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The Evolution of the Traditional Bengali Mosque

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Abstract: The amalgamation of two diverse cultural traditions, ensuing ethnic-religious reforms, extant traditional practices, and their cumulative effect on the built fabric has always proved a challenging frontier for historians, archaeologists and architects. The social engine gears itself up to tilth the beautiful harvest of cultural cross-breads that has sprouted up ubiquitously. The *hoi polloi* struggle to make sense of the multitude of foreign modes and ideas, the obtrusiveness of conflicting preaching, and the adoption of traditional mores into the accepted structure of the reigning institution. The magnitude of the impact is placed in perspective when one considers the evolution of one particular building type that not only subscribes to a particular religious institution, but also assumes the role of a vanguard of all subsequent changes of the age. As a result, we are witnessing a unique cultural transformation and a concomitant change in architectural features, techniques, materials and workmanship.

Introduction

In the context of the symposium, a relevant question is: Why should we choose 'Bengal'[1] as a novel setting to trace the historic evolution of Mosque Architecture? Clearly our attempt to trace the development is not just to create an Inventory of mosque-types in a particular geographic region, but to demonstrate the interplay of those forces that will ultimately shape the built fabric.

Islam was born and nurtured in a land (Arabia) where there is not a single permanent river but a network of wadis (valleys) which carry off the occasional rainfall. [1, p.469] Contrast this with flood, forest and family that the Bengali learns to grow up with. Strong river currents, an equally strong kalbaisakhi (northwesterly storms), and a relentless monsoon deliver their indelible impressions on the Bengali conceptions of time, place and destiny. It was therefore fundamentally necessary for the complete adoption of Islam - its moods, symbols and values as well as its conceptions of divinity described by the Quran in desert based allegories into the Bengali cultural universe. [2]

The introduction of Islam offered a wonderful opportunity to observe the orchestration of a harmonious symphony of foreign and local architectural traditions. Seven hundred years of Islam in Bengal have produced a greater variety of buildings than can be seen anywhere in the subcontinent, a testimony to the genius of the Bengali Architect. [3] Specifically, our interest centres on the impact of regional factors on the evolution of Mosque Architecture.

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[1] In this paper, the name 'Bengal' denotes the undivided Bengal immediately before the partition in 1947. Although British references [38, p. 1] refer to 'Bengal' as containing "four large sub-provinces: Bengal proper, Bihar, Chota Nagpur and Orissa." A few mosques in the above regions may bear traces of the Bengali characteristics discussed in this paper, but they are beyond the scope of our study.

The Architecture of Bengal forms a distinct school of Islamic Architecture. Awareness needs to be generated regarding its aesthetic and sublime virtues that are quietly mingling to dust.

The introduction of Islam to Bengal has not only enriched the region architecturally but has enhanced life quality. In this regard, the development of the Bengali Mosque as a religious as well as cultural institution is of axiomatic significant.

- Muslim culture is both humanistic and religious. [4, p.61] It relied on Sassanian and Byzantine schools because they were its sources.
- It seems probable[2] that the institutions that would make possible the emergence of a "regional identity" in Bengal did not come into existence before the thirteenth century. When we first have information about the inhabitants of the Delta, they appear as linguistically and culturally diverse population. Bengal was thus composed of a heterogeneous mass of people awaiting powerful Delta wide institutions that were backed by financial and military resources. These, the Muslim rulers[3] would ensure.
- The Introduction of True Brick Arches, mortar, plaster, domes and arabesque decoration all owes its origin to Persian Islamic sources. In fact Muslim Persia can also be accredited with dissemination of the vaulting system as an integral part of architecture. [5]

In the context of creation of a permanent structure of worship (here, the Mosque) the following constraints need to be highlighted:

- The Bengali people were amiable agrarian rural folk ruled by feudal lords who could not have afforded very ambitious plans.
- The inherent weakness of the building materials (clay, bamboo, reeds) used in this region.
- The soft and alluvial formation of the land with its damp climate and excessive rainfall. This had a deleterious effect on buildings.
- The rivers with their swiftly changing courses. [6,pp.5-9]

In contrast with the task of constructing a time-daring edifice of worship, was the pagan attitude of the impermanent in nature. [7,p.7] Nobel laureate Rabindranth Tagore has delineated the backdrop of Bengal in his ever eloquent charm: "... the river lost its sliminess, scattered its current in many directions, and spread out finally into a beel (marsh) where here a patch of grassy land and there a stretch of transparent water, reminded me of the youth of this globe when through the limitless waters, land had just begun to raise its head, the separate provinces of solid and fluid as yet undefined... [8, p. 1 5] (Fig. 1)

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[2] The early political, cultural and commercial centres lie on the confluence of the major rivers or where the rivers provided ready access to the sea. There was no strategic centre for the whole of the Delta until the rise of Vikrampara in the tenth century. According to Morrison [39, pp. 1 3-14] it seems that at the level of sub-regions of the Delta it is quite possible that a distinct local culture began to emerge with the continuity of the Dynasties with the settlement of the Brahmans or the foundation of Buddhist monasteries.

[3] For a chronological listing of the Muslim rulers of Bengal seethe article for the Imperial Gazetteer [38, pp 24-25].

The Pre-Muslim Bengali Heritage

Since pre-history[4], the Bengali Man has been trudging his own path, and there is evidence [9] that he had attained a highly developed state of Art[5] at least three centuries before the Christian era.

Numerous descriptions discovered from North Bengal and dating from the Gupta period refer to temples and monasteries, while cities with magnificent buildings and imposing religious establishments are mentioned in literary works like *Ramacharitra of Sandyakara Nandi*. [6, pp. 2-3]

Herman Goetz rightly remarks "in the East, Bengal and Bihar, loyal to Buddhism and the Gupta art tradition, formed a cultural province almost distinct from the rest of India..." It is gratifying to note that a distinct school of Eastern Art developed under the patronage of the Palas as evident from the numerous Buddhist temples and stupas namely the Basu Vihara at Mahasthan and the Sonapur Vihara at Paharpur. [10, p.3]

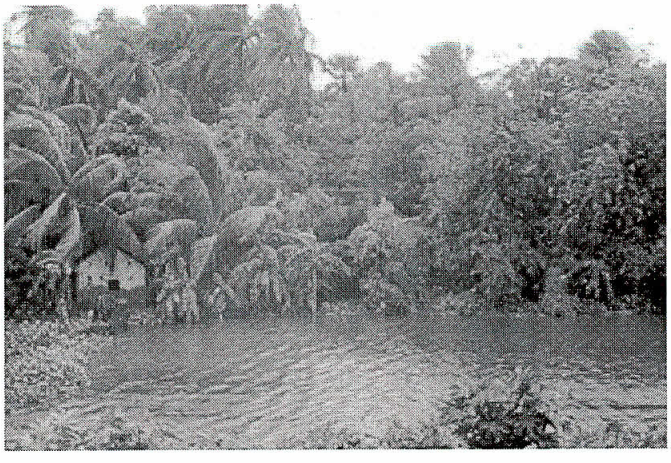


Fig. 1: A hamlet in Hooghli.

