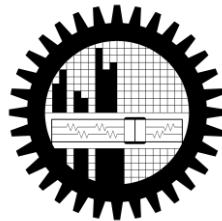


STUDY OF THE BUDDHIST VIHARAS DURING PALA DYNASTY IN BENGAL

KHONDKER TAUFIQ ELAHI

Thesis submitted in partial fulfillment of the requirement for the degree of
MASTER OF ARCHITECTURE

DECEMBER 2018



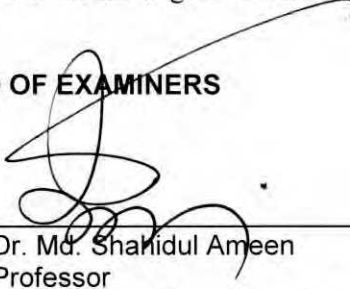
DEPARTMENT OF ARCHITECTURE
BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY
DHAKA, BANGLADESH

**Department of Architecture
Bangladesh University of Engineering and Technology
Dhaka-1000, Bangladesh.**

The Thesis Titled “**STUDY OF THE BUDDHIST VIHARAS DURING PALA DYNASTY IN BENGAL**” submitted by Khondker Taufiq Elahi Student No. 0411012004 and Session April 2011 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of **MASTER OF ARCHITECTURE** on 15th December, 2018.

BOARD OF EXAMINERS


1.



Dr. Md. Shahidul Ameen
Professor
Department of Architecture, BUET, Dhaka.
(Supervisor)

Chairman

2.




13.1.19.

Dr. Nasreen Hossain
Professor and Head
Department of Architecture, BUET, Dhaka.

Member (Ex-Officio)

3.



Dr. Khandaker Shabbir Ahmed
Professor
Department of Architecture, BUET, Dhaka.

Member

4.



Dr. Faruque Ahmed Ullah Khan
Ex-Professor
Department of Architecture, BUET, Dhaka.
House No. 2, Road No. 1, Sector-5
Uttara Model Town, Dhaka

Member (External)

DECLARATION BY THE CANDIDATE

I hereby declare that the work in this thesis is the result of my own work and that to the best of my knowledge it contains no materials previously published or written by another person, or substantial portions of the material which have been accepted for the award of any other degree at this university or any other educational institution, except where due acknowledgement is made in the main body of texts. Any contribution made by others, either in the form of literature or diagrams, is duly acknowledged in the thesis.

I also declare that this thesis or any part of it has not been submitted elsewhere for the award of any degree or diploma.

(Signature of the Candidate)

Khondker Taufiq Elahi

0411012004

Department of Architecture
Bangladesh University of Engineering and Technology
Dhaka-1000, Bangladesh

ACKNOWLEDGEMENTS

First and foremost, I am thankful to the Department of Architecture, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh for giving me the opportunity to participate in the master degree program and to carry out this thesis.

I offer my sincerest gratitude to my research supervisor Dr. Md. Shahidul Ameen, who has supported me throughout my study with his patience and knowledge, and allowing me access to his resources in my own way. His clear vision on the subject, which he heartily bestowed upon me, helped the formation of the research. This thesis would not have been completed without his selfless effort and encouragement.

I owe deep sense of appreciation to Mr. Swadhin Sen of the Department of Archaeology, Jahangirnagar University, Savar, Dhaka; with whom I had frequent consultations throughout the entire process of the study. His experience and insight provided me with a wider grasp on the subject matter. The seminar library at their facility had been a heaven for me whenever I needed to concentrate in my pursuit. And I am also thankful to Dr. Nasreen Hossain, Dr. Khandaker Shabbir Ahmed and Dr. M. Zakiul Islam of the Department of Architecture, BUET for their kind support.

I am indebted to my colleagues at the Department of Architecture, Shahjalal University of Science and Technology, Sylhet for helping me out with all the grueling surveys at the field level and in preparation of the drawings. With every philosophical debate I engaged with them, newer dimensions opened up and I could dig deeper into the problems of my study.

I am especially thankful to my parents Dr. Sabiha Sultana and Dr. K. Maudood Elahi, my mother-in-law Mrs. Nazmun Nahar, my wife Anzum Anowar, daughter Charu and son Che for sharing the pain of my wearied moments in many ways throughout the years of this research. I am grateful to them.

KTE

December, 2018

ABSTRACT

The Buddhist monastic establishments in Bengal are the glorious testimony to the prosperous *janapada* of Pundrabardhan that once dominated the social, political and economic milieu across the entire South and Southeast Asian territory. Throughout c.750-950 AD a significant number of *viharas* and *mahaviharas* served as the earliest known religious, intellectual and educational institutions having distinctive architectural merit and systematic functional disposition. These mega-monuments – from *Nalanda* to the *Somapura mahavihara* at Paharpur – are considered to be the concluding signature that not only represent Buddhism during the *Pala Rajas* in their final years, but also accommodate features that are readily identifiable as the architectural traits of the previous religious and monastic terms in the region. However, built entirely of locally available building materials, this volume of unique architectural heritage now stands in utter ruin while little initiatives are there to protect them from the threats of local geo-climatic forces and unwarranted human intervention.

While these *viharas* and *mahaviharas* bear distinctively comparable dimensions in their form and spatial arrangements, they represent the process of experimentation and adaptation in each successive development phases; where dissimilarities prevail in many instances. The ground plans in the *Bhoja vihara* and *Ananda vihara* at Comilla shared organizational principles typical of their later representatives – the *Somapura mahavihara* at Paharpur and the ruins of *Salban mahavihara* at Mainamati. The *Vasu vihara*, on the other hand, represents architectural characteristics similar to the practices in *Nalanda*, India and other earlier examples of Buddhist religious edifices across the region. Evidences suggest that before the practice of Buddhism was almost entirely uprooted from the deltaic landmass of Bengal the evolution was complete and the basic spatial and morphological properties in these monuments became archetypal to the cultural bearing of the region as a whole.

This study highlights the distinctive artistic and architectural endeavor that marks a significant development in the concept of the Buddhist *viharas* and *mahaviharas* in Bengal. An overall pattern of development in the Buddhist building art has been scrutinized in the light of behavioral attitude, geometrical configuration and spatial articulation (within the boundaries of the Indian subcontinent); and by doing so, some of the features corresponding towards the formulation of conjectural image have been discussed. The study also addresses to the unanswered discrepancies in their arrangement, pattern, and purpose that still shroud these treasured mega-monuments.

Keywords: *Built heritage, Buddhist architecture, Bengal, mahavihara, architectural manifestation.*

CONTENTS

Declaration	I
Acknowledgements	II
Abstract	III
Contents	IV
List of Plates	VIII
List of Figures	VIII
List of Tables	IX

Chapter 1: Background of the Study

1.1	Introduction	1
1.2	Statement of the Problem	1
1.3	Literature Review	3
	1.3.1 On Social-Political and Cultural History	3
	1.3.2 On Philosophy and Religion	4
	1.3.3 On Archaeological and Architectural History-Criticism	5
	1.3.4 On Archaeology	6
1.4	Research Gap	6
1.5	Objectives and Probable Outcome	7
	1.5.1 Objectives of the Study	7
	1.5.2 Probable Outcomes	7
1.6	The Defining Parameters	8
	1.6.1 Reality Setting 1 – Buddhism	8
	1.6.2 Reality Setting 2 – Social-Political Contexts	8
	1.6.3 Reality Setting 3 – Architectural Style	8
1.7	Methodology	9
	1.7.1 Organization of the Research	9
	1.7.2 The Methodology Diagram	13
	1.7.3 Quality Considerations	13
1.8	Limitations of the Study	14
1.9	Framework of the Report	15
1.10	Concluding Remarks	16
	References	17

Chapter 2: Ethno-religious Backdrop – A Historical Overview

2.1	Introduction	19
2.2	The Birth of Buddhism	19
	2.2.1 The Early Buddhism	20
	2.2.2 Buddha and the Order of Monks	20
	2.2.3 The First Two Councils and the Two Sects	21
2.3	The Continuity of Buddhism through the Political Frontiers	22
	2.3.1 Buddhism during Asoka and the Third Council	23
	2.3.2 Buddhism during Kanishka and the Fourth Council	25
	2.3.3 Buddhism during Gupta Supremacy	25
	2.3.4 Buddhism during Harshwardhana	26
2.4	Buddhism during the <i>Palas</i>	27
	2.4.1 <i>Vajrayana</i> Buddhism in Bengal	30
2.5	The Fall of Buddhism in the Indian Subcontinent and Bengal	31
	2.5.1 The Philosophical Paradox	31
	2.5.2 The Practicality Paradox	31
	2.5.3 The Political Paradox	32
2.6	Implications – Development of the Buddhist Philosophy	33
2.7	Concluding Remarks	35
	References	36

Chapter 3: Contexts for the Buddhist Monastic Architecture in Bengal

3.1	Introduction	37
3.2	The Physical Realities of the Indian Subcontinent and Bengal	37
	3.2.1 Defining 'Bengal' in the Study	39
	3.2.2 The Geo-Context of Bengal	40
	3.2.3 The Climate of Bengal	42
3.3	Implications – The Physical Realities of Bengal	43
	3.3.1 On Political Aspects	43
	3.3.2 On Ethno-religious Aspects	44
	3.3.3 On Built Heritage	44

3.4	Settlements during Ancient and Medieval Bengal	46
3.4.1	The Major <i>Janapadas</i> and <i>Mahajanapadas</i>	47
3.5	Assimilation of Contexts – Its Necessity	49
3.6	Concluding Remarks	50
	References	51

Chapter 4: Stylistic Evolution of the Buddhist Monastic Architecture

4.1	Introduction	53
4.2	Selection of Buddhist Monuments	53
4.3	The Primary Manifestations of Buddhism	54
4.3.1	The First Functionalities – from Caves to the <i>Sangharamas</i>	54
4.3.2	The First Symbols – of <i>Toranas</i> and <i>Stupas</i>	57
4.4	Buddhist Architecture in India – Through the Formative Stages	59
4.4.1	Stylistic Context – the Formative Stages	60
4.4.2	Asoka, and the Rise of Buddhist Formalism	61
4.4.3	The Post-Asokan Transitory Stage	66
4.4.4	Kanishka, and the High-Style Formalism	71
4.5	Buddhist Architecture in India – Through the Transformative Stages	78
4.5.1	Stylistic Context – the Transformative Stages	79
4.5.2	The <i>Guptas</i> , and the Resurgence of the Cave-Communities	80
4.5.3	Harsha – the Last Revivalist in India	83
4.6	Probable Externalities in Buddhist Architecture	90
4.7	The Concept of Evolution – Synthesis	92
4.8	Concluding Remarks	97
	References	98

Chapter 5: Buddhist Monastic Style in Bengal

5.1	Introduction	99
5.2	Buddhist Monastic Style in Bengal – The Defining Parameters	100
5.2.1	The Social-Political Synergy	100
5.2.2	The Ethno-religious Synergy	102

5.2.3	The Geo-Contextual Synergy	103
5.2.4	The Stylistic Synergy	103
5.3	Buddhist Monastic Style in Bengal – An Index	104
5.4	Comparative Analysis – Buddhist Monastic Architecture in Bengal	106
5.4.1	The Early Developments	106
5.4.2	The Matured Developments	113
5.4.3	The Later Developments	116
5.5	Archetype <i>Mahavihara</i> – Somapura Mahavihara, Paharpur	119
5.5.1	Physical Anchorage of Somapura <i>Mahavihara</i>	121
5.5.2	The Elements of Somapura <i>Mahavihara</i>	122
5.5.3	Functionalities and Zoning of Somapura <i>Mahavihara</i>	127
5.5.4	Spatial Organization of Somapura <i>Mahavihara</i>	129
5.5.5	Material Components of Somapura <i>Mahavihara</i>	130
5.6	Buddhist Monastic Style in Bengal – Implications	131
5.6.1	The Basic Morphology	132
5.6.2	The Intraregional Inspirations	136
5.6.3	The Interregional Inspirations	138
5.7	Concluding Remarks	140
	References	141

Chapter 6: Conclusions

6.1	Introduction	144
6.2	Summary of the Study	144
6.2.1	Physical Anchorage in Different Contexts	144
6.2.2	The Elements of Buddhist Architecture	145
6.2.3	Functionalities and Zoning of Buddhist Architecture	146
6.2.4	Symbolic Manifestations of Buddhist Architecture	147
6.2.5	Material Components of Buddhist Architecture	148

Bibliography	X
Appendices	XVIII
Glossary	LII

LIST OF PLATES

<u>Plate I:</u>	Chapter 1: Selection of Study Areas
<u>Plate II:</u>	Chapter 1: Monuments Under Survey
<u>Plate III:</u>	Chapter 2: The Continuity of Buddhism through the Political Frontiers
<u>Plate IV:</u>	Chapter 3: The Physical Realities of the Indian Subcontinent
<u>Plate V:</u>	Chapter 3: The Physical Realities of Bengal and the <i>Mahajanapadas</i>
<u>Plate VI:</u>	Chapter 3: The Environs of Mahasthangarh
<u>Plate VII:</u>	Chapter 4: Stylistic Evolution of the Buddhist Monastic Architecture
<u>Plate VIII:</u>	Chapter 4: The First Functionalities – from Caves to the <i>Sangharamas</i>
<u>Plate IX:</u>	Chapter 4: The First Symbols – of <i>Toranas</i> and <i>Stupas</i>
<u>Plate X:</u>	Chapter 4: Asoka, and the Rise of Buddhist Formalism
<u>Plate XI:</u>	Chapter 4: The Post-Asokan Transitory Stage
<u>Plate XII:</u>	Chapter 4: Kanishka, and the High-Style Formalism
<u>Plate XIII:</u>	Chapter 4: The <i>Guptas</i> and the Resurgence of the Cave-Communities
<u>Plate XIV:</u>	Chapter 4: Harsha – the Last Revivalist in India
<u>Plate XV:</u>	Chapter 4: Probable Externalities in Buddhist Architecture
<u>Plate XVI:</u>	Chapter 4: The Concept of Evolution – Synthesis
<u>Plate XVII:</u>	Chapter 5: Buddhist Monastic Style in Bengal – An Index
<u>Plate XVIII:</u>	Chapter 5: The Early Developments in Bengal
<u>Plate XIX:</u>	Chapter 5: The Matured Developments in Bengal
<u>Plate XX:</u>	Chapter 5: The Later Developments in Bengal
<u>Plate XXI:</u>	Chapter 5: Archetype <i>Mahavihara</i> – Somapura <i>Mahavihara</i> , Paharpur
<u>Plate XXII:</u>	Chapter 5: Buddhist Monastic Style in Bengal – Implications

LIST OF FIGURES

<u>Figure 01:</u>	Literature survey diagram	10
<u>Figure 02:</u>	The methodology diagram	13
<u>Figure 03:</u>	Copper plates depicting the greatness of Dharmapala's House	29
<u>Figure 04:</u>	The five <i>Dhyani Buddhas</i>	30
<u>Figure 05:</u>	The central temple (1923); Somapura <i>mahavihara</i> at Paharpur	45

LIST OF TABLES

<u>Table 01</u> : Research strategy	9
<u>Table 02</u> : Development of the Buddhist philosophy	34
<u>Table 03</u> : The evolution of rock-hewn settlements in India	93
<u>Table 04</u> : The evolution of <i>viharas</i> in India	94
<u>Table 05</u> : The evolution of <i>stupas</i> in India	95
<u>Table 06</u> : The evolution of Buddhist temples in India	96
<u>Table 07</u> : Buddhist monastic style in Bengal – an index	105
<u>Table 08</u> : The early developments in Bengal – spatial organization	112
<u>Table 09</u> : The matured developments in Bengal – spatial organization	116
<u>Table 10</u> : The later developments in Bengal – spatial organization	119
<u>Table 11</u> : Somapura <i>mahavihara</i> , Paharpur – spatial organization	130

Chapter 1: BACKGROUND OF THE STUDY

- 1.1 Introduction
- 1.2 Statement of the Problem
- 1.3 Literature Review
- 1.4 Research Gap
- 1.5 Objectives and Probable Outcome
- 1.6 The Defining Parameters
- 1.7 Methodology
- 1.8 Limitations of the Study
- 1.9 Framework of the Report
- 1.10 Concluding Remarks

1.1 INTRODUCTION

The social-political history of greater Bengal, with its diverse ethno-religious juxtaposition of great extremities, is best expressed through the vibrant existence of the region's built heritage. The ruins scattered all over the countryside from the early Buddhist to the Hindu and Muslim monuments are expressed testimony to this fact. Although the deltaic landmass of Bengal has been widely heterogeneous with the other parts of the South Asian (popularly, Indian) subcontinent in terms of its physiographic and climatic characteristics, its history suggests that the region shared the same political and philosophical intentions in many instances. In one hand, it was often ruled under the greater dynastic powers that dominated most of the subcontinental territories, and on the other, when independent Bengali regimes formed within its geographic boundaries, they commemorated almost identical principles or influences in their social and cultural practices (Roy, 1993). Whichever the circumstance may be, the extra-territorial influences such as these tended to be absorbed with its aboriginal mass, blending with its already rich and vibrant physical forms (*i.e.* art, architecture, and etc.) and vernacular practices of the land – eventually forming a unique and uncommon dialect that fitted well to its setting. In order to understand the Buddhist monastic architecture in Bengal – style and practice in the light of a suggestive evolution process, the parameters of this research has been outlined here within a concrete methodological framework.

1.2 STATEMENT OF THE PROBLEM

In the course of almost two thousand years or more (as far as our built heritage can be traced), the agrarian commoners of Bengal had experienced rise and fall of a good many number of notable dynastic rules of different traditional background (Ahmed, 1984). As it should have been, this particular portion of the Indian

subcontinent is not as fortunate as other ancient civilizations of contemporary epoch in terms of its artistic and archaeological heritage. Comparing to its western counterparts in and around Europe, and even in India, where the early cities have endured the test of time and survived through the dynamic changes in their social-political contexts and became megalopolises of today; Bengal lacks existence of similar proportion. Today, only a handful of monuments are still visible that commemorates to the country's enlightened past (Doxiadis, 1968; Gallion and Eisner, 2000). Absence of permanent building materials, hot and humid climatic conditions, geomorphic characteristic like frequently shifting river courses (associated with flood and riverbank erosion), and other natural calamities, together with the instability of successive dynastic reigns were the key determinants of their fate (Grover, 1981).¹

The Buddhist ruins scattered across the plains of Bengal are the oldest testament of cultural heights that are extant within its boundaries. Prior to these, no significant building activity can be traced that sheds a good light on the architectural practices of the societies far more antediluvian. With the rise of the *Palas* in Bengal, the people of the land experienced supreme development in the philosophy of the religion and its associated social-cultural domains (Bagchi, 1993; Roy and Chattaroy, 2007). During this period, new settlements flourished with absolute rapidity, and the architectural traditions of the region were stretched to a new height.

Distinctive in its own character and style, the Buddhist architectural tradition in Bengal during c.750-950 AD was never confined only within its own boundary. It signifies almost a thousand years (or more) of evolutionary process within the greater subcontinental region by marking its zenith in terms of a comprehensive realization of spatial and morphological properties; and at the same time, influences further enhancements in the overall aesthetic and compositional traits even beyond its regional dimensions. With a role as substantial as this in the history of architecture, together with its personal dialect that responds by far and well to Bengal's indigenous

¹ The builders of the Independent Sultanate in Bengal, in particular, were notable for the practice of employing composite building materials in their basic structural system. Right through the 300 years of their building activity, it became customary for them to use spoils scavenged from Buddhist and Hindu monuments from earlier political periods.

systems in building art, some of the Buddhist monuments had been included in the World Heritage List of the UNESCO regarding the protection of World Culture and Natural Heritage (UNESCO-WHC, 2015).

1.3 LITERATURE REVIEW

The basic technical, functional and aesthetic issues in the study of architecture are never without the cultural, social, philosophical, and the 'other' qualitative and quantitative aspects of human being that ultimately contribute to the overall diversity in building traditions throughout the globe. Therefore, architecture is an *institution* – the basic cultural phenomena (Rapoport, 2005). With this in view, the research involves some of the major branches of knowledge, forming the fundamental base for this present discourse. The literature studied throughout the entire process also identifies the existing body of information on the subject matter, and consequentially exposes the gap where focus should be given. In the following subsection, a brief review of literature is provided based on some specific themes:

1.3.1 On Social-political and Cultural History

In his volume, Basham (2005) provides with a comprehensive discourse on the cultural composition of the Indian subcontinent, mainly covering the periods between ancient India and the arrival of the Muslims in the region. A polymath in its overall outlook, it covers nearly all known aspects of the Indian civilization. Bagchi (1993), on the other hand, concentrates on the history and culture of Bengal under the *Pala* rulers, focusing directly on monarchical achievements and their consequent impact on the society in general. While Shafer (1954) provides with a clear insight on the ethno-political discourse on ancient India. Relying upon an array of old-Indic literature, geographical data and genealogical references, the author endeavors to reconstruct the ethnic history of the region from the Indo-Aryan times till the end of the epic period.

Scrupulously accurate and detailed, the works of Roy and Chattaroy (2007) and Smith (1983) deal with the study of history as an investigative process where the relationships among *man* and his environment – geological and territorial, *his* archaeological contributions towards society, diversity in their social and cultural dimensions, etc. are incorporated. Scrupulously accurate and detailed, these references are reliable textbooks for both social-political and cultural history of the Indian subcontinent.

Distributed in intelligible sections, Thapar's publication (2003) provides with a chronological frame of dynastic history of early India; but the essential thrust has been carefully put on the explanation of the changes in society and/with both political and economic aspects. It depicts the thousands of years of history, tracing India's evolution before the incursion of modern Europe – the prehistoric initiations, the earliest civilizations, the emergence of the mighty dynasties such as the *Mauryans*, *Guptas* and *Cholas*, and the teachings of the Buddhist philosophy in a historical point of view; and eventually, the creation of regional cultures.

1.3.2 On Philosophy and Religion

With a primary base on the epigraphic and archaeological sources, Chatterjee (1985) focuses directly on the religious practices and their ensuing impact on society and culture during the *Pala* and *Sena* rules in Bengal. While Dutt (1962) and Ling (1980) provides with a thick description of history and the changing shape of Buddhism and its *sangha* – not just in the Indian subcontinent, but in other places like Tibet and Sri Lanka. It also investigates the philosophical grounds of both *Mahayana* and *Vajrayana* Buddhism, and portrays a clear picture on how the religion have changed over the course of time throughout the region.

Based on his doctoral thesis, Singh (1982) portrays an in-depth historical overview of the origin and growth of Buddhism during the lifetime of Buddha

himself, the promulgator of the creed and the expansion of the philosophy in the different countries of Asia. It also renders a vivid picture of the ethics and the culture of Buddhism during the subsequent period of time. Chodron (2001), on the other hand, provides with the foundation for understanding the basic philosophical organization and ethical position of Buddhism as a global religious system.

1.3.3 On Archaeological and Architectural History-Criticism

The information in this category had been drawn primarily from the works of Ahmed (1984), Brown (2003), Fisher (1993), Grover (1981) and Phuoc (2010). Brown (2003) and Grover (1981) have conveniently organized their treatises to the historic progression while interpreting the Hindu and Buddhist building traditions throughout the region. However, in both of the publications the study of philosophy, religion and politics had been widely neglected, rendering these volumes incomplete to some degree. On the other hand, Fisher (1993) converses on religion and philosophy of Buddhism as a single thread that unites the Asian world – from India to Southeast Asia and through the Central Asian territories; and beyond. This reference, nevertheless, does not render a complete picture of the artistic and architectural endeavor of the Buddhists in the Indian subcontinent. Phuoc (2010) thoroughly examines the origin, evolution and the principal types of Buddhist architecture in Asia between c.3rd BC and c.12th AD with a primary emphasis on India; but in an attempt to categorize the components of Buddhist architecture, he largely overlooks their historic and contextual situatedness.

Ahmed's (1984) publication stands as the only reference regarding an overall discourse on the archaeological history in Bangladesh. In the form of an inventory, it covers the built heritage since the earliest history of Bengal, and at the same time, maintains a satisfactory balance between technical aspects and storytelling.

1.3.4 On Archaeology

The study includes a number of archaeological publications on the selected Buddhist monuments of Bengal during the *Palas*. Significant are the technical interpretations of Ahmed *et al.* (2015), Ahmed (1975 and 1979), Alam (1976), Alam and Miah (1999 and 2000), Alam *et al.* (2000), Dikshit (1991), Imam (2000), Rahman (1997) and Zakariah (2011); and these have been frequently cross-referenced with other sources of information.

1.4 RESEARCH GAP

Till today, the study of historic Bengal has been largely neglected in the global architectural forum. Although the region had held numerous connotations in the fields of dynastic politics, agriculture and trade, and even in stylistic significance in the areas of aesthetics and architecture; somehow they were overshadowed by the very own forces which made them stand apart from rest of the world.

As for the Buddhist mega-monuments (and also for their smaller versions) of Bengal, a survey within the existing body of literature has revealed that there prevails a wide-ranging gap in knowledge regarding their proper place in the subcontinental history, and even beyond. Unique in their personal dialectic and/or stylistic character, these architectural masterpieces not only represent the hundreds of years of Buddhist reign in Bengal within its geographic boundaries, but also contribute to the overall development (or continuum) of Buddhist architecture throughout Asia as a significant piece in the entire puzzle. There are several resources that shed light on the exclusivity of the local parameters, such as: building material, surface detailing, scale of built form, compatibility of form and approach, and so on. Integrating these aspects, the research pledges to uphold Buddhist architecture of Bengal during c.750-950 AD, the most prosperous era of the *Palas*, on a wider platform in terms of its architectural history and criticism.

1.5 OBJECTIVES AND PROBABLE OUTCOME

The proposed research initiative is primarily directed towards preparing a technically viable documentation on the Buddhist monastic establishments in Bengal during the first millennium AD; and their origin and evolution of basic architectural trends in the local and regional parameters. In view of this, the specific objectives are:

1.5.1 Objectives of the Study

- a) To identify the differences in layout patterns, architectural forms and the functional properties of the *viharas* and *mahaviharas* (e.g. *Rupban mura*, *Vasu vihara*, *Sitakot vihara*, *Salban vihara* and *Somapura mahavihara*, etc.) within the respective regional boundaries; and in doing so, determining the behavioral and morphological components that eventually constitute Buddhist monastic architecture in the Bengal delta with respect to their comparable dimensions.
- b) To address the unanswered queries in plan arrangement, architectural design and purpose that still shroud these monastic establishments in *Pala*-Bengal.
- c) To investigate the probable connection(s) with the past; and by doing so, establishing a path that might have influenced the stylistic development of the *viharas* and *mahaviharas* during the *Pala Rajas* in Bengal.

1.5.2 Probable Outcomes

- a) With the monastic establishments in focus, preparation of an analytical discourse on the overall pattern of development of Buddhist building art and architectural style in Bengal.
- b) Rendering suggestive (and generalized) guidelines corresponding towards formulation of interpretive conjectural images on this specific debate.
- c) Developing methodologically preemptive guidelines regarding the accurate architectural intention of the original builders for the preservation, restoration and/or conservation of the Buddhist *viharas* and *mahaviharas* in Bengal.

1.6 THE DEFINING PARAMETERS

In order to address to the fundamental queries outlined in the preceding section,² the study involves a number of independent variables that analyze and assess various static conditions in history in parallel situations. Although self-determining in their individual dimensions, these conditions interact and eventually explain the dynamics of another reality setting when their causal relationships are studied. The architectural interpretation of the Buddhist monastic establishments in Bengal is thus evaluated against the context and continuity of a number of reality conditions and socially rooted meanings (or historical events) where the evolution of style and its components are identified. In this particular case, the study involves the following issues in the form of defining parameters:

1.6.1 Reality Setting 1 – Buddhism

Concerns an in-depth study of the history and philosophy of Buddhism and its changing realities through time since its birth in the Indian subcontinent, and also its commencement in the regional territories of Bengal.

1.6.2 Reality Setting 2 – Social-Political Contexts

Concerns a thorough understanding of the social and political dynamics of the Indian subcontinent and Bengal during the periods in which Buddhist art and architecture flourished in these geographical areas.

1.6.3 Reality Setting 3 – Architectural Manifestation

Concerns the complete study and understanding of Buddhist architecture and its evolution through time across various locations in the subcontinent in order to formulate the knowledge of the architectural manifestations of Buddhism during the *Palas* in Bengal.

² See explanation: chapter-1, section-1.5, p.7.

1.7 METHODOLOGY

The range of literary works that have been studied forms the main body for the secondary sources of information. Thus, the nature of information available in the shape of existing scholarly initiatives and subsequent field surveys are largely explanatory in organization; and they predominantly follow an Interpretative-Historical Strategy (Groat and Wang, 2002). Qualitative in nature, the study involves multiple socio-physical realities within the boundaries of complex contextual and historical settings. The following table summarizes the methodological design:

Stage 1	Data /Evidence: <ul style="list-style-type: none"> - Buddhist architecture in the regional parameter – architectural history in political and social-cultural dimensions. - Buddhist architecture during the <i>Pala-Bengal</i>; with specific focus on <i>viharas</i> and <i>mahaviharas</i>, and other comparable monuments. 	Assimilation: Secondary sources, published and unpublished records, photographic evidences, field reconnaissance, etc.
Stage 2	Identification /Organization: <ul style="list-style-type: none"> - Buddhist architecture in the regional parameter – identifying monuments that are relevant to the study; shortlisting examples. - Identifying functional and organizational components of the Buddhist monastic establishments in Bengal – establishing the primary archetype; assessing and associating the basic typological variations. 	Assimilation: Identifying and organizing sources, observations, appropriating material evidences, etc.
Stage 3	Evaluation: <ul style="list-style-type: none"> - Addressing to the research objective: <i>“Archetype Mahavihara – its commencement and continuity in Pala-Bengal; suggestive guidelines for conjectural studies.”</i> 	Assimilation: Description, analysis, assessment and triangulation of evidences, etc.

Table 01: Research strategy.

1.7.1 Organization of the Research

The study attempts to address the *Pala-viharas* and *mahaviharas* in Bengal in an architectural viewpoint in order to render a comprehensive interpretation

on its basic planning aspects, space-form relationship and functional manifestation; indicative of their general human-behavior that once corresponded to their purpose. In doing so, various references in the relevant field(s) have been examined and appropriated against the preceding Buddhist (and non-Buddhist) monuments within the subcontinental regions that might have influenced their form, spatial organization and the overall character.

Literature Survey: In determining the process of development of the Buddhist monastic institutions in *Pala*-Bengal, relevant literature and data have been drawn from a range of secondary sources. This body of information, in the form of references published in various studies, served as the main source of information, and these have been quoted as and when used in the text. Moreover, copies of various epigraphic records, drawings and maps were collected from the relevant authorities in the country, and transformed into convenient mediums of presentation throughout this research.

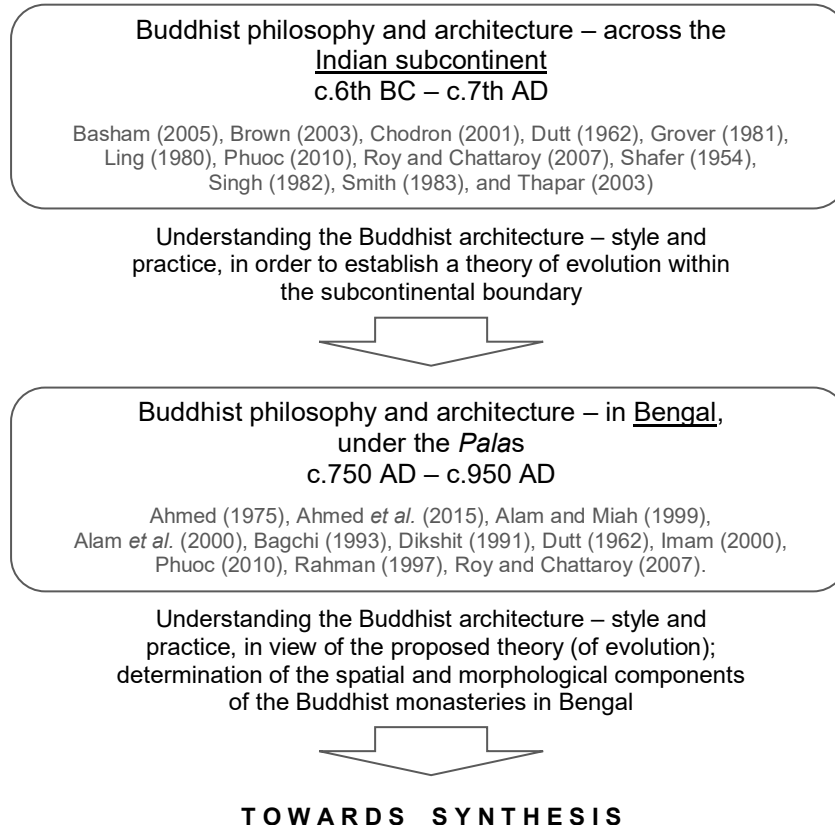


Figure 01: Literature survey diagram.

The information collected in the second stage is juxtaposed with frequent field visits whenever it became necessary. The literature survey eventually directs the study towards its synthesizing segments (Figure 01).

Physical Survey: The first physical survey had been conducted on the basis of random selection of the Buddhist monuments in various locations throughout Bangladesh in the form of basic reconnaissance or pilot surveys. The data were then analyzed, verified and categorized against the existing body of literature and suggestions rendered by the resource persons involved in this study. The second physical survey had been more focused and methodical in organization, with a number of group/activity areas selected conferring to their positions in the map. The data collected in this process were then synthesized and classified under different archetypes (orders) and presented systematically in the report. Finally, a spot survey has been carried out in order to maintain the overall consistency of the research.

Selection of Activity Areas: During the physical survey, two (2) main activity areas were selected for the purpose of this study. These areas were selected following the principles mentioned below:

- a) The site or complex must be well documented in published references so that they can provide a ready ground for further study.
- b) The structure must be fully or partially excavated and should be in a condition where the overall appearance is visible.
- c) The monument(s) in focus must be situated within a complex or group of other monuments of comparable dimensions (in terms of their origin and character) so as to maintain feasibility of access during the field surveys in these areas.

The activity areas selected are (Plates I and II):

- a) The Samatata Group, southeast Bengal
Covering the Buddhist archaeological sites of *Rupban mura*, *Kutila mura*, *Itakhola mura*, *Salban vihara*, *Ananda vihara*, *Bhoja vihara*, and others (if any).

b) The Varendra Group, northwest Bengal

Inclusive of the citadel of *Mahasthangarh*, the archaeological sites of *Vasu vihara*, *Sitakot vihara*, *Halud vihara*, *Odantapuri mahavihara*, *Vikramsila mahavihara*, *Somapura mahavihara*, *Satya Pir bhita*, *Jagaddala vihara*, and others (if any).

