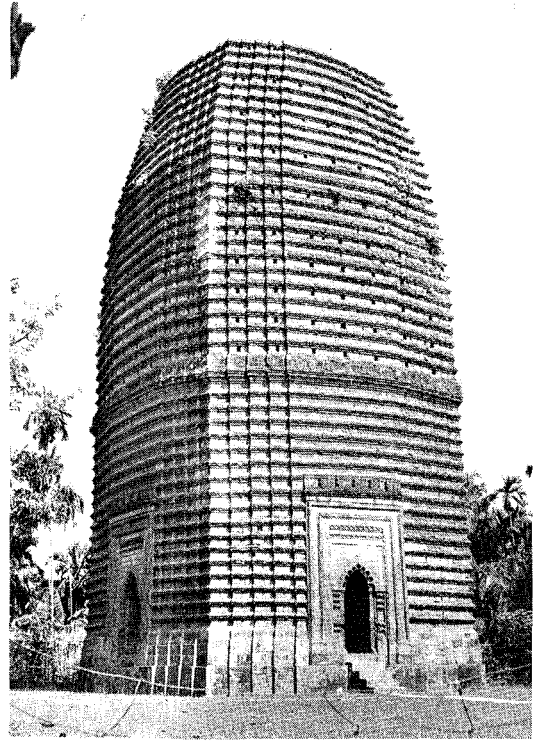
General view of the Central Cruciform Temple, Paharpur (8th Century A D.).

influenced the later temple architecture of South East Asia

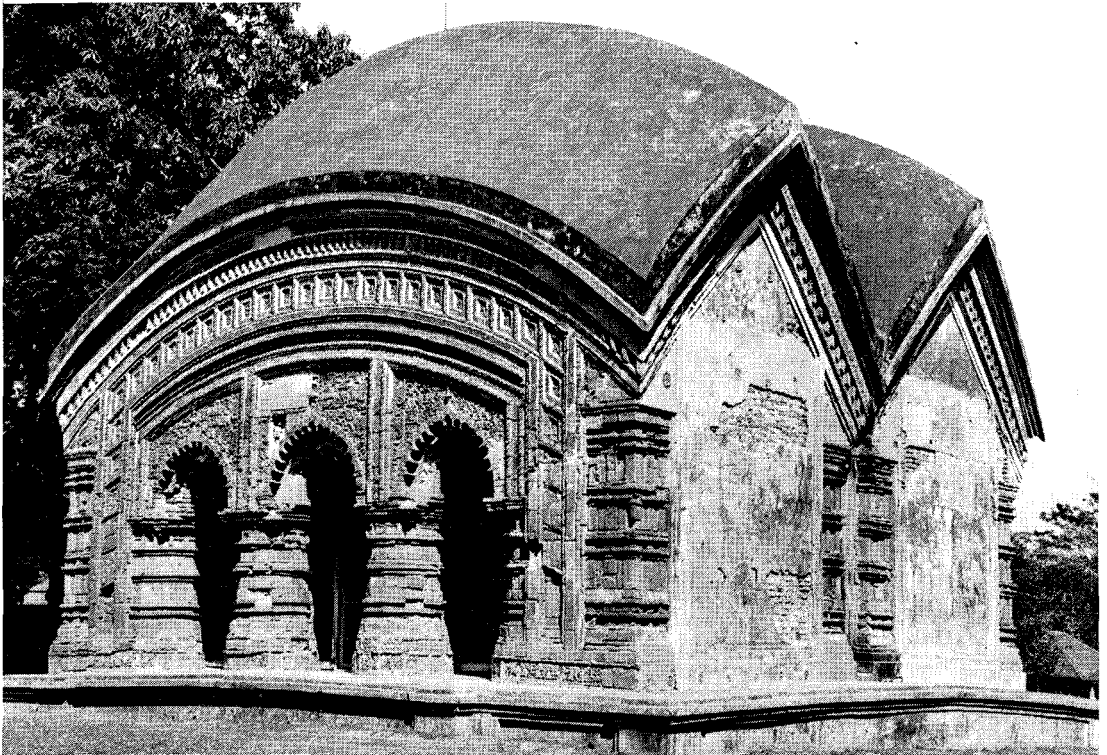
Another indigenous style which developed in medieval Bengal during the Muslim period, under the patronage of various Hindu feudal landlords, was possessed of a freshness and spontaneity of its own which is rarely found in the earlier examples. This style is characterised by a cabin-like profile with sloping roofs, curved eaves and exceptionally stunted pillars, richly embellished with intricate terracotta art