The various factors of pagan Folk Culture that distinguished the socio-cultural patterns of the Bengalis from the rest of the Indian sub-continent is:

a) As oppose to Brahmanism of the North, the religion of the Bengali people was founded upon bedrock of Tantrik beliefs and practices that were mostly of PreAryan origin. [1 1, pp.3-7] Tantricism put its emphasis on both yoga (meditative self-control) and *bhoga* (enjoyment) rather than austere penance and ritual of the North.

b) Goddess worship (Shakta culture) is highly concentrated in Bengal. The Goddess shrines are usually small and inconspicuous, [12, p 10] but nevertheless places for intimate social gathering[6]. Later

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[4] Although we are yet to find fossilised remains in West Bengal, human handiwork as hand-axes and choppers does bear evidence of the presence of Prehistoric Man in the region [40]. There is no conclusive connection as yet established with the Indus Valley Civilisation.

[5] The Archaeological miscellany supported by miniature paintings and literary evidence indicate that the buildings of ancient Narendri (North Bengal) were massive and highly ornate in character, and that a distinguishing feature of the style was an invariable use of the trefoil arch [9,p.9].

on, Chaitanya (1486-1534) was to expressly enunciate these sentiments of intimacy and *bhakti* (devotion). In fact, according to Saraswati [6, pp.7-9] "Bengalis looked upon the Gods and Goddesses as their near and dear relations".

c) Under the Palas, Bengal established a distinct ' identity in folk traditions, as exemplified by miniature painting. These differed from the classical in the simplicity and boldness of form and colour scheme, and elimination of unnecessary details. [13, p.50]

In the light of this socio-religious background, it is no wonder that Bengalis have favoured monolithic architecture, bold in its form yet low-hugging and intimate. [14] (Fig. 2) Contrast this with the Quwat-ul-islam Masjid at Delhi where Muslims piled up column upon column to portray the grandness of the edifice of the new region.

Pre-Muslim building tradition is summed up by A.H. Dani: [15] "The remains uncovered at Mainamati, Paharpur and Mahasthan definitely speak of a pattern in which angles and facets, recesses and projections, strong corners and deep mouldings play a dominant part. Everywhere the attempt is to create a heavy architecture with utmost care to have solid foundations and massive towers."

The Provincial Style

Muslim sovereignty of Bengal was established in the year 1203 A.D., when Lacknavati known as Gaur was capital. Md. Bhaktiyar Khilji, the Viceroy of Mohammed of Ghor defeated Laxman Sen, the Hindu king of Bengal. [16] Thus was established the vital link with the Delhi Sultanate during 1204-1338 A.D. Although the initial Mosques borrowed heavily from the earlier Hindu temples, the contribution of this period is fundamental in its introduction of the Islamic expertise in Mosque Architecture.

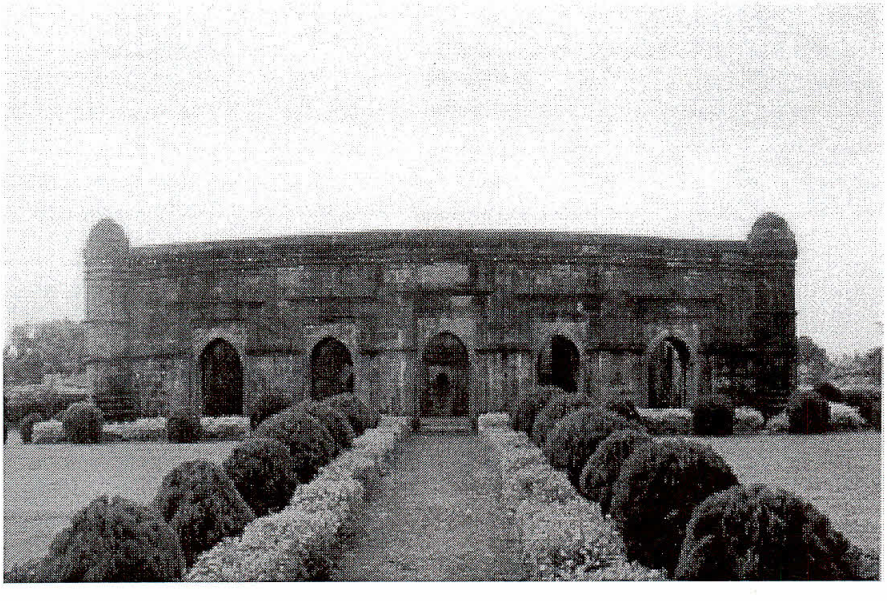


Fig. 2: The reposeful façade of the Qutub Shahi Mosque H. Pandua (15183 AD.).

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[6] Describing the Chandi Temple at Orissa, Preston writes... people talk freely in the temple. They purchase offerings, meet old friends, and watch each other come and go. Men are usually found sitting on platforms night after night observing people, gossiping, exchanging ideas, and absorbing the religious atmosphere. [12, p.49].

Introduction of The True Arch: Nowhere else in the Indo-Pak-Bangla subcontinent has the pointed arch been used so extensively and persistently than in Bengal, where the deep-seated tradition of accurate in place of buildings from Persia and Central Asia had a dominating influence on the formation of the typical style of Bengali Muslim Architecture. [10, pp. 1-22] Also, Muslims acquainted the Indian masons with the use of Mortar, which gave a lot more flexibility in the use of bricks (Fig. 3).

