

A Formal and Contextual Interpretation of the Boro Annik Temple, Puthia, Rajshahi District, Bangladesh

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Abstract:- The architecture of Bengal is marked by its unique regional characteristics, shaped by its geo-climatic conditions, political dynamics, social structures, religious influences, and cultural environment. This has led to a distinct architectural style with vernacular features. Notably, Hindu temple architecture in Bengal transcends its role as a place of worship, serving as a hub for knowledge, art, architecture, and culture. The Puthia Temple Complex in Rajshahi, located in the north-western zone, stands out with its collection of historic Hindu temples, each rich in myths and legends, making it unique in Bangladesh. The transition from indigenous hut designs to elaborate temple constructions illustrates the dynamic interplay between functionality, craftsmanship, and artistic expression in Bangladeshi architecture. This paper will focus on examining the architectural features of Boro Annik temple, to gain a deeper understanding of how local architectural practices have transformed the temple architecture over time and how they continue to reflect the cultural and historical influences of the region. Despite the absence of a well-established theoretical framework, the research attempts to contextualize the Boro Annik Temple within the broader historical and regional transformations, including social and religious changes. The paper concludes that late medieval temples, such as the Boro Annik Temple, were more than mere religious edifices. They represented a dynamic interplay between evolving social contexts and spiritual expressions, reflecting a profound integration of societal and religious influences in their design and construction.

Keywords:- Temple Architecture; Bengal Architecture; Regional influences; Spatial Interpretation, Terracotta.

I. INTRODUCTION

The evolution and significance of Hindu temples in Bangladesh, particularly focusing on the "Bangla Style," provide a fascinating insight into the region's architectural heritage. During the early medieval period, these temples served not only as places of worship but also as important cultural symbols, reflecting society's spiritual and artistic values. The four styles identified—rekha or Pirha, Bangla hut, Ratna, and Composite—showcase unique architectural characteristics. [1] However, the Bangla Style stands out due to its development during the Islamic period and subsequent Hindu patronage. The Bangla Style is particularly noted for its distinct features, such as the square or rectangular

sanctum, multistoried tapering structures, and pronounced curvilinear elevations. The architectural variety, with designs like "Ek-Bangla," "Jor-Bangla," "Char-Chala," and "Baro Chala," emphasizes a blend of aesthetic beauty and structural ingenuity. The rich ornamentation, including arch openings and intricate fretwork, highlights the artistry involved in these constructions.

One of the most significant surviving examples is the "Ek-Bangla between two char-chala," which combines the three structures in an integrated design. Only two examples are known in Bangladesh. One of them is the Boro Annik temple at Puthia. From the terracotta decoration, it appears to belong to the first half of the eighteenth century and is recognized as a protected monument. [2] Its conservation highlights the importance of these structures as historical and cultural landmarks. In studying these temples; we gain valuable insights into the socio-religious dynamics of the period, as well as the interplay between indigenous architectural practices and influences from various ruling regimes. The continued exploration of the Bangla Style offers the potential to uncover more about the architectural narrative of medieval Bangladesh and its lasting impact on the region's cultural landscape. [2]

➤ Aim and Objective of the Study

The significance of proper documentation in the conservation of historical structures cannot be overstated, as highlighted by various international charters, such as the Venice Charter and the Athens Charter. These foundational documents emphasize that thorough documentation is essential for understanding architectural heritage and guiding informed conservation decisions.

The primary objective of this paper focuses on creating architectural documentation for buildings within a temple complex. Such documentation serves as a vital resource, allowing for a comprehensive understanding of historical and architectural context. This understanding is crucial not only for preservation efforts but also for fostering appreciation of cultural heritage.

II. METHODOLOGY

This paper focuses on the archetypal analysis of the Boro Annik Temple of Puthia and concentrates on the formal expression and documentation of this temple by following steps of Interpretive historical research methods such as site

survey, visual observation, and reproduction of drawings from archives. This will accordingly open up the possibilities of analyzing its contextual relevance to art and architecture

through discussion, findings, and conclusion. This comprehensive methodology ensures accurate and effective heritage documentation and conservation.