Excellent examples of the 17th century *rekha-deul* type of temples in Bangladesh are the Mathurapur Deul in Faridpur, the Kodla Math near Bagerhat, Sarkat's Math at Mahilara in Bakerganj, the imposing Siva temple at Puthia and the Sonarang temples at Tongibari near Dhaka. The gently curved sikhara of all these temples are relieved with a series of horizontal brick mouldings, bearing floral tracery and mythological episodes from the Hindu Epics and exhibit curved cornice decoration, reiterated from the base to the crest.

The main features of the popular *Bangla* style are a square sanctum, often more than one storey, with a pronounced curvilinear elevation. The plan may be either on an elongated base with only two sloping roofs above, or on a square base with four pitched roofs. A singular hut of this type is known as *Ek-Bangla* while the two together are known as *Jor-*



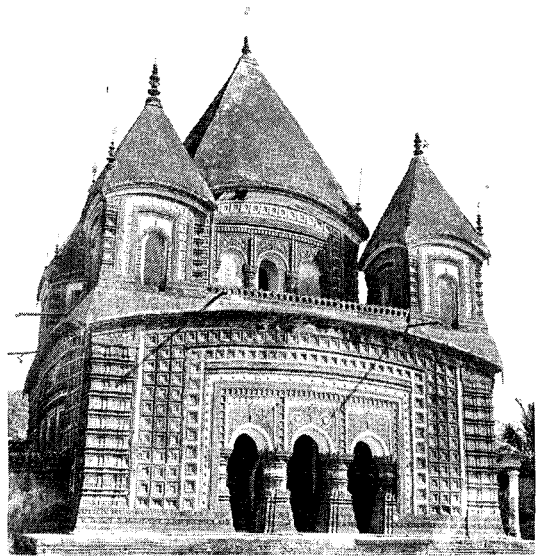
Kodla Math (17th century), Khulna



Jor-Bangla Temple at Pabna Town (17th century)



Aat Chala temple



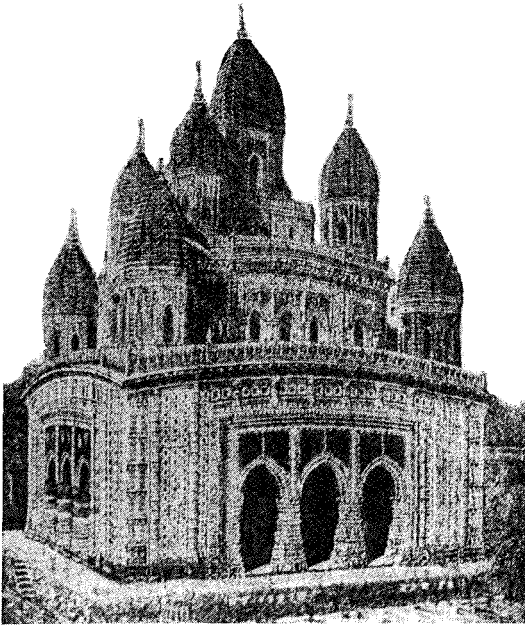
Pancha-Ratna Govinda Temple, Puthia (17th century)

Bangla. A four sided roof with curved cornice on a rectangular sanctuary is called a *Char-Chala* but when a miniature duplicate is repeated on top, it forms an *Aat-Chala* or eight-roofed. Sometimes the receding series of roofs are triplicated, making it *Baro-Chala* or twelve-roofed. The facade of all these temples are invariably covered with a profusion of terracotta floral and figural art. Fine examples of the *Ek-Bangla* temples are to be found within the palace ruins of Bardhankuti in Rangpur, at Puthia near Rajshahi, at Handial in Pabna and many other old sites, while the remains of some elegant *Jor-Bangla* temples may be seen at Dakshin Raghobpur in Pabna town, at Raigram in Jessore, at Mulghar near Bagerhat and scores of others in Jessore, Khulna and Faridpur districts