Monuments under Survey: Some of the aspects of the monuments selected for detailed survey, which are otherwise important, had been omitted for the purpose of this study; for example: detailing and ornamentations (terracotta-work, moldings, etc.) on the building façade, present structural condition, and so on. The aspects tentatively covered in the survey are:

- Location and identification of the monuments;
- Extent of excavation-work carried out on the monuments;
- Historic situatedness of the monuments (if found any);
- Materials for construction of the monuments;
- Basic functional components of the monuments;
- Relationship among the basic functional components in the monuments;
- Basic form-space relationship of the monuments;
- Geometric properties/composition of the monuments;
- Personal attributes within the monuments;
- Identification of external influences on the monuments;
- Relationship with other comparable monuments;
- Symbolic manifestations of the monuments; and
- Architectural interpretation of the monuments.

Tools for Data Analysis: The data that were collected in the field survey have been reproduced in various architectural modes so that they could be communicated throughout the study. Relevant computer aided tools were employed in this regard; for example: AutoCAD, Google Map, and so on. Moreover, the dissertation also includes schematic diagrams, also done by the researcher (or under his direct supervision), where it has been found necessary.

1.7.2 The Methodology Diagram

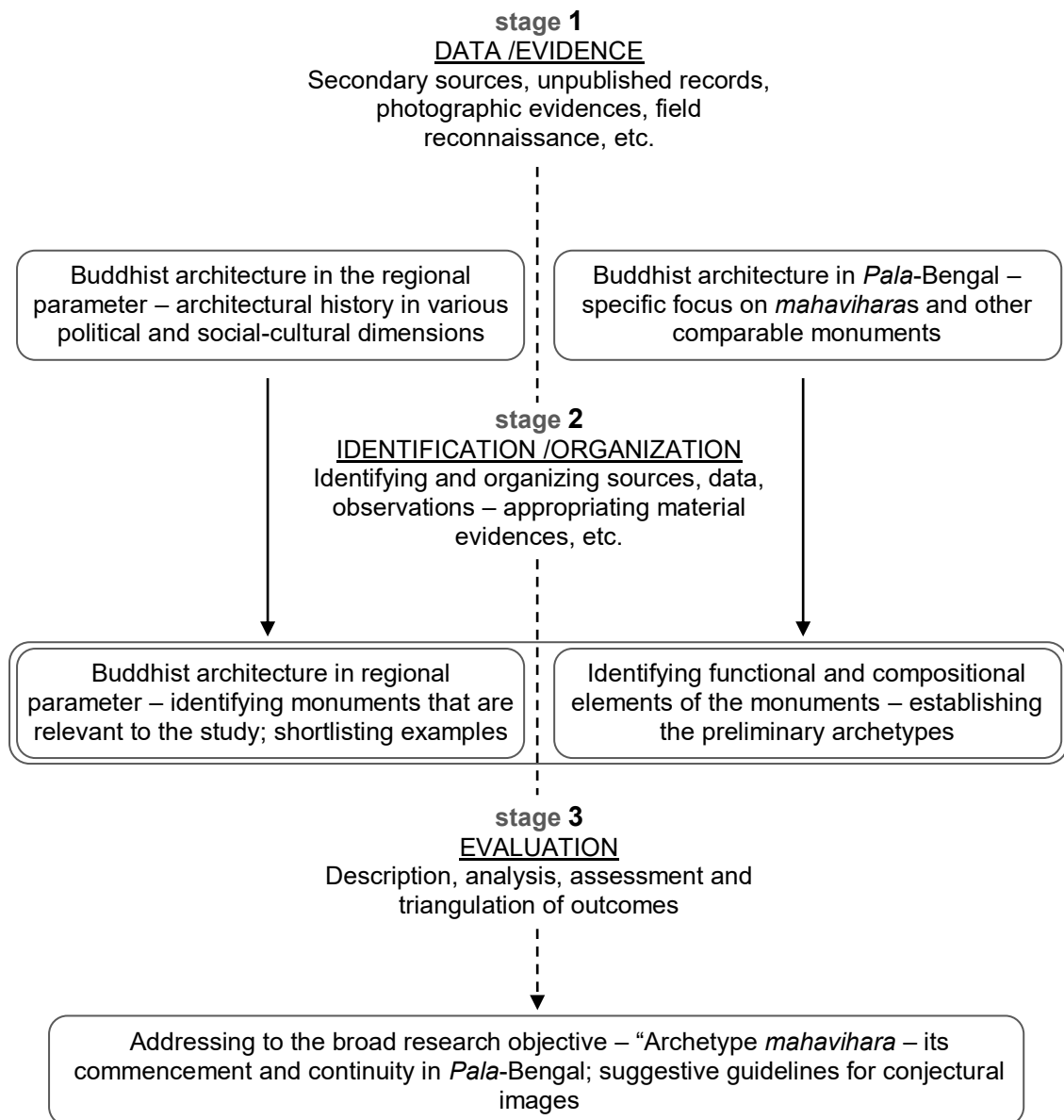


Figure 02: The methodology diagram.

1.7.3 Quality Considerations

Throughout the entire length of the study, triangulation of data has been carried out to ensure the credibility of the outcome as it involves multiple sources of information. At the same time, dependability has been ensured by tracking the apparent instabilities arising from the varied ranges in reality-settings and contexts. Frequent audit-trial in individual segment and to the entire process has also been executed so as to maintain consistency. The

study involves a broader regional setting (*i.e.* the South Asian subcontinent with focus on India) while discussing its primary objective (*i.e.* Bengal *viharas* and *mahaviharas*) with an aim to achieve transferability of the information collected in course of this research.

1.8 LIMITATIONS OF THE STUDY

Limitations identified in this section restrict the outcomes of the research to some degree, but they do not impart gross inconsistency in the overall process. However, it is to be mentioned here that the research has been limited down to a manageable level and scopes are open for further investigations on the subject matter on a wider platform. The limitations are:

Firstly, many of the archaeological sites within the local boundary of the study area (*i.e.* the geographical limits of greater Bengal) still remain unexcavated or partially excavated with most of their ground-levels hidden underneath. The information that is inaccessible due to this condition can be obtained through authorized excavations of the potential sites only, which is beyond the scope of this study. Moreover, the monuments surveyed during the course of this research date back to almost a thousand years and more, and are found in extremely dilapidated condition or altered to such extent by the concerned authority that in some instances inaccurate interpretations might occur.

Secondly, one of the most important aspects of the study involves a broader regional setting (*i.e.* the rest of the Indian subcontinent – the portion that is now largely within India, Pakistan and Nepal), where field surveys of the selected Buddhist monuments could not be conducted due to situational restraints. A major portion of the data or evidences concerning this segment have been collected from various secondary sources.

Finally, there remains a possibility that the research might stay inconclusive within the present volume. There are epigraphic records of many Buddhist monuments from the *Pala*-age in Bengal that are yet to be properly interpreted. Furthermore, the Department of Archaeology from Jahangirnagar University (in association with the relevant governmental bodies) has excavated a number of Buddhist sites in numerous locations throughout various locations in the country. These monuments are intentionally kept out of this dissertation as they are yet to be explained in appropriate archaeological and/or architectural perspectives.

1.9 FRAMEWORK OF THE REPORT

The thesis has been presented in six chapters. The first chapter (chapter 1) presents with the methods and outlines the main objectives of this research. Throughout the second chapter (chapter 2), the ethno-religious background of the study has been explained, where the philosophy of Buddhism is discussed against the ever changing social and political dynamics of the Indian subcontinent and Bengal. Chapter 3 deals with the physiographical context in which Buddhism flourished as a religion. The fourth chapter (chapter 4) explains and examines the factors of evolution under the dynamics of historical analysis and synthesizes Buddhist architectural style as a continuum through the greater Indian region, and beyond. In the fifth chapter (chapter 5), architectural manifestations of Buddhism in Bengal are scrutinized under the light of the theory of evolution, and thus the archetypes are established. Finally, chapter 6 summarizes the findings of this research, and that eventually concludes the study in a single volume.

Chapters 2 and 3 provide with the primary base for the study by addressing to the reality conditions of philosophy, society and politics, and physiography of the Indian subcontinent and Bengal, while the following two chapters (chapters 4 and 5) deal with the key questions of this research initiative.

1.10 CONCLUDING REMARKS

The chapter has identified the problem statement of this thesis, and simultaneously framed a review of the existing body of resources indispensable for its purpose. Not only that, scopes and limitations of this study have also been discussed with justifiable neutrality. Most importantly, the objectives regarding the subject matter have been outlined and they have been supported with a strong methodological framework. The ensuing chapters form the main body of the discussion and will eventually clarify the probable outcomes with respect to various reality settings.

REFERENCES

- Ahmed, Bulbul, Hasan, M.A.A., Amiruzzaman, Md., Rahman, M.A. and Alam, K. Mahfuz** (2015)
'Ancient Sites and Settlements', in: *Buddhist Heritage of Bangladesh*, (ed.) Bulbul Ahmed, Dhaka: Nymphaea Publication.
- Ahmed, Nazimuddin** (1975)
Mahasthan – A Preliminary Report of the Recent Archaeological Excavations at Mahasthangarh, Dhaka: Department of Archaeology and Museums, Ministry of Education and Religious Affairs, Sports and Cultural Division, GoB.
- Ahmed, Nazimuddin** (1984)
Discover the Monuments of Bangladesh – A Guide to Their History, Location and Development, Dhaka: University Press Ltd.
- Ahmed, Nazimuddin ed.** (1979)
Bangladesh Archaeology (Vol.1, No.1), Dhaka: Department of Archaeology and Museums, Ministry of Education and Religious Affairs, Sports and Cultural Division, Government of People's Republic of Bangladesh.
- Alam, A.K.M. Shamsul** (1976)
Mainamati, Dhaka: Department of Archaeology and Museums, Ministry of Education and Religious Affairs, Sports and Cultural Division, Government of People's Republic of Bangladesh.
- Alam, Md. Shafiqul, Dewan, M.T.A., Quadir, M.A. and Miah, M.A.H.** (2000)
Excavation at Rupban Mura, Mainamati, Comilla, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, Government of People's Republic of Bangladesh.
- Alam, Md. Shafiqul and Miah, M.A.H.** (1999)
Excavations at Ananda Vihara, Mainamati, Comilla – 1979-1982, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, GoB.
- Alam, Md. Shafiqul and Miah, M.A.H.** (2000)
Excavation Report on Rupban Mura, Mainamati, Comilla, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, GoB.
- Bagchi, Jhunu** (1993)
The History and Culture of the Palas of Bengal and Bihar - cir.750AD-cir.1200AD, New Delhi: Abhinav Publications.
- Basham, Arthur L.** (2005)
The Wonders that was India, New Delhi: Rupa & Co.
- Brown, Percy** (2003)
Indian Architecture – Buddhist and Hindu Periods, Mumbai: Taraporevala Sons & Co. Pvt. Ltd.
- Chatterjee, Rama** (1985)
Religion in Bengal during the Pala and Sena Times, Calcutta: Punthi Pustak.
- Chodron, Thubten** (2001)
Buddhism for Beginners, New Delhi: Sambhala Publications.
- Dikshit, K.N.** (1991)
Memories of the Archaeological Survey of India – No.55, Delhi: Swati Publications.
- Doxiadis, Constantinos A.** (1968)
Ekistics – An Introduction to the Science of Human Settlements, London: Hutchinson and Co. Publishers Ltd.
- Dutt, Sukumar** (1962)
Buddhist Monks and Monasteries in India – Their History and Contribution to Indian Culture, London: George Allen and Unwin Ltd.
- Fisher, Robert E.** (1993)
Buddhist Art and Architecture, NY: Thames & Hudson.
- Gallion, Arthur B. and Eisner, Simon** (2000)
The Urban Pattern – City Planning and Design, New Delhi: CBS Publishers and Distributors.
- Groat, Linda and Wang, David** (2002)
Architectural Research Methods, NY: John Wiley & Sons.

- Grover, Satish** (1981)
Buddhist and Hindu Architecture in India, New Delhi: CBS Publishers and Distributors.
- Imam, Abu** (2000)
Excavations at Mainamati – An Exploratory Study, Dhaka: The International Center for the Study of Bengal Art.
- Ling, Trevor** (1980)
Buddhist Revival in India – Aspects of the Sociology of Buddhism, London: St. Martin's Press.
- Phuoc, Le H.** (2010)
Buddhist Architecture, NY: Grafikol.
- Rahman, H.** (1997)
Excavation Report on Itakhola Mura, Mainamati, Comilla, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, GoB.
- Rapoport, Amos** (2005)
Culture, Architecture, and Design, Chicago: Locke Science Publishing Co. Inc.
- Roy, Atul C. and Chattaroy, Pranab K.** (2007)
Bharater Itihash, Calcutta: MoulikLibrary.
- Roy, Niharranjan** (1993)
Bangalir Itihash – Adiparba, Kolkata: Dey's Publishing.
- Shafer, Robert** (1954)
Ethnography of Ancient India, Wiesbaden: Otto Harrassowitz.
- Singh, S. Kumar** (1982)
History and Philosophy of Buddhism, New Delhi: Associated Book Agency.
- Smith, Vincent ed.** (1983)
The Oxford Student's History of India, Delhi: Oxford University Press.
- Thapar, Romila** (2003)
The Penguin History of Early India – from the Origin to AD1300, New Delhi: The Penguin Press.
- UNESCO – WHC**
Bangladesh – UNESCO World Heritage Centre, accessed on: 2015, web:
whc.unesco.org/en/statesparties/bd.
- Zakariah, A.K.M.** (2011)
The Archaeological Heritage of Bangladesh, Dhaka: Asiatic Society of Bangladesh.

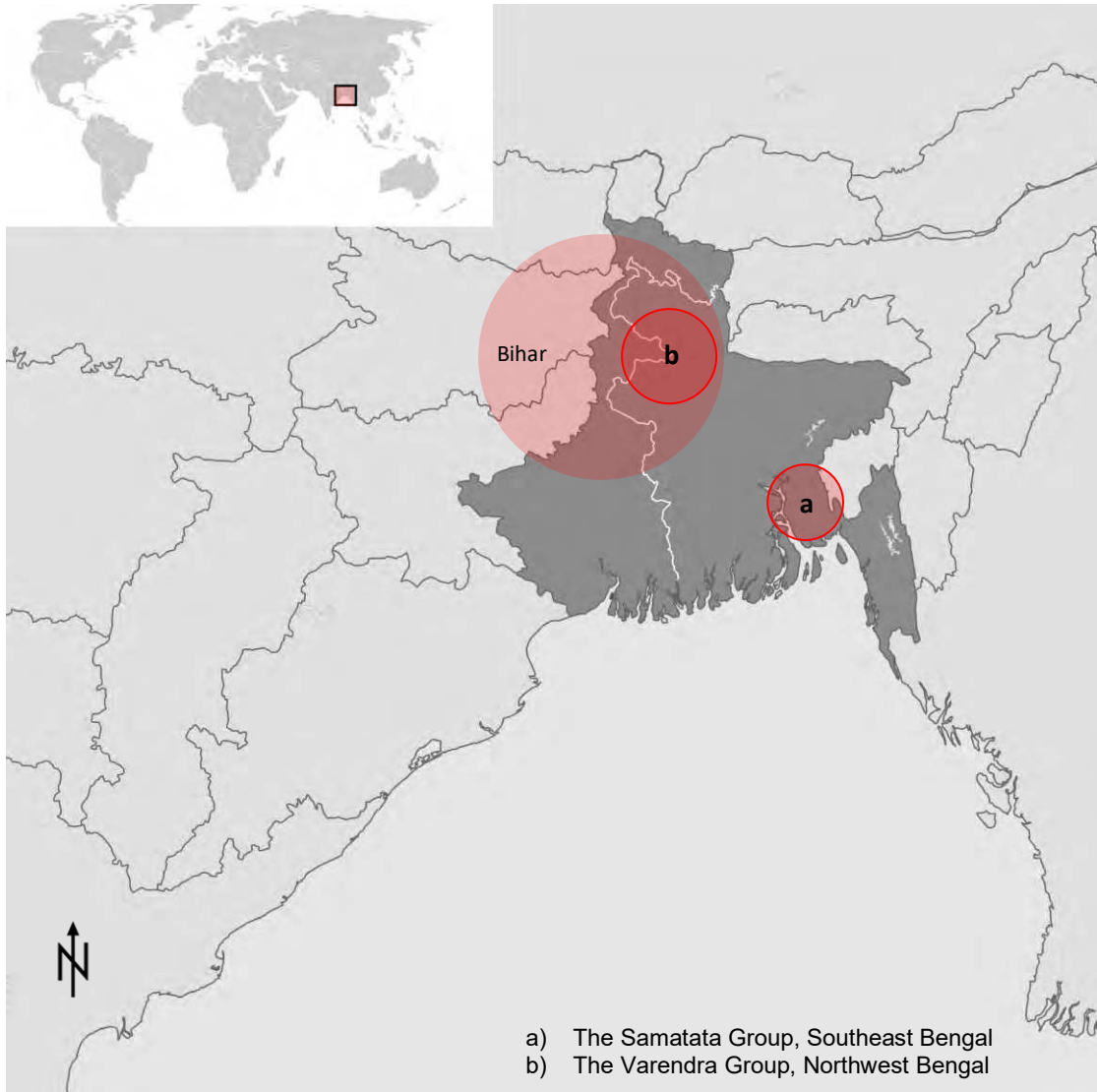


Plate I: Selection of Study Areas
Source: <https://Wikipedia.org>
Edit: **Author**

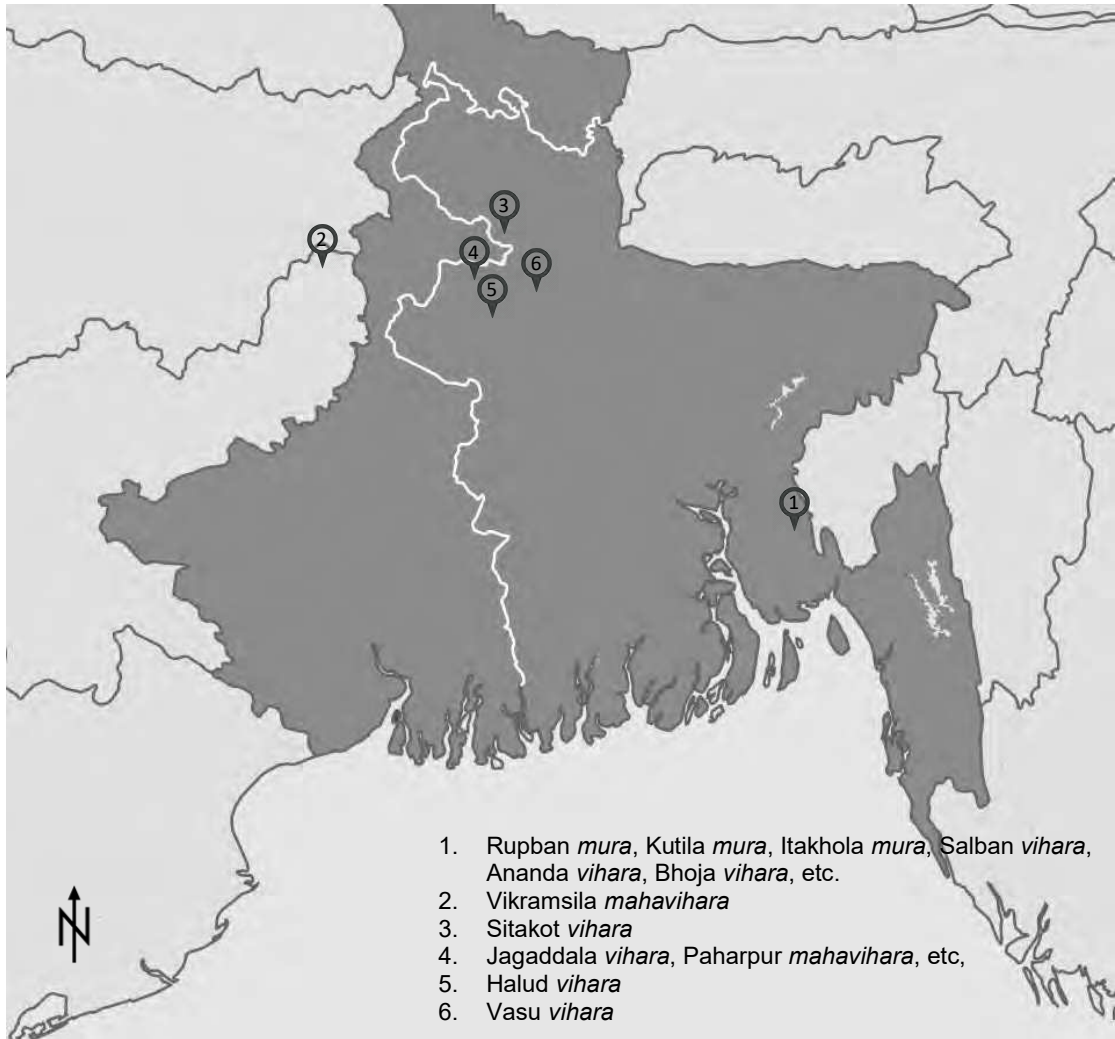


Plate II: Monuments Under Survey

Source: <https://Wikipedia.org>; and Ahmed, Nazimuddin (1984)

Edit: Author

Chapter 2: ETHNO-RELIGIOUS BACKDROP – A HISTORICAL OVERVIEW

- 3.1 Introduction
- 3.2 The Birth of Buddhism
- 3.3 The Continuity of Buddhism through the Political Frontiers
- 3.4 Buddhism during the *Palas*
- 3.5 The Fall of Buddhism in the Indian Subcontinent and Bengal
- 3.6 Implications – Development of the Buddhist Philosophy
- 3.7 Concluding Remarks

2.1 INTRODUCTION

Buddhism, as a philosophy and religion, has a definitive influence over the course of history in the Indian subcontinent. In a span of almost 1500 years and more, this particular system of religious philosophy has undergone numerous changes in both its construct and practice that correspond and correlate to the overall socio-political dynamics of the region itself. Buddhism in Bengal, thus is not an isolated event, but can be defined as a crucial segment in the overall continuum in history, and the study of its architecture can only be carried out integrating a range of stylistic changes that occurred under its influence.

This chapter renders a brief chronological overview on Buddhist religious and political extent during various stages of its history within the broader subcontinental territory. With this as the backdrop of the study, focus will be gradually narrowed down to the deltaic landmass of Bengal where religion and architecture culminated to take its ultimate form.

2.2 THE BIRTH OF BUDDHISM

Arising in the northeastern India sometime between the late-6th and the early-4th century BC, it took little time for the philosophy to gain acceptance in Magadha (namely, South Bihar) and its neighboring localities (Encyclopedia Britannica Online, 2016; Roy and Chattaroy, 2007). The emergence of the new philosophical stance was seen to have been a direct but non-violent reaction against the strict Brahmanic practices³ of the late-Vedic rulers dominating the northern and northwestern parts of the Indian subcontinent during this period of time (Shafer, 1954; Smith, 1983). The basic fact that the conditions of prevailing doubts and turmoil amongst the various

³ See [Appendix-A](#).

independent sects with their moderate ethno-religious backgrounds might have presented lesser difficulty in breaking away from the mainstream Hinduism, which in turn, did not have the strongest of its holds in these localities (Roy and Chattaroy, 2007).

2.2.1 The Early Buddhism

During the first few centuries of its existence in the Indian subcontinent, Buddhism has transformed into a religion from a simple philosophical stance of moral practices. Gautama Buddha, in his lifetime, has travelled distances to disseminate his teachings. Several individual principalities in and around Magadha were the first to recognize his doctrine as their monarchs embraced Buddhism as means of social and political reform (Dutt, 1962; Singh, 1982). After the *Parinirvana*⁴ – the ultimate *Nirvana*⁵ of its founder, the followers of his faith provided the wandering ascetics with the material support that they required to strengthen its cause in the indigenous mass. Although dissimilar to its core, resemblance with the prevailing Brahmanic values and practices, and at the same time, complete denial of the caste-system were the reasons that eventually helped Buddhism flourish throughout the subcontinent. Between the 4th century BC and the first half of 3rd century BC, Gautama's philosophy has gained enough popularity to reach as far as northern and northwestern regions of India, including Mathura and Ujjayani in the west (Singh, 1982).

2.2.2 Buddha and the Order of Monks

After attaining *nirvana*, the great journey began as Buddha went on to spread his teachings (that is, the *Dhamma*) of the Four Noble Truths and the

⁴ *Parinirvana* – In Buddhist religious ideology, the term '*parinirvana*' (the ultimate *nirvana*) is commonly referred to as '*nirvana*-after-death', which occurs upon the death of the body and soul of a person who has attained *nirvana* during his or her life. The accounts of the Buddha's own *parinirvana* was found in 'Mahaparinnibbana Sutta', an ancient epigraphic record originally written in *Pali*.

⁵ *Nirvana* – The term '*nirvana*' is generally synonymous to '*mukti*' or '*moksa*' (meaning: freedom) in most ancient Indian philosophy. It is the state of perfect quietude and/or the perfect condition of happiness, alongside the liberation from physical ties with the family, society or *samsara*; and the repeating cycle of birth, life and death. In the Buddhist belief, *nirvana* refers to the realization of 'non-self' or 'non-existence', by breaking the cycle of rebirth.

Eightfold Path with his first fraternity of monks.⁶ The number of followers joining the Order grew during the subsequent years disregarding their religious sects, age, gender and/or social-political standings. It appears that Buddha received hospitality and attention from the monarchs and the mercantile class of the society as well, among them many followed him in pursuit of spiritual enlightenment, while the others were just being curious – a fact that probably helped him and his Order of monks to evade head-on conflicts with the more orthodox Brahmins (Dutt, 1962; Singh, 1982). As far as historical accounts suggest, his teachings did not provoke serious conflicts as they held nothing that severely contradicted the prevailing concepts in the form of a religion.

Gautama Buddha's association with his Order of monks and disciples was categorically democratic and rather unique to the society where social stratification was traditionally maintained with more rigidity. However, there were instances where he was compelled to impose *Vinaya Sutta* – rules that were regarded as exceptions – to resolve conflicts or misconceptions regarding his teachings, but at the same time, no compulsion appears to be necessary to him. Some of the monks among his *Sangha* were opposed to such leniency from Gautama Buddha, and they expressed their disapproval openly and often voiced for stricter rules. It has been observed that Buddha was tolerant towards his opposition within the fraternity perhaps because of the reason that he believed in high level of tolerance where freedom existed for every man.

2.2.3 The First Two Councils and the Two Sects

The first council, often called 'the Council of Rajagaha', was held by the ranked monks of the *sangha* shortly after Buddha's *parinirvana* with an aim to resolve sectarian clashes, and consequently, marking the commencement of the theological phase of Buddhism. The council had another major resolution

⁶ The *Pancavaggiya* – Brahmins in their original belief – the first converts forming the 'Order of the monks'. They were: Kondanna, Bhaddiya, Vappa, Assaji and Mahanama.

in hand – to reach a concord for a canon of basic rules and doctrines – perhaps because it became quite important for the monks to recollect the teachings of Buddha which was at risk of misinterpretation. Whereas, the second council, called ‘the Council of Vaisali’, was probably held about a century later in order to discuss upon monastic practices and other ritualistic basics. Disagreements marked both the councils; and from these first councils, several schools of thought emerged under two major sects, namely – the *Sthaviravadins* and the *Mahasanghikas*. *Sthaviravadins* are basically the sect of the more orthodox monks who did not entertain the slightest deviation from the *suttas* – the factional branch that eventually became known as ‘*Hinayana* Buddhism’⁷ during the following centuries (Chodron, 2001; Roy and Chattaroy, 2007; Singh, 1982). On the other hand, *Mahasanghikas* are the more liberal Vaisalian monks in favor of relaxing the rules and/or *suttas* observed by the orthodox *Sthaviravadins* – they became the forerunners of ‘*Mahayana* Buddhism’.⁸

2.3 THE CONTINUITY OF BUDDHISM THROUGH THE POLITICAL FRONTIERS

Some of the ancient Buddhist texts and edicts observe that the ruler or the king should not act arbitrarily and tyrannically, but on the other hand, should be wise and benevolent to his subjects and the kingdom. While describing ‘the ideal’ king, these texts further emphasize that there should be a mutually efficient relationship of respect and support between the parties, without which, the society will eventually revert to *matsyanyaya* or the ‘practice of fishes’ (where the large devour the small ones) and the ruler will essentially become either tyrant or a puppet (Ling, 1980).

⁷ *Hinayana* (the lesser vehicle) – A disapproving name given by the followers of *Mahayana* Buddhism to the more conservative schools of early Buddhism (prior to 1st century BC). In 1950, The World Fellowship of Buddhists finally declared that the term should not be used to any form of Buddhism existing today and renaming it as ‘*Theravada* Buddhism’.

⁸ *Mahayana* (the greater vehicle) – The movement is considered to have started in India during 1st century BC to 1st century AD and became a dominant on the Buddhist cultures of Central and East Asia by 9th century AD. More liberal in its basic philosophical stance from the *Hinayana* Buddhists, it is the largest tradition of Buddhism existing in the world to this day.

Most interestingly, keeping in line with these observations, it may be seen that the philosophy of Buddhism and the Buddhist *sangha* had been an effective trilateral relationship with the ruler and the people. Throughout the political frontiers of its existence in the Indian subcontinent, the *dhamma* played an instrumental role in guiding and supporting the ruling administration with this 'ideal' model by forming a bridge between the parties, in return of which, the *sangha* received security and protection. Buddhism was desirable for the ruling class also because of its virtue of being non-priestly and therefore, more acceptable in the administrative mechanism, wherein rivalry between the Brahmin priests and the Ksatriya kings was a common scenario during both in the ancient and the medieval times. Besides, Buddhism helped elevate social ethics among the ordinary mass as it suggests positive habits of peacefulness, abstinence and generosity – by means of which, Buddhism as a religion flourished and kept itself alive against all odds (Ling, 1980).

This debate appears to be valid when seen against the changing dynamics of the Indian subcontinent under advent of the Muslims. Buddhism found no place in the new order of politics and it became extinct throughout the land, while the religious philosophy continued to thrive in the other regions of the world.

2.3.1 Buddhism during Asoka and the Third Council

Buddhism reached its highest peak in the history of the Indian subcontinent during the reign of Asoka (c.273-232 BC) – the great *Maurya* emperor, who not only took up the teachings of the Buddha, but also declared it as the state religion. Asoka's intention involved political conditions and strategies which contributed to his own imperial ambitions, prompting fervent activities to uphold Buddhist art and culture throughout the subcontinent as well (Basham, 2005).

Soon after the Kalinga war, he recognized the administration's accountability and responsibility towards public welfare by introducing necessary changes within the system, which in turn, was quite unlike at that time (Roy and

Chattaroy, 2007; Thapar, 2003). It was during Asoka's reign that Buddhism received further recognition as he convened the Third Buddhist Council at Pataliputra (c.250 BC). From this council, Buddhism turned into a world religion as missionaries and emissaries were sent to various parts of the subcontinent and even beyond (Singh, 1982; Thapar, 2003). Establishment of diplomatic ties with other contemporaries in the outside world ultimately ensured safety and stability for his empire, and at the same time, harvested better economic and/or political outcome than conquering a region with ruthless military might.

The Third Council: The third council became necessary as Buddhism fell into severe sectarian differences after the *parinirvana* of Gautama Buddha. The non-Theravada monks proclaimed their own doctrines as that of the Buddha and carried out their individual practices. One of the main objectives of this council was to protect the *dhamma* and the *vinaya* from the heretics by putting an end to the disputing elements, and thus restoring the orthodox *Theravada* Order (Singh, 1982).

During Asoka's capacity, magnificent Buddhist monuments, such as the *stupas* at Barhut, Sanchi and many other places were built. Monolithic pillars – marking the extent of his empire and rock-cut sanctuaries for the followers of the Jaina belief⁹ at Gaya were the foremost architectural manifestations. These commemorate the beginning of an era that managed to impart permanent indentation on the region's socio-cultural fabric in the years to come (Brown, 2003). Asoka's empire began to disintegrate soon after his death but the ideas of his school persisted through the next 500 years or so, under numerous individual principalities, occasionally changing its form to adopt to their own political and ethnological demands (Basham, 2005; Shafer, 1954).

⁹ See [Appendix-B](#).

2.3.2 Buddhism during Kanishka and the Fourth Council

With the rise of the *Kushan* empire during the 1st and the early 2nd century AD, Buddhism began to spread into Central Asia and China. The religious philosophy was by then well divided into two major factions during this era – the *Hinayana* (alternately known as the *Theravada* sect) and the *Mahayana* sects. Kanishka, the most accomplished ruler of this era, was the man responsible for attempts to mitigate the rivalries between these two basic streams in Buddhism. As a converted Buddhist himself, Kanishka patronized many sacred monuments all throughout his realm. New *stupas* and sanctuaries were built across the subcontinent, and at the same time, the old ones were repaired with utmost care and passion (Roy and Chattaroy, 2007). It was during the first half of this millennium AD that the religious philosophy saw transformations in its architectural representation as Gautama's figural motif began to appear in practice (Dutt, 1962).

The Fourth Council: The fourth council is probably the last one held within the subcontinental boundary. It is believed that the dissensions which have been raging in the brotherhood for centuries were finally resolved in this assembly. All of the eighteen sectarian divisions under the two major camps (that are the *Theravada* and the *Mahayana* factions) were acknowledged as original and their viewpoints were put into writing. A significant change was commenced in the language of the canons by converting the earlier *Pali* scriptures into *Sanskrit*, thus enabling the Buddhist scholars to write their commentaries and treatises, and promoting Buddhist literature in the region (Singh, 1982). The *Theravadas*, however, never switched to *Sanskrit*, and it is probably the reason why their Order began to lose popular audience during the following years.

2.3.3 Buddhism during the *Gupta* Supremacy

The Brahmanic principles and ideals regained its former glory when the *Guptas* took over much of the Indian subcontinent in around c.350 AD, setting

Hinduism on a height that would never leave the region in the years to follow. Historical references suggest that the initial settlement of the Hindus involved a few (if not many) instances of brutality and intolerance towards Buddhism in general (Roy and Chattaroy, 2007; Thapar, 2003; Ling, 1980). However, the *Guptas* allowed other ethno-religious groups, as well as the Buddhists, the freedom to practice and maintain their ideologies without much interference. Buddhism lost almost all of its vigor in the field of art and architecture as the main focus during this period (Brown, 2003). But during the *Gupta* period, Buddhism gained acceptance in many areas of Central, Eastern Asia, and even beyond.

2.3.4 Buddhism during Harshwardhana

Harsha or Harshwardhana is another name that must be associated with the development of Buddhism in the Indian subcontinent. During the first half of the 7th century AD he came to assume the role of the great political reformist, bringing the small post-*Gupta* republics under the single majestic rule that comprised of the entire north Indian territories.

By this time, *Mantrayana* and *Vajrayana*¹⁰ – the two main subdivisions of the *Mahayana* Buddhism were already on the surface. Ritualistic performances and recitations in the form of *mantras* and *mudras* (changing and positioning of fingers and postures in a certain manner) became predominant. These variations in the mainstream Buddhism also required deities to be worshipped as *Dhyani Buddhas*, their families and other associates. It was most probably that this evolution of the original ascetic Buddhism into theistic *Vajrayanism* was the result of prolonged and dominating influence of the cultures in Hinduism (Singh, 1982).