Introduction of Islam

Stalactite Pendentives: Typically seen in the form of solid corner brackets corbelled out of the walls and occasionally carved with smaller niches in almost all subsequent mosques in Bengal up to the 16th Century. [5, p.48]

Multi-domed Oblong Mosques: The kind of structure seen in the Mosque of Zafar Khan at Tribeni (1298 A.D.) (Fig. 4) can be traced back to the Persian multi-domed monuments, as observed in the Masjid-i-Jami of Isfahan (1 1 th century A.D.). [5, p.49]

The development of the Bengali Vernacular Tradition was resuscitated by the political unification and consequent independence of Bengal. Unification was finally achieved in the reign of Ilyas Shah (1342-57 A.D.) when a political definition was given to the region for the first time. Under the succeeding rulers, especially the Sultans of the Husain Shahi Dynasty (1493-1538 A.D.), Bengal controlled by an increasingly central administration.

The Sultans appealed to the regional spirit of the people and even encouraged the new literature and architecture by acting as patrons. Thus was initiated a dynamic interaction between Muslims and Hindus, in which many cultural factors came to be adopted by Muslim rulers. [17, pp. 3-4]

The characteristics that gave shape to the Provincial Bengali Mosque are innumerable and unique in themselves.

The Plan

The plan of the interior of the Mosque consisted of an arrangement of arched bays covered by small domes. In general, there was no courtyard, and verandas were preferred. Ahmad H. Dani [15] broadly classifies the Pre-Mughal Mosques into four basic types:



Fig. 3: The arched façade of the Adina Mosque, Pandua (1374 – 75 AD).



Fig. 4: Dome and Mehrab, Ghazi Mosque, Tribeni (1298 AD).

i) Single-domed (usually square in Plan) e.g. Molia Simia Mosque, Hooghly District dated 1377 A.D.

ii) Single-domed with a veranda in front (the veranda being a prototype Bengali Veranda with curved roof) e.g. Lattan Masjid, Gaur,[7] Malda District, dated 1480 AD. (Fig. 5)

iii) Multi-domed (rectangular in plan with or without corridor) e.g. Bara-Sona Masjid, Gaur, dated 1526 A.D.

iv) Multi-domed with large central nave: this was sometimes covered with a barrel vault as in the Adina Mosque, Hazrat Pandua, Maida dated c. 1374 A.Dor with a chauchala hut roof as in the Chota Sona.Mosque, Gaur, Rajshahi, dated c. 1493-1519 A.D.

The Bengal Roof

In the equatorial tropics, the roof is the most important element of the house from the point of view of climatic protection. [18, p.9] The simplest form of the domestic hut is an elongated base with two sides to the roof, and gable ends. As built in East Bengal, where it is most commonly found, it consists of a bamboo frame filled in with jute stalks, reed or lattice-work and a thatch roof curved both along the lower edges and the ridge, giving it a humped appearance. This design is referred to as *ekbangla ordochala.* [19, pp.4-8] The Bengal roof form with crossed curved ridges curving on all four sides is called the *charchala.* In order to capture the symbolic association of the 'Bangla Roof' in permanent materials, the Bengali Architect conjured an unparalleled array of Architectural Imagery, in basalt, brick, and terra cotta. (Fig. 6)

- A process of khilan (centering) made the roof doubly sloping possibly using bamboo shuttering to give the desired curves. Thin bricks (hardly 5 cm. thick) were cut into wedge shaped pieces and placed to fit in like a jigsaw puzzle.
- The curvilinear cornice was also utilitarian in a region of heavy rainfall. This possibly drew its inspiration from bamboo structures with drooping eaves.
- To support the huge roof-form both visually as well as structurally, corner posts were projected out of the walls, and are reminiscent of the bamboo/wooden struts holding the roof and tied by lateral binders to take the horizontal shear.
- In continuation with this Bengal-Hut Metaphor is the treatment of wall surface with a variety of offsets and recesses, and above all the numerous lines of mouldings, recalling the wood and-wattle panels. [15]

Two-centred Arches

The adherence to the two-centred pointed arch springing from the side-pillars appears to have its natural counterpart in the bamboo original where the tying together of two bamboos tightly produced this form. [15] Brick, the traditional material of the Bengalis responded gracefully to the formation of the arch. It can also be presumed that the massive vault of the Adina Mosque is also an experiment in this direction as Percy Brown called it the & earliest example of a form of construction very rare indeed in Indian Architecture." [20, p.37] (Fig. 7)

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[7] The term 'Gaur' is derived from growing vernacular the common name for molasses or raw sugar for which it is known [41,p.30]. Today, Gaur is divided by an international border partly into the Rajshahi district of Bangladesh, and partly into the Maida district of India.

Pillars

As described by S. K. Saraswati [6, pp.99-110] pillars of the pre-Muslim period were vertically divided into three-sections: the base, the shaft, and the capital; the first and the last being square and the second octagonal. From the Kamboja Pillar at Bangarh (West Dinajpur), we can deduce that the pillars were rather stout, with high richly ornamented bases and projecting capitals. This pre-Muslim enriched the Bengali Mosque by its singularly indigenous quality. In describing the pillars bearing the takht (raised platform) of the Adina Mosque, (Fig. 8) Percy Brown comments: "... they (the pillars) are very short, ponderous piers rather then pillars, abnormally thick, square above and below, and surmounted by massive bracket capitals. Pillars of a similar type are found in other buildings in Bengal, but are seen nowhere else in India, and are unique" [20, p.36]: A tribute to the individuality of a craft having its lineage from the Palas.

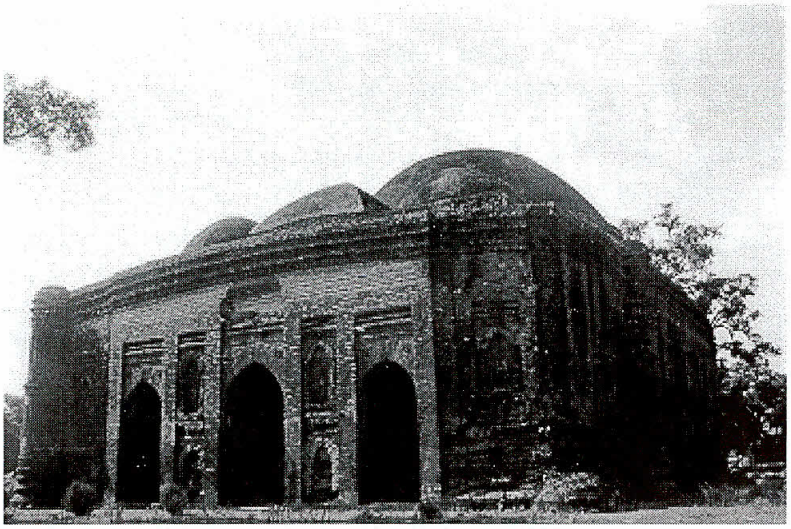


Fig. 5: Ribbed vault over the verandah, Lutton Masjid, Gaur.