By adding decorative towers or *ratnas* (literally gems) over the central cella, another distinctive variety of temple architecture was introduced in the medieval period. Clusters of between four and twenty-four such decorative miniature spires, added at different roof levels in groups of 4, 8, 12, 16, 20, 24, etc plus the central tower or *sikhara*, created a wide variety of *Pancha-ratna* and *Nava-ratna* types of temples. Some excellent examples of *Pancha-ratna* or 5-towered temples are the Siddheswari temple at Naldanga and the Govinda temple at Puthia, while the Damreli and Sonabaria temples in Khulna and the Kantaji temple in Dinajpur are beautiful surviving specimens of the *Nava-ratna* or nine-towered style. The only surviving *Satara-ratna* or 17-towered temple in Bangladesh is the imposing octagonal temple near Comilla town. The other variants of the 21-spired temples have all disappeared now

Muslim Period

The building art of the Muslim period, covering more than five centuries, beginning from 1204, may broadly be classified under two phases: the pre-Mughal and the Mughal. The period of its isolation and independence for well over two centuries between 1338 and 1575 is distinguished by the manifestation of strong regional elements on monuments, reflected in a luxurious richness of surface decoration with the traditional art of terracotta and occasional use of intricate stone carving or glazed tilework. Other characteristic regional elements are the curvilinear cornice and the adoption of the multi-domed roof rather than the open court. Most of the important monuments of this period are located in the twin abandoned capitals of Gaur and Pandua, which stretch along between the old course of the Ganges and Mahananda rivers for about 17 miles (27 kilometres) in utter desolation and ruins. The city ruins are now largely situated in the present district of Malda in West Bengal (India) while a small portion is included in the Rajshahi district of Bangladesh. During this period some beautiful monuments in Bangladesh evince a high degree of refinement in terracotta and stone carving and often their domes were gilded with gold. Among the surviving monuments of this Sultanate Period (1338–1575), the tomb of Ghiyasuddin Azam Shah at Sonargaon, the tomb of Khan Jahan at Bagerhat, the Shait-Gumbad Masjid, the Mosque of Baba Adam near Dhaka, the Small Golden Mosque at Gaur in Rajshahi, the Bagha and Kusumbha mosques in the same district, are excellent examples. In this period however, a



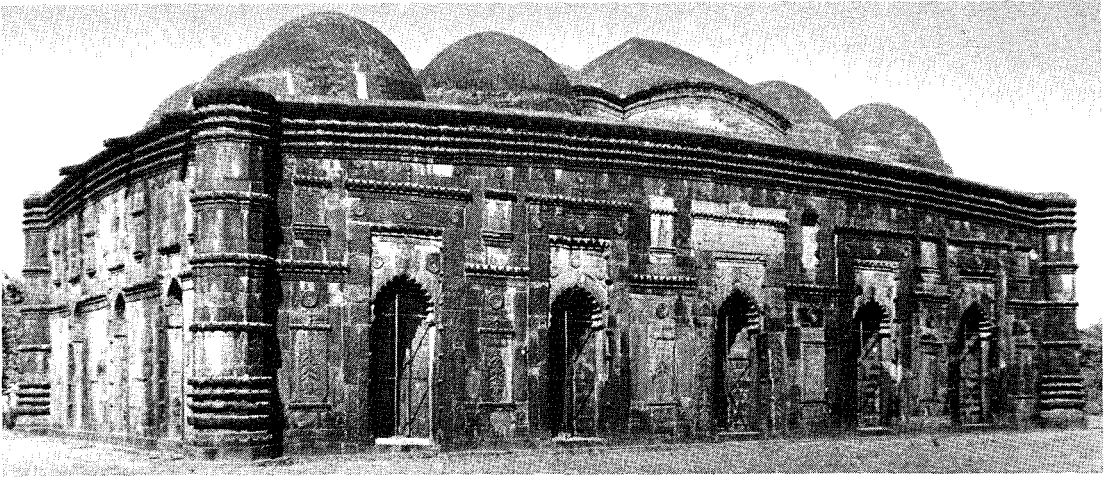
Kantanagar Temple, before earthquake damage in 1897 A D

homogenous group of buildings erected at the present site of Bagerhat in the south by Khan Jahan, in the mid-15th century, stand apart from the rest. The old city of *Khalifatabad* (present Bagerhat) was systematically laid out around the largest multi-domed mosque in Bangladesh, known popularly as *Shait-Gumbad Masjid*. The building art of Khan Jahan is characterised by its austere simplicity, massive tapering walls and bastion-like round towers which closely resemble the more famous Tughlaq architecture of Delhi.