¹⁰ *Mantrayana* and *Vajrayana* – *Mantrayana* is considered to be the vehicle in which, *mantras* or words and syllables of cryptic power are the means of attaining salvation, and on the other hand, *Vajrayana* is the vehicle which leads someone towards salvation by means of *Vajra* or the thing impermeable (which also means the male organ) – it is a queer mixture of Buddhist monastic philosophy, magic and eroticism.

Notable among Harsha's contributions was the *mahavihara* at Nalanda – basically an educational institution, it was an effusively capacitated center for the Buddhist intellectual and religious activities. Under his leadership, the Buddhist architectural intensions have found the most apposite dialect through the realization of their *viharas*. Although the Buddhist intensions seems to be faring well during the *Guptas*, and in particular – Harsha, Chinese pilgrims visiting India between c.400 AD and c.700 AD observed a decaying countenance of the Buddhist community as it was gradually becoming absorbed by the forces of Hinduism (Roy and Chattaroy, 2007). Buddhism (its new form, in reality) survived fairly well during the kings of the *Pala* dynasty during the subsequent years.

2.4 BUDDHISM DURING THE PALAS

Bengal, during the great *Palas* (c.700-925 AD), experienced supreme development in Buddhism and Buddhist culture that eventually became phenomenal across Asia. The *Palas* ruled Bengal, Bihar and even beyond for about four centuries or even a bit more. Founded by Gopala, the reign of the dynasty undergone numerous vicissitudes and lasted for about eighteen generations of kings (Ahmed, 1984).

It has been observed in several historical accounts that political stability within the greater subcontinental region required a strong and dominating central authority to unify the smaller monarchical territories with similar religious and/or partisan interests. Characterized by higher cultural and social development, the trend is seen repeating itself throughout the ancient and medieval history of the region (Ahmed, 1984; Shafer, 1954; Smith, 1983; Thapar, 2003). Bengal, as well as a greater portion of the north and northeastern India during the mid-8th century AD had been politically unstable due to the absence of such authoritative control. Referred to as '*matsyanyaya*', there were several disputing elements in the region – the stronger principalities waged war

and anarchy over their weaker neighbors; while the general population suffered untold misery. It is in this situation the people eventually developed a unique and uncommon sense of political realization and a spirit of selflessness; and elected Bapayata's son Gopala – a dominant Ksatriya king from Varendra – as the leader of their new unified government. With Gopala, the famous *Pala* dynasty of Bengal began its journey in or around c.750 AD, during which a period of peace, prosperity and political stability was enjoyed (Ahmed, 1984; Bagchi, 1993; Roy, 1993; Roy and Chattaroy, 2007).

In the period of ascendancy, the *Pala* empire witnessed widespread expansion. In the beginning of the 9th century AD they succeeded in spreading their sphere of influence up to Kanuj, if not over the entire northern India; and this was Bengal's first successful involvement in the politics of the greater subcontinental region as a whole. Though their hegemony outside the boundaries of Bengal did not last long, but the power and strength that was generated during the early years of *Pala* rule allowed them to hold their ground against the aggressions of the northern Indian powers through 10th and 11th century AD (Ahmed, 1984; Bagchi, 1993). Widespread empire, organized administrative system that they inherited from the *Guptas* and developed in every aspect of public life, policies oriented towards welfare of the people, art (and architecture, included) and literature – all these are the glorious achievements of the *Pala* dynasty (Bagchi, 1993).

The greatest ruler of the *Pala* dynasty, Dharmapala succeeded his father Gopala to the throne in around c.770 AD, and ruled up until c.810 AD. In the 8th century AD, Kanuj – once a strategically vital setting and the imperial capital of Harsha – was at the center of attention from the *Gurjara-Pratiharas* of the west, the *Rashtrakutas* of the Deccan and the *Palas* of Bengal from all the major directions. Dharmapala occupied the city after several vicious campaigns and eventually became the most powerful ruler in North India at that time. The copper plate (Figure 03) found in the district of Maldah in West Bengal depicts the greatness of his House (Roy, 1993; Roy and Chattaroy, 2007).

Devapala (c.810-850 AD), the next in line to claim the throne, not only inherited a vast empire from his father – Dharmapala, but also proved himself to be a keen statesman and strategist in the fields of war. With renewed conquests, Devapala successfully brought the entire North India – extending from the Himalayas to the Vindhya – and from the eastern to the western seas under a singular dominion. But eventually, Devapala’s successors failed to retain their supremacy in the greater Indian subcontinent as the *Palas* of Bengal were under constant attack from a number of feuding elements in the region. Rampala, the fourteenth king on the line, was the last to stand against the tide of degeneration by consolidating his power in Varendra and marginally restoring the empire’s former glory. However, in the midst of all the turmoil, the *Senas* from the South India rose to power in Bengal (Ahmed, 1984; Ling, 1980; Roy, 1993).

The epigraphs read:

“His court was attended by the rulers of Bhoja, Matsia, Madra, Kuru, Yadu, Yavana, Avanti, Gandhara and Kira. These kings accepted the installation of Chakrayudha on the Kannauj throne, while ‘bowing down respectfully with their diadems trembling’.”



Figure 03: Copper plates depicting the greatness of Dharmapala’s House.
Source: www.Banglapedia.org

The last days of the *Pala* empire (towards late-10th to early-11th century AD) were characterized by internal revolt and factionalism that weakened their vast kingdom. Buddhism became corrupt due to the increasing influence of Hinduism. It was in this situation that the *Sena* dynasty, known as the bearers of strict Brahmanic Hinduism, came to power. During this period, the Buddhists suffered the worst persecution by the *Sena* rulers, and by the time the Muslims advanced into the north Indian territories and much of Bengal the religious philosophy was almost entirely uprooted from the region (Elahi, 2008).

2.4.1 *Vajrayana* Buddhism¹¹ in Bengal

Buddhism during the *Palas* had undergone massive transformations in terms of both its tangible and intangible principles. It is believed that the form of Buddhism prevalent at that time was not original, but was an assimilation of various Brahmanic and other native ritualistic practices with the *Mahayana* trends that existed during the last decades of Harsha's rule in the region (Chatterjee, 1985).

However, Buddhism under the banner of *Vajrayanism* was viewed as extremely diverse in nature and somewhat lacking an original structure (Hoque and Hoque, 2004). As with *Mahayana* Buddhism, the *Vajrayana* also greatly emphasize the role of the *bodhisattva*¹², and at the same time, the tradition tended to favor deities (*i.e.* the *Dhyani Buddhas*), and significantly expands the *bodhisattva* pantheon. Its rituals and devotion favored *mantras* (esoteric verbal formulas), *mandalas* (diagrams used in the visualization practices), and other complex array of performances. Great emphasis was seen to have been placed on the *guru* – the religious teachers who had mastered the philosophical and ritualistic traditions of (*Vajrayana*) Buddhism (Chatterjee, 1985; Singh, 1982).



Figure 04: The five *Dhyani Buddhas*.
Source: <https://Mandalas.Life>

¹¹ See [Appendix-C](#).

¹² *Bodhisattva* – (*Bodhi* – spiritual awakening or enlightenment, and *Sattva* – a being, essence or spirit) is the compassionate person who is able but delays his own *nirvana* in order to save others into earthly suffering.

2.5 THE FALL OF BUDDHISM IN THE INDIAN SUBCONTINENT AND BENGAL

Conze (2007) theorizes that Buddhism in India and Bengal had died of old age. In his writings it has been expressed as an analogy with the human body and all the beings that live and die of natural causes. He emphasizes that Buddhism had outlived its usefulness as a philosophy and its ideas were not as per with the time in which it finally breathed its last in the region (Ling, 1980). A brief examination of the Buddhist philosophical continuum in the subcontinent yields the following explanations:

2.5.1 The Philosophical Paradox

Some of the basic inconsistencies within the roots of Buddhism began to surface from the very first days – while Gautama Buddha was still preaching his doctrines among the existing social-ethnological diversities. It would be only natural that he had rival philosophers belonging to the Brahmanic Order making capital out of such ambiguities, which in the course of time, persisted and even drew larger criticisms (Singh, 1982).

Implication: Buddhism started its journey as a philosophy of denial from physical responsibilities of life, and at the same time, rejecting the already existent religious practices in the subcontinent. Brahmanism, on the other hand, had been a highly structured religious system that thrived from its strict disciplinary values, enforced with castes and prescriptions on specific social responsibilities as guidelines. The first debate that arises between the two is – how does humanity survive if one remains inactive from physical realities?

2.5.2 The Practicality Paradox

It has been commonly understood that the religious philosophy thrived well with patronage of the ruling and the mercantile class, and slumped down every time it was unavailable to them – a pattern that repeated time and again from the birth of Buddhism till its last days. The fact widely exposes one of the

major weaknesses of the ideas of Buddhism as there was no opportunity for practicality within the limits of the monastic rules and regulations to address to this issue. It can very well be stated here that the question of mere existence of Buddhism in this region hinged on other parties with power and affluence, and such overdependency eventually left it nowhere but in the hands of fate (Conze, 2007; Ling, 1980; Singh, 1982).

Implication: When Chinese pilgrims like Hsuan-Tsang and I-Tsing visited the region during 7th century AD, they observed an already dilapidated state of Buddhism in the northwest and the southern localities of India. While in Bengal the condition was marginally better, but the signs of decay were evident (Devahuti, 2001; Ling, 1980). The scenario quickly reverted with the *Pala* ascendancy in Bengal; and monasteries sprung up everywhere and the *sangha* multiplied by thousands. Hence, the question arises – what would really happen if Buddhism fails to secure imperial support and approval for a considerable length of time or in case of an altered social-political dynamics in the subcontinent?

2.5.3 The Political Paradox

In Bengal – the last stronghold for the Buddhists in the subcontinent – it was the jealous rivalry of the Hindus from which Buddhism suffered the most. Originating from the South Indian territories, the *Senas* were harsh upholders of the Brahmanic Order, and therefore, more hostile towards the Buddhists comparing to their northeastern contemporaries. Already crippled in a severe manner, Buddhism suffered its mortal blow when the Muslims entered into the political scenario of the subcontinent and the economic basis of the *sangha*'s continued existence became faltered due to the total absence of support from the upper strata of the community (Elahi, 2008; Ling, 1980).

Implication: It has been historically known that the Brahmanic community was sympathetic towards (and even in service with) the Buddhists since its birth in

India; not to mention that the first converts were Brahmins themselves. It would have helped the Buddhists in the long run to survive the event of rapid Islamization had they been sensible enough to return the favor and be more appreciative in response. The relationship between these two parties became severely antagonistic with the turning of the new millennia, and as a result, the Buddhists lost their one of the most benevolent supporters in the region (Singh, 1982). On the other hand, the oppressed lower castes from the Brahmanic camp as their primary victims, the Muslims eventually uprooted the economically and diplomatically desolated Buddhists from the entire subcontinental region, including Bengal (Elahi, 2008).

2.6 IMPLICATIONS – DEVELOPMENT OF THE BUDDHIST PHILOSOPHY

From origin to its commencement into Bengal under the *Pala* regime, Buddhism has experienced several distinctive stages of development. During its journey through the political frontiers, it has absorbed a diverse array of aboriginal social-cultural values that helped appropriating its philosophy to the political scenario of that time. It is also evident that Buddhism often played a frontal role in the politics of the region as a whole, imparting significant changes into the society; by means of which, positive reforms could be brought about into the lives of common people.

It is generally agreed upon that a total of eighteen schools were in existence during or shortly before Asoka's reign and that six others surfaced in the subsequent period of time. Whatever the number might be, the difference between these schools of thought were mitigated at the Third Buddhist Council of Pataliputra under Asoka's direct influence, and eventually, they continued their journey in the subcontinent under the banner of two major sects – namely, the *Hinayana* Order and the *Mahayana* Order.

The following table summarizes the overall continuum of Buddhism in both its social-political and religious dimensions:¹³

Timeline	Political Significance	Ethno-religious Significance	Religious Status
c.6th-4th BC	-	<ul style="list-style-type: none"> - Birth of Buddha - <i>Parinirvana</i> of Buddha - The First Buddhist Council 	<ul style="list-style-type: none"> - From philosophy of ethical practices to religion - Early missionary activities
c.4th-3rd BC	-	<ul style="list-style-type: none"> - The Second Buddhist Council 	<ul style="list-style-type: none"> - Early missionary activities - Rise in sectarian disputes
c.3rd-2nd BC	Asoka, from the <i>Maurya</i> dynasty	<ul style="list-style-type: none"> - Buddhism declared as state religion - The Third Buddhist Council 	<ul style="list-style-type: none"> - The <i>Hinayana</i> and the <i>Mahayana</i> Orders acknowledged; the orthodox <i>Hinayana</i> Order validated - Religious missions sponsored beyond the subcontinent
c.1st-2nd AD	Kanishka, from the <i>Kushan</i> dynasty	<ul style="list-style-type: none"> - The Fourth Buddhist Council 	<ul style="list-style-type: none"> - Both the <i>Hinayana</i> and the <i>Mahayana</i> Orders validated; the latter Order prioritized in practice - Continued religious missions beyond the subcontinent
c.3rd-6th AD	<i>Gupta</i> dynasty	<ul style="list-style-type: none"> - General intolerance towards Buddhism 	<ul style="list-style-type: none"> - Overall recession in religion throughout the region
c.7th AD	Harshwardhana, from the <i>Wardhana</i> dynasty	<ul style="list-style-type: none"> - Generous patronization of Buddhism 	<ul style="list-style-type: none"> - <i>Mantrayana</i> and <i>Vajrayana</i> Buddhism on the rise
c.8th-10th AD	<i>Pala</i> dynasty	<ul style="list-style-type: none"> - Fervent activities to uphold Buddhism 	<ul style="list-style-type: none"> - <i>Vajrayana</i> Buddhism in the mainstream
c.11th-12th AD	<i>Sena</i> dynasty	<ul style="list-style-type: none"> - Hostility towards Buddhism 	<ul style="list-style-type: none"> - Buddhism suffers persecution by the <i>Senas</i>
c.12th AD	Muslim invasion	<ul style="list-style-type: none"> - New political dynamics 	<ul style="list-style-type: none"> - Buddhism uprooted from the subcontinent and Bengal

Table 02: Development of the Buddhist philosophy.

¹³ See Plate III in association with this table.

While there is a little or almost no difference between these two Orders, except for the presence of the imagery and/or figurative expression of Gautama Buddha as a deity becoming more and more prominent in Buddhist art and architecture during the political reign of Kanishka; its philosophy in the later periods evolved into a distinctive mixture of monastic ideals, *tantra-mantras*, and rituals borrowed from the Brahmanic Hinduism of the *Guptas*. In other words, this evolution of the original atheistic Buddhism into the theistic *Mahayanism* – and subsequently the extremities of *Vajrayanism* – was the result of the unrelenting and, at the same time, dominating presence of the fundamental doctrines of Brahmanism that firmly kept its authority alive in the Indian subcontinent.

2.7 CONCLUDING REMARKS

This chapter addresses to two of the major reality settings that had been explained in the preceding one, laying the foundation for the key questions to be answered in this report. Although independent in its own volume, this study will also associate other parameters in the following chapter, forming an integrated explanation in order to delineate the probable outcomes.

REFERENCES

- Ahmed, Nazimuddin** (1984)
Discover the Monuments of Bangladesh – A Guide to Their History, Location and Development, Dhaka: The University Press Ltd.
- Bagchi, Jhunu** (1993)
The History and Culture of the Palas of Bengal and Bihar (cir.750AD-cir.1200AD), New Delhi: Abhinav Publications.
- Basham, Arthur L.** (2005)
The Wonders that was India, New Delhi: Rupa & Co.
- Brown, Percy** (2003)
Indian Architecture – Buddhist and Hindu Periods, Mumbai: D.B. Taraporevala Sons & Co. Pvt. Ltd.
- Chatterjee, Rama** (1985)
Religion in Bengal during the Pala and Sena Times, Calcutta: Punthi Pustak.
- Chodron, Thubten** (2001)
Buddhism for Beginners, New Delhi: Sambhala Publications.
- Conze, Edward** (2007)
Buddhism – A Short History, New York: Oneworld Publications.
- Devahuti, D. ed.** (2001)
The Unknown Hsuan-Tsang, New Delhi: Oxford University Press.
- Dutt, Sukumar** (1962)
Buddhist Monks and Monasteries in India – Their History and Contribution to Indian Culture, London: George Allen and Unwin Ltd.
- Elahi, K. Taufiq** (2008)
"Mosque Architecture during the Independent Sultanate of Bengal: A Comparative Review on Gaur Mosques", *The Journal of the Institute of Bangladesh Studies*, Volume 31, Rajshahi.
- Encyclopædia Britannica Online**
Buddhism, accessed on: 2016, web:
<http://www.britannica.com/EBchecked/topic/83184/Buddhism/68665/Southeast-Asia>.
- Hoque, Seema and Hoque, M.M.** (2004)
'Understanding the Paharpur Temple Architecture in New Perspective', in: *International Seminar on Elaboration of an Archaeological Research Strategy for Paharpur World Heritage Sites and its Environment*, UNESCO: Dhaka.
- Ling, Trevor** (1980)
Buddhist Revival in India – Aspects of the Sociology of Buddhism, New York: St. Martin's Press.
- Roy, Atul C. and Chattaroy, Pranab K.** (2007)
Bharater Itihash, Calcutta: MoulikLibrary.
- Roy, Niharranjan** (1993)
Bangalir Itihash – Adiparba, Kolkata: Dey's Publishing.
- Shafer, Robert** (1954)
Ethnography of Ancient India, Wiesbaden: Otto Harrassowitz.
- Singh, S. Kumar** (1982)
History and Philosophy of Buddhism, New Delhi: Associated Book Agency.
- Smith, Vincent ed.** (1983)
The Oxford Student's History of India, Delhi: Oxford University Press.
- Thapar, Romila** (2003)
The Penguin History of Early India – from the Origin to AD1300, New Delhi: The Penguin Press.

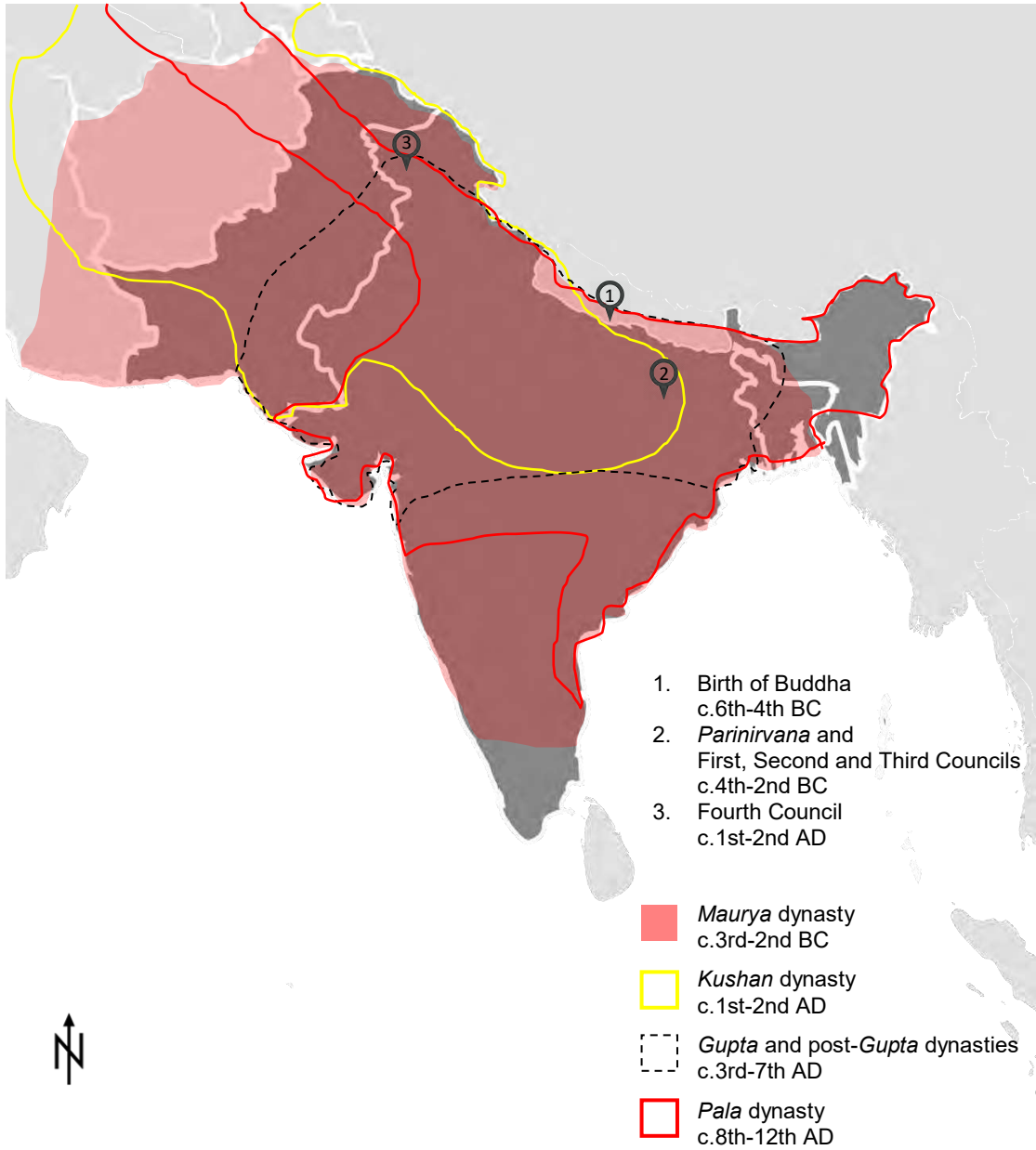


Plate III: The Continuity of Buddhism through the Political Frontiers

Source: <https://Wikipedia.org>; and Roy, Atul C. and Chattaroy, Pranab K. (2007)

Edit: Author

Chapter 3: CONTEXTS FOR THE BUDDHIST MONASTIC ARCHITECTURE IN BENGAL

- 3.1 Introduction
- 3.2 The Physical Realities of the Indian Subcontinent and Bengal
- 3.3 Implications – The Physical Realities of Bengal
- 3.4 Settlements during Ancient and Medieval Bengal
- 3.5 Assimilation of Contexts – Its Necessity
- 3.6 Concluding Remarks

3.1 INTRODUCTION

The history of Buddhism is a continuous journey that started from the physical realities of the Indian subcontinent and reached to an age of high maturity in Bengal before it finally perished from the region. The development of the Buddhist monastic architecture under the *Palas* in Bengal, therefore, is not an isolated incident, but a process of evolution that demonstrates the dynamics of interpretative relationship between boundaries, and even beyond. Moreover, it is necessary to recognize the overall influence of geo-climatic elements on architecture and their synthesis from a broader regional setting so that profound causal relationships could be established with more accuracy. In addition, the present chapter also highlights the significance and applicability of various contextual analyses (*i.e.* regional, historical, social-political and so on) in the study of this interpretative-historical research involving a multitude of correspondents before proceeding on to the main research objectives.

3.2 THE PHYSICAL REALITIES OF THE INDIAN SUBCONTINENT AND BENGAL

The Indian subcontinent¹⁴ and its physical extent was shaped almost 50 million years ago due to a geological collision that formed its unique, but diverse geographical and ecological characteristics (Walsh, 2006). It is fundamentally an island-landmass that drifted from a location off the Gondwana coast in the course of 10 million years (or even more) and collided with the Tibeto-Siberian plate in the north. The upward thrust due to this collision formed the steep mountain ranges and high plateaus on the north that we know today as the Himalayas, the Karakoram and the Hindu Kush, and the Tibetan highlands as its rippling effect. The Arakan mountains in the east is

¹⁴ *Subcontinent* – A 'continent' is defined as a large landmass constituting of similar geological characteristics. A 'subcontinent' is another large landmass, smaller than the continent, but appears geographically as a separate land and often holding different social-political behavior than that of its continental origin. The Indian subcontinent is comprised of the present-day constituencies of India, Pakistan, Nepal, Bhutan, Sri Lanka, the atolls of Maldives, and Bangladesh.

also believed to be the result of the subsequent tectonic movement at later dates (Baker and Chapman, 1992; Jones, 2011). The topographic variation between the northern edge and the level-plains caused two major downstream rivers to flow – the Indus River, traversing through the northwestern India to the Arabian Sea; and the many tributaries of the Ganges on the northeast, emptying into the Bay of Bengal to the east. The western threshold of the Indo-Gangetic Plain in between these two waterways, and particularly the Bengal Delta on the east, are mostly fertile because of their heavy riverine deposits (Walsh, 2006).

Another significant feature of this triangular landform suspended off the mainland Central Asia is the low mountain ranges of the Vindhya and the Satpura, with the Narmada River traversing along their foothills – branching off from the Ganges to the Arabian Sea, that eventually divides the subcontinent into two major geographic units. With their level plateau, rolling hills and forest zones, the arid central area south to the Vindhya called the Deccan highlands renders the south mostly inaccessible to the northern communities (Smith, 1983; Walsh, 2006).

The geo-political and cultural singularity of the landmass that ultimately sets it apart from the rest of Asia and makes it a 'subcontinent' is determined by the geographical composition and ecological arrangement of the land that took shape millions of years ago (Plate IV). Cordoned off by the sheer mountain ranges that run down from the north to the east, and with its southern peninsular surrounded in all the sides by high seas, and thus the Indian subcontinent forms a comfortable cul-de-sac for the people inhabiting it. From the ancient times (and even today) communication on land with the Near East and Central Asia was only possible through the Bolan Pass on the northwest and the Khyber Pass or the Swat valley on further north. These routes were frequented by migrants, saints and preachers, travelers and traders, and invaders through centuries, opening up its northern territories to the dynamics of intercultural and political fusion. The seaports on the subcontinent's east, west and southern edges were also popular as trading posts – the earliest evidences of which date back as far as c.2000 BC (Roy and Chattaroy, 2007; Smith, 1983).

Most interestingly, there are further impasses within the subcontinent's interior – one is the southern peninsular, the Deccan highlands being its barrier; and the other is the Bengal Delta on the east, with its natural fencings like hill forests and fast-flowing rivers and extensive marshlands rendering migration, movement and conquest less severe. These are the areas where distinct provincial cultures evolved and the people enjoyed greater political autonomy as it was reasonably difficult for the so-called northern superiorities to maintain their dominance for a considerable length of time (Walsh, 2006).

The deltaic landmass of Bengal very well adds up to the physiographic diversity of its subcontinental mainland. Comparing to the Indian peninsula to the west, Bengal remained a mystery to all of the ancient and pre-medieval civilizations of Asia and Europe for a considerable period of time.

3.2.1 Defining 'Bengal' in the Study

The term 'Bengal' is relatively new and has been popular since Islam entered into the political scenario of the subcontinent in or around c.12th AD (Roy, 1997). But the region defined by the term indicates a natural setting that is quite different or largely isolated from the rest of the Indian territories by means of its individual geographical and ecological physiognomies. Conceptually speaking, it is the geological event that took place after the formation of the Himalayan ramparts on the north and northeast, causing downstream rivers to flow, and by means of heavy siltation and sedimentation, creating a large deltaic area on the low basin between the uplifts of the subcontinental mainland (Mafizuddin, 1992). The total area of this region is roughly about 84,832 square miles; of which, 54,141 in approximate value lies within the boundaries of the present-day Bangladesh, and the rest belongs to West Bengal under India (Rashid, 1979-81).

Stone Age tools dating back almost 10,000 years have been excavated in the western fringes of this region, presently West Bengal; whereas Copper Age

settlements in these localities date back around 4,000 years. It is difficult to ascertain as to when people had actually settled here, but it is believed that they spoke Austric or Austro-Asiatic languages. At a subsequent age, people speaking two other languages – Dravidian and Tibeto-Burman – seems to have settled in Bengal.

Numerous literary accounts suggest that the people in this region were different in ethnicity and culture from the Vedics in the subcontinent. However, there are citations in the epics of *Mahabharata* that the region had been divided among a number of non-(Indo-)Aryan principalities – namely, Pundra (northern Bengal), Vanga (southern Bengal) and Suhma (western Bengal). The *Ramayana* corroborate to this fact by recognizing the greatness of these realms and their diplomatic ties with the north Indian counterparts (Ahmed, 1984; Banglapedia, *History*, 2015; Roy, 1997).

The history of this region becomes more or less prominent since both north and west Bengal went under the influence of Magadha, and subsequently, during the invasion of the Greeks in c.326 BC. Alexander the Great withdrew his force anticipating the valiant counterattack of the Gangaridae (in Latin, Gangaridai) and the Prasioi warriors from south and east Bengal. Also it was during this period that these territories thrived with its overseas trades (Ahmed, 1984; Roy and Chattaroy, 2007; Sultana, 1993).

3.2.2 The Geo-Context of Bengal

The life of Bengal and therefore its artistic heritage are largely determined by the two great river systems from the Himalayas – the Brahmaputra (old course) and the Ganges. These two as a combined river, and with the Meghna joining in from the northwest, used to leave behind a thick alluvial treasure before they finally empty into the bay to the south. The rivers with their innumerable subsystems and channels frequently shift courses as they travelled through the land, watering the wider area of the active delta; and

thus, eventually crowning Bengal as one of the most fertile regions of the world. However, the mainstream of the Ganges had previously built several older deltas and abandoned them before it took up its latter/newer position (Banglapedia, *Bengal Delta*, 2015).

The most significant physiographic divisions of Bengal during its earliest stages of development became opulent in its flora and fauna so as to become suitable for human habitation are (Plate V):

The Barind Tract: The northern and the northwestern Pleistocene areas;

Western Inactive Delta: The western and the southwestern areas;

Eastern Active Delta: The eastern and the northeastern areas;

The Ganges-Brahmaputra Delta: The southern plainland areas; and

The Chittagong Hill Tracts: The southeastern hilly areas.

This unique deltaic land formation can be further identified in terms of its geographic location (Plate IV and V):

The Northern Extent: The magnificent ramparts of the Kanchanjunga as an extension of the Himalayan ranges, barred even the most casual migrants from Bengal's Central Asian neighbors from entering the region – namely, Tibet and China.

The Eastern and the Northeastern Extent: The rugged and impenetrable Garo-Khasi-Jaintiya forest hills, extending from the east towards the Lusai-Chittagong-Arakan extent to the south; geographically separating the region from Myanmar and Lusai.

The Southern and Southwestern Extent: The Bay of Bengal stretching from one end to the other, allowed mostly the seafarers to enter the region from its south. The Sundarbans on the southwest, covered with thick morasses and swampland of Mangrove forests, render the area almost inhabitable.

The Western Extent: The western frontier of Bengal was largely a combination of ochre-colored hill forests and fast-flowing rivers, like the Ganges, rendered it almost unpractical for an invading force to pass through.

The only access remained from the west were, therefore, the three extremely difficult mountain passes at Teligiri, Tirhut and Jharkhand.

3.2.3 The Climate of Bengal

Several epigraphic records dating back to the medieval Bengal under the *Palas* were discovered that bear testimony of the abundant and heavy rainfall as a salient issue (Mukherji and Maity, 1967). Bengal, with the tropic of Cancer passing through its mid-regions, denotes the characteristics of a 'tropical-monsoon' climatic zone, with features that are unlike anywhere in the world. Other than its climatic zone, the influencing factors that bestow the deltaic landmass of Bengal with such a unique weather are none other than the Himalayan mountain-wall on the north and the Bay of Bengal on south.

Tropical monsoon climates (or composite climates) usually occur in large land masses near the tropical markers, necessarily far from the Equators, and with distinct seasonal changes in solar radiation and wind direction. Usually, two seasons occur in these areas – approximately two-thirds of the year is hot-dry and the other third is predominantly warm-humid, with microclimatic variations that tend to vary with local or regional physical features – which is exactly the case with Bengal (Koenigsberger et al., 2011).

Monsoon wind blowing in from the Indian Ocean causes exceptionally heavy rainfall (June-September) in this region after it gets checked by the Himalayan ranges on the north; and as a result, the banks of the river systems get flooded in a frequent manner. The people of this region are also prone to natural calamities, like cyclones, high tides, thunder and windstorm, and *kalboishakhi* (i.e. the nor-wester). The pre-monsoon storms in late-spring are a regular feature, but the occasional post-monsoon cyclones reign serious havoc to the inhabitants of the land, especially in the coastal areas and in the offshore islands. Generally, the air contains water vapor and humidity is high enough to cause discomfort (Rashid, 1979-81).

3.3 IMPLICATIONS – THE PHYSICAL REALITIES OF BENGAL

Historically speaking, the nature had bestowed upon Bengal the privilege of being distinctive in terms of its very own regional identity. In one hand, it contributed generously to the lives of its people, and on the other, it destroyed what was created from it. In doing so, its geography played its part in a very intricate manner – taking the upper hand over every activity the human life could possibly encompass – eventually giving it a shape that we know today as ‘Bangali’ (বাঙালী).

3.3.1 On Political Aspects

Traditionally, the natural barricades of the high mountain ranges, dense forest hills, along with its marshy jungle areas, the fast-flowing rivers and the open bay, altogether had been a great strategic advantage for Bengal since the ancient times (Bagchi, 1993; Roy and Chattaroy, 2007; Roy, 1993). This extremely diverse scenario had many a time prevented mass military aggression and prolonged colonial subjugation of the external forces so effectively that the region itself is often seen to have been drifting into isolation from the wider political perspective of the subcontinental India and Asia. And vis-à-vis, whenever Bengal could assert its dominion over the north Indian territories, the political hegemony outside its boundaries did not sustain for long – it had been the very exact physiographic extremities that made tactical communication exceptionally difficult from both the ends. It is highly probable that the same could have happened with the *Palas* of Bengal too – as they quickly lost their control over the vast expansions outside in the northwest after only two generations of pursuit.

The geo-context of Bengal, on the other hand, also had its profound influence over the internal political dynamics that generally prevailed within the region. Although divided by means of many crisscrossing river systems and channels, a sustained state of harmony among the inland principalities seem to have

existed and that inspired them to form diplomatic alliances at the times of external worries or severe anarchical conditions within. The succession of the *Palas* in this region after the historic event of *matsyanyaya* corroborates to this debate.