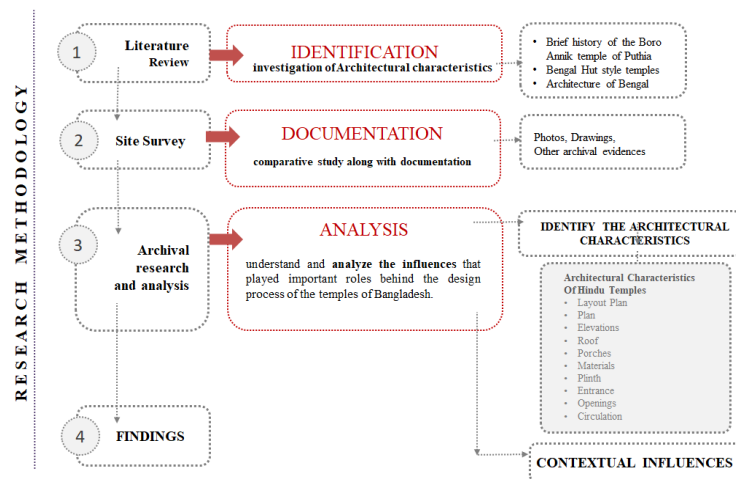


Fig 1 Outline of Methodology

Source: Prepared by the Author

III. BENGAL ARCHITECTURE

The architecture of Bengal, encompassing modern Bangladesh and parts of India's West Bengal, Tripura, and Assam's Barak Valley, showcases a rich and diverse history. This architectural heritage blends indigenous elements with external influences, reflecting a unique integration of local and global styles. [6] Additional Bengali architecture features a mix of ancient, religious, and vernacular styles. Characteristic elements include curved roofs designed to handle heavy monsoon rains, and the extensive usage of brick and wood (Fig 2). Decorative terracotta plaques, often carved or molded, are a notable feature, with brickwork being both durable and repurposed over centuries.

Archaeological findings reveal the use of local materials such as clay, mud, stones, and rocks. Bamboo, cane, and reed have played significant roles in daily life and architecture, as highlighted by Prof. Dani, who notes their extensive use in everything from household items to furniture. The distinct curvature of Bengal's traditional roofs, inspired by these flexible materials, adapts well to the region's heavy rainfall. This practical and aesthetically distinctive style, while not rising to classical heights, is a testament to the ingenuity of a people intimately connected to their environment and climate. [9]



Fig 2 Kassimpore Village in Bengal - c1 186

Source: British Library; <https://www.oldindianphotos.in/2016/03/kassimpore-village-in-bengal-c1860.html>

IV. LOCATION AND SATIAL ORGANIZATION

➤ Site

The whole Puthia complex is surrounded by water bodies namely Shiv Sagar, Govinda sagor, baki sagor, mora choki & hogla choki. At present, the complex consists of temples, two zamindar houses, a market, two schools, one degree (diploma) college, madrasas, a residential zone, etc. Some of the structures have completely disappeared with time, like the full bangle temple, jagadhatri temple, Durga mandir, kali mandir, astabal, revolving theater, rath mancha, and clubhouse, and so on. [8]

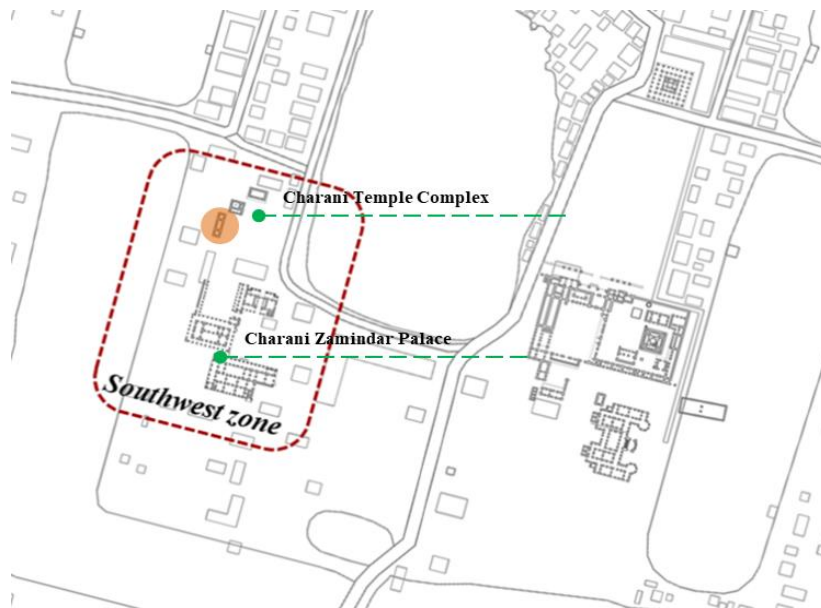


Fig 3 Location of the Temple
Source: Prepared by the Author

The complex consists of two main parts, one the Char Annie state which contains Char anni place, Char Annie temples, Char Annie bazaar, a residential area, and a school. Another part was Panch Annie state which contained Panch Annie place, Panch Annie (Fig 3).

Temple, panch Annie bazaar, Puthia Degree College, school, and so on. This temple is located on the west bank of Shyam Sarovar Lake in front of the Char Ani Raja's palace. The temple was built by four Ani kings. It is located in the southwest corner of Choto Govinda Temple. Temples are established around a courtyard (Fig 4).