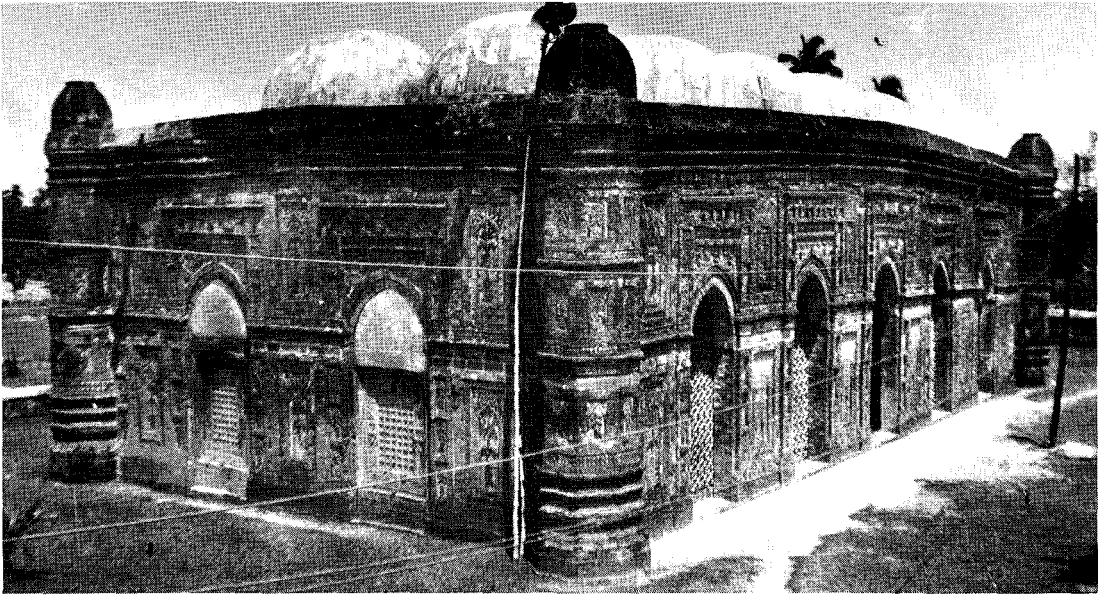
Some of the monuments erected in outlying areas of Dhaka during the early Mughal period demonstrated a happy syncretism of the pre-Mughal features with the new imperial Mughal features which, indeed, characterise a transitional phase. The finest example is the *Atia Mosque* in Tangail where the cornice is deeply curved while the wall surfaces, except on east and the corner turrets, are covered with plaster panels. The eastern facade and the *mihirabs* are richly embellished with beautiful floral scrolls. Both the pre-Mughal and Mughal architectural features are fused here harmoniously to present a very pleasing appearance.



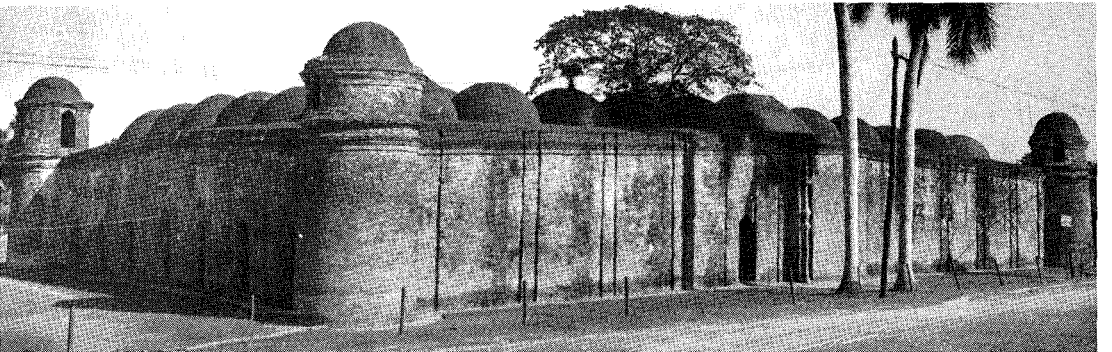
Kantanagar Temple, after repair of damage by earthquake in 1897 A D



Small Golden Mosque, Gaur (Rajshahi), 1493 A.D.