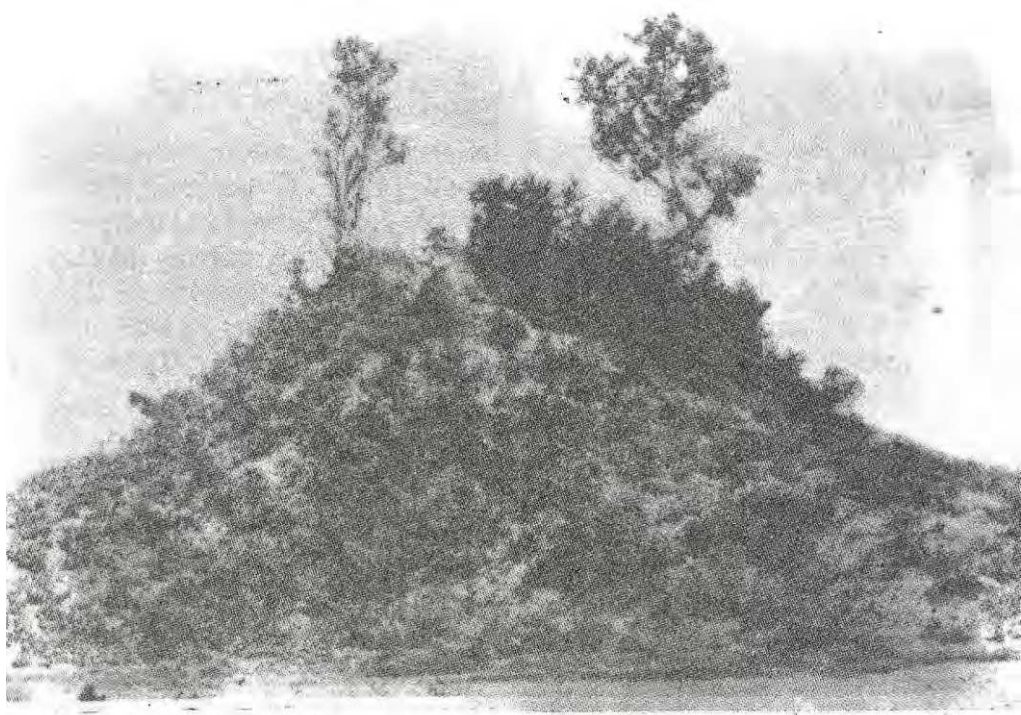
3.3.2 On Ethno-religious Aspects

Bengal's distinctive social and cultural identity is rooted deep into its soil, wind and the waters; and most importantly, its behavior and its bearing with the neighboring geographical territories (Ahmed, 1984; Chatterjee, 1985; Singh, 1982). Rather introvert in nature, Bengal had always shown the tendency of absorbing intruding cultures into its aboriginal fabric. While discussing the evolution of the Buddhist philosophy in Bengal under the *Palas*, Sheo Kumar Singh (1982) has outlined the phenomena as – “*The lands where Trantism (i.e. Mantrayana, Vajrayana or Sahajayana) was the most widespread, and perhaps where it originated, are Assam and Bengal.*” A comparative analysis in the fields of cultural and social history of this region reveals that a good many researchers hold opinions similar to this. Buddhism, like other religious practices before it (and/or even after), might have gone through the process of behavioral synthesis with the local ‘Bengali’ traditions prevailing during that time in order to become ‘*Bengalized*’ to gain acceptance in the land.

3.3.3 On Built Heritage

Architecture and built heritage of the Indian subcontinental mainland can be characterized by the practice and procedure of stone as its principal building material and by the coherent technique in which it had been employed in the construction of buildings (Ahmed, 1984; Dikshit, 1991; Murthy, 1987). Bengal, on the other hand, accentuates its style by means of burnt brick made out of the readily available silt deposit from the nature's bounty. The contrast between these two visible features establishes dialectic differences that can be recognized in terms of their scale, texture, and most of all, in their affiliation with human environment-behavior.

Brick can be produced anywhere in Bengal and in a large quantity; and with that, it also gives the flexibility of being composed of small units, enabling the builder to concentrate his artistic compassion with utmost care and detail. The Buddhist monuments scattered all over the countryside proudly announces the excellence of brickwork building art under the patronage of the *Pala* kings. These massive structures, made entirely out of burnt brick, not only defy the limitations of brick as their primary building material but also explore its potentiality through artistic and constructional innovations. The tradition of sculpted terracotta plaques used in the form of burnt tiles on the wall surfaces of these magnificent buildings represents the popular folk-art of their time. The widespread use of this inexpensive plastic medium was not only confined within its aesthetic limits but also devised to serve as a shield against the distinctive warm-humid climate of the region (Elahi, 2008).



From the narratives of K.N. Dikshit:

"... He¹⁵ found 'a steep heap of bricks 'from 100 to 150 feet in perpendicular height, covered with bushes, and crowned by a remarkable fine tree'. The tree (a Banyan tree or its descendent) was still there before the final clearance of the top of the mound (in 1923)."

Figure 05: The central temple (1923); Somapura *Mahavihara* at Paharpur.
Source: **Department of Archaeology, Jahangirnagar University**

¹⁵ *Buchanan Hamilton* – The Scottish physician who made significant contributions as a geographer-explorer and botanist in the Indian subcontinent – the man credited for the first notice of the Paharpur mound.

The extremely fertile land, together with the extensive downpours during the monsoon seasons, allow overgrowths of dense foliage to engulf a building almost instantaneously once it has fallen into a state of neglect. Moreover, the changing courses of the rivers that vitalize the land, also destroyed everything in their path during the times of heavy flooding, riverbank erosion and/or geomorphic alterations resulting from shifting of their courses (Elahi, 1984). As found in the accounts of the Chinese travelers Hsuan-Tsang and I-Tsing, the port-settlement of Tamralipti on the banks of the river Bhagirathi once flourished during the pre-*Pala* Bengal. The settlement perished during the subsequent centuries as the lower Ganges changed its course to become the Padma as known today (Sultana, 1993). These are among the major reasons for the monuments belonging to the medieval Bengal to be lost during the course of time, and those that are still existing are found with their superstructure completely damaged or even destroyed. In addition, the Bengal basin and its adjoining areas sits on one of the most active tectonic areas in Asia, and therefore, most prone to earthquakes too.

3.4 SETTLEMENTS DURING ANCIENT AND MEDIEVAL BENGAL

The occupation of human forming organized settlements in the deltaic landmass of Bengal probably followed the sequential changes in flow of the rivers and their sediment deposits. The oldest geological formation of the Tertiary period is the northeastern, eastern and southeastern fringes of Bengal (known today as the greater Sylhet, areas from Mymensingh to Comilla including the Lalmai hills, and Chittagong respectively). Subsequently, the Pleistocene era followed, characterized by the old alluvium of the ancient Ganges and Brahmaputra river systems, eventually forming the Barind and the Madhupur Tracts. It seems that these are the areas where the first settlers moved in. The rest of the areas to the south were developed during the latter periods (probably not more than 10,000 years ago) and were

gradually populated with the growth of new landforms (Ahmed, 1984; Sultana, 1993). However, the areas known as the Western Inactive Deltas on the southwestern edges of Bengal are presumed to be much older formations in the region, and therefore, were built up with human settlements even before the historic ages (Banglapedia, *Bengal Delta*, 2015).

3.4.1 The Major *Janapadas* and *Mahajanapadas*

In general, the ancient settlements (*mahajanapadas*) of Bengal were largely associated with the three earliest natural formations that came into existence of this region's geological history (Elahi, 1984; Sultana, 1993). It is highly probable that these were the localities where Bengal saw the birth of its first urbanized settlements (*janapadas*). These urban centers, in terms of their geographic disposition, have had the natural impetus of developing into significant intersections for both land and riverine routes that rendered higher strategic, social-political and commercial advantages in favor of the people they contained. There are also suggestions that these *janapadas* were not completely devoid of agricultural functions, but maintained a balance for their juxtaposed capacities that represented their broader cultural area as a whole (Roy, 1997). The following are some of the significant *janapadas* and *mahajanapadas* in Bengal that thrived through the ancient and the medieval times (Plate V):

Pundravardhana: It is considered to be one of the major *mahajanapadas* that can be traced as far back as the *Maurya* times (c.4th-1st BC). With its capital as Pundranagara, it performed the role of a frontier region between the east and the Indian mainland to the west. Pundravardhana stretched through the entire area that lies in between the rivers Kosi-Ganges and Karotoya, which is roughly the northern Bengal that we know today. Historical accounts suggest that the settlement had direct political and/or commercial ties with other important urban areas throughout the region. It flourished as a distinct regional force up until the *Palas* lost their authority over Varendra in 12th

century AD. The ruins of Mahasthangarh¹⁶ is reminiscent of this early-ancient settlement (Plate VI).

Vanga or Gangaridae: There are disagreements among historians regarding the exact stretches of this *mahajanapada*, but generally the territorial name of Vanga indicates the localities between the Bhagirathi and the Padma-Meghna arterial channels. Centering this area, Vanga is seen to have expanded its dominion over a greater portion of the south and the southeastern areas of Bengal; and its extent might have often reached up to the southwestern and the western boundaries too. Vanga's position coincides with Gangaridae from the c.4th BC when Alexander attempted to wage war against this region, and therefore, it is presumed that these two were the same group having locations of their settlements in the same area. In various accounts dating back from the 1st and 2nd century AD, the *mahajanapada* of Vanga had been referred to as the coastline area approachable by the Bay of Bengal.

Samatata: The *mahajanapada* of Samatata had a well-defined territory that extended longitudinally from the lower reaches of Sylhet, along the hilly areas of Tripura-Arakan on the east and the combined system of the rivers Padma-Meghna-Brahmaputra on the west, and stretching down to the estuary islands of the Bay of Bengal to the south. Its peaceful existence had been well registered since 4th century AD (while its history remains quite vague before that); and the accounts of Chinese pilgrims and explorers (namely, Hsuan-Tsang and I-Tsing) visiting this *mahajanapada* during 7th century AD also described it as such. Epigraphic copperplates discovered in and around the ruins of Mainamati¹⁷ recognizes Samatata as an independent principality (Banglapedia, *Samatata*, 2018; Roy, 1993).

¹⁶ See [Appendix-D](#).

¹⁷ See [Appendix-E](#).

3.5 ASSIMILATION OF CONTEXTS – ITS NECESSITY

Levi-Strauss¹⁸ (1963), in line with the semantic or syntactic doctrines of Chomsky¹⁹ (2002), stresses the necessity of structural analysis of form(s) in order to generate cognitive and stylistic interpretations. Contexts in their studies are not only the mere settings for material culture and other modes of expression, but also involve degrees of human psychological experiences of the situation as a whole. Interpreting an architectural context where other historical references from the past (*i.e.* society, politics, economy, biography, ideas, mentality, and so on) are lacking, this approach may prove to be effective given that the built structure under scrutiny is in a 'readable' condition or have not experienced major alterations from the actual period of its construction. Unfortunately, excavations and thorough investigations in almost all of the sites under scrutiny have revealed monuments dating back to the medieval Bengal with their superstructure badly spoiled or destroyed beyond recognition (Ahmed, 1984). Therefore, a semantic approach might not prove to be appropriate in addressing to some of the key questions of this study.

Tosh²⁰ (1984) – the famous historian, on the other hand, has stressed significantly on the role of 'analysis' while explaining the necessity of causal relationships in an Interpretative-Historical Research. To him, it greatly maintains the validity of the interpretation of concurring events or circumstances. Although Tosh's idea of historical interpretation commonly encompasses the fields of society, politics, economy, biography, ideas and mentality; it does not involve any of the modes of architectural history and its inquiry and/or other relevant fields of material culture. However, it can be conveniently assumed that art and architecture, as an ultimate embodiment of human expression, naturally incorporates all or some of the contexts outlined here by Tosh depending on the nature and the extent of the study. Thus,

¹⁸ *Claude Levi-Strauss* – The French social anthropologist and one of the leading investigators of structuralism – a name applied to the analysis of cultural systems in terms of the structural relations among elements.

¹⁹ *Noam Chomsky* – The American theoretical linguist whose work revolutionized the fields of linguistics – its human cognitive capacity and cognitive psychology, and philosophy.

²⁰ *John A. Tosh* – The British historian who has made significant contributions in the study of history and the construct of knowledge of the past.

contextual transferability and assimilation of various reality settings may prove to be useful as a strategy for explaining architectural history of the Buddhists (*i.e.* society and idea) during the *Palas* (*i.e.* politics and economy) in Bengal (*i.e.* the place or geographic setting) for this particular research initiative.

More to that, the symbolic interpretation of meanings – as debated in the scholastic studies of Jung²¹ (1968) – has often been the key focus of investigators in the field of architecture, such as in the works of Snodgrass (2007). Snodgrass has analyzed in his writings the pattern of interrelated meanings generated by the form of the *stupa* in the spiritual context of the Indian subcontinent. Snodgrass's approach to historical-architectural interpretation primarily relied upon the conceptual framework of the tradition in which these monuments belonged. With this in focus, it is possible to interpret the array of architectural typologies belonging to the *Pala* era in Bengal.

3.6 CONCLUDING REMARKS

In determining the backgrounds in which Buddhist architecture commenced in the boundaries of the Indian subcontinent and Bengal while its interpretative meanings continued to evolve through various social-political frontiers, a number of reality settings have been thoroughly discussed. These reality settings or contexts form an assimilated whole rather than independent constituents such as religious philosophy, society and politics. Adding to these reality settings, the physical context ultimately confines all forms of human activity within a definite boundary, and therefore, acts as the container for the eventual experience. With the backgrounds fully recognized, the following chapters will now address to the main arguments of the discourse.

²¹ *Carl Gustav Jung* – The Swiss psychologist and psychiatrist, the founder of analytic psychology, who developed critical concepts of human personality, archetypes and the collective unconscious.

REFERENCES

- Ahmed, Nazimuddin** (1984)
Discover the Monuments of Bangladesh – A Guide to Their History, Location and Development, Dhaka: The University Press Ltd.
- Bagchi, Jhunu** (1993)
The History and Culture of the Palas of Bengal and Bihar (cir.750AD-cir.1200AD), New Delhi: Abhinav Publications.
- Baker, Kathleen M. and Chapman, Graham P.** (1992)
The Changing Geography of Asia, New York: Routledge.
- Banglapedia**
Bengal Delta, accessed on: 2015, web: http://en.banglapedia.org/index.php?title=Bengal_Delta.
History, accessed on: 2015, web: <http://en.banglapedia.org/index.php?title=History>.
Samatata, accessed on: 2018, web: <http://en.banglapedia.org/index.php?title=Samatata>.
- Chatterjee, Rama** (1985)
Religion in Bengal during the Pala and Sena Times, Calcutta: Punthi Pustak.
- Chomsky, Noam** (2002)
Syntactic Structures, New York: Mouton de Gruyter.
- Dikshit, K.N.** (1991)
Memories of the Archaeological Survey of India – No.55, Delhi: Swati Publications.
- Elahi, K. Maudood** (1984)
'Urbanization in Bangladesh – A Historical Perspective', in: *Seminar on Urbanization*, Bangladesh Unnayan Parishad, Dhaka.
- Elahi, K. Taufiq** (2008)
"Mosque Architecture during the Independent Sultanate of Bengal: A Comparative Review on Gaur Mosques", *The Journal of the Institute of Bangladesh Studies*, Volume 31, Rajshahi.
- Jones, Robert W.** (2011)
Applications of Palaeontology – Techniques and Case Studies, New York: Cambridge University Press.
- Jung, Carl G. ed.** (1968)
Man and His Symbols, New York: Dell Publishing.
- Koenigsberger, Otto H., Ingersoll, T.G., Mayhew, Alan and Szokolay, S.V.** (2011)
Manual of Tropical Housing and Building – Climatic Design, New York: Universities Press.
- Levi-Strauss, Claude** (1963)
Structural Anthropology, (trans.) C. Jacobson and B. Schoepf, New York: Basic Books.
- Mafizuddin, Mirza** (1992)
'The Physiography of Bangladesh – An Overview', in: *Bangladesh – Geography, Environment and Development*, (eds.) K. Maudood Elahi, A.H.M. Raihan Sharif, A.K.M. Abul Kalam, Dhaka: Bangladesh National Geographical Association (BNGA).
- Mukherji, Ramaranjan and Maity, Sachindra K.** (1967)
Corpus of Bengal Inscriptions Bearing on History and Civilization, Calcutta: K.L. Mukhopadhyay.
- Murthy, K. Krishna** (1987)
Glimpses of Art, Architecture, and Buddhist Literature in Ancient India, New Delhi: Abhinav Publishers.
- Rashid, M. Harunur** (1979-81)
"The Geographical Background to the History and Archaeology of Southeast Bengal", in: *The Journal of the Asiatic Society of Bangladesh*, Vol-XXIV-VI, Dhaka.
- Roy, Ajoy** (1997)
Adi Bangali – Nritattik o' Shomajtattik Bishleshon, Dhaka: Bangla Academy.
- Roy, Atul C. and Chattaroy, Pranab K.** (2007)
Bharater Itihash, Calcutta: MoulikLibrary.
- Roy, Niharranjan** (1993)
Bangalir Itihash – Adiparba, Kolkata: Dey's Publishing.
- Singh, S. Kumar** (1982)
History and Philosophy of Buddhism, New Delhi: Associated Book Agency.

Smith, Vincent ed. (1983)

The Oxford Student's History of India, Delhi: Oxford University Press.

Snodgrass, Adrian (2007)

The Symbolism of the Stupa, New Delhi: Motilal Banarsidass Publications.

Sultana, Sabiha (1993)

Rural Settlements in Bangladesh – Spatial Pattern and Development, Dhaka: Graphosman.

Tosh, John (1984)

The Pursuit of History, New York: Longman Group.

Walsh, Judith E. (2006)

A Brief History of India, New York: Facts on File Inc.

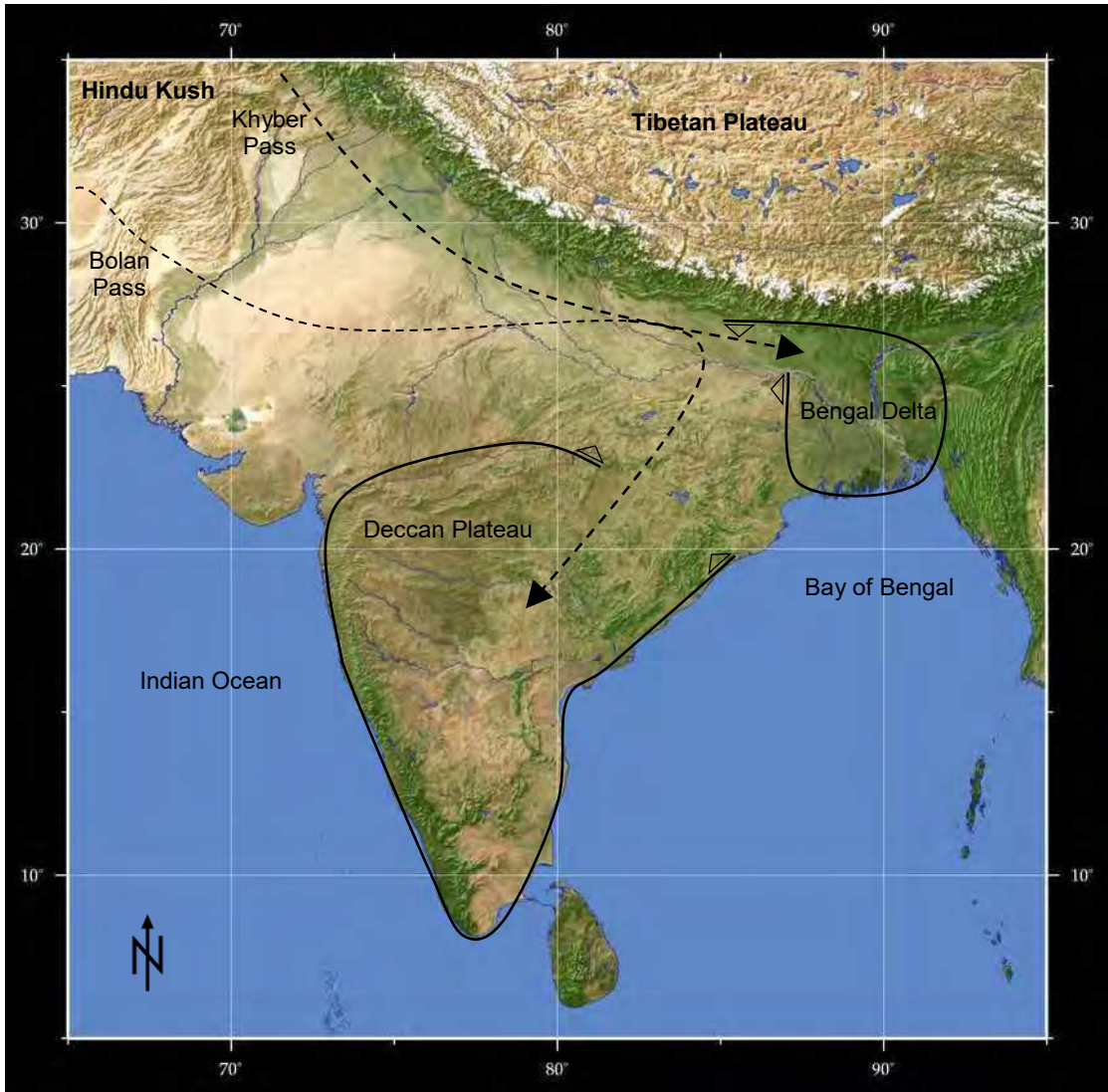
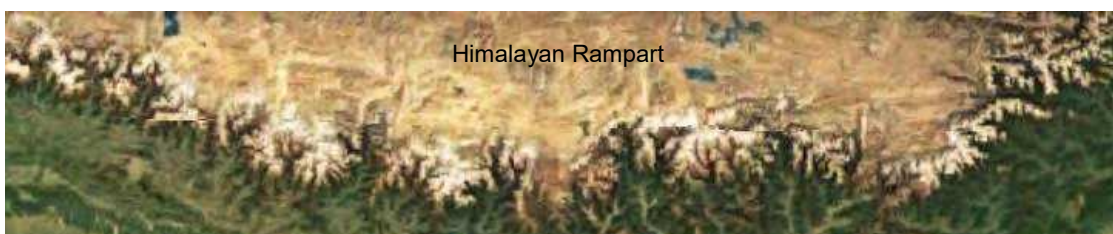


Plate IV: The Physical Realities of the Indian Subcontinent

Source: <https://WorldAtlas.com>; and Walsh, Judith E. (2006)

Edit: Author



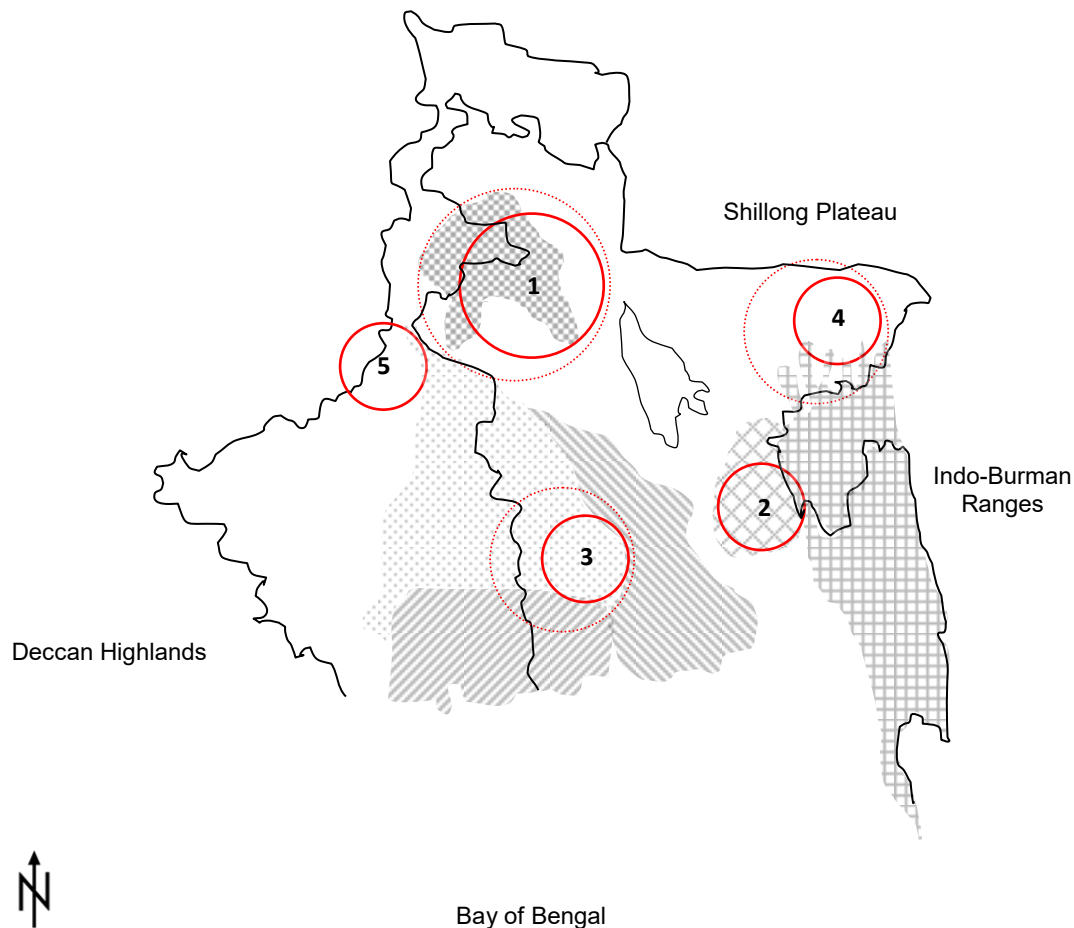


Plate V: The Physical Realities of Bengal and the *Mahajanapadas*

Source: <https://www.Google.com/earth>; and Rashid, Haroun Er (1991)

Edit: **Author**


1. Pundravardhana or Varendra
2. Samatata
3. Vanga or Gangaridae
4. Harikela (location in dispute)
5. Anga

 The Barind Tract

 Western Inactive Delta

 Eastern Active Delta

 The Ganges-Brahmaputra Delta

 The Chittagong Hill Tracts /Fold Belt

 The Tippera Surface

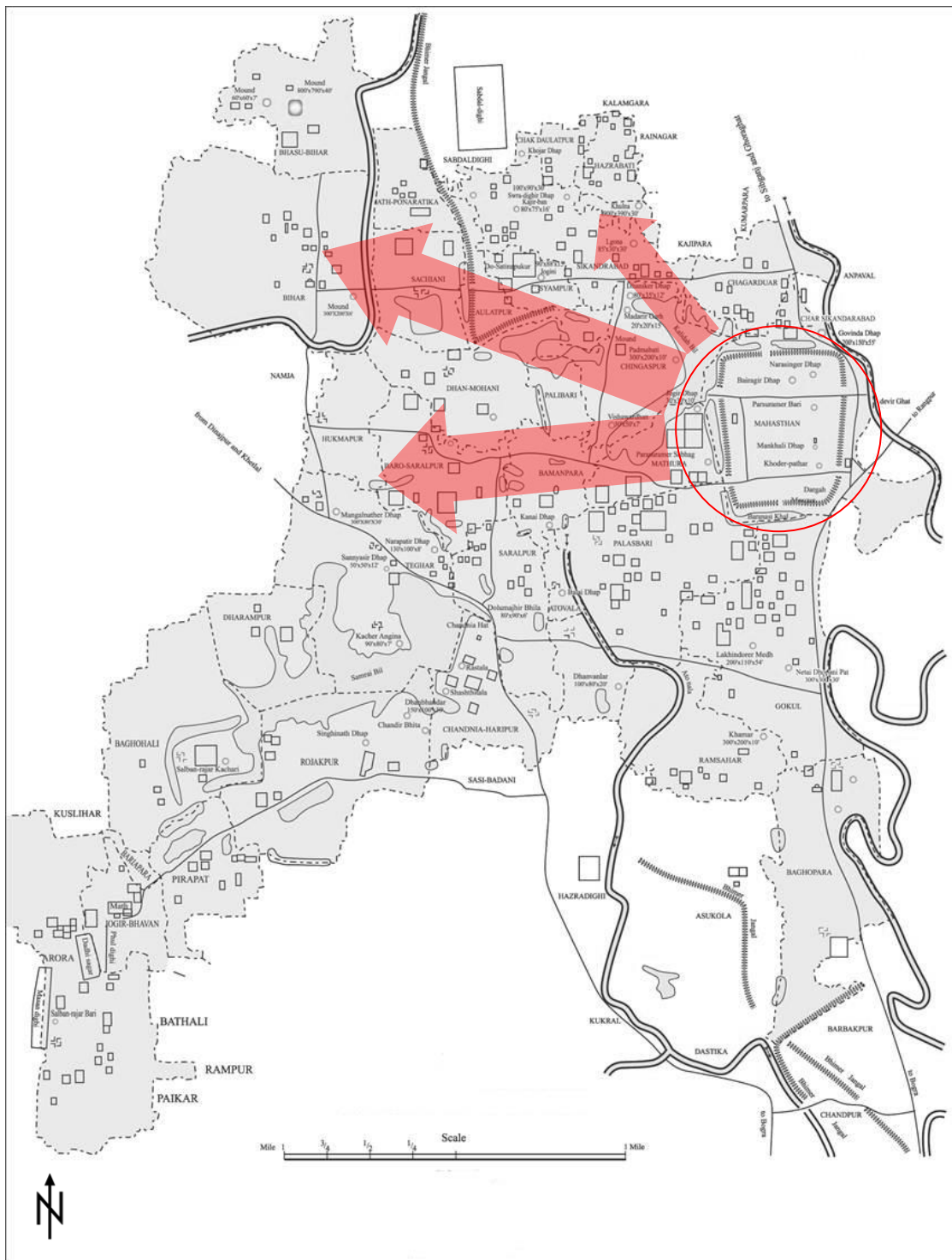


Plate VI: The Environs of Mahasthangarh

Source: Haque, Saif Ul, Ahsan, Raziul and Ashraf, Kazi K. ed. (1997); and Smith, Monica L. (2001)

Edit: Author

- The citadel of Mahasthan (c.3rd BC-c.16th AD)
- The Pala activity areas (c.8th-12th AD)

Chapter4: STYLISTIC EVOLUTION OF THE BUDDHIST MONASTIC ARCHITECTURE

- 4.1 Introduction
- 4.2 Selection of Buddhist Monuments
- 4.3 The Primary Manifestations of Buddhism
- 4.4 Buddhist Architecture in India – Through the Formative Stages
- 4.5 Buddhist Architecture in India – Through the Transformative Stages
- 4.6 Probable Externalities in Buddhist Architecture
- 4.7 The Concept of Evolution - Synthesis
- 4.8 Concluding Remarks

4.1 INTRODUCTION

The Buddhist architecture in the Indian subcontinent, from origin to its continuity in Bengal, portrays a remarkable process of evolution that resulted as an extension of the religious philosophy itself. Naturally, its physical forms required more diversity and functionality as Buddhism progressed through time and adapted to the changes in sectarian divisions and numerous schools of thought (Dutt, 1962; Phuoc, 2010). Amidst constant struggle for power, great empires rose to the pinnacle of political success and fell only to give away to newer regimes; and with it, the Hindu and Buddhist (and seldom, Jainist) philosophical ideologies transferred balance between themselves in the most frequent manner; giving shape to a unique personality of Hindu-Buddhist-Jain artistic continuity in the region's building tradition.

This chapter aims to classify and categorize the architecture of the Buddhists in India with an aim to establish its onset in the Bengal delta. In doing so, it also attempts to analyze and assess the social-political aspects that eventually influenced its dialectic-symbolic forms and behavioral tendency at various stages of history.

4.2 SELECTION OF BUDDHIST MONUMENTS

A primary literature survey through the historic monuments and/or sites in the Indian subcontinent has yielded the fact that there might remain confusions in determining the historic buildings as originally/categorically belonging to the Buddhist belief. The following guideline will help in the process of selection, and therefore maintain the creative focus of the research initiative:

- Forms and spaces of indicative/distinctive functionality associated with the life and teachings of Gautama Buddha himself;

- The monument must present positive visual key(s) to Buddhist imageries, iconographies and/or inscriptional texts and motifs, and simultaneously hold functional-behavioral properties; and
- Works functionally associated with the religion of Buddhism, although they might previously (or subsequently) belong to other philosophical groups, such as the Hindus and/or the Jains, and regardless of their intended architectural characteristics.

4.3 THE PRIMARY MANIFESTATIONS OF BUDDHISM

As observed in the earlier chapter;²² the philosophy of Buddhism as preached by the Buddha himself rejects the idea of worldly responsibilities and purposes, sufferings, privileges of pleasures, and the already existing theories of reincarnation in the Brahmanic practices by denying the latter's underlying concept of caste-classicism (Chodron, 2001; Singh, 1982). This non-existentialist theory of absolute isolation from the physical realities of life, during the initial stages when Gautama resorted to the meditative form of self-mortification for the first time, had to be abandoned because it prevented him from attaining spiritual enlightenment (Singh, 1982). Therefore, his life gradually took up an existentialist system of minimal assignation with the worldly features and the environment surrounding him. The requirements grew more complex and began to accumulate various functionalities when this simple form of philosophical endeavor subsequently took up the shape of a religion in the course of the 45-years of his travelling and teaching throughout several principalities across the northeast Indian territories.

4.3.1 The First Functionalities – from Caves to the *Sangharamas*²³

Gautama Buddha's life as a wandering and ascetic teacher can be identified in the terms of the *varsavasas*²⁴ he, with the company of his ever-expanding

²² See explanation: chapter-2, section-2.2, pp.19-22.

²³ *Sangharama*(s) – Popularly known as '*Vihara*(s)' – the private space(s)/area(s)/dwelling(s) for monks.

order of the monks and disciples, spent altogether since his first sermon at the deer park in the vicinity of Varanasi. Between travelling and teaching, the other nine months of the dry season each year were usually designated to extensive tours. Frequented many times by the Buddha himself, one of his preferred natural shelters was the Gijjakuta hillside caves in Rajagriha, Bihar (Plate VIII; Phuoc, 2010). *Varsavasas*, in the meanwhile, grew to be a custom in the occasion of which monks congregated and observed the rainy seasons in various religious activities, ceremonies, rituals and rites (Phuoc, 2010; Singh, 1982).

Any form of formal manifestation of the Buddhists probably came to light for the first time in history when Bimbisara, the ruler of Magadha, sponsored and commissioned for a monastery (conventionally known as the '*sangharama*') in observance with the traditions of *varsavasas* and for the service of Buddha and the *sangha* (Singh, 1982). It has been noted in the *Cullavagga* canon that Buddha himself had specific annotations regarding the selection of its site in the royal park of Rajagriha. He required for the *sangharama* to be built nearby townships – easily accessible to the nearby city so that alms could be sought for without much trouble, but just as far so that the bustles of the town should not disturb its sanctity – in a place near the streams where the clean and the calm could concentrate in his meditations (Phuoc, 2010). This only validates the fact that Gautama not only endorsed the realization of earthly necessities of forms and their function, but also owned the conscious recognition of the environment that embodies them.

Subsequently, as Buddhism became popular and patrons from the society's powerful and the affluent class began to pour in, the number of *sangharamas* quickly multiplied throughout various localities where Buddha and his order of the monks frequented with visits during such occasions of *varsavasas* (Dutt,

²⁴ *Varsavasa(s)* – Retreat(s) or shelter(s), usually in the forest groves across different locations of Bihar, eastern Uttar Pradesh and the Nepalese foothills; where the Buddha and/or his order of the monks made it a practice of settling down during the three months of the Indian monsoon as travelling became extremely treacherous.

1962). Beside Veluvanarama – the first monastery in the history of Buddhist architecture – some of the other eight *sangharamas* built during the lifetime of Buddha were: Ghositarama in Kausambi (Uttar Pradesh), Jetavanarama in Sravasti (Uttar Pradesh) and Jivakavanarama in Rajagriha (Bihar). Begging for alms no longer required, the wandering life of the monks gradually ceased to an end as they resorted to monasticism before Buddha's *parinirvana* from earthly existence.