Fig 4 Landscape and Surroundings of the Temple Complex

The temple was built by four Ani kings. However, due to lack of written information, it is not possible to say exactly when and who built it, but the style of construction suggests that it may have been built in the latter half of the eighteenth century after the small Ahnik temple. There are many examples of temples in Bengal in the shape of two *chauchala* rooms attached on either side, which have already been mentioned in the descriptions of the *dochala* temple and the *chauchala* temple. [8]

➤ Unique case as Temple

Dochala and Chauchala infrastructure in Puthia, known as the Boro Ahnik Temple, is a mixed temple of the tri-temple type. However, the tri-temple that is built by adding two square rooms on either side of this *dochala* infrastructure is very fancy. An example of the construction of such a tri-temple is probably not found anywhere else in Bangladesh except the Rajaram temple (of the eighteenth century) at Khalia in the greater Faridpur district. Even the construction of such a tri-temple is not known to have taken place anywhere else outside of Bengal. Thus, in the history of the Chala temple architecture of Bengal, the Boro Annik temple of Puthia holds a prominent place. [8]

➤ Spatial Organization

This east-facing temple has a rectangular exterior, measuring 48 feet in the north-south direction and 15 feet in the east-west direction. The interior is divided into three chambers. The main chamber is rectangular, measuring 18 feet 2 inches by 9 feet 6 inches, with two adjoining square rooms on each side, each measuring 8 feet 10 inches (Fig. 5). The upper part of the main sanctum is topped with a *dochala* Bengali-style low-pitched roof, which curves gracefully like a cornice bow. The front of the main chamber is accentuated by three semicircular arches, providing an elegant and open facade [5,8]

The archway is enclosed within three rectangular frame structures, sustained by two short pillars. Inside the sanctum sanctorum, there are three wide niches along the west wall, with the central niche being larger than the two side niches. The two small square rooms adjoining the main sanctum each feature a semi-circular dome built in the Pendentive style on the interior. Externally, these rooms are topped with a *chauchala* roof, ample with a curved cornice, blending traditional design components with architectural sensitivity. [5,8]

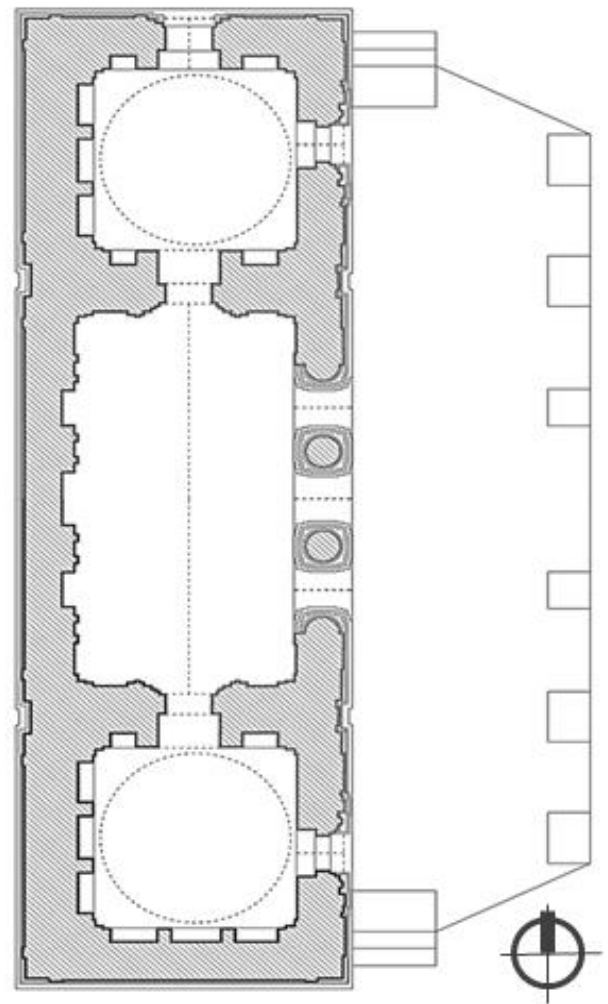


Fig 5: Plan of Boro Annik Temple
Source: Prepared by the Author

V. ANALYSIS ARCHITECTURAL ATTRIBUTES

➤ Plan

- The temple is east-facing with a rectangular exterior measuring 48 feet (north-south) by 15 feet (east-west) this east-facing temple is also elongated to the north-south.
- It features an uneven rectangular verandah in front, measuring 10 feet 6 inches by 36 feet 4 inches, extending the structure in the north-south direction
- The main chamber is exposed by three semicircular arches, framed by three rectangular structures and supported by two short pillars.
- Two additional open arches are on the east and north walls, allowing entry to the room on the sanctum's north side.
- The temple's floor plan is almost symmetrical, with two secondary chambers flanking the main sanctum on the north and south sides.