Fig. 6: Corner Turrets framing the curved cornice, Lutton Masjid,Baur. (Late 15th century AD).

Brick Pendentives[8]

The small domes raised over the bays of the Provincial Mosque were supported by pendentives of an "interesting kind" [20, p.37]. These pendentives consist of horizontal rows and bricks set in oversailing courses corner-wise and edge-wise alternatively giving an appearance of a delicately carved pattern in high relief. (Fig. 9) This technique appears to be novel in its kind, and many be considered as one of the most distinguishing features of the Sultani Architecture of Bengal. [21, pp.5-6] This is beautifully illustrated in the remaining 11 (of the original 44) domes of the Bara Sona Masjid (1526 A.D.) at H. Pandua. [22, pp.45-49]

Terracotta Ornamentation

Terra Cotta literally means burnt earth. An unromantic- sounding material was employed in a splendid *coup de grace* of the llyas Shahi and Hussain Shahi Mosques. An almost endless variety of motifs including general arabesque patterns could be crafted in terracotta. (Fig. 10) [21, pp.4-5] The most outstanding exemplary Mosque bearing this style of ornamentation is the Chota Sona Masjid (c. late 15th century AD), aptly termed as the gem of Gaur. Its balanced adjustment of proportions, compactness, and ornamentation make it the "finest testimony to Muslim building art." [23]

Clay suitable for the purpose of making plaques and panels is known in colloquial Bengali as entel meaning loamy soil with the desired adhesiveness or binding qualities. Pure clay with its adhesive tension has a tendency to crack when placed in a kiln for baking. It is therefore necessary to mix fine-grained sand or rice -husk in a proportion 2:1 in order to create pores for the heat to breathe out without damaging the plaques or panels. [7,p.32]

In Paharpur and Mainamati plaques, the process of modelling had been adopted where bits of clay pellets were added gradually to build up a form from the background of the clay panel. But terracotta taken up extensively for the mosques of the Sultanate periods was not in the bold, vigorous Paharpur style, but sharp-edged in neat shallow relief closer to Pala stone carving or Middle-Eastern stucco. [19, pp. 13-14] The method and execution of the plaques was quite opposite to the Paharpur style.

According to a method described by P. Dasgupta, [7, pp.33-42] the clay is prepared to the required consistency by a process of kneading and flattened to the shape of tiles of the required thickness. The design is transferred by tracing it on the face of the plaque or panel when it has somewhat dried but soft enough for the drawing to be inscribed.

After this is done, the plaques are further dried on the sun to bring to a stage where the *Sutradharormistri (masonlcraftsman)* can start scooping or taking out the unwanted portion along the exterior side of the drawing or the design, with the help of a sharp knife-like instrument, either made of steel, wood or bamboo. It should be pointed out here that in the panel decoration, sometimes one complete motif is depicted in single terracotta, and sometimes the whole scheme is joined together by marvellously engineered pieces. The central motif of the panels is generally made of thin terracotta, while the border motifs are mostly depicted on the edges of thick brick-sized terracotta used also as building materials. [21, pp.4-5]

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[8] For a definition and discussion on 'Pendentives' see D. Jones and G.Michell "Squinches and Pendentives: Problems and Definitions", AARP, 1(1972), PP, 9-25; R.J. Mainstone "Squinches and Pendentives; comments on problems of definitions", AARP, 4(1973), pp. 131-7

Stone Carvings

Basait formed a fine medium for delicate stone chiselling as observed in the Chota Sona Masjid at Gaur. The artisans of Bengal had a flair for artistic designs and decorative ingenuity, and they executed their works with utmost delicacy and exquisite fineness. [10, p.xvii] Also, since the hitherto Hindu motifs such as chain-and-bell patterns, rosettes, lotus petals, etc. are to be noticed in these carvings, it is not unlikely that Hindu Temple craftsmen's expertise was utilised. [21, pp.3-4] In fact the Hindu-craftsmen themselves received training and skill from working in Mosques. [24] Such was the inter-cultural symbiosis (Fig. 11). Tile decoration probably began in Bengal as a result of growing Persian influence, and as a natural consequence of throwing off of all allegiance on the part of the Bengal rulers to the imperial Delhi kings. It is therefore not unexpected that tile should be seen for the first 9 time in Bengal in the Eklakhi Mausoleum erected during the rule of Ganesh dynasty (14151433). [21, p.5] The Lutton Masjid (C. Late 15th century AD) was embellished with a most beautiful accoutrement of colourful tiles (Fig. 12).

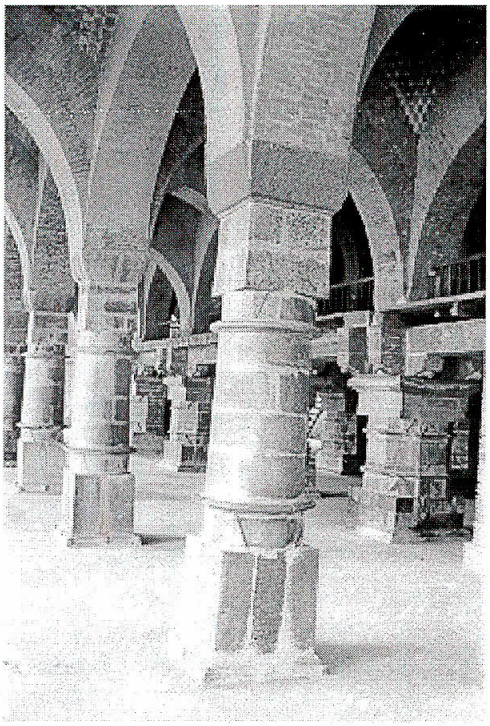


Fig. 7: Interior View of the Adina Mosque, Pandua.



Fig. 8: Detail of column bearing the takht, Adina Mosque (1374-75 AD).