Stylistic Context for the Sangharamas: As the brick-built (and intermittently, stone) and well-planned cities no longer functioned in Harappa and Mohenjo-Daro,²⁵ the Vedic-Aryans in northern India during c.5th BC were fumbling for material innovations and style that could serve with the new context. The Aryan villages and townships at that time relied upon timber, bamboo and thatch that were found in abundance in the nearby forests. Stone and burnt brick-slates were employed in special occasions where a greater degree of permanency was required. The conical-shaped and/or linear-barrel roofs were devised with bent bamboo in an overlapping pattern. The townships were usually cordoned off with strong timber fencings with controlled (*i.e.* indirect access) gateways or *toranas* that, at the same time, acted as a strong visual key from afar because of their height, and compositional and artistic significance (Plate VIII). The early-Aryan townships were basically rectangular in plan and were divided into four quarters by two major intersecting thoroughfares running at the right angles with each other (Brown, 2003; Grover, 1981).

Example – The Ruins of Jivakavanarama (c.5th BC): Representative of the other earliest *sangharamas* in India, the establishments of Jivakavanarama has its substructure still *in situ*, and therefore demands careful scrutiny (Phuoc, 2010). On the other hand, Jetavanarama is probably considered to be the most significant amongst all in terms of historical merit as it said to

²⁵ See [Appendix-F](#).

have housed Gautama Buddha himself through his nineteen *varsavasas* – presumably more than in any other monasteries from his time. With minor variations, these typical garden-setting *sangharamas* were commonly consisted of major functional, symbolic and compositional components such as (Plate VIII):

- Elaborate *Toranas* with gateway-chambers, towers and/or pavilions were erected with the enclosing walls that safeguarded seclusion for the monks from the commoners;
- Relic-*stupas* (as said to have existed in Veluvanarama) commemorating the key personages relating to Buddha and the *sangha* were often accommodated within the walls or in the proximity of the *toranas*;
- Reservoirs inside the walls of the monastic complexes ensured service and hygiene for the resident monks;
- A multiple number of communal hall rooms (usually two and without roof-supporting pillars; popularly known as *viharas*) with elongated-oval ground plans were the most common feature with these *sangharamas* that housed the monks and the disciples within the compounds;
- Sizable congregation halls (both elongated-oval and quadrangular plans have been found) were placed with or detached from the main complexes for religious and/or ceremonial proceedings, as/or guild halls for the commoners, often added during the later phases of development;
- Other smaller private quarters, service facilities (e.g. refectory, kitchen and storage areas), cloisters and arcades, pavilions, etc. were arranged attached to the main functions or as detached or additive forms; and
- Some of the forms might have been more than one storied in vertical limit and must have accommodated stairways linking to the upper floors.

4.3.2 The First Symbols – of *Toranas* and *Stupas*

It is interesting to note that Buddha was born, have attained his *nirvana* on the eve of a full moon while in deep contemplation under a *bodhi* tree, and passed away on the same (moon); and all of these events of his appearance

(birth), enlightenment (*nirvana*) and disappearance (*parinirvana*) took place between the *sala* and the *bodhi* trees (Plate IX). This particular visual motif, as a psychological phenomenon in the collective conscious and subconscious minds of his followers, might have instigated the use of similar elements (*i.e. toranas, dhamma stambhas*, strong vistas on the entrances of numerous Buddhist monuments, etc.) in the later architectural practices of the Buddhists in the subcontinent and even beyond.

On the other hand, the tradition of building *stupas*²⁶ over bodily relics (*i.e.* ashes and bones from burnt dead bodies) and object relics (*i.e.* embers from pyres or other objects relating to the cremation of the body) of personages holding social and/or religious significance has been a conventional practice in the Aryan-India during 5th century BC.²⁷ Buddha, with his death impending, not only accepts the form of *stupa* in the process of his burial rites, but also validates the use of *stupas* in the religion of Buddhism by making specific instructions to his disciples that they could pay homage (to the relics placed inside the *stupas*, in memory of Buddha) in order to earn good *karmas* and happiness in life (Phuoc, 2010).

Example – The Stupa at Piprahwa (c.5th-3rd BC): Representative of the other nine *stupas* that originally contained body-relics and object-relics of Buddha, the ruins of the *stupa* at Piprahwa perfectly embodies the circumstances of time and reason. Although there are disputes among scholars regarding its actual location, many consider it to be the Kapilavastu *stupa* – situated in an area where Prince Siddhartha is presumed to have spent the first 29-years before conforming to the life of an esoteric. Built in three phases, its symbolic and other compositional aspects are given below (Plate IX; Brown, 2003; Phuoc, 2010):

²⁶ *Stupa* – ‘*Stupa*’ in Sanskrit, ‘*Thupa*’ in *Pali*, and etymologically deriving from ‘*stup*’ or meaning ‘to heap’ – by philosophical definition contains(/ed) relics within their usually hemispherical domes, often symbolically commemorating a person, or as epitomized in the religion and philosophy of Buddhism, considered as a sacred object of worship.

²⁷ See explanation: chapter-4, subsection-4.3.1, pp.53-57.

- The *stupa* initially had *pradakshinas* (*i.e.* circumambulatory paths) in two tiers around its domical form, it presently sits on top of a square plinth with lamp-niches on its elevations at regular intervals – probably fabricated no later than 3rd century BC.
- The square base might have been conceived as a preliminary scheme to orient the *stupa* with the four cardinal directions symbolizing Buddha as the eternal *dhammachakravartin*;
- The two-layered dome surmounting the plinth is now almost flattened as its original form might have been considerably reduced over 2000-years of degradation – both natural and human; and
- An approach platform, as customary with the Vedic gateways, from any of the earlier stages of its development has been traced projecting outwards from the mound; but the insertion of the quadrangular base suggests that, for some unknown reason, the feature was intentionally removed during the subsequent period of time.

4.4 BUDDHIST ARCHITECTURE IN INDIA – THROUGH THE FORMATIVE STAGES

Owing to the direct involvement of Asoka what began as a zealous activity to uphold Buddhism throughout the subcontinental region is, as it appears, a movement in the field of art and architecture in its own right. This movement not only defined India from the rest of the world, but also paved the way to newer innovations in building art and technology that continued to inspire generations in the years to come (Brown, 2003; Dutt, 1962; Thapar, 2003). During the last few years of its founder the elements of Buddhist architecture were already reconnoitering newer dimensions within the roots of its contexts; however, functional-behavioral advancements demanding higher implications were yet at large. With the conditions of such stagnancy, the movement itself provided the necessary impetus when Asoka – the greatest of all the *Mauryas* – oriented himself with the task of glamorizing the already

existing manifestations of Buddhism by adding renewed features to its qualitative and quantitative value (Fisher, 1993). In brief, the stylistic trend set by Asoka – through the hands of the *Sungas*, and the *Andhras*, and the *Kushans* – and with a few exceptions apart, remained almost unchanged in its basic morphological properties, and flourished confidently up until the *Guptas* ascended in the frontal position in politics in India.

4.4.1 Stylistic Context – the Formative Stages

The *Maurya* capital city of Pataliputra (today's Patna) was no more than an advanced creative and technological extension of the typical early-Aryan township (Plate X; Grover, 1981). Timber of outstanding artistry had been employed extensively in the superstructures of almost all the houseforms, supporting the overhead semicircular ribbed-vaults with their horseshoe-shaped dormers on the barrel sides – a visual attribute that might have affirmed to the city's stylistic connection to the humble villages and townships of the past. The imperial palace within the city limits most likely had its own timber-reinforced barriers and must have contained the royal gardens with water tanks, springs and artificial mounds. Unlike anywhere before, stone pillars placed in a regular order were assembled in the interior of the palace allowing larger spans to support a series of ribbed-vaults in the parallel direction (Ancient World History, 2017; Brown, 2003). The use of columns, instead of brick and/or bamboo-processed walls, also indicates that the synthesis of quadrangular ground plans from their circular or elongated-oval origin have had already taken place during the *Mauryas*.

In a broader regional perspective, the *Mauryas* most probably had positive communicative terms with their Near Eastern neighbors in the fields of art, architecture and in many other forms of cultural disposition. The influence of the Greek and Persian Hellenistic Classicism²⁸ is evident in the manner (*i.e.* style) and the use (*i.e.* application) of stone pillars and other structural and/or

²⁸ See [Appendix-G](#).

non-structural members in the construction of their monuments during that time. These fine and advanced craftsmanship in stone were, as it is said to have been, carried out by either Persian artisan from Taxila (now, Rawalpindi) under the Greek authoritative control or local apprentices trained by them (Phuoc, 2010).

4.4.2 Asoka, and the Rise of Buddhist Formalism

[**Emperor Asoka's Edict**, RE No.II, translation: **Phuoc, Le H.** (2010), *quote*. p.33: on a public proclamation by Asoka]

"My only intention is that they live without fear of me, that they may trust me and that to them I may give happiness, not sorrow. Furthermore, they should understand that the king will forgive those who can be forgiven, and that he wishes to encourage them to practice Dhamma so that they may attain happiness in this world and the next."

Asoka, otherwise known to the common as a benevolent ruler with an open and democratic mind was actually, according to many academics, quite the opposite. Their arguments are supported by the rock edicts from the initial stages of his regime and also by the numerous *stambhas* (i.e. monolithic pillars; popularly, the Morality Pillars or *Dhamma Stambhas* of later periods) with public declarations – such as in the citation above – engraved on the surfaces of these vertical sandstone shafts. The *dhamma stambhas* symbolically proclaimed Asoka's authoritarian control over his vast empire and its people with their various ethno-religious backgrounds. These also announced, by means of their creative detailing, his personal affiliation and motivation towards Buddhism; while psychologically encouraging his subjects to abide by the positive doctrines of peacefulness of the religion. Although the *stambhas* typically marked the imperial territory of the *Mauryas* in all quarters, these were frequently placed in proximity with monuments or settlements of Buddhist religious significance and/or origin as a prominent visual marker (Fisher, 1993; Phuoc, 2010).

Example (generalized) – Dhamma Stambhas (c.3rd BC): There are presently no more than twelve freestanding *dhamma stambhas* still placed *in situ* – all of these concentrating around the northern Indian region of Bihar, Uttar Pradesh and Madhya Pradesh – the former heartland of the great *Maurya* empire. Of the twelve, only two at Vaishali (Bihar) have their original features intact (Plate X). A brief triangulation of archeological and historical accounts reveals that the total number might have very well exceeded forty-one (Phuoc, 2010).

Typically, the *dhamma stambhas* were assembled in two major sections and with a maximum height not exceeding 70'-0" from ground level including the capital (Plate X). Both the sections – the upward tapering shafts of a mild degree and their extensively elaborate capitals at the top – were carved out of fine-grain sandstone locally accessible by the time Asoka ascended to throne. These heavy *stambhas*, weighing as much as 50-tons, had their additional lengths buried into the ground in order to keep these in upright position; often with solid footing slabs at the bottom that prevented the shafts from sinking into the subsoil, but occasionally the bedrock sufficed. Plinths at the bases of these monuments were often laid out with brick or solid stone blocks for added sustenance and to create visual emphasis as well. An estimated proportion of one (the capital), one (the substructure shaft), and four (the superstructure shaft) was usually maintained in these *stambhas*; with the finest mirror-polish over the entire length of their exposed sections – a feature that is indicative of imported craftsmanship of a Persian origin. The capitals surmounting the 2'-0" diameter tip of the shaft were essentially composed with three successive parts – with striking similarities with the contemporary Greco-Persian Order (Plate IX; Cole, 2002) – the lotus-petal (lotiform) bell, the abacus ornamented with native details, and the crowned animal(s). The animals – elephant (east), bull (west), lion (north), horse (south), and/or their combined categories – in harmony with the Vedic mythological trends that were prevalent in the subcontinent, might have symbolically underlined

Asoka's intention as a secular emperor impartial towards other religious beliefs (Brown, 2003; Fisher, 1993). Moreover, as a proclamation of the good law of the empire and the religion, an imposing Wheel of Order (also having Vedic overtone) often formed the pinnacle in the whole compositional scheme of these magnificent *dhamma stambhas*.

It is important to note that the ultimate necessity of these monolithic *stambhas* as a unifying element for his imperial territory abounded with ethno-religious multiplicity might have formed in the subconscious mind of Asoka. In search of an absolute symbolic expression, there lies a possibility that he borrowed from the historical precedents in Gautama's life with the *bodhi* and/or the *sala* trees.²⁹

No matter how secular Asoka might have been as a ruler and a person, his reign during the 3rd century BC was not promising to the orthodox Brahmins, the Jainas and the Ajivika³⁰ ethnicities; while Buddhism, on the other hand, for all resolutions enjoyed the prestige of being a state religion (Roy and Chattaroy, 2007; Thapar, 2003). It was the times of struggle and hardship that impelled the Brahmanic religious personalities – comprising the majority in the Indian population at that period – to move south and eastwards; and the remaining others, who were a bit less compelling as threats, to the nearabout Barbar, Nagarjuni and Sitamarhi hill forests and caves across Bihar. There are evidences decisive enough that argue about the immediate withdrawal of royal patronage for the Brahmanic convention after Asoka adopted Buddhism. Other accounts are also suggestive of brutal persecution of the Ajivikas during the initial years of his administration (Dutt, 1962; Phuoc, 2010). Nevertheless, it is widely apparent in the rock-hewn cave shelters of Bihar that Asoka was indeed involved as a supporter of secularism in the then contemporary politics of the subcontinent.

²⁹ See explanation: chapter-4, subsection-4.3.2, pp.57-58; and alternate/inaccurate theorization regarding the *dhamma stambha*'s historical precedence as an ancient Indian belief of unknown origin by: **Brown** (2003).

³⁰ *Ajivika(s)* – Presently extinct and popularly known as an extreme heterodox philosophical branch contemporary to the Buddhists and Jains in India – more associated with Jainism in particular; believing in '*niyati*' (fate) – that there is no free will and everything is absolutely predetermined by the broader cosmic principles.

Example (generalized) – The Cave-Sanctuaries of the Ajivikas (c.3rd BC):

Eight rock-hewn caves belonging to the Ajivika faith, are found concentrating in three principal locations of Bihar – four in the Barabar hills, three grouped together in Nagarjuni and one isolated in Sitamarhi (Brown, 2003; Grover, 1981; Phuoc, 2010). Amongst the others, the Lomas Rishi sanctuary was left unfinished and probably sheltered Buddhist monks during their times of despair in the post-*Maurya* period. With minor variations in each, these typical cave-shelters chiseled out of large quartzose sandstone boulders maintain the following architectural features (Plate X):

- The sanctuaries are commonly rectilinear antechambers with additional cylindrical cavities often hewn to their deepest end;
- Entrance to these caves are carved out from the longitudinal sides, but some have direct frontal access;
- The antechambers have linear-barrel vaults, while the smaller cylindrical chambers have domical or pointed arch-vaults over their top; and
- The interior of these caves are exquisitely mirror-polished – identical to the craftsmanship of Asoka's *dhamma stambhas*, but otherwise bare and without any detailing.

[Brown, Percy (2003), *quote*. p.11: on the event of sudden disappearance of the Asokan School from India]

“Extending over a period of less than fifty years, this movement³¹ had no growth and (therefore) no decline, so it emerges not so much as a school but as an outstanding episode in the early history of Indian art.”

The movement in architecture created by Asoka only involved his excessive obsession with simplified visual markers as a language of his grand political scheme, and in it, religion had been also a ‘mechanism’. His intentions are very well expressed in the number of *stupas*, *chaityas* and *sangharamas* he built himself and/or contributed indirectly in the process of building across the

³¹ Asokan School – The stylistic movement in the field of Buddhist art and architecture during the reign of Asoka (c.268-232 BC), commenced by the *Maurya* emperor himself as his own predilections.

land – in accounts of his Buddhist contemporaries, it was an overwhelming 84,000 (Phuoc, 2010). In actuality, the numbers are most possibly far less, but it indicates a qualitative decrease against a sheer veneration for quantity; and thus with his death, the legacy died as the movement simply did not get the opportunity for imparting significant stylistic influence in the currents of building art. But Asoka's very own manifestations of Buddhism through architectural dialect, in a broader perspective, did create the momentum that enabled the Buddhists to survive throughout centuries of social-political uproar in India.

The *Mauryas'* lack of attention towards *stupas* and *sangharamas* yielded a new architectural category for the Buddhists – namely, the *chaitya*-temple. It might also have been the result of seemingly perceptible sectarian disputes among the *Hinayana* and the *Mahayana* followers of Buddhism (Grover, 1981). In the need of an appropriate dialect to commemorate the aniconic symbols of Buddha, experimentations with the situated traditions in other religions and also with the prevailing vernacular in architecture must have paved the way for such a development.

Example – The First Chaitya-Temple (c.3rd BC): Only one example dating back from as early as c.250 BC had been exposed in Bairat (now, Rajasthan). Following are some comments regarding its spatial-morphological properties (Plate X; Brown, 2003):

- Unassertive in scale, the *chaitya*-temple was most probably raised on a rectilinear platform and upon which, a traditional wood and thatch linear-barrel vault must have roofed an antechamber of comparable proportions; having a rather large cylindrical additional chamber at its western end;
- The antechamber might have been accessed from the eastern linear end, or it might as well be from the longitudinal side as observed in the Lomas Rishi rock-hewn sanctuary,³² and

³² See explanation: chapter-4, subsection-4.4.2, pp.63-64.

- A small commemorative sandstone *stupa* with distinctive *Maurya* polish might have been placed in the center of the cylindrical chamber having two consecutive tiers of circumambulatory paths around it.

4.4.3 The Post-Asokan Transitory Stage

With the fall of the *Maurya* empire, the *Sungas* and the *Andhras* – both the dynasties belonging to the Brahmanic philosophical creed – ascended to the political fronts of the subcontinent. The *Sungas* took hold of the northeastern territories that once was the headlock of the mighty *Mauryas*; whereas the *Andhras* gained control over almost all of the Deccan valley to the south and the southwest (Roy and Chattaroy, 2007). In this scenario, a careful scrutiny of the political map of India will reveal that the Buddhists were concentrating around several key strategic positions out of the ready range of the two Hindu dominions – among them, Nasik in the Western Ghats and the Raisen district in Madhya Pradesh are worth mentionable. Most interestingly, the *Hinayana* rock-hewn settlements are located in the wild gorges of the Western Ghats; while the Sanchi *stupa*-settlement in Madhya Pradesh lies in between the territorial borders of these two kingdoms (Plate VII). As it appears, these two post-*Maurya* dynasties were a little less tolerant towards the Buddhists in the subcontinent than their predecessor was to the Hindus, the Jains and the Ajivikas. This period also saw the rise of the mercantile community of the Indian subcontinent (Thapar, 2003).

[Brown, Percy (2003), *quote*. p.13: on the event of sudden disappearance of the Asokan School from India]

“For a space of time after the fall of the Maurya rule a state of transition supervened while the form of Buddhism found by Asoka went through the process of changing its authority from the throne to the priesthood, the latter having been apparently organized with this in view. The art naturally followed the same course as the religion, there been a static interval between the cessation of the autocratic art of Asoka and the beginning of a new or hierarchic phase.”

This 'transition', made apparent as an effect of the economic sovereignty of the Buddhists through the hands of the rising mercantile community can be traced in the behavioral interpretation of the two disputing sects – the *Hinayana* and the *Mahayana*. Both the sects relied on the economic elite as their key patrons and placed themselves at the vantage points where the trade routes had been at that time. But noticeably, the *Hinayana* Buddhists – being the orthodox among them – chose to carve out the caves of the Western Ghats in reminiscent to the Buddha's struggles in his initial years as a wandering esoteric; whereas the *Mahayana* doctrine most expediently took position with the Asoka's old *stupa* at Sanchi (Plate XI).

Example – The Cave-Settlements of the Western Ghats (c.2nd BC-AD): The first settlers, encouraged by the teachings of Buddha and numerous other examples that went before them, ventured to reconnoiter the natural cave formations of the hills that consisted of horizontal amygdaloidal layers and thick cognate traps of marked uniformity. Within less than a span of 50-years, the hillsides were filled with the echoes of gentle knocking of mallets and chisels in their attempt to carve out the practical necessities of the religion and its people (Grover, 1981; Phuoc, 2010). The caves were no longer primitive, but gradually took their shape as unique forms of art, sculpture and architecture belonging to the Buddhists. Thus, a new assembly of rock-hewn grottoes developed – complete with grand *chaityagrihas*,³³ each having their designated *lenas*³⁴ grouped together to form settlements on the hillsides.

Generally, the rock-hewn *lenas* were closed-in reproductions of the Buddhist *sangharamas* and/or their advanced variations that were in practice in the outside world in terms of both their behavioral and organizational principles (Plate XI).³⁵ These monasteries that provided accommodations for the monks

³³ *Chaityagriha(s)* – Popularly synonymous to the term '*Chaitya*-temple(s)' – the Buddhist temples that were extensively sculpted out from cave formations to replicate their counterpart in the outside world; a place of worship, rituals and religious ceremonies performed and observed by the monks and the common people alike.

³⁴ *Lena(s)* – Popularly synonymous to the term '*vihara(s)*' or '*monastery(ies)*' – the residential quarters for monks that were extensively sculpted out from cave formations to replicate their counterpart in the outside world.

³⁵ See explanation: chapter-4, subsection-4.4.3, pp.69-71; and as found in the Sanchi *stupa*-settlement.

had their deeper-most private cells grouped together around a quadrangular central hall having flat ceiling within the caves. The opening side of the *lenas* were usually separated by vestibules or often even verandahs as transitional spaces. These *lenas* of the aniconic or the *Hinayana* Buddhists frequently had hewn-in stone sittings, shelves or niches with their individual cells. The entrance façades of these monasteries were conventionally bare comparing to the exquisitely articulated *chaityagrihas* (Phuoc, 2010).

The aniconic rock-hewn sanctuaries of the *Hinayana* Buddhists are located in the hills of Bhaja, Kondane, Pitalkhora, Ajanta, Bedsa, Nasik and Karli of the Western Ghats. Among these, it is believed that the highest form of artistic and architectural refinements were accomplished in Cave No.8 (Karla)³⁶ – the *chaityagriha* at Karli. Cave No.8 (Karla) forms its own group with an assortment of twelve more cave sanctuaries attached to its service in the same surface of the hill. It is, in all practicality, the interior volume of the extensively detailed rock-hewn replication of the woodwork *chaitya*-temples that were in existence during the middle of the 1st century BC (Plate XI; Brown, 2003; Phuoc, 2010):

- The approach to this *chaityagriha* is boldly defined with a monolithically carved out 39'-0" tall freestanding *stambha* with its four-figured lion capital with the left curvature of the hill; its verticality being rather abridged by the massive girth of its shaft;
- Behind the *stambha*, the entry is further defined with four slender pillars – the two on the sides being merged with the rock formations – separating or somewhat screening the vestibule from the outside;
- The wall surfaces of the inner sides of the vestibule are richly ornamented with sculptures and repetitive horizontal bands of relief-works portraying *chaitya*-frame motifs with human figures – both male and female;
- The vestibule measures almost 19'-7" deep and 57'-6" wide with its roof leading up to the full height of the chiseled-out frame of the main entrance;

³⁶ There are about sixteen (16) rock-hewn cave sanctuaries in this group – of which, three (3) were carved out during the latter periods, therefore not belonging to the original period of construction.

while there are triforiums, mortice holes and an access stairway to the upper level on the left suggesting that a wooden platform might have been raised comfortably above human height;

- The main stone-hewn screenwall that splits the vestibule from the interior of the *chaityagriha* contains three doorways on its lower portion; with the central one being the largest – all of the doors open up to the roundabout space of the aisle that is further separated from the central nave or the main *chaitya*-hall with a screen of forty-one stone pillars;
- The upper portion of the screenwall has a recessed sun-window set within the frame of an immense horse-shoe archway;
- Cave No.8 (Karla) is rectilinear in plan with an apsidal end containing the *stupa* in its spatial volume, and measuring roughly about 129'-9" deep and 47'-10" wide;
- The nave is almost 43'-9" high with its form of the timberwork linear-barrel vault having progressive archways leading to the depths of the cave, and in the process of which, maintaining an extraordinary visual balance within the main spatial volume; whereas the aisles are flat-roofed and rather unadorned with a height of about 17'-10"; and
- The rock-hewn relic-*stupa* has a diameter of 13'-4" and a total height of 30'-7" with its original wooden *chhatra* surmounted on the top of its stone outward expanding finial block.

Example – The Sanchi Stupa-Settlement (c.2nd-1st BC): With their recently acquired independence from the grasps of Asoka's authoritative influence, the organization of the monks and the lay communities of the Buddhist religious philosophy in the neighborhood of Sanchi-I (No.1) gradually increased; and with it grew the immediate necessity of lodging and other subsidiary amenities. The Buddhists were by then more or less accustomed to the monastic life and to the sangharamas³⁷ that housed them since the earliest days (Brown, 2003; Grover, 1981). These rock-hewn monasteries were basically a simple-linear

³⁷ See explanation: chapter-4, subsection-4.3.1, pp.53-57.

arrangement of small living quarters of uniform nature and volume around an interior open patio, further defined by inside verandahs with their doors opening onto it. One of the linear sides of these compact quadrangular forms probably had defined portico entrances complete with large pillared narthexes and entrance chambers that provided additional security and privacy for the resident monks. These Sanchi *stupa*-settlement monasteries have their superstructures still intact up to a certain height above the ground where brick was widely used. The upper portions of these superstructures might have been constructed with wooden frameworks and other perishable materials in their forms (Plate XI; Brown, 2003; Grover, 1981).

The archaeological facts suggest a sporadic and spontaneous development of an assortment of built structures in the area of Sanchi *stupa*-settlement that includes other significant morphological categories; such as – the *stupas* and the early forms of the *chaitya*-temples (Grover, 1981). The *stupa*-prime called Sanchi-I (No.1) that is seen today is basically the result of a chronological development through the timespan of three political authorities. While the basic symbolic concepts of the *stupa* remained almost unchanged, the following qualitative improvements were realized to its original form (Plate XI; Phuoc, 2010):

- The original brick mound, erected by Asoka, measured an approximate diameter of 70'-0" with a stone *chhatra* (*i.e.* umbrella crown) placed to its uppermost tip; and additionally, a lion-capital *dhamma stambha* claimed its position as a landmark near the side of its southern corner;
- During the *Sungas*, the actual diameter of the *stupa* was increased to an outstanding 120'-0" and its height to 54'-0" by means of a covering with thick hammer-dressed stone blocks layered in even courses, completely encasing its brick-built core within; while the finial was further elaborated by a tripartite *chhatra* with a *harmika* (*i.e.* square balustrade) around it;
- Furthermore, the process of enlargement also included a *medhi* (*i.e.* high terrace) almost 16'-0" from the ground level and encircling the bulk of the

stupa as an upper ambulatory path – access to which was made possible by a double stairway from its southern side – while for the accommodation of which its lower circumambulatory path became slightly elliptical;

- The wooden balustrades around the circumambulatory paths and the stairways were later replaced during the *Andhras* with intricately carved-out stone *vedikas* (*i.e.* palisade railings of Vedic origin) with distinctive *Maurya* polish; imitating – both structurally and artistically – the finest of woodwork carpentry in stone blocks; and
- Four soaring 34'-0" stone-sculpted *toranas* were devised with the *vedikas* in order to create indirect access sockets to the lower circumambulation; and at the same time, to orient the *stupa* with the symbolic universality of the key cardinal directions (*i.e.* north, south, east and west); while the customary design principles of woodwork-to-stone remained unaltered.

4.4.4 Kanishka, and the High-Style Formalism

The turn of the first millennium had been a time of extreme social-political and transcultural juxtaposition for the subcontinent; in particular, its northwestern regions that shared geographical boundaries with the Near East. The stirring vicissitudes in political ascendancy – from the *Achaemenids* to the Bactrian Greeks, and the *Scythians* after them, again followed by the Yei-Chi invasion, and finally, the rise of the *Kushans* – resulted into a remarkable cohabitation of the Indo-Persian-Bactrian commons in these constituencies (Roy and Chattaroy, 2007; Thapar, 2003). In the midst of all these, the Buddhists might have probably deemed Gandhara (at the foci) more acceptable as their new destination than the Indian midlands dominated by Hindu supremacy and their collective intolerance towards them.

The ascendancy of Kanishka to the throne of the great *Kushan* empire, and simultaneously, his conversion to Buddhism marks the zenith of Buddhist art and architecture in terms of both quantitative and qualitative development in the Indian subcontinent. Kanishka fervently extended his dominance over the

entire north-Indian constituencies up to Varanasi in the east and the greater Gandhara province to the west (Plate VII; Grover, 1981; Roy and Chattaroy, 2007; Strayer and Gatzke, 1979). Buddhism, with its *Mahayana* doctrine by then flourishing and gaining popularity under such circumstances of cultural multiplicity, proved to be more malleable, fashionable and adaptive as a religious philosophy in comparison with Brahmanism and Zoroastrianism at that time. In Gandhara, Buddha's figural illustrations in various forms had been accepted as a conscious realization of the need of a 'god' as the religion quickly amassed local practices and influences – an idea that Buddha himself opposed during his lifetime (Thapar, 2003).

Stylistic Context – the High-Style Formalism: The ethos of Gandhara in general had been the product of urban life that was highly developed and organized not only within the Gandhara proper, but also throughout the entire region as a whole (Encyclopedia Iranica, 2018). At the height of their power, the Bactrian Greeks had laid out the primary foundation having the strength of manifesting itself over other ethnological groups that subsequently came in contact by establishing as many as sixty large-scaled townships across the land. While these townships were fundamentally Indian (or local) regarding their characteristic intents and a few plastic treatments, there were much in their constructional or structural properties that could be readily identified as Hellenistic (Plate XII). These influences included numerous forms of the Classical Order that are predominantly Corinthian in style and treatment, sculptural and/or mural outputs that take on Greek proportions in their formal arrangements and appearances (*i.e.* anthropomorphic Buddha in stucco), stonework detailing, and so on. Simultaneously, Parthian (*i.e.* fire alters, engaged animal capitals, etc.) and Roman influences were also beginning to be popular while the *Kushans* were already dominating the political frontiers of Gandhara (Brown, 2003; Encyclopedia Britannica Online, 2018; Thapar, 2003).

Moreover, excavations have revealed that the Gandhara townships were in general the nearest reproductions of the Greek city-state (Plate XII). These urban settings commonly had a major axial artery that longitudinally divided the whole into two sections, with secondary accesses running perpendicular from it. The private houses were built with rubble masonry and were coated with lime or mud plaster. Compact clusters of houses were generally not more than two storied in height with their individual private courtyards (Strayer and Gatzke, 1979).

Example – Dharmarajika Stupa-Settlement (c.1st BC-5th AD): Characteristic of this composite category found at Chakpat, Manikyala and Butkara-I in the extreme northwestern regions of India, Dharmarajika *stupa*-settlement has a large hemispherical rubble-built *stupa* presumably built during the mid or late-*Maurya* eon. The synchronicity of the old structure of the *stupa* with features originating due to the later behavioral tendencies in Buddhism has resulted into its eventual composite nature. Following are the functional, symbolic and compositional components of this example (Plate XII; Phuoc, 2010):

- Originally, the dome of the *stupa* with its *harmika* forming the apex might have once had a total height of about 80'-0" from the elevated plinth and a diameter of almost 120'-0";
- A 5'-0" high raised *pradakshina* having an average width of 4'-9" encircled the *stupa* with admissions from the four cardinal directions by means of flights of steps; but no *vedika* protecting the pathway was traced at this level;
- The Dharmarajika *stupa* had a total of sixteen thick rubble walls radiating outwards from the inner core as its foundation beneath the *stupa* mound; which in turn symbolizes Buddha as *dhammachakravartin*;³⁸
- Afterwards, a ring of minor *stupas* (probably, votive) encircling the *stupa*-prime adorned the lower *pradakshina* or platform/base;

³⁸ *Dhammachakravartin* – 'The Monarch' of all and the religion (of Buddhism) who turns the *dharmachakra* or the 'Wheel of Truths' which radiates Gautama Buddha's *dhamma* across the four corners of the universe.

- Sometime during the *Mahayana* phases, four image chapels containing Buddha's sculptural figure and/or other anthropomorphic elements related to Buddhism were added to the base of the *stupa* on the main cardinal directions; these chapels were visually framed with ornamental Corinthian pilasters with trapezoidal doorways and *chaitya*-arch niches in between;
- A concentric band of *pratimagrihas* in between the small votive *stupas* defined the 12'-0" wide lower *pradakshina* with the *stupa*-prime; these *pratimagrihas* housed the anthropomorphic Buddha and/or *bodhisattvas* within their enclosures – reflecting the emerging necessities of functional adaptation and innovation with the rise of the *Mahayana* ideologies in the Indian subcontinent;
- A slender *stambha* carved out of locally obtainable sandstone having 2'-2" diameter and a tentative height of 30'-0" was erected beside the eastern flight of steps marking the same prime alignment; the *stambha* is possibly contemporary with the *stupa* itself; and
- The *stupa*-complex also had a quadrangular rubble-built monastery (*i.e.* *sangharama* or *vihara*) of conventional characteristics on its northeastern and western peripheries, and a numerous other building blocks scattered all over the site.

Example – Takht-e-Bahi (c. 1st-5th AD): The early hermetic settlements in and around Gandhara were seen to have been developing more organically and spontaneously with a central *stupa* dominating all the other features within their facilities. After successive experimentations, the ultimate model of these monasteries grew categorically organized in their functional disposition and compositional arrangement to form a comprehensive whole. In association with the Hellenistic planning principles (Plate XII; Cole, 2002; Gallion and Eisner, 2000), the basic scheme was quite similar; *i.e.* strong axial orientation acting as a datum in order to achieve unity among variations (Brown, 2003; Ching, 1996; Phuoc, 2010). This unification or idealization of an assortment of elements also symbolizes Buddha's teachings epitomized in *nirvana*. More

specifically, the axis – terminated on both ends with strong geometrical (*i.e.* the form of the *stupa* within an enclosed courtyard) and spatial (*i.e.* the space itself within an enclosed courtyard) receptors – might have been conceived out of a conscious realization of '*karma*'³⁹ as a determining factor in the cycle of rebirth.

The overall planning arrangement indicates that the whole scheme had been considerably predetermined and was executed with relevance to the physiographical setting and the symbolic rationalities of *Mahayana* Buddhism. The highest seat had been, therefore apportioned to the slightly elongated quadrangular image chapel (*i.e.* the *pratimagriha* sanctuary) with its high-style Gandhara-form *stupa* placed at the center of its courtyard. The *vihara* – on the opposite end of the axis – was planned on a lower level with the votive *stupa* court in between connecting the two most significant ends. This being the principal scheme of the complex, the other ancillary and service functions were arranged, somewhat organically. Following are some explanations regarding its spatial-morphological properties (Plate XII; Grover, 1981; Phuoc, 2010):

- The settlement had been accessed by two main approaches; from the southwest – a more public entrance; while the other one was somewhat private in nature, accessed from the southeast corner – the first terrace being placed with a bell-tower for the service of the monks;
- Both the approaches led to the votive *stupa* court that connects the main sanctuary and the monastery at its southern and northern ends;
- A single flight of steps led to the 62'-0"X72'-6" courtyard of the core *stupa*-chapel on the uppermost terrace that once contained a Gandhara-style central *stupa* in the middle, enclosed on three sides (*i.e.* south, east and west) by no less than sixteen *pratimagrihas*; while the entrance side was linked visually with the votive *stupa* court below;

³⁹ *Karma* – '*Karma*' in Sanskrit; meaning 'action' or 'doing'; is the law of moral causation as a fundamental doctrine in Buddhism.