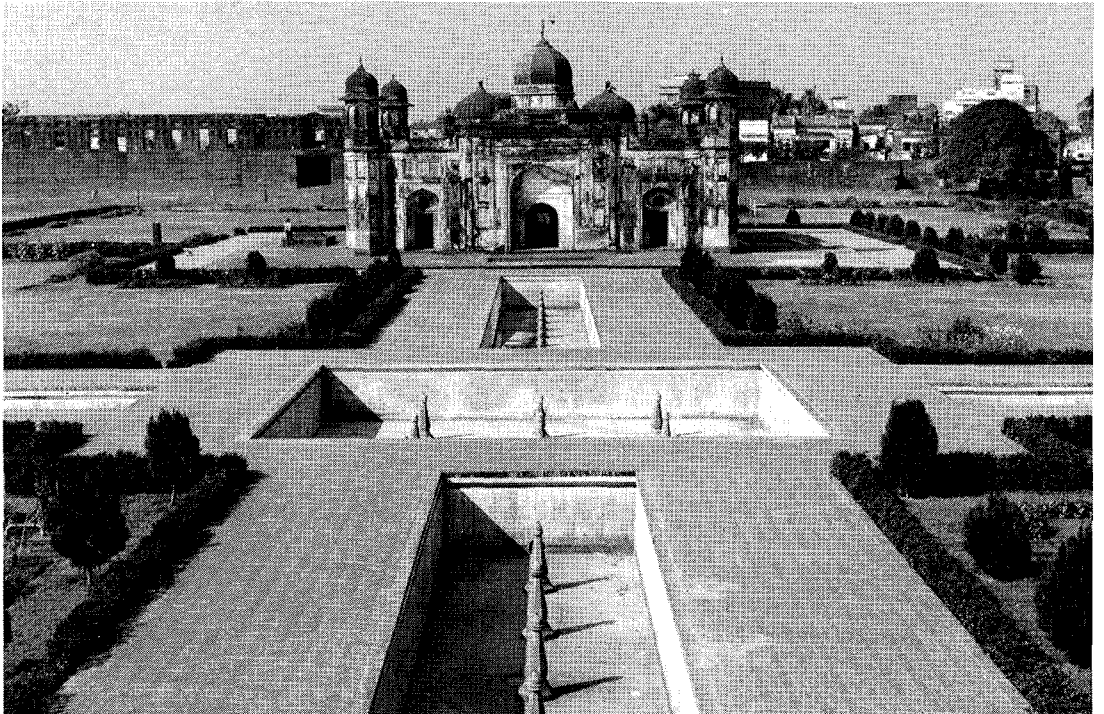
Bagha Mosque, Rajshahi (1523)



Shait Gumbad Mosque, Bagerhat (C. 1459)



Atia Mosque (1609)



Bibi Pari's Tomb within Lalbagh Fort, Dhaka (17th century)

Mughal Period

With the advent of the Mughals in 1575 and enforcement of political centralisation, a uniform Mughal style in the building art was ushered in which largely discarded the indigenous elements. Chief elements introduced by them included dominant central domes and tall axial entrances, set in a central projecting bay for emphasis, while the entrances themselves were inset in taller half-domes. The fundamental change in the decoration of their buildings was brought about by discarding the age-old art of terracotta and replacing it by reiterated plaster panels. The typical curvature of cornice and battlements of the earlier phase was also abandoned in favour of straight horizontal parapet

Important architectural legacies of the Mughal period in Dhaka are the Bara and Chhota Katras, the unfinished Lalbagh Fort, the unique tomb of Bibi Pari, Sat-Masjid, and a very interesting series of river forts in Munshiganj and Narayanganj near Dhaka. The Lalbagh Fort, built in the typical provincial Mughal style, contains within, a number of handsome buildings such as the Audience Hall and the Hammam of the Governor, a small, elegant 3-domed mosque and the striking tomb of Bibi Pari — the reputed daughter of Governor Shaista Khan. The unique tomb of Bibi Pari is the only monument in Bangladesh where marble from Rajputana, black basalt from Rajmahal and glazed tiles have been used to decorate the interior of its 9 chambers, whereas the roofs of the chambers are spanned by massive overlapping courses of black basalt slabs using the principle of the corbel. The mortuary chamber is covered outside by a false copper dome in order to attain balance to the otherwise flat unimposing composition.