Glazed Tile Ornamentation

As the glazed tile was introduced from Upper India, blue and white colours (favoured by the Persians) are commonly used in Bengal, but here in addition, reddish brown, orange and terracotta-red colour schemes are distinctive colour schemes of Bengal tiles. It is interesting to note that occasionally the local artists accustomed to the terracotta art of the land largely left bare the plain terracotta surface of the tiles except thin glazed bands or creeper motifs so as to emphasise the red terracotta more than the glazed design. [25]

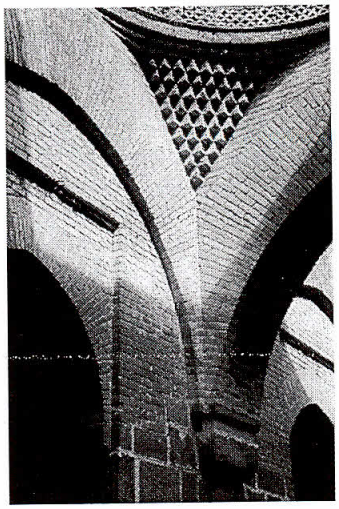


Fig. 9: Brick Pendentive, Adina Mosque, Pandua.

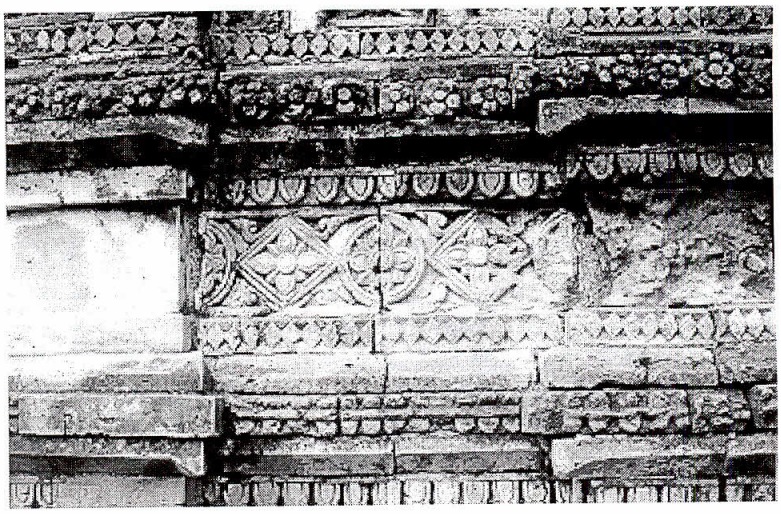


Fig. 10: Terracotta and Brick Panel, Eklakhi Masoleum, H. Pandua (1425 AD).

The patterns of the early Multan tiles are mostly geometrical and inscription with occasional use of foliated designs. In Bengal tiles however, most of them resemble floral and creeper motifs distinctly resembling Persian in character. Further, the shapes of the early Multan tiles are 6 - petal stars and polygonal blocks where as the Bengal tiles are mostly hexagonal or rectangular.

The Pre-Mughal Bengali Mosque

In sum, the Bengali mosque is shaped by the local soil, climate and folk traditions. With the exception of the Adina Mosque at H. Pandua, the mosques do not have open courts, the iwans and the attached minars[9]. Rather, according to Dani,[15] the Bengali Mosque is a compact building having an open grassy courtyard in front and a large tank on one side. All bays and aisles open directly through the doors to let fresh air in. But at the same time, the doors have been deliberately kept short to keep off the rain.

The Bengali folk culture is once again reflected in the treatment, massing and form of the mosque. It is a unified structure, not placed on too high a pedestal as to be distant from the worshipper, but at the same time distinct and well-defined in its sanctity.

The humble and heavy lines of projections (Chaja), cornices, and mouldings give a sense of horizontality and permanence to a structure born in the Land of Impermanence. Contrary to the architectural trends in the rest of the Islamic world[10], emphasis is on creation of tectonic values.

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[9] The Pre-Mughal Bengali Architecture is less represented by minars than any other school of Indo-Islamic Architecture [5, p.50].

[10] In his essay on the characteristics of Islamic Architecture, Ernst J. Gribe [42] speaks of "... creation of non-tectonic values, the dissolution of all those elements that in architectural traditions emphasise the structure, the balance and counter-balance of loads and stresses, the actual mechanics of a building... Thus in Islamic Architecture the effect of weightlessness is created, and the walls and structure in the process are made non-substantial.

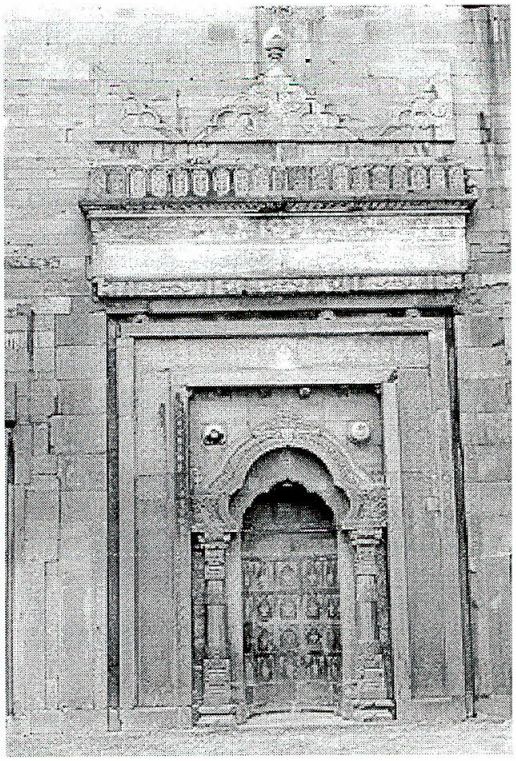


Fig. 11: Basalt stone carved mehrab of the, Adina Mosque, Pandua

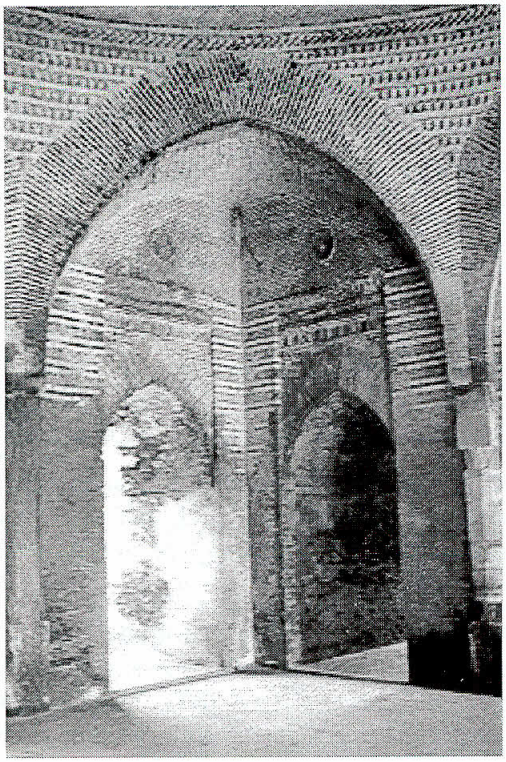


Fig. 12: The Corner Arch of the Lutton Mosque, Gaur (Late 15th Century AD)