- The dome of the central *stupa* probably was vertically enlarged having an elaborately constructed *chhatra* as its finial, measuring no less than 30'-0" high from the terrace level; while the double-tiered platform still remains, measuring about 20'-3"X29'-7", and presumably decorated with bands of terracotta detailing illustrating religious imageries;
- The *pratimagrihas* of the *stupa*-chapel were raised on a continuous 2'-9" high platform and had a dimension of 4'-8"X6'-0" in base plan and 17'-0" in height, alternated with smaller ones having 2'-6"X2'-11" dimension in plan and an average height of 7'-5";
- The residential cells of the 79'-0"X85'-0" *vihara* on the northern end of the axis were arranged around a quadrangular central space containing a water cistern that ensured service and hygiene for the resident monks; the cells had uniform dimensions on the three enclosures (*i.e.* west, north and south), while a kitchen and a refractory formed its eastern side;
- A narrow staircase with the kitchen suggests that the *vihara* might have had an upper story comprising with more blocks of housing cells;
- The western portion had a linear arrangement of meditational chambers and also a promenade for relaxation and/or contemplative walks down the terrace below; while the promenade itself was buttressed with a massive retaining wall against the adjacent hillside on the west; there was also an assembly hall at the same level with the monastery on the northwestern corner of the settlement; and
- Like the other monastic settlements of its time, *Takht-e-Bahi* was built of the diaper and semi-ashlar masonry with plaster finishing, and detailed with pseudo-Corinthian pilasters, dentils and gilded stucco sculptures, and so on.

Example – Stupas and Stupa-Stambhas at Gandhara (c.2nd-5th AD): The small 4'-6" high (including the *harmika* on top) Loryan Tanqi votive *stupa*, now preserved in the gallery of the Indian Museum at Kolkata, is representative of the full-scaled Gandhara *stupa*. Typically, these *stupas* from the *Mahayana*

practices in Gandhara included one large or often multiple *chaitya*-niche(s) containing the anthropomorphic Buddha figures at the mid-section where the dome is integrated with the drum below. While at the same time, use of Corinthian pilasters and dentils were indicative of the then prevailing Greco-Roman influences. The morphology of these *stupas* significantly emphasized verticality by multiplying the number of tiers at the drum and the characteristic multi-*chhatra* formation that shaped the finial (Plate XII; Brown, 2003; Phuoc, 2010).

The zealous building activity of the *Kushans* also included towering *stupa-stambhas* of mammoth proportions; where in many circumstances, the main form of the *stupa* is fundamentally overpowered by simply multiplying the tiers of the drums and the number of the *chhatras* added as their finials. One such example is the Shah-ji-ki-dheri *stupa-stambha* near Peshawar, of which only the dilapidated mound of its 175'-0" quadrangular podium with four corner bastions still remains. Historians have attempted to reconstruct its conjectural morphology from a surviving reliquary model⁴⁰ in comparison with references from ancient Chinese travelers in this region during the early-6th century AD; and that indicates its tentative height possibly being a soaring 400'-0" at the least (Plate XII). Historical suggestions also indicate that the original stone-built *stupa*, with less than half its height stated here, might have contained the relics of Kanishka; and was most probably destroyed by the White Huns⁴¹ before its reconstruction by the later *Kushans* with a woodwork superstructure. It appears that the *stupa-stambha*, with flights of steps leading up to the first terrace of the heavy-built podium from four prime axes, was cruciform in plan – measuring almost 272'-0" in both the directions. The main *stupa* was almost insignificant in the overall scheme and sat on five tiers of receding drums, having large *chaitya*-arch niches in the cardinal sides.

⁴⁰ *Stupa* No.A11 – discovered at the Jaulian monastery settlement near Taxila.

⁴¹ *White Hun(s)* – Alternately, the Hephthalite(s) or the Epthalite(s) – were the race of largely nomadic tribes forming a part of the Hunnic population of Central Asia – ruling over the vast area stretching from Central Asia and all the way to the western Indian territories around c.5th BC.

The evolution of *stupa-stambha* from the traditional form of the *stupa* is one of the major contributions of Buddhist architecture that once flourished across the rugged topography of Gandhara – the *stupa-stambha* irrefutably being the precursor to the Chinese pagodas in far away, and even to the fundamental principles of *shikharas*⁴² in their homegrown Hindu temples (Grover, 1981; Phuoc, 2010).

4.5 BUDDHIST ARCHITECTURE IN INDIA – THROUGH THE TRANSFORMATIVE STAGES

After the fall of the prodigious *Kushans* in the western fronts, the smaller principalities in the mainland Indian subcontinent then floating in an abysmal state of skirmishes and trivial territorial disputes among them, suddenly found themselves in a situation of regional affinity (Walsh, 2006). The apparent semblance among such diversity of the northern and midland states was probably the result of an incidental event that prompted them to form their own principal ‘circles’ of potential alliances; as had been theorized by Kautilya⁴³ centuries ago. One such example that might have held higher significance for the *Guptas* was perhaps Chandragupta’s (*i.e.* the third *Gupta*) matrimonial link with the Licchavi family of the extreme north (Thapar, 2003; Watson, 2002). It was not a meagre concurrence that the administrative framework of the *Guptas*’ thus varied from that of the *Mauryas*’ in the principle in which the latter had conceived a consolidated government allowing a considerable degree of local control throughout the various territorial domains of their empire. Other than that, both the dynasties gained control over the entire north Indian territories – stretching from east to west; and those who opposed, were dealt with the *Guptas*’ military might (Roy and Chattaroy, 2007; Walsh, 2006).

⁴² *Shikhara(s)* – ‘*Shikhara*’ in north India and ‘*Vimana*’ in south India – are the characteristic tapering engaged towers of the Indian temples; placed directly above a building’s sacred and/or entrance chamber(s).

⁴³ *Kautilya* – Also known as ‘Chanakya’ or ‘Vishnugupta’ – who lived during the 3rd century BC, a Brahmin and educated in Taxila; was a statesman and philosopher responsible for the ancient treatise on property, economy and material success named: ‘*Arthashastra*’; and furthermore, theorized a diagram consisting of twelve states, divided into four primary ‘circles’ of potential allies among Indian states and kingdoms.

There was maybe another motivation behind such concord among the post-*Kushan* confederations; expressed in terms of their ardent act of refurbishment of the Hindu religion and the Brahmin Order in the subcontinent. The commencement of a 'golden age' was therefore for the Hindus' to cherish as the uniformity of the utopian did not somehow reach the other communities that existed at that time. Among them were the lower caste Hindus, the Jains and the Buddhists – who had been somewhat neglected, if not ruthlessly persecuted – and were not received affectionately in the abundance of 'classical' delicacy exhibited through the mediums of literature, theatre, visual arts, architecture, science and the sophisticated use of *Sanskrit* in the upper strata of the society (Roy and Chattaroy, 2007; Thapar, 2003).

Harsha, the *maharajadhiraja*⁴⁴ to succeed the *Guptas* was also from the Hindu Order, but was rather eclectic in his personal religious views and profusely encouraged and patronized scholars, artists and religious personalities of all ethnicity; not just the Buddhists in their pursuit of knowledge (Thapar, 2003). It was during Harsha's prosperous reign that Buddhist building art and architecture ventured for the last time to retain its lost splendor in mainland India (Plate VII).

4.5.1 Stylistic Context – the Transformative Stages

In around 4th century AD, there seems to be an overall state of decline in the qualitative standards of the urban centers in India; which went further downhill towards the late 5th century AD probably due to the gradual ineffectiveness of trade and commerce in the subcontinent. Textual references reflect the norms of the affluent in these centers; whereas, excavations and various accounts from travelers and traders during that time reveal rather the opposite for the general population. It has been also noted that the number of urban centers across north India had also reduced to a small number during this period (Sharma, 1987). There is a considerable lack of literary evidence regarding the organizational pattern of townships and their building traditions through the early days of the *Gupta* eon.

⁴⁴ *Maharajadhiraja* – The title given to Harsha in the assembly in which he was crowned the supreme ruler by the smaller monarchical states that were previously ruled by the *Guptas*.

4.5.2 The *Guptas*, and the Resurgence of the Cave-Communities

The genuine condition of the Buddhists during the *Guptas* in India can be best communicated with the example of the *chaitya-temple at Ter* in Maharashtra (Plate XIII). Otherwise branded by the local Hindu communities as Trivikrama temple, the *chaitya*-temple was in its tangible dimensions and in all probability a freestanding apsidal gallery of the typical and modest Buddhist temple as seen in the Sanchi *stupa*-settlement from the c.2nd-1st BC.⁴⁵ It is apparent in its prevailing wood-and-brick compositions that the *chaitya*-temple must have gone through several stages of renovations while still in use by the Buddhists (Grover, 1981; Phuoc, 2010). The original *chaitya*-vault with wooden ribs was replaced by horizontal layers of over-sailing brick masonry with a thick plasterwork coating to recreate the curvilinear profile of the vault. At some point during c.4th-6th AD, the temple was transformed for the use of the Brahmanic purposes – with its stone-built *stupa* removed and probably destroyed – the 18'-5"X29'-5" in plan and 35'-0" high vaulted profile was added with a flat-roofed *mandapa*⁴⁶ at its frontal end, creating an entrance hall for the converted Hindu temple.

In such backdrop, the Buddhists were retracing their way back to the wild gorges of southwest India once again. The secluded refuges of the grottoes which they abandoned during their high time with the *Kushans*, were revived with their acquired style, competence, and most of all, their iconic ideals of the *Mahayana* way of life. Other than their usual locations in Pitalkhora, Nasik and Karli of the Western Ghats; Ajanta and Elora received a fair amount of attention from the Buddhist settlers in this exodus (Phuoc, 2010).

Example – The Cave-Settlements of Ajanta (c.1st BC-1st AD, aniconic phase – c.5th-6th AD, iconic phase): The rock-hewn sanctuaries in Ajanta were carved out of the horse-shoe shaped hillside facing the deep canyon below (Brown, 2003; Phuoc, 2010). Out of its thirty conditioned caves, twenty-four

⁴⁵ See explanation: chapter-4, subsection-4.4.3, pp.69-71.

⁴⁶ See explanation: chapter-4, section-4.6, pp.90-92.

belong to the later iconic phase; while on the other hand, there are four *chaityagrihas* in total – two belonging to each of the sects, and the rest of the caves are typically *lenas*. Alongside other countenances, the *Mahayana* iconic sanctuaries can be differentiated from their aniconic predecessors by extensively detailed color frescoes and/or murals essentially covering all the accessible surfaces inside the grottoes – depicting almost every aspect of social-cultural, religious and political life of India at that time (Grover, 1981). These latter cave sanctuaries also had figural motifs of Buddha (in both sitting and standing positions) and *bodhisattvas*, alongside monster-masked and demon-faced stone carveworks. These were strikingly devoid of woodwork detailing.

The *Mahayana lenas* are typically much larger and deeper than the *Hinayana* ones; therefore, requiring substantially heavy monolithic pillars for additional support against the deep overhead formation in their internal spaces. These latter *lenas* are also customarily more organized and symmetrical in overall configuration. Of the iconic *lenas* of the Ajanta group, Cave No.1 (Ajanta) demands much attention (Plate XIII):

- On approach, Cave No.1 (Ajanta) had a double-pillared flat-roofed portico, now extinct, projecting outward from a 9'-0" deep rectilinear colonnade loggia flanked with two cells in both ends; there are three more entrance chambers on each hillside outside the heavy-pillared colonnade, probably for the use of amenities and services;
- The semi-outdoor of the colonnade loggia is differentiated from the inside by a thick monolithic wall having a doorway on its middle and a pair of additional doors and windows on both sides of its façade; the doors lead to a 9'-4" aisle defined by a colonnade of curved-bracket columns around the central gathering space;
- In the interior of the cave, the aisle separates the central space from the residential cells on three sides of the cave – the cells each having an average dimension of 8'-0"X10'-0" and accessed by 2'-0" doorways; the

fourteen interior cells are rather bare but have carved niches on their deeper-most surfaces; the average height from roof to floor of this rock-hewn sanctuary is 13'-0" throughout;

- There is a double-pillared antechamber at the opposite axis of the main entrance doorway of the sanctuary and through it an 18'-6"X20'-2" chapel that contains a rather large sculpture of the sitting Buddha carved out of solid rock formation, with two *bodhisattva* figures on his both sides; and
- The nearly square central hall has a dimension of 63'-0"X65'-0" with its flat ceiling; and in its highest extent, it measures a huge 88'-0"X114'-0" from the outer loggia pillars to the back of its image chapel.

On the other hand, the *Mahayana chaityagrihas* are typically much smaller in volume than the *Hinayana* ones in all proportions. These latter *chaityagrihas* are also customarily more organized with their distinctive hierarchical spatial divisions from outside to the interior space of the rock-hewn sanctuary. Of the iconic *chaityagrihas* of the Ajanta group, Cave No.19 (Ajanta) characterizes the highest form of maturity of their generation (Plate XIII):

- On approach, Cave No.19 (Ajanta) has a spacious open-to-sky and semi-enclosed piazza flanked on both sides with two double-pillared entrance chambers probably for the service of the laity – each of the cavities having their own additional inner cell at the side of its depth;
- A generously ornamented rock-hewn wall, with its double-pillared and flat-roofed portico slightly protruding on the outside, screens the exterior from its interior *chaityagriha*; while its only opening in the form of a doorway and a much lesser *chaitya*-window (*i.e.* sun-window) on top are deeply set within its almost-square frame;
- In the interior of the cave, the plan bears absolute resemblance to Cave No.8 (Karla) in its organizational principles, but in a much smaller scale; having seventeen sturdy monolithic pillars echoing its horizontal spatial volume, and at the same time, defining the 3'-2" circumambulatory aisle from the 47'-2"X23'-7" central nave with an apsidal end;

- The 11'-5" tall stone pillars are square at the base with octagonal shafts, and are crowned with curved-bracket capitals on *amalaka*⁴⁷ sections;
- The upward elongated monolithically carved-out *stupa* has its three-tiered *chhatra* transcended with a bulbous finial that nearly touches the stone-ribbed vaulted ceiling imitating the 'old-fashioned' woodwork carpentry; and
- The frontal surface of the commemorative *stupa* is carved with a standing Buddha framed within a niche having decorative pilasters and an arch that conforms to Brahmanic influences.

4.5.3 Harsha – the Last Revivalist in India

The *Guptas*, already left severely crippled from the repeated attacks of the *Alchon Huns*,⁴⁸ finally gave away against a chain of internal revolts and uprisings within the principalities that once were their closest allies. The *Alchon Huns* were extremely hostile towards the Buddhists too, destroying countless religious settlements and persecuting whoever was on their path (Roy and Chattaroy, 2007; Walsh, 2006). This particular incident might have caused the Buddhists to migrate to east – to a place that was once their birthplace – their holiest sites, with their primary areas of concentration in and around Bihar.

Example – The Sarnath Stupa-Settlement (c.5th BC-12th AD): Sarnath is significant to the Buddhists because of its historic reference to the event that Buddha addressed his first sermon to his first five disciple monks in its deer park; and that this is the place from where the religion of Buddhism began its journey (Grover, 1981; Phuoc, 2010). The first building activity in its location most possibly took place in the hands of Asoka during his visit to this park at Sarnath, and in the event of which, ordered a *dhamma stambha*, a temple and a Dharmarajika *stupa* to be erected in the glory of Buddha and the

⁴⁷ See explanation: chapter-4, section-4.6, pp.90-92.

⁴⁸ *Alchon Hun(s)* – The '*Alchon Hun(s)*' – also known as the '*Alkhon Hun(s)*', were a nomadic tribe concentrating around Central Asian territories during c.4th-6th AD; popularly known to be extremely fierce warmongers.

dhamma. It has been historically referred that the *stupa*-settlement was populated by the *Hinayana* followers of Buddhism up until c.4th AD since its inauguration. This indicates that when the *Mahayana* doctrines of Buddhism was at its pinnacles in Gandhara, the religion had been prevalent – although through its ‘lesser vehicle’ – in the northeastern territories of India.

It is highly probable that the *Hinayana* practitioners in Sarnath, and in the other sacred sites of the northeast, probably was overshadowed by the rapid incursion of the followers belonging to the ‘higher vehicle’ in 6th century AD. However, the *stupa*-settlement in Sarnath survived quite well under the imperial sponsorships of Harsha in c.7th AD and through the *Palas* in Bengal. Comprising an area of almost 7,60,000 square feet, Sarnath *stupa*-settlement is the biggest of the four holiest sites for the Buddhists in India. It contains an assortment of functional entities and had been rebuilt/renovated/reorganized in a number of phases. The following texts will attempt to draw a brief review of the masterplan keeping a specific focus on the development that took place during c.6th-7th AD (Plate XIV):

- The *dhamma stambha*, inscribed with proclamations, is one of the oldest elements in the masterplan; with its capital not *in situ*, its estimated height might have been almost 50’-0” in total, while its *stambha* still remains in its original glistening polish;
- There are ruins of two temples in the *stupa*-complex – the first one, about 25’-0” east of the *dhamma stambha*, was most probably commissioned by Asoka and was originally built with modest proportions;⁴⁹ while the other one was a typical *chaitya*-temple of c.2nd-1st BC, placed almost 60’-0” west of Asoka’s morality pillar;
- There are two stupas in Sarnath – the Dharmarajika *stupa* sits almost 50’-0” south of the main temple, commissioned by Asoka and enlarged later during Kanishka’s reign – the *stupa* had a diameter of 100’-0” and a 15’-0” wide elevated *pradakshina* wrapped it around at the ground level with

⁴⁹ See explanation: chapter-4, subsection-4.5.3, p.83.

steps on the four cardinal directions; whereas, the massive 100'-0" high Dhamekh *stupa* with its 99'-0" diameter and 37'-0" high drum with eight image niches on it was placed almost 450'-0" east of its earlier *stupa*, and was undoubtedly restored and enlarged during c.6th AD;

- Small stone monolithic and/or brick-and-stone combination votive stupas are scattered all over the settlement; most of them having image niches on their four sides; and
- There were a total of seven brick-built typical quadrangular viharas placed in the northernmost and southernmost edges of Sarnath *stupa*-settlement, constructed between c.2nd-12th AD; these *viharas* were probably several stories high.

The Sarnath temple (*i.e.* Asoka's original temple) was probably renovated and redesigned in c.5th AD with 11'-0" walls enclosing on three sides (*i.e.* north, south and west) and forming a 23'-6" square central space within. A straight-edged pyramidal and multi-tiered tower then surmounted the chamber with a projecting portico outside on its east. It might be later during c.6th-7th AD that additional 10'-0" thick walls were added with its interior core having recessed chapels on the three blind sides; in which Buddha or *bodhisattva* figures in stone might have been positioned. Four pyramidal corner turrets were then added on the roof of the peripheral wall, finally converting the whole into a cruciform temple in plan (Plate XIV). The anthropomorphic Buddha carved in Brahmanic influence of that time might have been placed within the central space. In his visit in c.7th AD, Hsuan-Tsang describes the Sarnath temple as a 200'-0" tall erection of *shikharas* (*i.e.* towers) with a golden-colored *amalaka* surmounting its top (Devahuti, 2001). The Sarnath temple, along with its parallel edifice at Bodhgaya, represents the journey of Buddhism through the high period of the *Gupta* 'golden age'; as it is apparent in many of its features, adapting and experimenting with forms and functionalities that would ultimately set aside the symbolic predominance of the *stupa* throughout the Indian subcontinent.

[Dutt, Sukumar (1962), *quote*. p.323: on Nalanda *Mahavihara* and its new generation of Buddhist monks]

“It must have been felt at a certain stage that the mere ‘study of faith’ fell short of the standard set by the Lord himself for the perfect and accomplished monk – one who, having mastered the doctrine, is able also to spread it abroad and confute the doctrines of other faiths. It demanded the knowledge of ‘other faiths’ and also intellectual equipment(s) to be gained from other and non-canonical sources.”

The monastic settlement of Nalanda, officially celebrated as the ‘*Sri Nalanda Mahavihariyaarya Bhikshusanghasya*’⁵⁰ during c.5th-13th AD, was indeed a pioneer among the new group of monastic universities in the subcontinent. It once housed monks and intellectuals, educators and learners of all levels, religion and background both from within the region and even from beyond; functioning both as a spiritual center and an establishment that nurtured knowledge of almost every aspects of human life – might that be Hindu or Buddhist, religious or secular – from sciences, medicine, linguistics, logic, metaphysics, philosophy to fine arts. At its height during c.7th AD, about 200 villages in its vicinity was said to have been denoted to its service and the total number of resident students might have surpassed 10,000; as recorded by Hsuan-Tsang (Devahuti, 2001). The concept of such a universal institution was definitely of the Buddhists’ as they formed the mainstream of its population. The behavioral personality of this monastery, by its own merit, compellingly overshadowed the religious exclusiveness of the typical Buddhist monastery in India and draws emphasis on the component of ‘*viharas*’ in the whole composition. Therefore, the terminologies of ‘*vihara*’ and ‘*mahavihara*’ becomes widely prevalent in this region in particular.

In conjunction with Nalanda’s outwardly novel approach towards the social and intellectual development of the larger Indian community, there might be

⁵⁰ Meaning: Venerable Community of Monks at Nalanda Mahavihara.

other assumptions regarding its actual contextual position in the course of history. They are furnished below:

- In c.5th-6th AD, a number of *Gupta* kings were said to have been among its major donors; implying that the Buddhists might have conceived such an idea of 'transreligious' or transtheist⁵¹ enlightenment among the Hindus and the Buddhists (and probably the Jains too) in order to prove their validity in the society against the massive upsurge of the Brahmanic principles under the banner of 'mass cultural revival';
- In around 6th AD, the idealization of such an establishment might have helped mitigate severe antagonism and growing competition between the *Hinayana* and *Mahayana* sects within, and also with other non-Buddhist philosophies like Hinduism and Jainism;
- In c.6th-c.7th AD, Harsha most presumably provided his generous support to the 'intellectual initiative' that was Nalanda at that time, and in which he was dedicated to; but there remains a possibility that his contributions were not to the religion of Buddhism in general;⁵² and
- In c.8th-12th AD, with the rise of the *Vajrayana* ideologies in Buddhism, other newer establishments (*i.e.* Odantapuri, Vikramasila and Somapura) became more prominent throughout Bengal and its peripheral localities under the *Palas*; while on the other hand, Nalanda gradually became less popular along with its *Mahayana* principles.

Example – Nalanda Mahavihara (c.5th-13th AD): It was not unusual in these localities of northeastern India and in Bengal to reconstruct/renovate/redesign newer/additional structures over the foundations of older ones; regardless of their functional and/or ethno-religious predisposition (Reza, 2008; Reza et al., 2015). However, the scholars have already defined the corporeal extents of this *mahavihara* in terms of its social-historical aspects (Plate XIV; Phuoc, 2010).

⁵¹ *Transtheist(s)* – 'Transtheism' is a term made popular by the philosopher Heinrich Zimmer referring to an existential system of thought which is neither theistic nor atheistic, but is a philosophy beyond them; a term more appropriate with the doctrines of Jainism.

⁵² See explanation: chapter-4, section-4.5, pp.78-79.

The monastic settlement of Nalanda lies in a definite north-south elongated orientation. Its earliest assemblages include a small temple (No.3) and its two supplementary *viharas* (Nos.1A and 1B) grouped together in a sporadic order towards the southern extent of the complex; with all of their facilities accessed from the north. The newer expansions were more ordered and its elements were gradually added from south to north with each successive development stage; and in the process of which, creating a wide central avenue in between them. The newer additions faced the avenue from both sides – on its parallel west are the latest three temples (Nos.12, 13 and 14) of almost comparable configurations as seen in Sarnath and Bodhgaya, and therefore conforming to their contemporary artistic and architectural alliances;⁵³ while on its parallel east is the uninterrupted row of eight monasteries (Nos.1, 4, Annex-5, 6, 7, 8, 9, 10 and 11)⁵⁴ from later stages.

Temple No.3 was most probably built as a commemorative *stupa*, which still exists within the confines of its sanctum; but was transformed at some point during the later periods in observance with the conventions of the settlement's *Mahayana* ideologies. These temples were retained on low plinth areas; each treaded by a single flight of steps leading to their inner sanctum. The biggest of the temples (No.12) measures an outstanding 170'-0"X194'-0" in plan. The four corner *shikharas* are noticeably absent from temples No.13 and No.14.

The earliest and the smallest of these quadrangular *viharas* with open central courtyards measure 71'-0"X100'-0" (No.1B); while on the other hand, the largest one ranges about 178'-0"X255'-0" (No.11). Moreover, the original dimension of *vihara* No.4 was stretched with an extension (Annex-5) on the back. Following are some prominent countenances of this unique category of residential facilities (Plate XIV):

⁵³ See explanation: chapter-4, subsection-4.5.3, pp.83-85.

⁵⁴ Temple No.2 beyond the row of the *viharas* on farthest east facing the opposite direction had been identified as a Brahmanic temple; and therefore, was not included under Nalanda's administrative authority.

- The *viharas* generally had low flights of steps leading up to the narthex, flanked and defined with protruding entrance chambers on both sides; porticos were common to almost all of these *viharas*;
- There were image chapels on the opposite axial end across the central courtyards – constricted *pradakshina* passages around their sanctums are often found;
- Continuous colonnade verandah defined the spatial volume of the central courtyard with residential chambers for monks attached to it in all the four sides; the earlier wooden members supporting the verandah space were replaced with stone pillars during the later stages for added durability and strength;
- The central courtyards of these monasteries are found less disturbed with arbitrary elements lying scattered about, although image chapels, water-wells and hearths were often placed within the courtyards; water systems were devised beneath the courtyard slabs that carried water and wastes away from their premises;
- Four staircases on the four corner chambers led to the upper floors of the *viharas* as these *viharas* were frequently several stories high;
- Built-in furniture, racks and niches were typical with most of these cells; central kitchens and refractories were also provided in the *viharas*;
- The roofs of these monasteries were generally flat, but corbelled and/or semicircular vaults were also reported in Nalanda *mahaviharas*;
- The primary building materials were brick and mud mortar; the walls were often covered with thick layers of decorative plasterwork; and
- Although the monasteries were placed almost adjacent to one another – leaving only a narrow passage in between two individual building blocks, some of the *viharas* might have been laterally connected through narrow passageways for the convenience of the resident monks.

There is also a ruin of a very small temple in front of *viharas* Nos.1A and 1B, but its purpose was not confirmed. Numerous votive *stupas* – ranging in their

size and construction periods, are scattered arbitrarily around the grounds of temple No.3 – the largest one not exceeding 20'-0" in height. These *stupas* also corroborate, in an overall appraisal, to the ones that are seen in Sarnath in style and their detail. The existence of several large water reservoirs in the nearby areas suggest that beside their functional necessity to the inhabitants of the settlement, these might have been the sources of their primary building materials (Ahmed, 1994).

4.6 PROBABLE EXTERNALITIES IN BUDDHIST ARCHITECTURE

It is commonly believed that the artistic continuity of the Hindu-Buddhist-Jain building traditions during the *Gupta* 'golden age', and even afterwards, had been principally dominated and determined by the practices of the Hindus. It is true in a sense that the latter forms the majority in the society and therefore their buildings are numerous; and also because the impetus that was created during the Classical revival of the Hindus has eventually yielded the largest variety of architectural creations across the land. Moreover, it is as well expected of a 'style' representing a certain context to inspire and influence its future generations for the sake of dynamic progression through the passage of time. But the case that is 'Indian architecture', in a broader spectrum, was unquestionably pioneered by the followers of the Buddha before any other philosophical order; and had been actually an inseparable history of the Hindus and the Buddhists and the Jains with their faiths also having comparable ideologies among themselves. Therefore, it seems necessary to briefly address to the issue by assessing the basics of Hindu architecture in a timeframe of c.5th to c.8th AD.

Elements in Hindu Temples (c.5th-8th AD): Although the initial forms of the Hindu temples in India began to surface in and around c.5th AD, it was not until late-c.7th AD that these establishments became matured enough to proclaim their individual stylistic personalities. In *Sanskrit* jargons, the entire sanctuary is commonly known as

the '*vimana*', meaning – 'well-proportioned/measured'. The other key components, in their full extent, found in the *Gupta* and the post-*Gupta* temples were (Plate XV; Fletcher, 1996; Kramrisch, 1976):

- Representing the Mount Meru⁵⁵ – varying in shape and size – the pyramidal or tapering spire section of the temple is called the '*shikhara*';
- The '*garbhagriha*' is the deepest chamber of the temple and the most sacred sanctum in Hindu religion – the womb; where the deity is placed for worship;
- The '*pradakshina*' is the ambulatory walkway that encircles the *garbhagriha*;
- The multi-pillared hall in front of the *garbhagriha* for the congregation of the devotees is called the '*mandapa*';
- The '*antarala*' is the vestibule that unites the *garbhagriha* with its *mandapa*;
- The '*ardhamandapa*' is the front porch of the temple;
- The plinth or the platform of the temple is called the '*pitha*';
- A fluted stone piece forming the finial of the *shikhara* is called the '*amalaka*' – representing the lotus seat for the deity placed below; and
- The '*gopuram*' is the monumental transitional entrance that is usually placed at the main axes of temple complexes.

Temple Architecture in India at a Glance (c.5th-8th AD): In contrast to the extrovert and extensively diverse North, the more introvert and original South had been less exposed to stylistic externalities, as the deltaic landmass of Bengal always had been – the geographical differences between these three regions being one of the major contributors in this. However, the evolution of temples in India has been summarized in the following paragraphs (Plate XV; Brown, 2003):

- The earliest temples of the *Nagara style (i.e. the Northern Style)* of the northern Indian territories began to flourish about c.5th AD during the reign of the *Guptas*. These early forms were rather simple and unimpressive in their proportions and overall configurations; and some of the major components were still missing in these experimental beginnings. The first form of the *shikhara* was most probably installed at the temple in Deogarh (Madhya Pradesh). Towards 8th century AD,

⁵⁵ *Mount Meru* – In Hindu mythology, it stands in the symbolic center of the universe and is the axis of the world.

the *garbhagrihas* became relatively smaller, while the *shikharas* become the crowing features with these temples. The practice of *mandapas* were also inaugurated during this phase of development. In their more advanced forms, the temples often had a rectangular wall around the sanctuary with additional shrines at each of their corners. The most appropriate examples in this connection are the Osian temple at Rajasthan and the Jain temple complexes at Gujarat and Rajasthan. The Lingaraja temple (Bhubaneswar), the Jagannath temple (Puri) and the Sun temple (Konark) with their *shikharas* reaching up to almost 180'-0" are the finest examples of the North having a pyramidal *mandapa* inside and a higher tapering tower of the *shikhara* on their top. A further development in the *shikhara*-form took place in the temples of Khajuraho (Madhya Pradesh) from c.9th-11th AD.

- Inspired from the Buddhist rock-hewn architecture in the Western Ghats, the Dravidian style (i.e. the Southern Style) started its journey in the early-c.7th AD during the *Chalukyas*. The roofs typically had smaller mound-like structures that later grew to be full-formed *shikharas*. Simple in appearance, an example of this experimentation is the Lad Khan temple at Aihole. The *Pallavas* further enhanced their temples' artistic qualities and the proportions of various components through c.7th-9th AD; the temples at Mahabalipuram are their finest examples. From then on, the South began to focus on temple complexes of utmost grandeur and scale with the form of the *gopuram* added to their peripheral enclosures.

4.7 THE CONCEPT OF EVOLUTION – SYNTHESIS

The approach in this study had been to explore the angle or area of knowledge that had been left unaddressed in the contemporary research initiatives; and with an objective of scrutinizing the voyage through time in which Buddhist building art made its appearance in Bengal under the *Palas*. The study proposes to assimilate the complete experience in order of appearance in time while appraising the historic

buildings of the Buddhists' in the subcontinent; and by means of which, it is expected that its 'character' would be better understood.

The synthesis of such a wide variety of aspects has yielded the essential functional components of Buddhist architecture in mainland India – with their key personalities and potentialities being the determining factors for their stylistic permanence in *Pala-Bengal*. A brief synopsis of these elements are furnished below (Plate XVI):

Buddhist Rock-Hewn Settlement(s):

Buddhist rock-hewn settlements were predominantly located in the areas from the Deccan ranges to the wild canyons of the Western Ghats. Symbolizing non-permanency, these basic cave shelters gradually became more organized and grew to house a multiplicity of functional basics – taking up the form(s) that signified the social identity and organization of the Buddhists, and more importantly – expressing the basic human-behavioral tendencies of spatial differentiation. These rudimentary communal forms within the caves were popular among the Indians belonging to any religious system or ethnicity; Hindu, Buddhists and Jains alike, whenever there was crisis in their society. The rock-hewn shelters have ensured exactly the same for the Buddhist community, denoting each phase of struggle they had undergone.

Timeline and Location	Social-political Significance	Status/Potentiality
<u>c.6th-4th BC</u> (Bihar and Uttar Pradesh)	Birth of Buddhism and its initial stages of development	Natural conditions of hillside grottoes; unmodified and/or unaltered
<u>c.3rd BC</u> (Bihar and Uttar Pradesh)	Asoka, and the <i>Maurya</i> dynasty	Small-scaled alterations, originally commenced by the Ajivikas; basic spatial differentiations observed
<u>c.2nd BC-2nd AD</u> (Western Ghats and Madhya Pradesh)	The post-Asokan transitory stage	Large-scaled alterations of natural conditions; distinct realization of spatial differentiation and artistic style
<u>c.5th-6th AD</u> (Western Ghats and Madhya Pradesh)	The <i>Gupta</i> supremacy	Large-scaled alterations of natural conditions; distinct realization of spatial differentiation and artistic style

Table 03: The evolution of rock-hewn settlements in India.

Vihara(s) /Monastery(ies) in Buddhist Settlements:

The impact of this housing component, in particular, in the overall dynamics of Buddhist architectural development throughout India (and also in Bengal) has been grossly neglected in the scholarly initiatives in general. With its roots in the earliest years of Buddhism, it remained steady and provided the support the religious philosophy required – through high (at Nalanda) and through low (at the Western Ghats). At the same time, these *viharas* also delineate the personality of the religion based on its principles of the *sangha*. Symbolizing permanency, the *viharas* were rather basic in their behavioral organizations and conventionally modest in physical attributes.

Timeline and Location	Social-political Significance	Status/Potentiality
c.6th-4th BC (Bihar and Uttar Pradesh)	Birth of Buddhism and its initial stages of development	A traditional arrangement of residential facilities; also housed rituals and religious congregations; denotes the Buddhist social organization
c.2nd BC-2nd AD (Western Ghats and Madhya Pradesh)	The post-Asokan transitory stage	Accumulates formal organization – the primary stage of the <i>vihara</i> archetype; becomes an essential secondary element
c.1st BC-5th AD (Gandhara)	Kanishka, and the <i>Kushan</i> dynasty	Becomes accentuated with its primary element (<i>i.e.</i> the <i>chaitya</i> -chapel); archetype established
c.5th-6th AD (Western Ghats and Madhya Pradesh)	The <i>Gupta</i> supremacy	Accumulates and enhances stylistic features; <i>Mahayana</i> ideologies fully incorporated; remains static
c.7th-8th AD (Bihar and Uttar Pradesh)	Harsha, from the <i>Wardhana</i> dynasty	Becomes primary-parallel in the overall scheme; archetype in full maturity; <i>Vajrayana</i> ideologies surfacing

Table 04: The evolution of *viharas* in India.