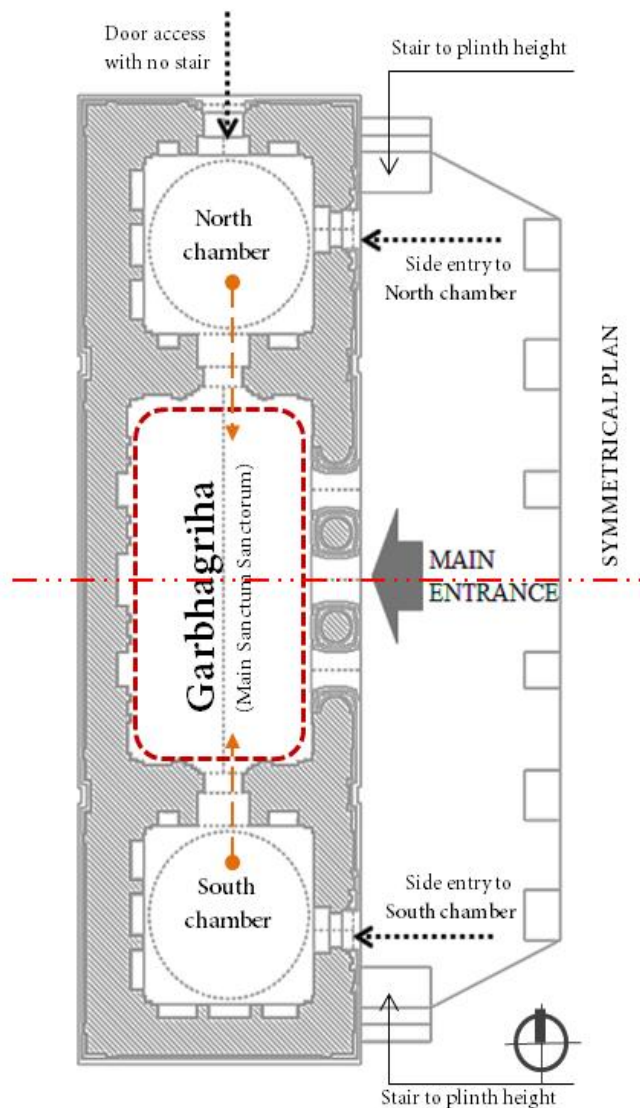
➤ *Garbhagriha or the Main Sanctum Sanctorum*

Fig 6: Showing Multiple Entries to Garbhagriha of the Temple
Source: Prepared by the Author

- The main chamber of the temple is rectangular, measuring 18 feet 2 inches by 9 feet 6 inches. It is flanked by two adjoining square rooms, each measuring 8 feet 10 inches on either side. The sanctum, or Garbhagriha, is accessible through archways from both the north and south side chambers (Fig. 6).

➤ *Plinth*

- The temple is elevated on a 2.5-foot-high plinth, which extends into an open plinth at the front.
- Two staircases lead up to the plinth, providing access to the temple chambers (Fig. 8).

➤ *Structural Elements*

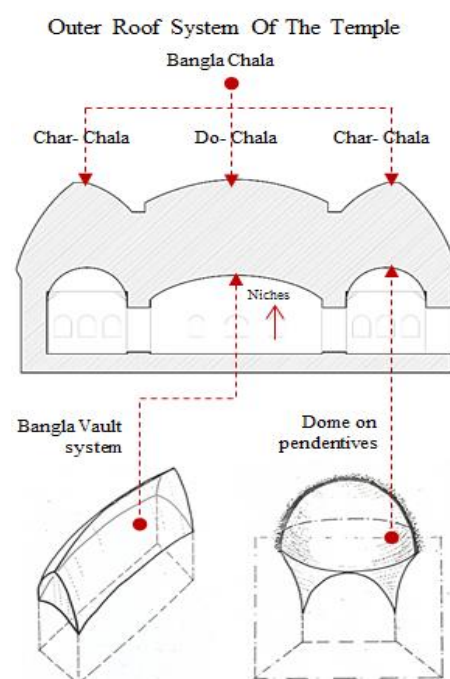
- **Column:** The archway is enclosed by three rectangular frame structures, supported by two short pillars, as illustrated in the figure (Fig 8a).
- **Walls:** The temple walls are approximately 2 feet 4 inches thick, providing robust structural support. The cornice is curved like a bow, complementing the thick walls that form the main structural element of the temple.

➤ *Openings*

- **Arch:** The front of the temple features three semicircular multi-foiled pointed arches. The archway is enclosed within three rectangular frame structures, supported by two short pillars.
- **Connectivity:** The north and south square rooms are linked to the sanctum by pointed archways. In total, there are six openings: five at the front and one on the north side.