Bearing low domes (without any drums or 'necking'), low facades and curved cornices, these structures seem not to be concerned with projecting the majesty of the religion or power of the state. Rather by adopting the *chala,* or thatch bungalow, as their model they appear to have been more concerned with presenting Islam within the architectural experience of the common folk for whom they were intended. [26]

The Mughal Impact

The political instability that followed the fall of the Husain Shahi Sultans (1 493-1538 AD) came to an end in 1575 with the Mughal conquest of Bengal. During the long and fairly peaceful Mughal rule (1576-1717 AD), both Muslim and Hindu enjoyed a considerable degree of freedom. [17, p.3]

For most of the seventeenth century, Mughal rule in Bengal reflected the secular outlook of the emperor Akbar. This secular outlook was continued by the seventeenth century Mughal Viceroys, who built relatively fewer mosques than did the Sultans proceeding them. [2, p.33] The capital of Bengal was shifted from Rajmahal (Akbarnagar) to Dacca (Jahangirnagar) in 1608-09 AD and back to Rajmahal in 1639 AD As Jahangir was also not a keen patron of Mosque Architecture [27, p. 1 99] we find a lull in the continuum of our development-study. Nevertheless, under Shah Jahan an architectural efflorescence came to Bengal. Shah Shuja, son of Shah Jahan, served as governor of Bengal from 1639-1659 A.D. Like his father, he appears to have been an enthusiastic patron of architecture. [27, p.201]

A number of mosques were built during this period both in Rajmahal as well as in Dacca[11]. In 1660, the capital was shifted back to Dacca.

The patronage of the Arts by Akbar and Shah Jahan slowly permeated into the rank and file of the feudal lords. The suspicious attitude of the Bengali rural-folk towards Mughal-Imperial ideas was allayed by broad vision policies of the Emperors. Specifically from the linguistic and thematic point of view, middle ages was a glorious period of Muslim traditions. [4, p.32] Muslims had not only created a new form of romantic literature, they had also thereby freed Bengali literature from the cramp of sectarian influence. Architecture followed the other fields of Arts in the adoption of Mughal vocabulary. The Bengali Architect was not blind to the architectural feats in Agra and Delhi. In fact Bengali masons had a forum to display their indigenous expertise in Fatehpur Sikri alongside craftsman of other regions. Shah Jahan introduced the curved cornice in the Bangla Mahal in Agra. The "Bengali Style" was now recognised and appreciated by the whole nation.

Back home, the Satgumbad Mosque (1680 AD) and others at Dacca illustrate the articulation of both interior and exterior surfaces, which is considerably more extensive during this period than earlier. For example, the projecting corner turrets of the Satgumbad Mosque are vastly larger than those of earlier mosques. [27, p.204]

Jubiliant architects began cashing in on the Bengali populace's fascination of the hitherto exotic Mughal marvels. Curbed arches, tall tapering minarets, shouldered domes, and plastered surfaces became the order of the day. And monumental entrances (e.g. Lukochuri Darwaza constructed by Shah Shuja) announced the glory of the Mughals. Based on the studies of Syed M. Hasan, [10, xviii] and others[12] we can outline the basic characteristics of the Mughal Mosque :

- 4-centred arch replaced the 2-centred variety
- Bulbous domes raised taller by shouldering
- Mosques become usually 3-domed and single-aisle
- Engaged twin-colonettes and faceted plaster work are chief decoration features introduced in this period.
- Wall panelling with niches and rectangular frames
- Pillared kiosks
- *Tahkhana* (terraced substructure) may have been derived from the Mughal monuments Delhi, particularly the Jami Masjid at Firuz Kotia.
- The curved cornices and *chala* roofs were gradually substituted with flat roofs having horizontal parapets.

Unfortunately, the intimacy of spaces and uniqueness of the Bengali Mosques was lost in the vacant unabashed borrowed forms. Small terracotta medallions and other isolated motifs were the compensating vestiges of the previously delicate relief work. Nevertheless, interior pendentives and corner towers were still to remain (Fig. 13) as in the Raushan Mosque at Rajmahal.

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[11] The Seventeenth century monuments of Dacca are built in the 'Shaista Khani Style' which itself is a misnomer. The features represented in these monuments came not after Shaista khan, but before him [10,p.18].

[12] See also A. H. Dani [15] and C. Asher [27].

The Nawabi Style

Being more conveniently located than Dacca for the collection of revenue, Murshid Quii Khan (Diwan of Bengal) shifted the capital from Dacca to 'Murshidabad' (previously Makhsusabad) in 1704. He administered the most brilliant period in the financial history of Bengal. [16]

Meanwhile, the ascendancy of the Mughal Empire was on the wane because of internecine strife and feuds. Nadir Shah was the last straw in the reign of Emperor Mohammed Shah (1719-48). Many 'Subedars' (Viceroys) defying authority declared themselves to be independent rulers. Bengal, Bihar and Orissa became a consolidated dominion where Nawab Ali Wardi Khan became an independent ruler. Under Nawab Ali Wardi (1740- 56) Murshidabad experienced the highest cultural development. [29] In fact a Muslim Renaissance of Bengali culture was on the cards in the early and mid eighteenth century because the Mughal Empire started disintegrating, and skilled artisans, poets, painters and sculptors found their way to more prosperous patrons. What the Suba of Bengal, the Aurangzeb [16] was to call "Suba-Jinnat-ul-Belaod-Bengala": the Suba of Bengal the Paradise of Nations was respiendant with beautiful gardens, proliferation of Urdu literature, and the grandeur of the Nawabi *tahzeeb* (customs). It was to bring into its folds the likes of hakim Masha-Allah Khan and poet Insha allah Khan"[13].