With the change in the social-political circumstances of the Indian community during and after the *Guptas*, these Buddhist *viharas* in Nalanda assumed an almost primary-parallel role with their temples (as expressed in the deliberate execution of its masterplan) and ascended to the higher stage of the society – be that a mean by which it alternately ensured its survival. These static forms also represent the advancements in building technology of Indian architecture during each successive phase.

Stupa(s) /Stupa-Stambha(s) in Buddhist Settlements:

What originally was a tumulus, became defined as the Buddhist *stupa* and an object of veneration after Gautama's *parinirvana*. The shape of these *stupas* gradually became geometrically profound and oriented themselves to various symbolic definitions during the initial stages of development. These were built outside in the open, and also frequently within defined/confined spaces for the convenience of the *sangha* and the general devotees.

Timeline and Location	Social-political Significance	Status/Potentiality
c.5th-3rd BC (Uttar Pradesh)	The initial stages of Buddhism	Retains the traditional morphology of the tumulus in two basic categories – the body-relic <i>stupas</i> and the object-relic <i>stupas</i>
c.3rd BC (The <i>Maurya</i> empire)	Asoka, and the <i>Maurya</i> dynasty	Accumulates bold geometric profile and becomes volumetric – becomes numerous and also symbolic to the religion; and Simultaneously, its reduced form introduced into 'a place' of worship
c.2nd BC-2nd AD (Western Ghats and Madhya Pradesh)	The post-Asokan transitory stage	Accumulates symbolic interpretations and stylistic enhancements – becomes the primary element in the overall scheme; and Continues to retain its form in the confines of caves and/or temples; becomes somewhat dynamic – remains aniconic
c.1st BC-5th AD (Gandhara)	Kanishka, and the <i>Kushan</i> dynasty	Accumulates iconic values of the religion – transformation of morphology begins; Simultaneously becomes essential as the central object of veneration – transformation of morphology at its extreme Symbolic value paralleled with images of Buddha and the <i>bodhisattvas</i>
c.5th-6th AD (Western Ghats and Madhya Pradesh)	The <i>Gupta</i> supremacy	Symbolic value paralleled and/or replaced with images of Buddha and the <i>bodhisattvas</i>
c.7th-8th AD (Bihar and Uttar Pradesh)	Harsha, from the <i>Wardhana</i> dynasty	Becomes a minor element in the overall scheme

Table 05: The evolution of *stupas* in India.

During the later years, when the *Mahayana* traditions of Buddhism grew more prominent, their behavioral tendencies turned to be increasingly dynamic; and as a result, somewhat unstable too. At its most matured stage in India, the

object itself was replaced by images of the Buddha and the *bodhisattvas*; and on the other hand, the bulbous volume was transformed into towers or *stupa-stambhas*. Whatever course it might have assumed, its ultimate fate was the form of the votive *stupas* that were used numerously across the land.

Temple(s) /Chaitya-Temple(s) /Chaitya-Chapel(s) in Buddhist Settlements:

The concept of a confined/defined space for ritualistic congregation had been, as far as the archaeological facts suggest, the contribution of the Buddhists in the subcontinent. The first Buddhist temples were rather elongated in shape, denoting a bold axial approach; and it converges into a circular path around the *stupa* at their linear ends. This particular character remained almost the same although both their ‘object of worship’ and ‘place of worship’ had taken up many different forms throughout the entire process of evolution. But it is to be noted that the final form that evolved during the latter stages, remained the primary/core standard of the Buddhists temples across the world; with minor deviations abound depending on the situated contexts of a region.

Timeline and Location	Social-political Significance	Status/Potentiality
c.3rd BC (Rajasthan)	Asoka, and the <i>Maurya</i> dynasty	Rather modest (and local) in scale; represents the primary stages of development in both its categories (<i>i.e.</i> freestanding temples and cave-confined sanctuaries)
c.2nd BC-2nd AD (Western Ghats and Madhya Pradesh)	The post-Asokan transitory stage	Becomes definite in spatial and morphological articulation in both its categories – the most widespread practice throughout the region Conforms to existing stylistic traditions
c.1st BC-5th AD (Gandhara)	Kanishka, and the <i>Kushan</i> dynasty	Accumulates dynamic changes – goes through a process of experimentation and adaptation Becomes primary and gets accentuated with its supporting elements (<i>i.e.</i> <i>viharas</i> , etc.)
c.5th-6th AD (Western Ghats and Madhya Pradesh)	The <i>Gupta</i> supremacy	Accumulates and enhances stylistic features; <i>Mahayana</i> ideologies fully incorporated – remains static
c.7th-8th AD (Bihar and Uttar Pradesh)	Harsha, from the <i>Wardhana</i> dynasty	Becomes primary-parallel in the overall scheme; archetype in full maturity; <i>Vajrayana</i> ideologies surfacing

Table 06: The evolution of Buddhist temples in India.

4.8 CONCLUDING REMARKS

In this chapter, the key elements of Buddhist building art up until it was commenced into the regional boundaries of Bengal under the *Pala* dynasty have been thoroughly scrutinized. It has been identified that the elements of Buddhist architecture are not isolated or independent in terms of their functional and morphological characteristics; rather they form an integral part, in the pattern of well-defined settlements, through an uninterrupted process of development. In doing so, the external stimuluses from outside the regional boundaries have also been taken into consideration. Set against the broader social-cultural and political scenario of the subcontinental mainland, the movement also signifies a specific pattern that recognizes Bengal as its continuity.

REFERENCES

- Ahmed, Khondkar I.** (1994)
Up to the Waist in Mud – Earth-based Architecture in Rural Bangladesh, Dhaka: University Press Ltd.
- Ancient World History**
Pataliputra, accessed on: 2017, web: <http://earlyworldhistory.blogpost.com/2012/02/pataliputra.html?m=1>.
- Brown, Percy** (2003)
Indian Architecture – Buddhist and Hindu Periods, Mumbai: Taraporevala Sons & Co. Pvt. Ltd.
- Ching, Francis D.K.** (1996)
Architecture – Form, Space, and Order, New York: Van Nostrand Reinhold.
- Cole, Emily** (2002)
The Grammar of Architecture, Boston: Bulfinch Press.
- Devahuti, D. ed.** (2001)
The Unknown Hsuan-Tsang, New Delhi: Oxford University Press.
- Dutt, Sukumar** (1962)
Buddhist Monks and Monasteries in India – Their History and Contribution to Indian Culture, London: George Allen and Unwin Ltd.
- Encyclopædia Britannica Online**
Taxila, accessed on: 2018, web: <http://www.britannica.com/place/Taxila>.
- Encyclopedia Iranica**
Gandharan Art, accessed on: 2018, web: <http://www.iranicaonline.org/articles/gandharan-art>.
- Fisher, Robert E.** (1993)
Buddhist Art and Architecture, NY: Thames & Hudson.
- Fletcher, Banister ed.** (1996)
Banister Fletcher's A History of Architecture, London: Routledge.
- Gallion, Arthur B. and Eisner, Simon** (2000)
The Urban Pattern – City Planning and Design, New Delhi: CBS Publishers and Distributors.
- Grover, Satish** (1981)
Buddhist and Hindu Architecture in India, New Delhi: CBS Publishers and Distributors.
- Kramrisch, Stella** (1976)
The Hindu Temple – Vol.1, New Delhi: Motilal Banarsidass.
- Phuoc, Le H.** (2010)
Buddhist Architecture, New York: Grafikol.
- Reza, Habib Md.** (2008)
"Bengal Gupta Viharas – Did Such Phenomenon Exist?", in: *The International Journal of Interdisciplinary Social Science*, <http://www.SocialSciences-Journal.com>, Melbourne: Common Ground Publishing Pty. Ltd.
- Reza, Habib Md., Bandyopadhyay, Soumyen and Mowla, Azizul** (2015)
"Traces of Buddhist Architecture in Gupta and post-Gupta Bengal – Evidence from Inscriptions and Literature", in: *Journal of Eurasian Studies*, Vol-VII, Issue-3, Hanyang University: Elsevier.
- Roy, Atul C. and Chattaroy, Pranab K.** (2007)
Bharater Itihash, Calcutta: MoulikLibrary.
- Singh, S. Kumar** (1982)
History and Philosophy of Buddhism, New Delhi: Associated Book Agency.
- Sharma, Ram S.** (1987)
Urban Decay in India – c.300-c.1000, New Delhi: Munshiram Manoharlal Publishers.
- Thapar, Romila** (2003)
The Penguin History of Early India – from the Origin to AD1300, New Delhi: The Penguin Press.
- Walsh, Judith E.** (2006)
A Brief History of India, New York: Facts on File Inc.
- Watson, Adam** (2002)
The Evolution of International Society, London: Routledge.

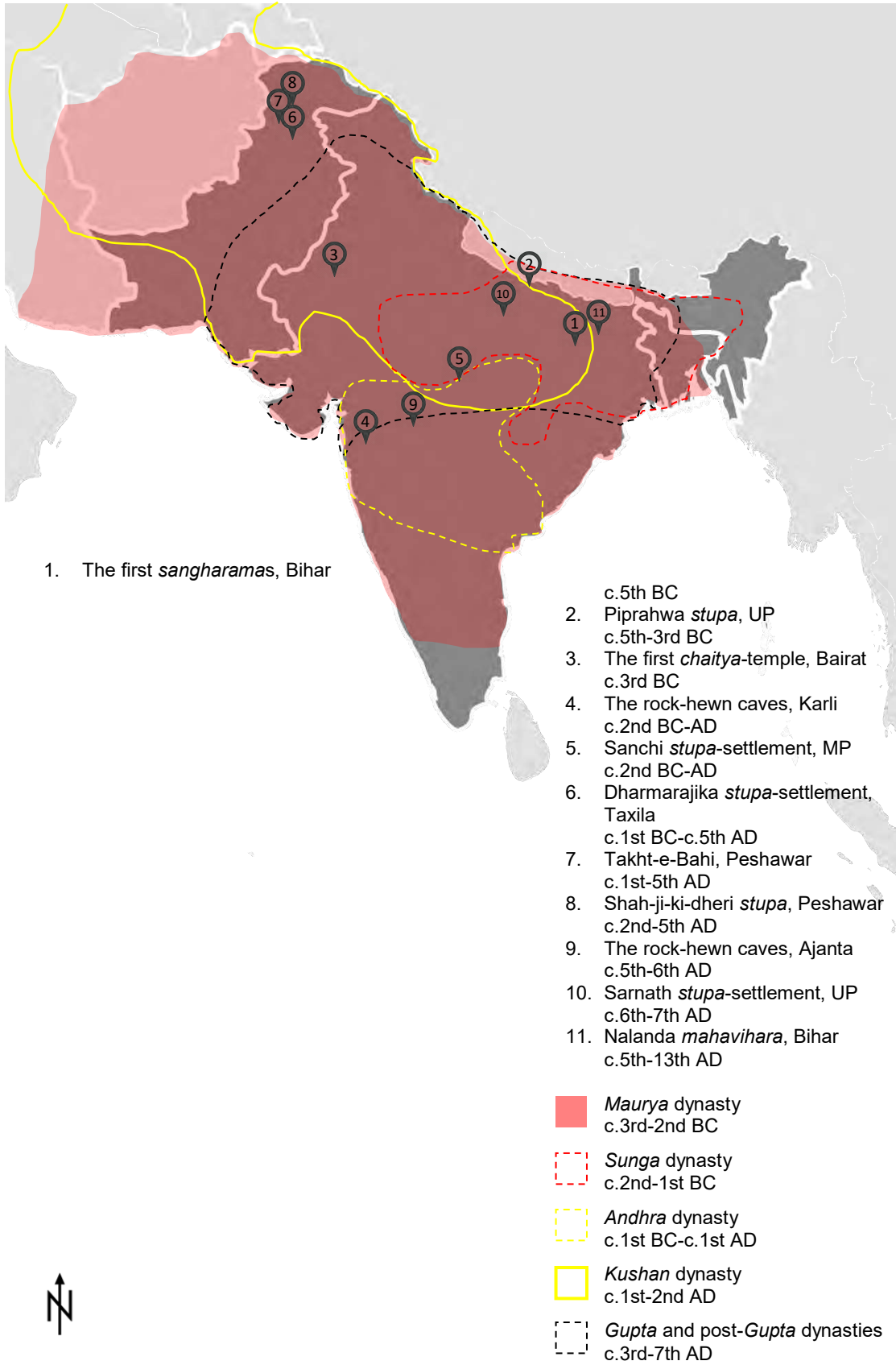


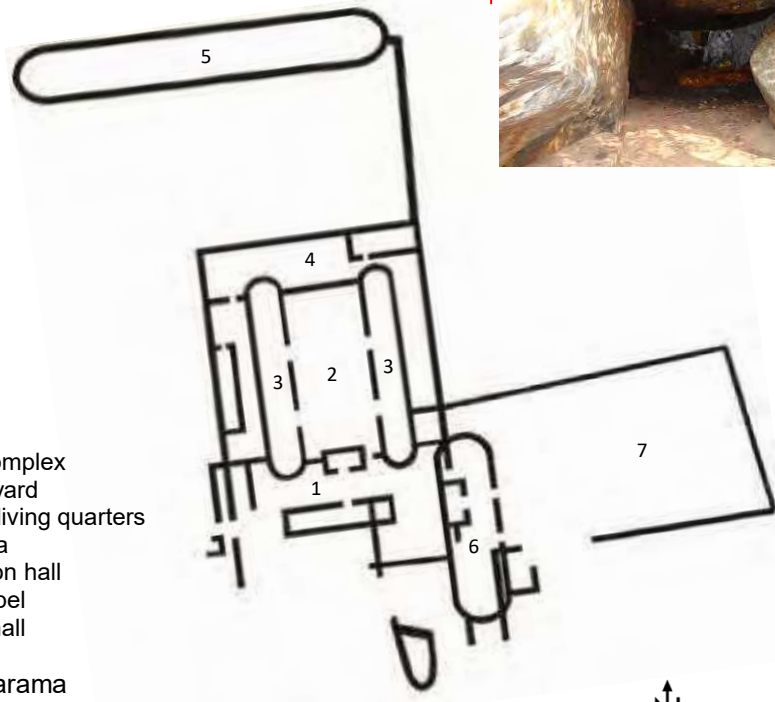
Plate VII: Stylistic Evolution of the Buddhist Monastic Architecture – An Overview

Source: <https://Wikipedia.org>; and Phuoc, Le H. (2010)

Edit: Author

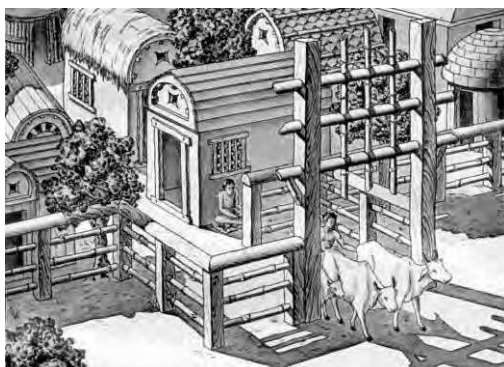
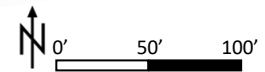


The Gijjakuta Caves, Bihar
 Source: <https://www.BuddhaViews.com>
 Edit: Author



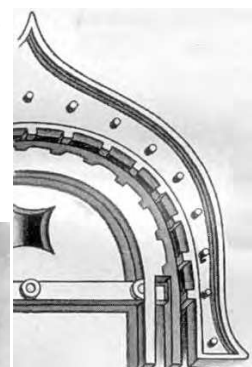
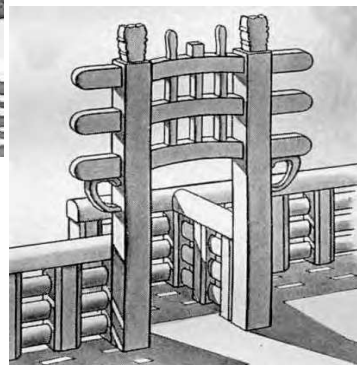
1. Entrance complex
2. Open courtyard
3. Communal living quarters
4. Service area
5. Congregation hall
6. Private chapel
7. Reception hall

Jivakavanarama
 Source: Phuoc, Le H. (2010)
 Edit: Author



A conjectural illustration of the early-Vedic village during c.5th BC – showing its indirect entrance portal, wooden fencing and the typical houseforms.

A typical woodwork *torana* complete with *vedika* fencing (below) and a gable end derived from Sanchi bas-reliefs (right).

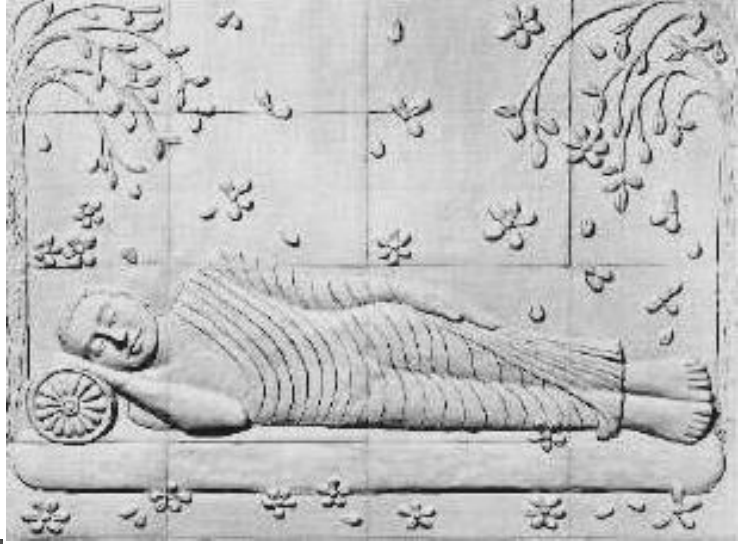


Stylistic Context
 Source: Brown, Percy (2003)
 Edit: Author

Buddha's Last Sojourn

[...] between two *sala* trees – its deep-rooted meaning might have instigated the use of *toranas*, *stambhas*, strong vistas on entrances, etc. as visual markers in the later architectural practices of the Buddhists (right).

Source: <https://Thanhsiang.org>
Edit: **Author**

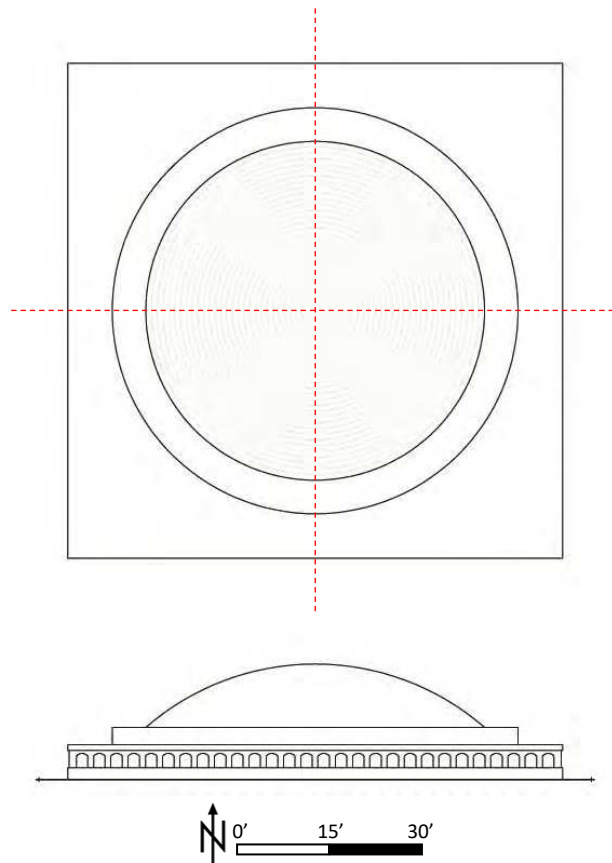


The *Stupa* at Piprahwa

[...] is thought to be one of the ten original *stupas* (below) that contained the body-relics and/or object-relics of the Buddha – above are some photographs of a few jars found deep inside its core – here, the square base might have been conceived as a preliminary scheme to orient the *stupa* with the four cardinal directions symbolizing Buddha as the eternal *dharmachakravartin*.

Source: <https://KPBS.org>; and <https://Wikipedia.org>
Edit: **Author**

Conjectural plan (upper-right) and elevation (lower-right): **Author**

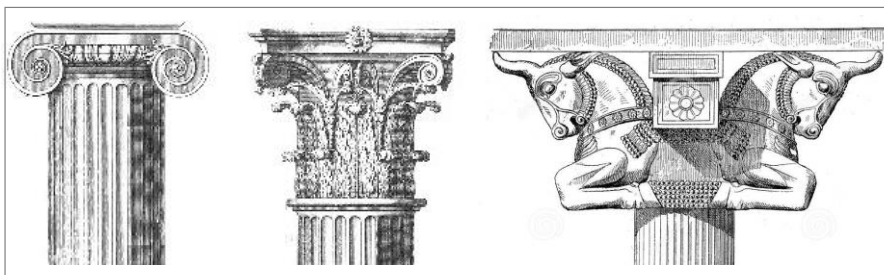




Grand procession on the city streets – there are elephant and chariot riders (probably the king) in the line with his royal guards – while the balconies are crowded with eager onlookers; the stone carving on the eastern *torana* with the Sanchi *stupa* represents the vibrant city life of Pataliputra (above).

Source: <https://Vishvkosh.Wordpress.com>
 Edit: **Author**

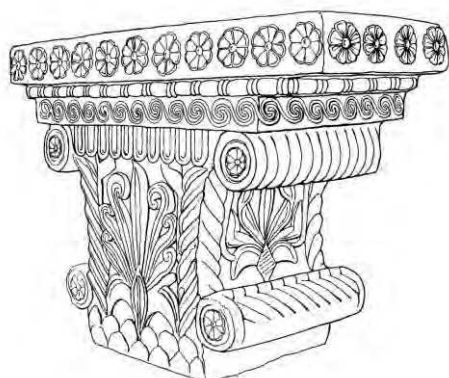
The first two capitals below are the Ionic and the Corinthian Orders of the Ancient Greeks during c.5th-c.4th BC, while the third one is a conjectural reconstruction of the pillar(s) that once adorned the Palace of Xerxes in Persepolis during that time.



An illustration of a Hellenistic stone pillar capital from Asoka's palace, Pataliputra suggests that the presence of Greek and/or Greek-inspired stylistic detailing in India was not unusual during c.3rd BC (left).

On the right (top and bottom) are the drawings illustrating the *dharmma stambha* at Sarnath commissioned by Asoka during c.3rd BC.

Source: **Phuoc, Le H.** (2010)
 Edit: **Author**



The *dharmachakra*

Lotiform bell

Monolithic shaft

Asoka's edict

Monolithic shaft

Substructure shaft

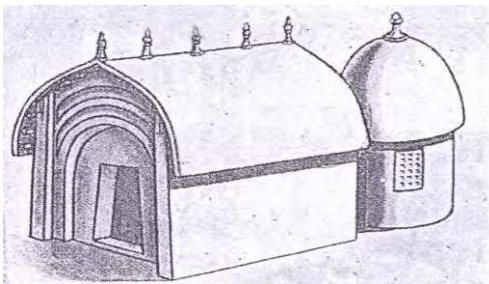




Lomas Rishi Cave-Sanctuary

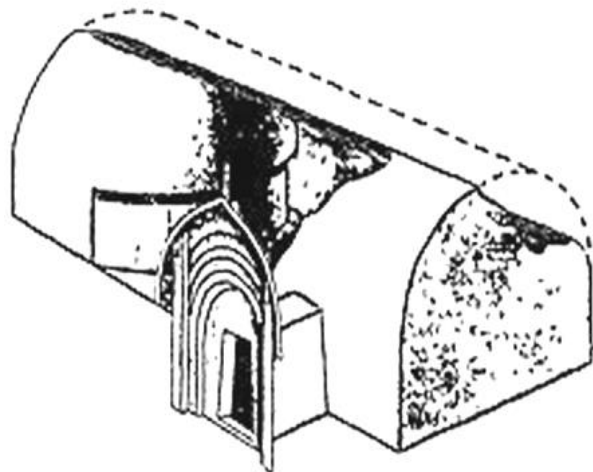
A view from the south showing the unique whale-backed rock formation (above), and the ornamental entrance façade to the sanctuary (right).

Source: **Apurba Ratan Roy**, Study Tour – India 2016, Department of Architecture, SUST; and <https://www.BL.uk>
 Edit: **Author**



Immediately above is a hypothetical drawing of a houseform in its traditional arrangement – it is considered that both the Ajivikas and the Buddhists had actually replicated the exact interior volume of such houseforms within these natural caves; and on the right is an illustration of the rock-hewn sanctuary.

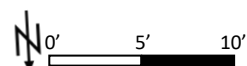
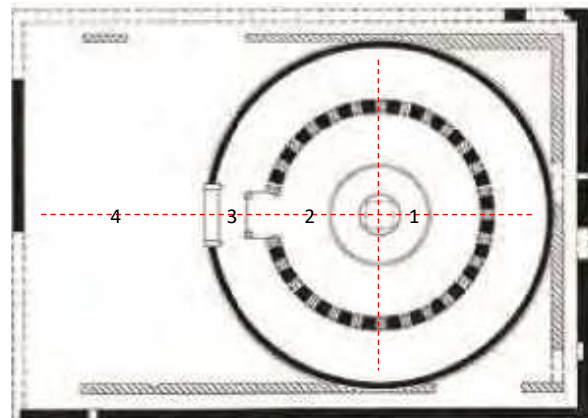
Source: **Brown, Percy** (2003); and <https://www.BL.uk>
 Edit: **Author**

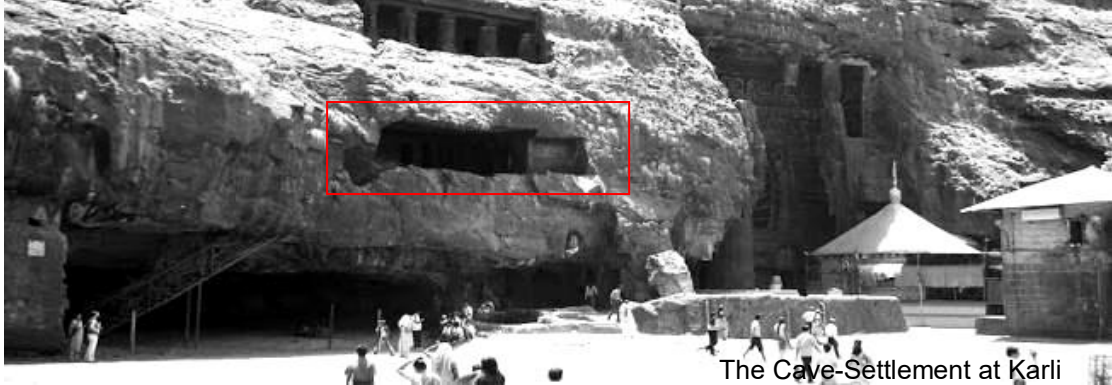


The *Chaitya*-Temple at Bairat also imitates the similar spatial and morphological arrangements of the traditional houseforms (right).

1. The *stupa* inside
2. The inner *pradakshina* core
3. The outer *pradakshina*
4. The antechamber

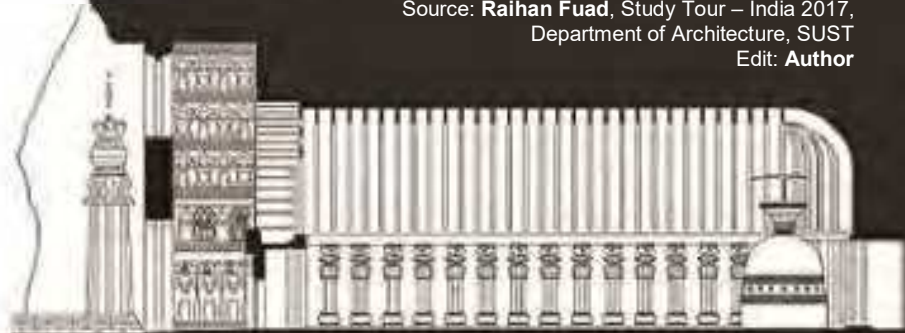
Source: **Phuoc, Le H.** (2010)
 Edit: **Author**





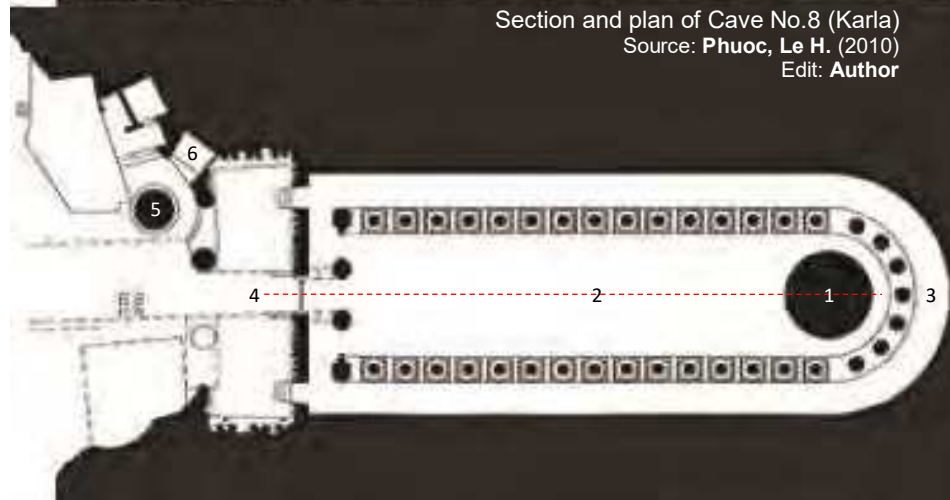
The Cave-Settlement at Karli

Source: Raihan Fuad, Study Tour – India 2017,
 Department of Architecture, SUST
 Edit: Author

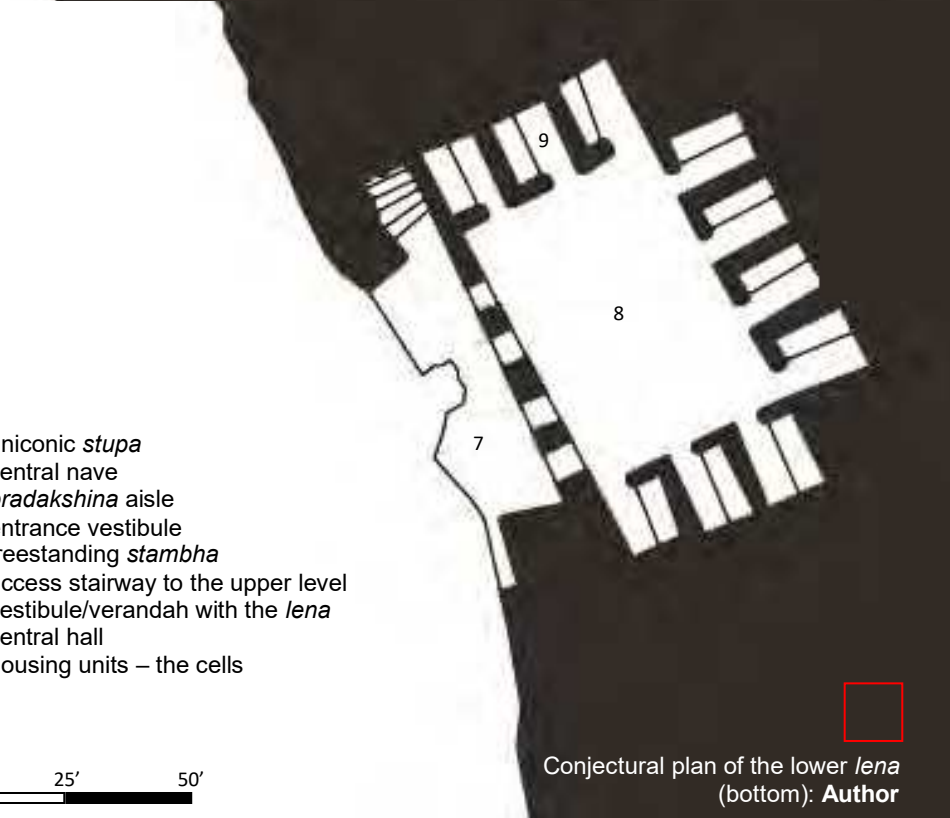


Section and plan of Cave No.8 (Karla)

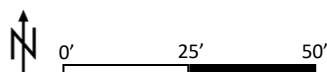
Source: Phuoc, Le H. (2010)
 Edit: Author



1. The aniconic *stupa*
2. The central nave
3. The *pradakshina* aisle
4. The entrance vestibule
5. The freestanding *stambha*
6. The access stairway to the upper level



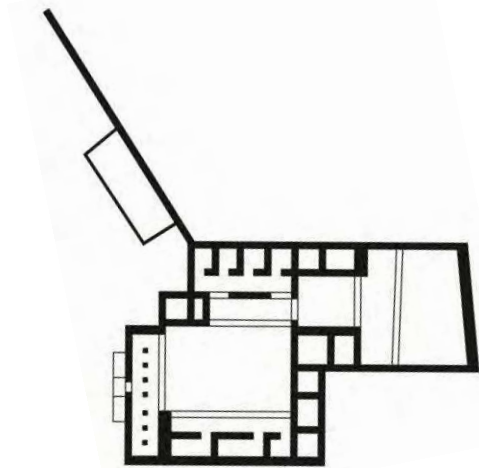
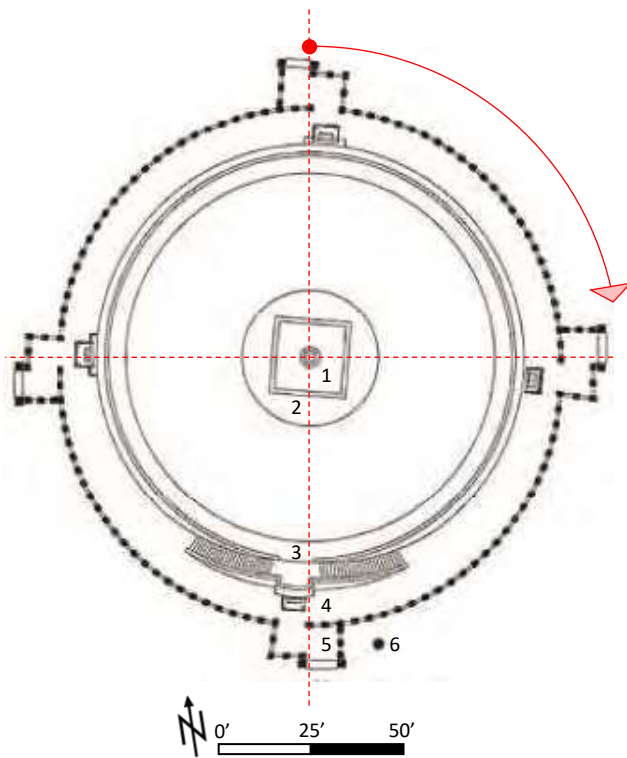
Conjectural plan of the lower *lina*
 (bottom): Author



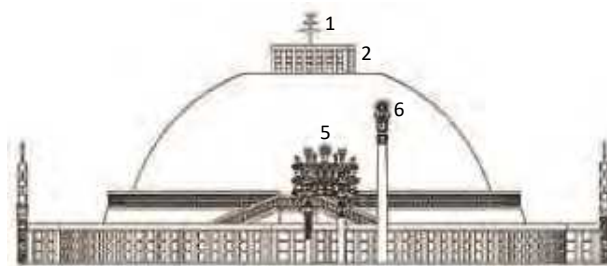


The Sanchi *Stupa*-Settlement

Source: **Raihan Fuad**, Study Tour – India 2017,
Department of Architecture, SUST
Edit: **Author**



The *sangharama* on the eastern edge of the settlement (not in scale) shows the use of thick brick-built walls in its construction – the cells, along with the other functional necessities, are placed sporadically; but there is a distinct realization of the fundamental reasoning of the right angles (above). The plan is drawn by the **Author**.