➤ *Roofing System*

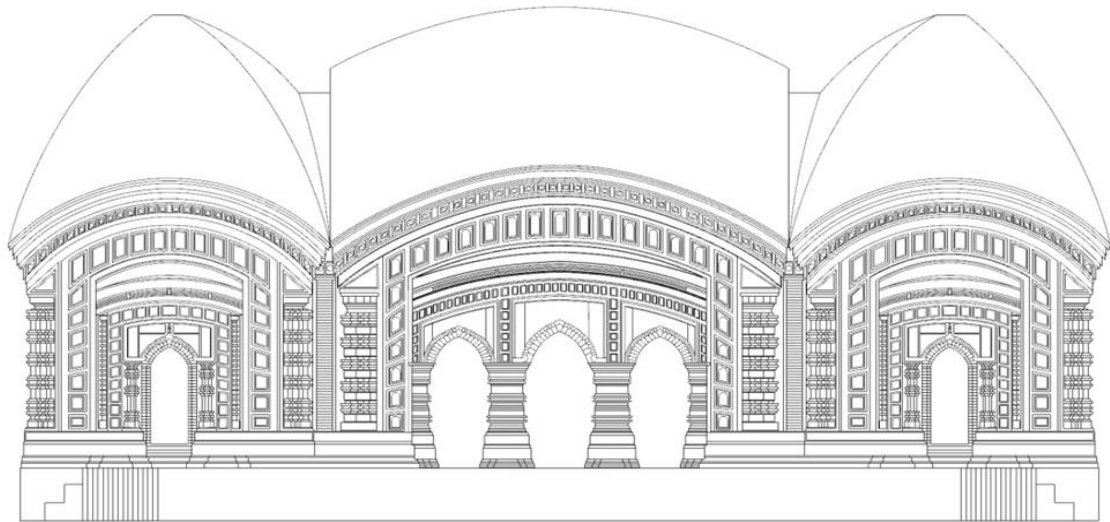
- **Inner Roof:** The main sanctum features a Bangla vault on the inner surface. Each of the two small square rooms adjacent to the sanctum has a semi-circular dome built in the Pendentive style.
- **Outer Roof:** The upper part of the main sanctum is covered by a *dochala* Bengali-style low-pitched roof, curved like a cornice bow. The two small square rooms are topped with a *charchala* roof (Fig. 7).
- **Cornice:** The cornice is curved, following the bow-like design of the outer roof.