Although very few relics of this period remain, we can assume from the ruins of Murshidabad that it was definitely a prosperous City[14], and a splendid revival of the Bengali-Muslim. Architectural heritage must have occurred. Alas, due to human apathy and the changing course of the swift R. Bhagirathi we have only legends to redress our architectural legacies.

One extant exception is the 5-domed Katra Masjid (built 1723-24 AD by Murshid Quli) which, though constructed in the Bengali Mughal idiom confers on its facade a unique horizontality and weighty quantity suggested by the proportionately smaller entrance arches, recalling the architectural tradition of pre-Mughal Bengal, [27, pp. 206 - 207] Murshid Quli's zeal in propagating his faith must have manifest itself in many other mosques and madrasahs, a few that remain could be the Kartalab Khan Mosque and the Mosque of Khan Md. Mirza in Dacca. In fact the Katra Masjid at Murshidabad was described as a grand seminary of Muslim learning in its heyday accommodating 700 readers of the Quran in the surrounding row of double-storey cells. (Fig. 14)

Although in power for a very short duration, these Nawabs provided the necessary thrust for a sinking indigenous folk-culture. The following characteristics of the Nawabi Mosque show an assimilation of the virtuosity in the previous styles, and an attempt to re-establish the independent regional identity:

a) Once more Bengali bricks cut to perfect wedge-shaped pieces dance to the tune of *mistris* who have acquired the knowledge of *khilan* from their forefathers. They used a mortar composed of a mixture of lime and *surkhi* (crushed brick powder) to give the required consistency and strength.

b) Four Stout octogonal minars were built at the Four Corners of the Mosque. Capturing the essence of both Mughal and provincial Bengal architecture.

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[13] It is enlightening to talk to the old people of Murshidabad on this issue. Syed Raza Ali Khan (8th descendent of Mir Jaffar) has written his doctoral thesis on "Contribution of Murshidabad to the Development of Urdu Language and Literature" - I would recommend an evening chat with him at the Kilia Nizamat.

[14] In 1759, two years after Plassey, Lord Clive described the capital (Murshidabad) to be "as extensive, populous and rich as London, with individuals possessing infinitely greater property than those in the English Metropolis".

c) As lime plaster can be washed away in the heavy rains of Bengal, we see in old Murshidabad (and other places in Bengal) a sort of punning with *sakher goru* (shell-dust). This material is- sticky (highly adhesive), light-weight and rapidly hardens to give a stone like surface[15]

d) It is possible that the curved roofs of the Provincial chala Mosques were constructed on *bakhari* (bamboo formwork) which was made from slit bamboo sleeves. These could be moulded into any shape. This traditional expertise was revived under the Nawabs.

e) The village craftsman (silpi) got back to work to shape out the *goramati* (terracotta) into a renewed pattern of designs.

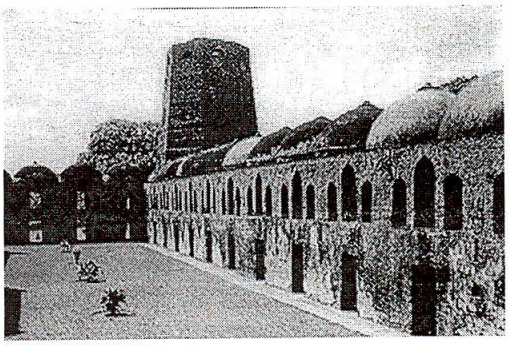


Fig. 13: Interior courtyard of the katra Mosque, Kurshidabad.



Fig. 14: Brick Façade, Katra Mosque, Murshidabad (Early 18th century AD).

The British Rule

In 1757, Lord Clive defeated the betrayed Nawab Siraj-ud-daulah at the famous Battle of Plassey and installed Mir Jaffar as his Viceroy. In 1765, the Diwani was confiscated, leaving the Nawab a paupered puppet of the British. Thus began a downfall of the glory of the Muslims leaving Murshidabad to fall to ruins, and Maulavi Abdul Wali Khan saheb to comment that... I found the community in dire stress.... Madrasahs and Khanaqahs closed, tanks silted up or overgrown with weeds. [31]

Indeed it can be said that indigenous art of this country was still living in the Post-Mughal period, but it had reached a very low state indeed without patronage and without fresh inspiration. [32] In fact some authors like K. Chatterje [33] were afraid that it was rapidly approaching extinction...

Another factor that led to the cultural and intellectual stagnation in the early nineteenth century was the growing rift amongst the various classes within Muslim society, perhaps catalysed by the British differential treatment. Thus the 'Arabized' and urbane *ashrafs* (ruling noblemen) looked socially disdainfully towards the 'Indianised' and rural *atrafs* (servile class). [34, pp. 1 -7] Bengali craftsmen were thus stymied by the impertinence of their own countrymen. The mosques of this period tried to continue the Mughal metaphor with a few 'European' bungalow details. Nevertheless the spires and domes assumed a symbolic important, which the architecture flaunted proudly (Figs. 15 & 16).

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[15] This information is gathered from my conversations with Shri Nepal Bhattacharya and others in the Directorate of Archaeology and Museums (West Bengal). Scientific analysis of *sakherguru samples* needs to be done to prove its efficacy in the Bengal context.

Discussion

- The evolution of the Traditional Bengali Mosque has therefore served as an exemplification of the mutual process of two disparate cultures. Specifically we find that:
- The receptivity, nature and cultural background of the native population have an important role to play in the cultural transformation that is concomitant to religious change.
- The effect of political patronage is manifested not only in the Architecture itself but in the splendour and refinement of the local crafts that shape the Architecture.
- Culturally responsive as well as locally responsible attitudes garner infinite scope of improvisation and originality, and lead to more sustainable products that grow with time.