Among a series of river forts, built in the 17th century with the aim of protecting the river route to Dhaka against the recurring raids of the Magh and Portuguese pirates, the Idrakpur Fort in Munshiganj, about 15 miles south east of Dhaka, is a typical example. It is an oblong Fort, with a circular bastion at each corner, filled solidly with earth to the rampart level, above which runs the battlemented parapet, liberally pierced with loop-holes for musketry. A striking feature of this fort, common to others of the group, is an enormous circular bastion, facing the river, which evidently was used for mounting high calibre cannon and also as watch tower. Two others of the series on either bank of the river Sitalakhya are to be found at Hajiganj and at Sonakanda in Narayanganj.

British Period

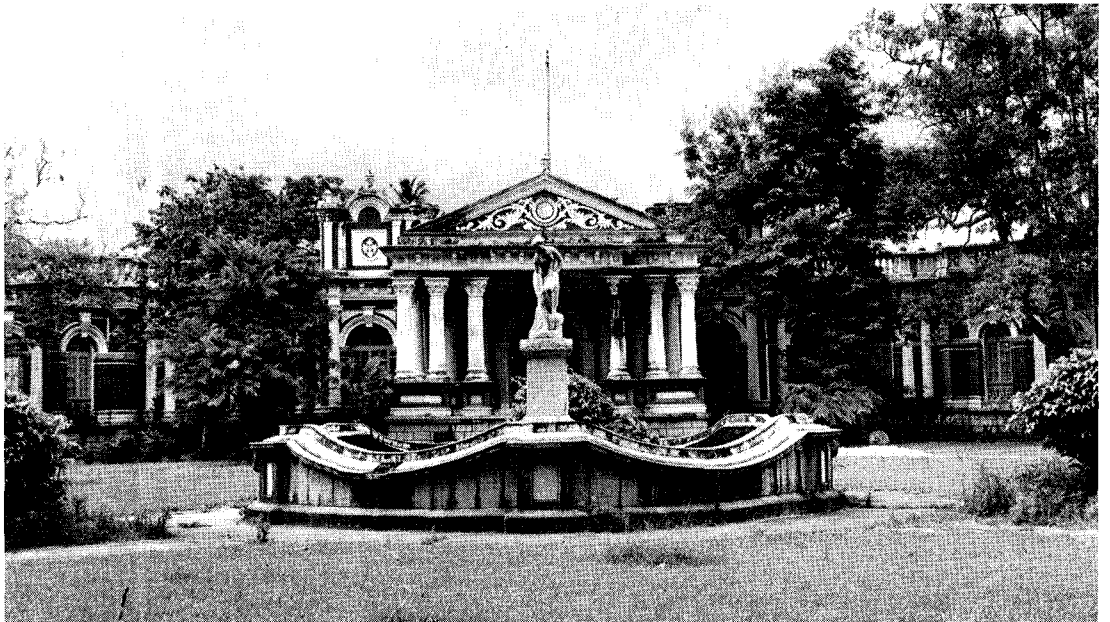
With the establishment of Calcutta by Job Charnock in 1690 it grew rapidly in importance around the moat-girdled Fort William during the initial period of British ascendancy to political power in India. In fact, Calcutta was the British capital of India from 1773 until 1912. As a consequence, most of the grand monuments of the British period, covering about two hundred years, were erected in and around the great city. Some of the finest buildings of the Colonial period sprang up in Calcutta such as the Vice-Regal House, the Belvedere House, the Indian Museum, the Writer's Building, the Victoria Memorial and a nucleus of imposing 18th century commercial and banking premises around Chawringhee, Dalhousie Square and Clive Street. Bangladesh with its vast agrarian base and very little urbanisation or industry, drifted in isolation and neglect during this period, feeding Calcutta and its industrial belt along the Hoogly river as a rich hinterland of raw materials. Some monuments erected here during this period are however historically and architecturally significant.