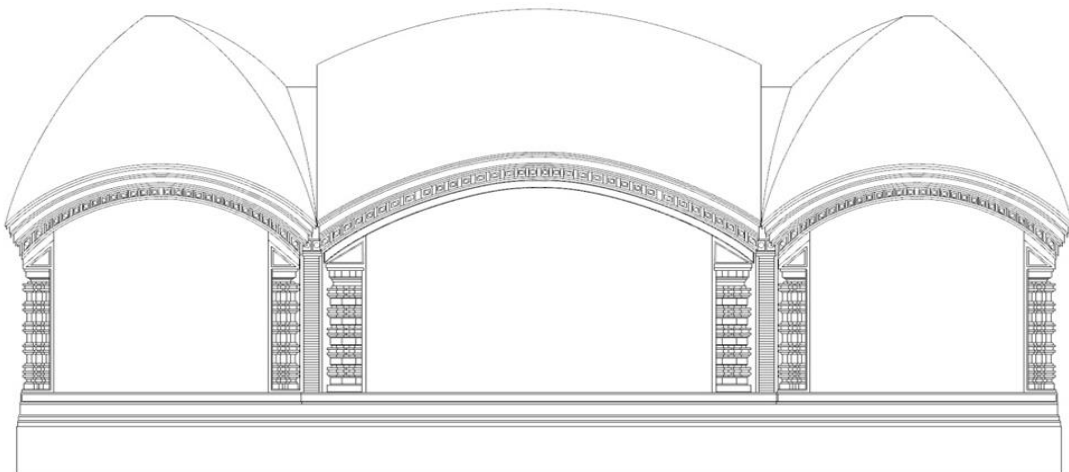
Inner Roof System Of The Temple

Fig 7: Roofing System

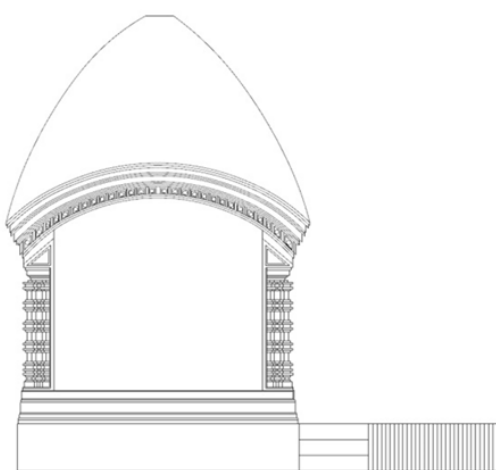
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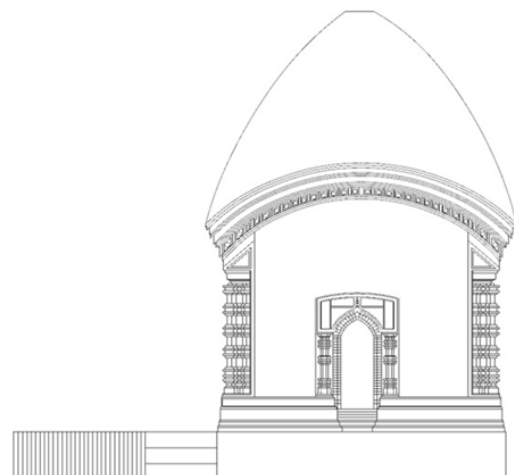
(a) East elevation (Front)



(b) West Elevation (Back)



(c) South Elevation (Side)



(d) North Elevation (Side)

Fig 8 Showing Openings on the Façade of the Boro Annik Temple
Source : Prepared by the Author

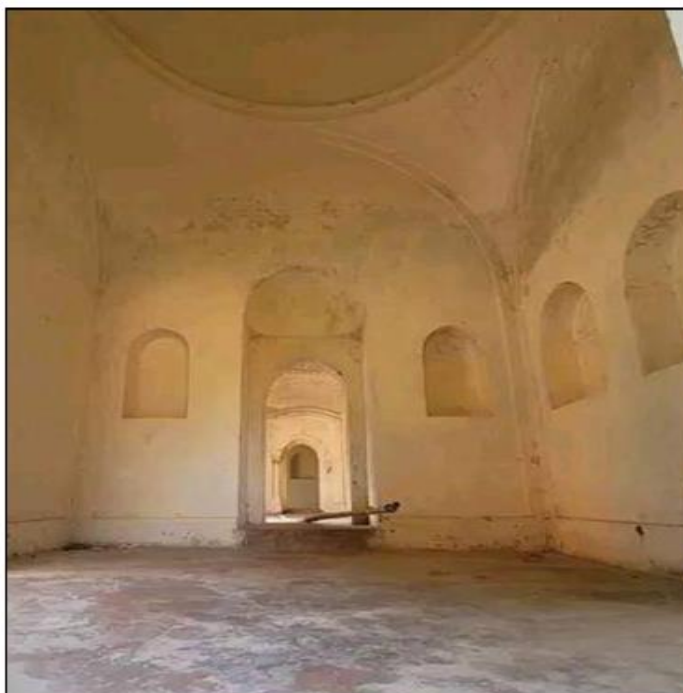
➤ *Decoration of Temple Facade*

Most of the temple's ornaments are in ruins, with the plaster lining of the interior having been peeled away. It is evident that the surface of the two square arches connected to the main sanctum was once adorned with terracotta slabs, although these are now largely ruined. The interior walls of the main sanctum were divided into several vertical and horizontal panels (Fig. 9(a)), but currently, only plaster remains visible in these panels.

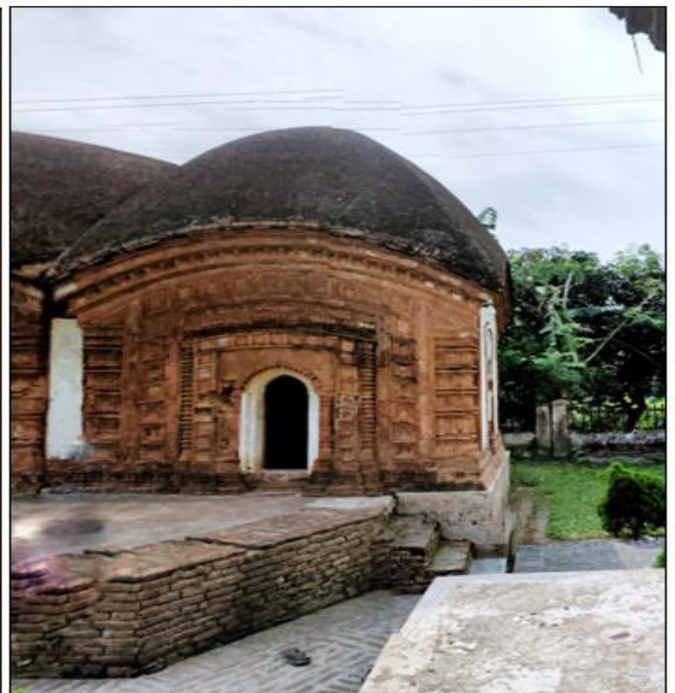
- **Exterior:** The facade is richly decorated with terracotta plaques.
- **Interior:** The interior is entirely covered with plaster.
- **Materials:** Brick, lime plaster, and terracotta plaques.
- **Repeated Module:** There are six vertical panels on either side of the tri-archway or tri-archway on the east side, extending from the cornice to the bottom. Above, there is a curved panel row at the bottom of the cornice. Additionally, the side chambers flanking the main sanctum feature two repeated modules on both sides
- **Art & Sculpture:** The faces of most portraits are now ruined, making identification challenging. The plaques depict scenes of Vaishnava dances, as well as figures such as Rama and Lakshmana holding arrows and scenes from the war of Lanka. The temple's exquisite exterior ornamentation, particularly on the east wall, was created using terracotta plaques. However, many of these plaques are now crumbling or have fallen off, obscuring the details of the artwork. Despite the damage, it is unclear if the remaining plaques were dedicated to Hindu deities. [8]