The Traditional Bengali Mosque has travelled a long journey. In the Sultanate period it was an Institution catering to the Spirit of the people with its "infinite structural mass, graceful contour and aesthetic spirit, conveying from a distance the spirit of repose and assurance" [35, pp.83] Indigenous folk-culture thrived under the aegis of the Bengali Mosque. And the Adina Mosque caught the fancy of the bengalis who justifiably called it "wonder of the world." [35, p.85]

In fact the Bengali Mosques form a distinct coherent style as a result of their regional character. [36] Once again, Islam proved that "it took the cultural inheritance of the people it conquered and transformed them creating an all-embracing culture of a unique type." [37, p. 328]

With the accession of Bengal to the Mughal Empire, indigenous expression stood on shaky ground. Free winds of architectural interaction brought from North India a plethora of new forms, symbols and materials. For the Bengali Architect it was an era of experimentation and adaptation. It was also an era of exultation, as the Bengali regional attributes had at last found a national status. And finally, we culminate our study of the Traditional Bengali Mosque in the cradle of Murshidabad : the last bastion of Muslim rule in undivided Bengal. The Katra Mosque symbolises the matured stage and savours a refined blend of Persian, Mughal and Bengali Traditions. In sum, the evolution of the Traditional Bengali Mosque does not begin or end with a particular design prototype.

It has always been a process of continuous development that took into its fold the many facets of socio-political changes in Bengali society. It refuses to be typecast into a particular style or set of styles. Rather, it stands apart in the order of Islamic styles, distinguished by its flair of enchanting character and indigenous disposition.

In the future, the author feels that more attention should be paid to the conservation of our fast ruining architectural heritage. If only for a little more solicitude on the part of both the Government[16] and the local people[17]. We would have many more buildings to enrich our architectural heritage.

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[16] The author was quite pleased to see the restoration of the Adina Mosque (H. Pandua) and the Katra Mosque (Murshidabad) by the Archaeological Survey of India. But a lot more needs to be done to make arrears for a history of indifference. Even in the beginning of this century British authors [43, p.47] report the "few ruins" surviving of the "Once famous city of Murshidabad". And regarding the once resplendent Adina Mosque the British Government [44, pp. 448-9] considered it "past all renovation" followed by a horrendous suggestion "to construct a new Adinah Mosque on a much smaller Scale" by dismantling the original mosque!

[17] In the ruins of Oasba Mahesha (in West Dinajpur district, West Bengal) M. Rahman [45] "discovered" beautiful terracotta - faiden mosque built in the early period of the Hussain Shahis. He comments: "The people of the locality neither appreciate the exquisite beauty of the architecture, nor understand its historical importance.... Not only did they add a clumsy structure in front, unwittingly they covered up the entire mosque both inside and outside with thick lime paint...[45,p.57].

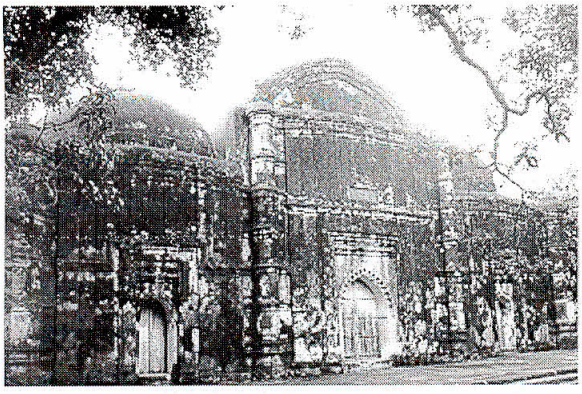


Fig. 15: The barrel vault over the central space of the Jami Masjid, Old Malda (1595 AD).

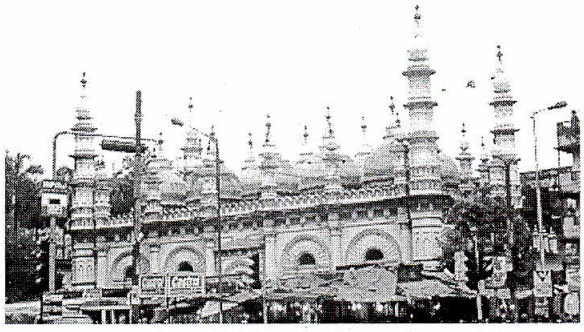


Fig. 16: Domes and Spires, Tipu Sultan Mosque, Calcutta (1842 AD).

Conclusion

In this paper, we trace the development of the traditional Bengali Mosque through seven centuries of Muslim rule, and relate it with the social and political developments of the time. Bengal is first studied in the backdrop of pre-Muslim traditions, folklore and climate. Islam was established in Bengal in 1203 A.D. by Md. Bhaktiyar Khilji. The need to express their power and distinguish themselves from the Delhi Emperors necessitated the Bengali Provincial Rulers to build mosques original in design and conforming to the needs of the place. The fourteenth century Suitans patronised the indigenous vocabulary and through the development of the 'Bengall Mosque' bestowed a regional identity to the people of Bengal. Horizontaliy of its massing, low openings to keep off the rain, curved cornices, and terracotta ornamentation gave it a distinct "brick-style'.

In the sixteenth century, the Mughals imposed an array of shouldered domes, triumphal arches and plastered decoration is that they conceived the Mosque should believe. A brief spell of Nawabi Independence educed a Muslim Renaissance in the early eighteenth century, When the Arts and literature restored the Bengali idiom with an added 'Arab' flavour. Mosque Architecture too revealed in the evolution of this matured indigenous grammar that has pronounced a distinct identity well known and recognised in the world.

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تطور عمارة المساجد التقليدية في البنغال

مرتضى حاتم بكساموسى

المؤسسة الهندية للتقنية

كراغبور، الهند

ملخص البحث: إن امتزاج ثقافتان متنوعتان تنشأ كنتيجة للإصلاحات الدينية والعرفية الموجودة في الممارسات التراثية الأصيلة وتأثيرها المتراكم على النسيج المبني عبر العصور. وهي الحالة التي تمثل التحدي للمؤرخين وعلماء الآثار والمعماريين. وقد وجهت الكيان الاجتماعية نفسها لتحصد نتائج امتزاج الثقافات المختلفة التي ازدهرت. كما أن نضال العامة لاستيعاب التيارات والأفكار الأجنبية وتبني المزيد من التقاليد الثقافية قبولها ساعد كثيرا.

ويمكن تحديد منظور هذا التأثير وحجمه من خلال الأخذ بالاعتبار التطور الذي حدث لنوعية معينة من المباني التي لا تمثل المباني الدينية فقط بل حتى الدور الطليعي لحركات التغير في العصر. وبسبب ذلك, فنحن نشهد تحولات ثقافية وتغييرات ملازمة للسمات المعمارية والنفسية في التقنيات ومواد البناء والعمالة.