The building art of the British period passed through a succession of phases. The European Renaissance Style appeared in the 17th century, initially in the churches of Dhaka, and later was applied to secular buildings. In the later part of the 18th century and 19th century another phase developed in which buildings with semi-octagonal or round corners and tall Doric Columns gained popularity. The revival of the Classical Graeco-Roman architecture, adopted in medieval Europe with its salient 'Orders' classified under Tuscan, Doric, Ionic, Corinthian and Composite, became very popular in Bangladesh. This may be studied on a series of feudal palaces in the outlying areas and some buildings in Dhaka. One is impressed by the striking resemblance of many feudal palaces here, especially the Baliadi, Puthia, Ahsan Manzil (Dhaka) and Dubalhati Palaces, with the famous Senate House in Cambridge (1722–30), although these have been considerably modified and enriched by local conditions. The new architectural elements introduced during the 19th century were the semi-circular arch, the triangular pediment carried over semi-Corinthian, Doric or Ionic columns and other foliated motifs in plaster. A typical example of it is the imposing Ahsan Manzil (1872) of the Nawabs of Dhaka, the Old High Court Building, and the unusual little Greek Memorial inside the Dhaka University Teacher-Student Centre.

In the late 19th and the early 20th centuries a new hybrid Mughal and European style emerged in the wake of the first partition of Bengal (1905), largely under the influence of Lord Curzon, a great admirer of the Mughal art and architecture. Notable examples of this elegant syncretic trend may be noticed at the



Ahsan Manzil, Dhaka (1872)



Mymensingh Rajbari, entrance facade (1905)



Curzon Hall (1904)

Northbrooke Hall, Curzon Hall, Dhaka Medical College, Salimullah Muslim Hall — all in Dhaka, and at the Carmichael College in Rangpur.

Post-British Period

With the Partition of the sub-continent into India and Pakistan in 1947, this region entered into a feverish era of building activities in order to fulfil the need of the expanding capital of the province. These were mostly of utilitarian type, common to all modern cities, without the splendour of the old monuments. These are characterised by the liberal use of reinforced concrete for high-rise buildings with straight horizontal vertical lines dominating the profile. However, there are a few silver linings in the new trend of stereotyped modern architecture. The Baitul-Mukarram Mosque, located close to the Stadium in Dhaka is one such bold concept given a masonry form. The main four-storeyed prayer hall has been set out in the form of an enlarged cube of the sacred Ka'aba, while its ancillary cloisters and the elevated



The Greek Memorial within T S C , Dhaka (1800).



Baitul Mukarram Mosque, Dhaka



Adamjee Court, Dhaka



Kamalapur Railway Station, Dhaka.

entrance bear Islamic traditional arches, domes and fretwork in plaster. The other successful experiments are the Bangla-Bhavan (Government House), the grand new High Court Building and the new Kamalapur Railway Building.

The striking layout and architecture of the Sher-e-Bangla Nagar in Dhaka occupy a very important place in the milestone of architectural development in the country. Its master plan, prepared in 1965 by the American architect Louis Kahn, is often described as a township built with the *rhythm of bricks*. The whole scheme of planning pivots around the gigantic octagonal concrete block of the multi-storeyed National Assembly Building, facing south to a plaza. The outer octagon, rises to a height of 105 feet (32 metres) while the inner circular block, relieved at 10 feet (3 metres) interval with continuous parallel bands of marble, shoots up to a height of 155 feet (47 metres). The nuclear block of this National Assembly, also known as the citadel, is encircled diagonally on the south-east and south-west by an artificial lake which gives an atmosphere of its floating in water — an atmosphere so familiar in riverine Bangladesh. Aligned on its banks are the ancillary blocks of residences of high Government officials. This unique building — the only solitary concrete block in the whole scheme of otherwise red brick buildings surrounding it — dominates the entire layout with its lofty height and imposing mass

In designing various buildings within the Sher-e-Bangla Nagar, this region's traditional brick



National Assembly Building Sher-e-Bangla Nagar, Dhaka

architecture has been uniformly and extensively used where stylised Islamic arches and vaults constitute functional elements rather than merely ornamental. Geometric forms such as triangles, rectangles, full and segmental circles and flat arches find free play in the architecture. The scrupulous avoidance of all sunshades and roof protections have created a monumental effect but their disadvantages have been effectively redeemed by the provision of core-walls with a small gap in between, in order to protect

against the inclement weather. The fundamental character of architecture here is monumental, an adaptation of Islamic architecture, and in that sense, it marks a distinct departure from the rest of modern building and is deeply imbued with the age-old tradition of the land which springs from its climate and geography

All photographs courtesy of Nazimuddin Ahmed