(a) Interior of the Main Sanctum Sanctorum



(b) Interior of the Side Chamber



(c) Stairway of the North Chamber

Fig 9: (a) (b) Interior Views of the Temple
Source: Author's Collection; Site Survey



(a) East Façade of the main Sanctum in the Middle



Left Side Single



Chamber Middle Column Right



Single Chamber

(b) Terracotta Details of Boro Annik Temple
 Fig 10 (a) (b) Photos of Boro Annik Temple Exterior
 Source: Author's Collection; Site Survey

The arch columns and plaques up to the cornice above the archway of the square rooms have been largely destroyed. Despite the damage, some remaining terracotta plaques on the north wall of the north square room reveal intricate designs. These include portraits of monks, cows, spiraling floral patterns, and depictions of dancing Krishna and

Balarama, along with geometric motifs (Fig. 10). The north entrance of this room was also decorated with terracotta plaques, but these are mostly ruined, leaving only some lined floral designs on the rectangular panels beside the entrance.

The south square room mirrors the north square room in its decorative style, with similar patterns and motifs on its front wall. [5,8]

The facade of the main sanctum sanctorum is divided into several vertical and horizontal panels (Fig. 10), each adorned with terracotta designs. The panels feature various portraits, but most of the faces are now ruined, making identification challenging. The portraits on the rectangular plaques above the archway are almost completely eroded, and many other decorative elements have been destroyed. It can be inferred that the four corners of the temple and some sections around the lower part of the exterior were once decorated with terracotta plaques, though much of this ornamentation is now lost.

VI. SUMMARY OF ANALYSIS AND THE CONTEXTUAL INTERPRETATION

➤ *Regional Influences*

The temples in Bengal are predominantly located within the delta of the Ganges River, reflecting the region's unique architectural features. The abundance of terracotta material and the preference for curved roofs are directly influenced by the local environment, particularly the heavy monsoon rains. An exemplary manifestation of regional architectural influence is the Bangla Chala, a hut-style temple that showcases distinctive local adaptations. This style integrates traditional materials and design elements tailored to the delta's climatic conditions, emphasizing the practical and aesthetic responses to the region's environmental challenges.

The emergence of a distinct Bengali culture is closely mirrored in the proliferation of temples throughout the region, highlighting their significance as cultural milestones. Bengali temples are not just architectural structures but vital indicators of the region's evolving cultural identity, intricately linked with the activities and developments in religion, literature, and the arts. These temples also reflect broader political, social, and economic changes that shaped Bengal's history. [3]

➤ *Summary of Analysis*

The temples in Bengal, mainly located in the Ganges River delta, feature a unique architectural style influenced by the local environment and climate. These temples are characterized by an abundance of terracotta material and a

preference for curved roofs, designed to withstand the heavy monsoon rains typical of the region.

A notable example of this regional architectural adaptation is the Bangla Chala, a hut-style temple that exemplifies local design responses to environmental challenges. The curved cornices and roofs of these temples are not only visually appealing but also highly functional. Inspired by traditional Bengal huts, these curved roofs effectively channel rainwater away, preventing waterlogging and structural damage during the monsoon season. This design ensures the longevity and durability of the temples in harsh weather conditions.

Another significant feature influenced by local architectural practices is the inner Bengal vault roof of these temples. These forms enhance the structural integrity of the temples, providing additional resilience against heavy rains and high humidity.

The extended veranda or plinth surrounding these temples is an important architectural feature that reflects traditional house forms in Bengal. This design element serves multiple purposes: it manages rainwater influx, offers a shaded area for devotees, and acts as a social space fostering community interactions. The veranda also functions as a buffer zone, protecting the inner sanctum from direct exposure to the elements.

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Terracotta decorations are a hallmark of these temples, adding both aesthetic beauty and cultural narrative to their structures. The intricate terracotta panels depict not only religious motifs and deities but also scenes from everyday life and social activities of the time. They provide valuable insights into the lives of the people and diverse cultural interactions and influences experienced in Bengal.

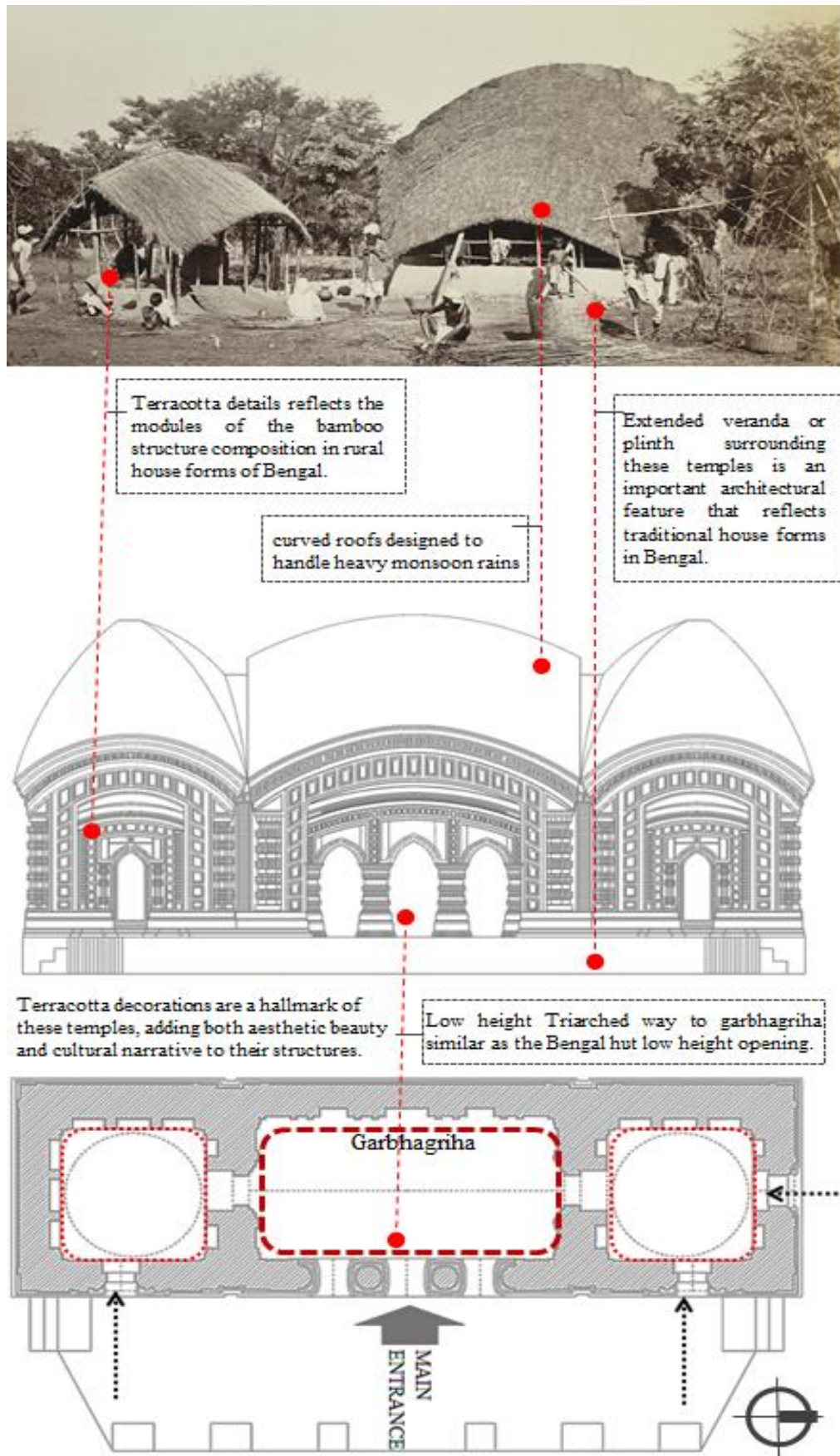


Fig 11 Analysis of the Architectural Attributes.
Source: Prepared by the Author

VII. CONCLUSION

In summary, the temples of Bengal stand as architectural marvels that flawlessly blend functional design with rich cultural expression. They are not just places of worship but also repositories of history, art, and community life, encapsulating the essence of Bengal's environmental and cultural heritage. The geographic distribution of Bengal's temples is closely tied to the Ganges River delta, where the abundance of terracotta and the need to withstand heavy monsoon rains shaped their design. The preference for curved roofs, like those seen in the Bangla Chala hut-style temples, reflects regional adaptations to these environmental conditions. These temples are unique examples of how local materials and climate influenced architectural styles in the region.

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