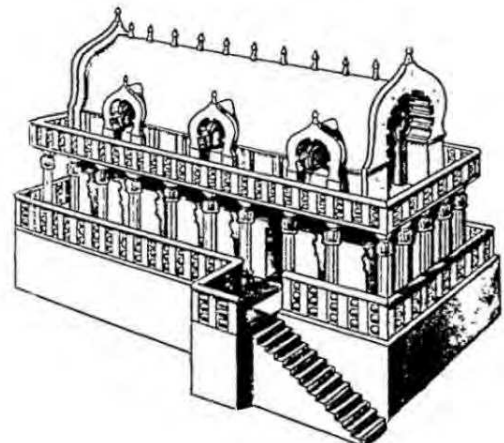
Below is a hypothetical illustration of the *Chaitya*-temple (No.40) on an elevated platform – showing the conventional woodwork linear-barrel vault as its roof, complete with sideways dormers and gable-end openings.

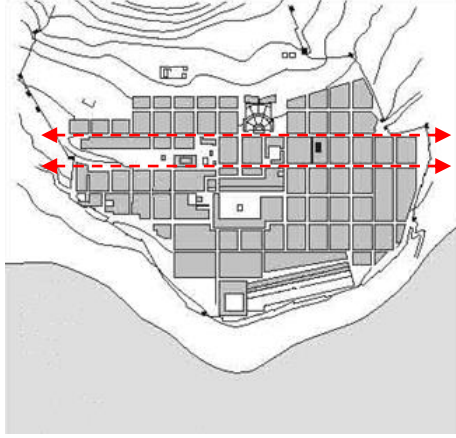
Source: **Brown, Percy** (2003)
Edit: **Author**

Sanchi-I (No.1) in drawings (above) – along with a multitude of symbolic features, the multi-tiered *pradakshina* would later become essential to the Buddhist temples in Bengal.

Source: **Phuoc, Le H.** (2010)
Edit: **Author**

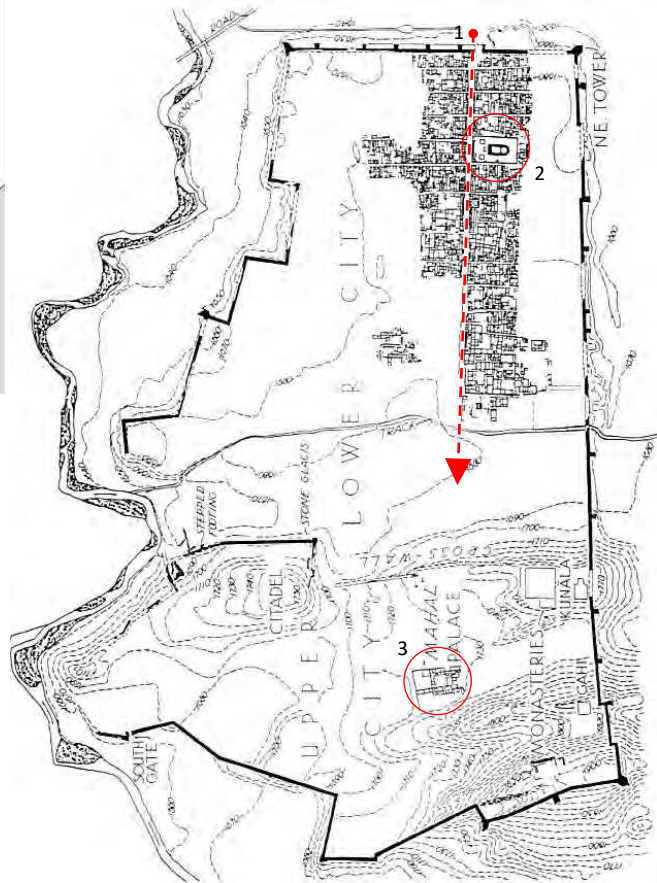
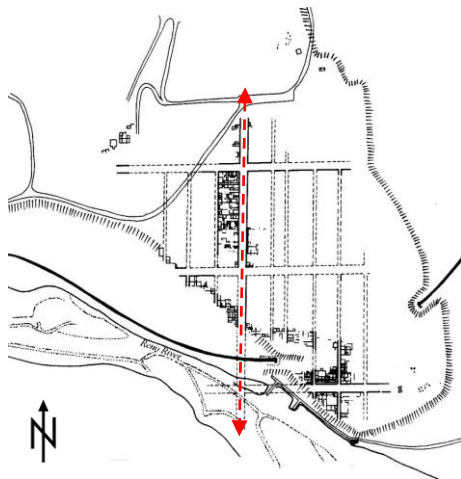
1. The stone *chhatra*
2. The *harmika*
3. The upper *pradakshina*
4. The lower *pradakshina*
5. The south *torana* with the lower *vedika*
6. The *dhamma stambha*



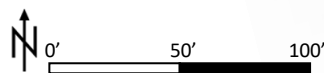


Strong axial alignment in various cities under the late-Classical/Hellenistic influence – the Greco-Persian city state of Priene in Turkey (above, c.4th BC-c.1st AD), the Roman township of Marzabotto (below, c.6th BC-c.3rd AD), and Sirkap (right) under the *Kushans*.

1. The north gate
2. The unmarked Buddhist temple
3. The palace



Source: <https://www.Payer.de>; and <https://www.ResearchGate.net>; and <https://Wikipedia.org>
 Edit: Author



Dharmarajika *Stupa*-Settlement is located southeast from the citadel of Sirkap – about 1.5 kilometers outside its defensive bastions – an array of various secondary and service built forms of this settlement are haphazardly placed around the Dharmarajika *stupa*-prime (right) at its approximate center; encircled by a number of image chapels accentuating its massive domical volume (upper right).

Source: **Phuoc, Le H.** (2010); and <https://TheBuddhistForum.com>
 Edit: Author



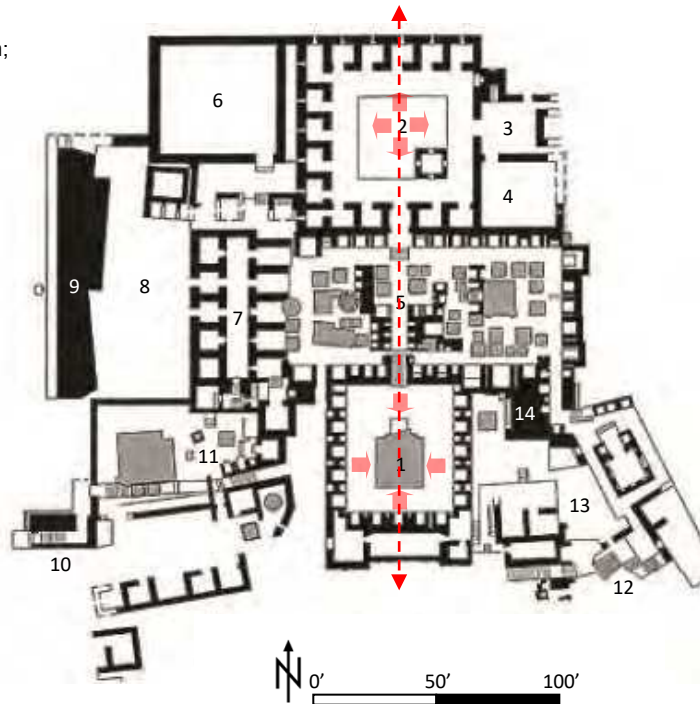


Venus de Milo

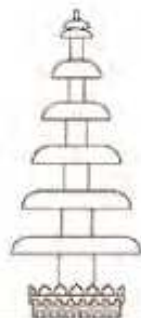
As shown in the photographs above, the Buddhist art were reportedly influenced by the prevailing Hellenistic style in Gandhara.

Source: <https://BuddhistArtNews.Wordpress.com;> and <https://Wikipedia.org>
 Edit: **Author**

1. The prime *stupa*-chapel
2. The *vihara* with housing cells
3. The kitchen
4. The refractory
5. The votive *stupa*-court
6. The assembly hall
7. The meditational chambers
8. The promenade
9. The western retaining wall
10. The southwest (public) access
11. The entrance court
12. The northeast (private) access
13. The entrance court
14. The bell tower

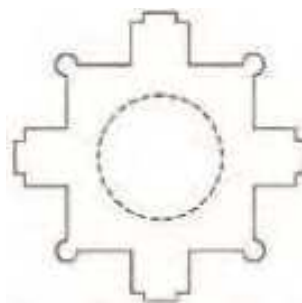


Takht-e-Bahi (right)
 Source: **Phuoc, Le H.** (2010)
 Edit: **Author**



Loryan Tangi votive *stupa* (left), the reliquary model of the Shah-ji-ki-dheri *stupa-stambha* (right), and the conjectural plan of the latter's cruciform podium with the four corner bastions (below).

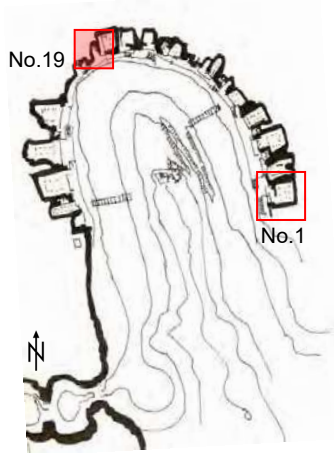
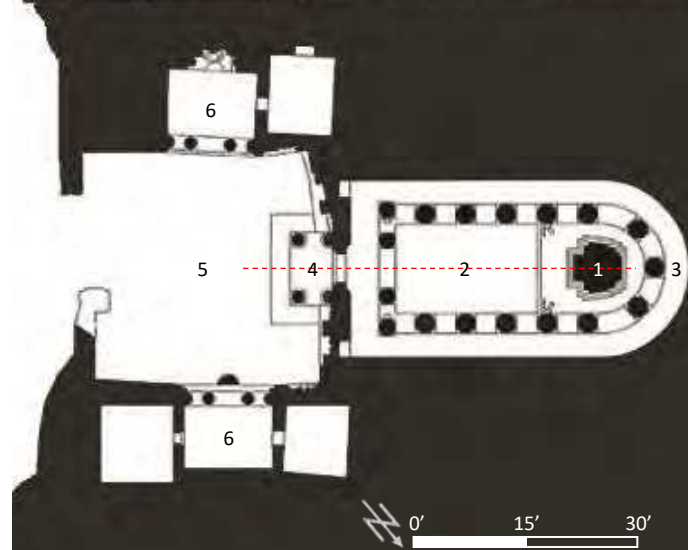
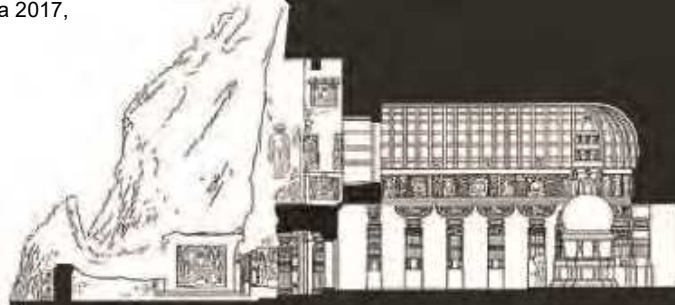
Source: **Phuoc, Le H.** (2010); and <https://Wikipedia.org>
 Edit: **Author**





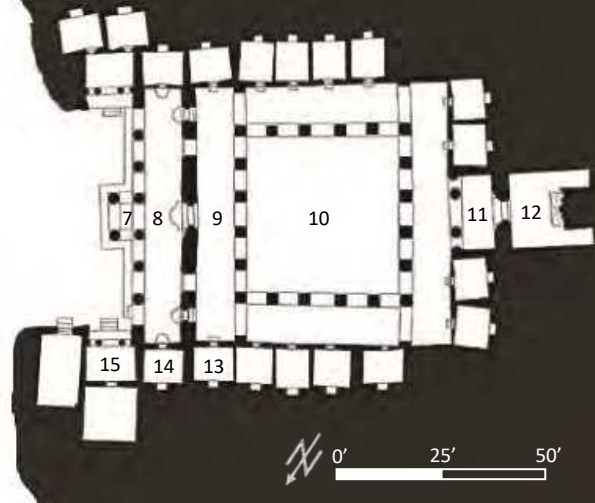
The Cave-Settlements of Ajanta

Source: Raihan Fuad, Study Tour – India 2017,
 Department of Architecture, SUST
 Edit: Author



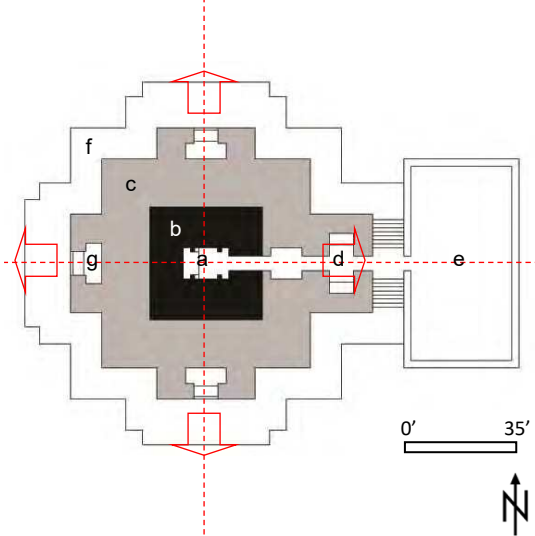
Section and Plan of Ajanta Cave No.19 (above)
 and Cave No.1 (below)
 Source: Phuoc, Le H. (2010)
 Edit: Author

1. The iconic *stupa*
2. The *chaitya*-hall – the central nave
3. The *pradakshina* aisle
4. The entrance porch – the temple
5. The piazza
6. The entrance chambers
7. The entrance porch – the *lena*
8. The colonnade loggia
9. The *lena* aisle
10. The central hall
11. The antechamber
12. The *chaitya*-chapel
13. The housing units – the cells
14. The loggia chambers
15. The outer chambers



The Cruciform Temple-Prime, Sarnath (below)
Plan drawn by: **Author**

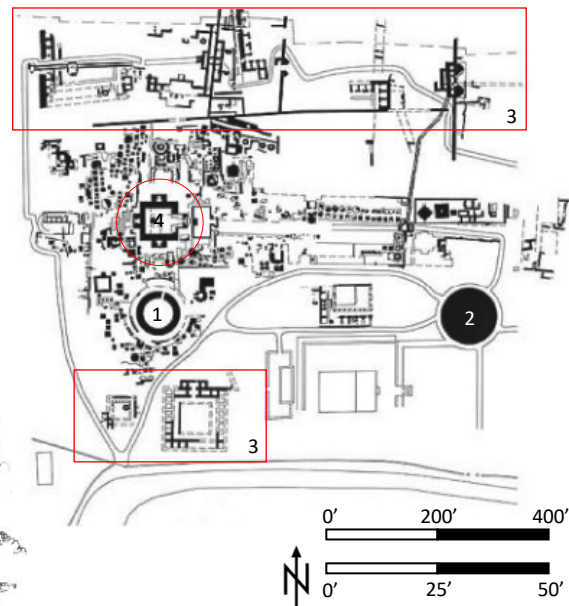
- a. The main sanctum
- b. The inner built-up core
- c. The outer wall
- d. The *antarala*
- e. The *ardhamandapa*
- f. The peripheral *pradakshina* platform
- g. The image niches



Sarnath *Stupa-Settlement*

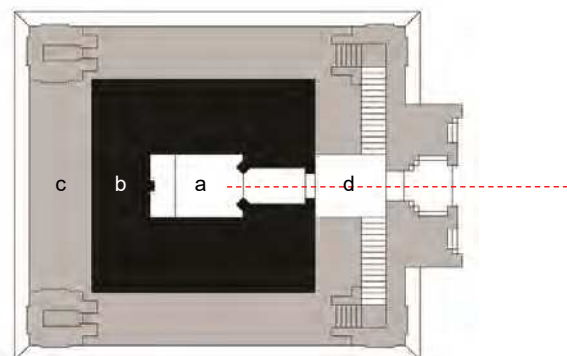
Source: **Apurba Ratan Roy**, Study Tour – India 2016, Department of Architecture, SUST; and **Phuoc, Le H.** (2010)
Edit: **Author**

- 1. Dharmarajika *stupa*
- 2. Dhamekh *stupa*
- 3. The cluster of *viharas*
- 4. The cruciform temple-prime
- 5. The *dhamma stambha*



The central cruciform Sarnath temple, along with its contemporary edifice at Bodhgaya (the sketch above and the plan on the bottom right), represents Buddhism during the *Guptas*; and are thought to characterize corresponding morphological and behavioral properties in observance with the changing doctrines of *Mahayana* Buddhism of that particular time.

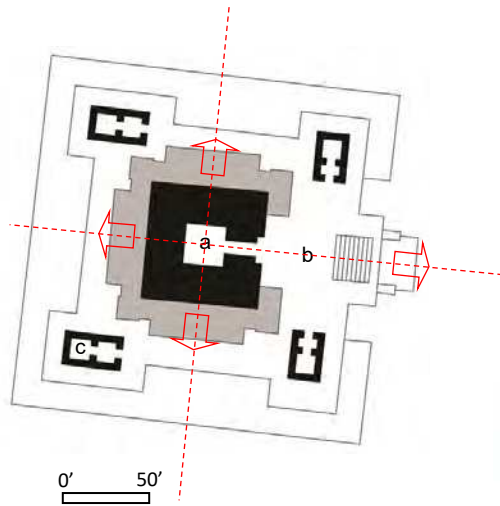
Source: **Touhidul Islam Moulik** (reproduced from Buck Lindsay's drawing), Undergraduate Course – 20012-2013, Department of Architecture, SUST
Plan drawn by: **Author**



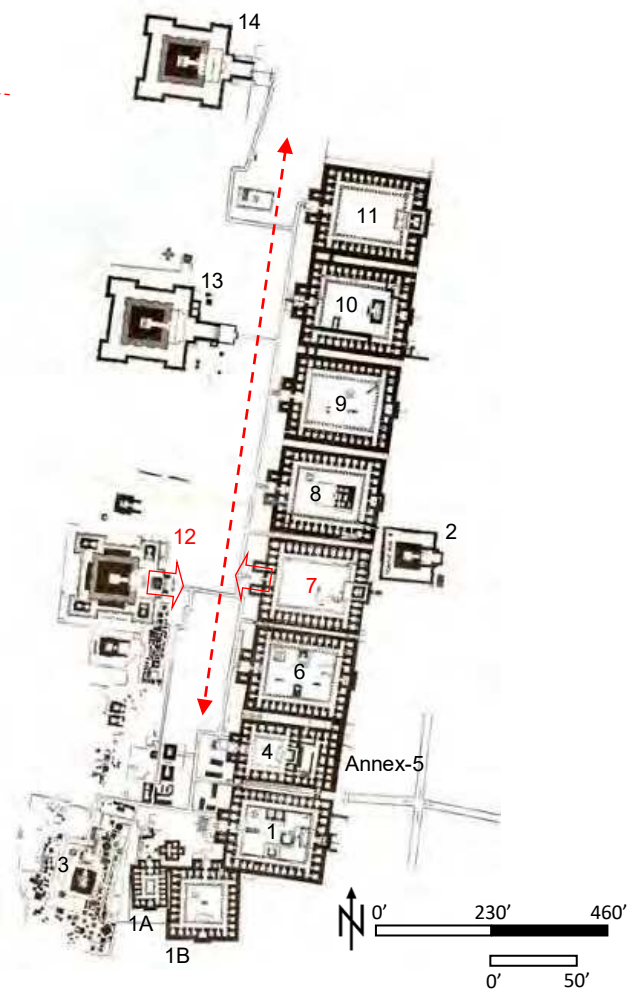


Nalanda Mahavihara

Source: **Apurba Ratan Roy**, Study Tour – India 2016,
Department of Architecture, SUST
Edit: **Author**



On the left and to the bottom right are the functional particulars of **Temple No.12** and **Monastery No.7** respectively. Both the plans are drawn by the **Author**.

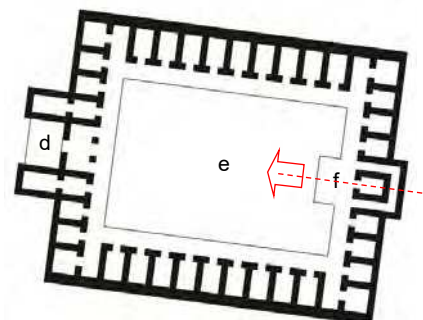


1. Monastery No.1A
2. Monastery No.1B
3. Temple No.2 – non-Buddhist temple
4. Temple No.3
5. Monastery No.1
6. Monastery No.4
7. Monastery Annex-5
8. Monastery No.6
9. Monastery No.7
10. Monastery No.8
11. Monastery No.9
12. Monastery No.10
13. Monastery No.11
14. Temple No.12
15. Temple No.13
16. Temple No.14

The masterplan of Nalanda *Mahavihara* takes up a formal axial organization in its overall planning scheme – all the functional elements consciously manifest the behavioral necessity of Buddhism under the post-*Gupta* regimes in the subcontinent (upper right).

Source: **Phuoc, Le H.** (2010)
Edit: **Author**

- a. The main sanctum
- b. The upper *paradakshina* terrace
- c. The corner *shikharas*
- d. The entrance portal
- e. The open-to-sky central courtyard
- f. The monastery sanctum



Development 1

Development 1/2

Development 1/2/3

c.6th-3rd BC

The Primary Manifestations of Buddhism



The Gijjakuta Caves – temporary shelter



Jivakavanarama – the primary form of *vihara* in India



The Stupa at Piprahwa – the earliest known Buddhist *stupa*

c.3rd-2nd BC

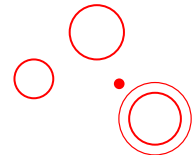
Asoka, and the Rise of Buddhist Formalism



Lomas Rishi Cave Sanctuary – the earliest caves conditioned by the Buddhists



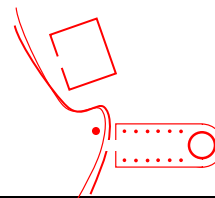
The Chaitya-Temple at Bairat, with aniconic *stupa* inside



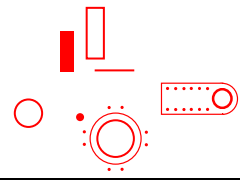
Asokan *dhamma stambha* and the numerous aniconic *stupas*

c.2nd BC-c.1st AD

The Post-Asokan Transitory Stage



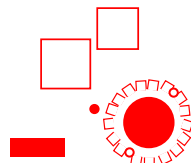
The Cave-Settlement at Karli, with aniconic *stupa* inside



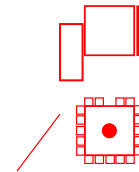
Sanchi Stupa Settlement – includes aniconic *stupas*, *toranas*, *viharas* and *chaitya*-temples

c.1st BC-c.5th AD

Kanishka, and the High-Style Formalism



Dharmarajika Stupa Settlement – the iconic *stupa*-prime symbolizes the impetus for the later developments in Buddhist temple architecture



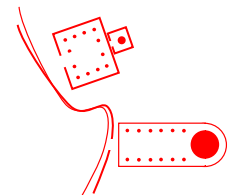
Takht-e-Bahi – the development of axial formalization of forms and functions in a Buddhist settlement – image chapel formed, replacing the iconic *stupa*-prime



Shah-ji-ki-dheri Stupa-stambha – the iconic *stupa* transforms vertically

c.5th-7th AD

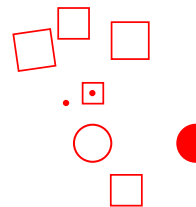
The Guptas, and the Resurgence of the Cave-Communities



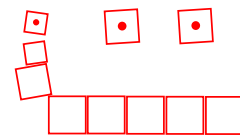
The Cave-Settlements of Ajanta, with iconic *stupas* inside

c.7th-c.8th AD

Harsha – The Last Revivalist in India



Sarnath Stupa-Settlement – the Buddhist temple surfaces, and takes up the primary position



Nalanda Mahavihara – temples and *viharas* take up the primary-parallel position – *stupas* are replaced

Note: The drawings are schematic and are not in scale.

Chapter 5: BUDDHIST MONASTIC STYLE IN BENGAL

- 5.1 Introduction
- 5.2 Buddhist Monastic Style in Bengal – The Defining Parameters
- 5.3 Buddhist Monastic Style in Bengal – An Index
- 5.4 Comparative Analysis – Buddhist Monastic Architecture in Bengal
- 5.5 Archetype *Mahavihara* – Somapura *Mahavihara*, Paharpur
- 5.6 Buddhist Monastic Style in Bengal – Implications
- 5.7 Concluding Remarks

5.1 INTRODUCTION

The Buddhist monuments in Bengal are the earliest testament of permanent built structures that are still in existence today. These monastic establishments not only represent the glorious days of the *Palas* in Bengal who once dominated a greater portion of the subcontinent for a stretch of almost 400-years or more, but also exhibit a time and context that still raises speculations in the inquisitive minds. Moreover, the brick-built ruins of these monastic establishments celebrate the zenith of architectural development of the Buddhists in the subcontinent, with all the elements playing in synchronicity⁵⁶ as a more cognizant realization of the total scheme; and in the process of which, also embodying the culmination of the philosophy with the emergence of *tantras* and *mantras* in the form of *Vajrayana* Buddhism in Bengal.

From the very first days of discovery, these monuments are of utmost significance to the sociologists, archeologists and architectural historians alike because the answer to many of the mysteries lies within the desolate ruins of these heritage sites. And it is the responsibility of the architectural historians to scrutinize what is still left of these archaeological remains with great care and caution, and in the light of various literary evidences, epigraphic records and travelogues of the ancient explorers in order to render an interpretative image that might answer to some of the questions.

This chapter primarily aims to identify the differences in basic organizational patterns, morphological and behavioral properties of the Buddhist historic monuments within the physiographical boundaries of Bengal. In doing so, the social-cultural and political contexts of the *Pala* regime have been considered as constant variables in this study as these represent a specific timespan in the overall continuum of history. Thus, an appropriate and effective framework of understanding might be developed for the evaluation of architectural style of this period.

⁵⁶ *Synchronicity* – A concept introduced by Carl Gustav Jung explaining the existence of 'meaningful coincidences' in validation of events that do not necessarily rely upon causality and yet seem to be meaningfully related to one another; and Jung (1968).

5.2 BUDDHIST MONASTIC STYLE IN BENGAL – THE DEFINING PARAMETERS

The basic manifestations of man and his purposes through the process of ‘making a place’ or his built environment form a profound anchorage in various extents of the society, and therefore, implies to a keen sense of belonging (Norberg-Schulz, 1991). Although self-determining in their individual dimensions, the architectural analysis of these heritage sites hence designate several independent variables or defining parameters which form interrelated and/or integrated meanings acknowledged as social identity.

5.2.1 The Social-Political Synergy

Various epigraphic records and archaeological evidences clearly suggest that the practice of Buddhism had been well endorsed in Samatata⁵⁷ as early as c.6th-7th AD – during a time when the reputation of Nalanda *mahavihara*,⁵⁸ as a monastic institution, was already gaining acceptance among all strata of the society in and around northwestern Bengal. It has also been identified that the earliest practices under the lesser known *Khadga* dynasty involved a few small-scaled religious edifices (*i.e.* Rupban *mura*, Kutila *mura*, Itakhola *mura*, etc.) and land donations in service of the Buddhist communities in Samatata, but no significant monuments are found that could be considered as large-scaled institutions in comparison with Nalanda. However, the *Khadgas* were in perpetual dispute with the neighboring Vanga on their west and eventually gave away to the *Devas* – the ardent believers of the Buddhist order – around c.7th-8th AD. In brief, the control of the *Devas* in the Vanga-Samatata region had been a period of peace, prosperity and creative excellence in the field of Buddhist art and architecture (Ahmed, 1984; Alam, 1976; Roy and Chattaroy, 2007).

⁵⁷ See explanation: chapter-3, subsection-3.4.1, p.48.

⁵⁸ See explanation: chapter-4, subsection-4.5.3, pp.86-90.

The Buddhist monasteries in Samatata during c.7th-8th AD seems to be the earliest examples where a cruciform central temple sits within the geometry of a quadrangular *vihara* forming a compact-consolidated arrangement hitherto unknown to anywhere in the world (*i.e.* Ananda *vihara* and Salban *vihara*). There is almost no doubt that this unique and bold planning scheme not only influenced the subsequent (or contemporary) Buddhist monastic architecture under the patronage of the *Palas* to the northwest, but also the monasteries in Indonesia and Cambodia beyond its geographical limits.

The Chandra kings, also presumed to be Buddhists, then replaced the *Devas* during the first half of the c.10th AD and ruled Vanga and Samatata through c.11th AD. Although the relationship amongst the *Palas* and the successive dynasties of Samatata are still shrouded in mystery, it can be safely assumed that these monarchies were not antagonistic to the *Pala* regime in terms of their political undertakings (Ahmed, 1984; Banglapedia, 2018; Ling, 1980). On the other hand, the outstanding similarity of stylistic trends in Buddhist building art purportedly suggest that there might have remained constructive terms that encouraged positive cultural exchange between these neighboring monarchical authorities.

The building activities of the *Palas* in the north and northwestern Bengal were basically concentrated in and around the Varendra region, with most of their monuments (*i.e.* Halud *vihara*, Vikramsila *mahavihara*, Somapura *mahavihara*, and etc.) conceived and realized during the c.8th AD – sufficiently inferring to the high tide of the empire in terms of political and economic achievements. Only a handful of Buddhist *viharas* (*i.e.* Vasu *vihara*) appear to be antedating this length of time, and the archaeological evidences also pertinently identify these monuments as pre-*Pala* practices. The troubled times of the *Palas* are, on the other hand, discernable with the striking absence of Buddhist religious edifices in their political strongholds. Jagaddala *vihara* from c.11th AD is one of their later developments.

5.2.2 The Ethno-Religious Synergy

The admittance of the *Vajrayana* ideologies into the mainstream Buddhism is very well expressed equally in the monastic establishments of Varendra and Samatata from c.7th-8th AD onward. While there appears to be wide-ranging disagreements among scholars concerning the evolution of this new practice in Buddhism from its *Mahayana* canons, the archaeological references amply indicate that these *viharas* and *mahaviharas* accommodated in their original morphological and behavioral schemes all the necessities the new philosophy required. More to this, the perpetual universal quality that Nalanda once had in its basic compositional arrangement, perfectly conveyed its ideology as an institution cultivating both spiritual and secular wisdoms. The monasteries in Bengal, on the contrary, seems to be resorting to a more symmetrical, static and centralized arrangement; breaking away from this tradition of universality and converging or focusing more on religious metamorphosis.

It has been referred that Dharmapala, during his long and successful reign over Varendra and a considerable portion of the north Indian territories, had commissioned for no less than fifty Buddhist institutions for the study of the *dhamma* (Ling, 1980). But regardless of all the passionate activities to uphold Buddhism by means of their strongly introverted planning organization (*i.e.* Odantapuri *mahavihara*, Vikramsila *mahavihara*, Somapura *mahavihara*, and so on), the common population remained largely isolated from the zeal of the royal party and probably had no significant part to play in the *Palas'* grand scheme.

Samatata, unlike Varendra, was undoubtedly less exposed to all the dynamic externalities of the north Indian territories, and therefore, had the opportunity to take in the philosophical ideologies of Buddhism more permanently under the uninterrupted reigns of several Buddhist families. A fairly small minority of Buddhists still inhabiting the southeastern fringes of Bengal, with their roots going back to the pre-Muslim era, corroborates to this debate.

5.2.3 The Geo-Contextual Synergy

The principal physiographic foundations of the Bengal estuary are the Barind Tract on the northern and northwestern Pleistocene sections, and the Eastern Active Delta that comprises the eastern and northeastern developments – containing the most ancient *janapadas* from the earliest known history of the region.⁵⁹ The Eastern Active Delta is conventionally referred to as the Lalmai Tract and had been the stronghold of Samatata under several Buddhist rulers during c.7th-11th AD, as mentioned in the earlier subsections. Whereas, The Barind Tract, otherwise known as the Varendra, was the nucleus of the *Palas* in Bengal.⁶⁰

The *viharas* and *mahaviharas* of Bengal were located within a firm system of riverine courses beside their usual networks of land routes. These waterways ensured vitality to these settlements, and the same time, provided a sense of seclusion in the form of indirect availability from the nearby *janapadas*. Moreover, in most of these monasteries, it has been determined that this perception of privacy and proxemics was further enhanced even in the early phase of selecting the site for these constructions. Generally, higher or elevated grounds were preferred in this purpose that also emphasized the presence of these monuments in the vast horizontal expanse of the typical deltaic countryside; and in turn, protected the settlements from the event of annual flooding and other natural calamities.

5.2.4 The Stylistic Synergy

A brief survey of the Buddhist monasteries in Bengal revealed a particular pattern of development that conforms very well to the stylistic current of the broader regional parameter of mainland India. The preliminary developments in Nalanda *mahavihara*, as the latest trend in the entire process of evolution, included a sporadic arrangement of a small temple (No.3) with its associated

⁵⁹ See explanation: chapter-3, subsection-3.4.1, pp.46-48.

⁶⁰ See explanation: chapter-3, subsection-3.4.1, pp.46-48.

viharas (Nos.1A and 1B) from no later than c.5th-6th AD towards the southern edge of the complex (Phuoc, 2010).⁶¹

Similar organizational patterns can be identified during the subsequent period of time in Samatata (*i.e.* in *Rupban mura*, *Kutilla mura*, *Itakhola mura*, and etc.), where the key compositional elements were placed without any organizational/ordering principles; and often having at least one of the elements missing from their general planning scheme. The *viharas* of pre-*Pala* times in Varendra (*i.e.* in *Vasu vihara*, *Sitakot vihara*, and etc.) also corroborates to this stylistic trend of dispersed arrangement (Ahmed et al., 2015). Whereas, there seems to be an active synergy within the perimeters of Bengal that prompted the Buddhist builders from c.8th AD onwards to break away from this tradition of spontaneous development and follow a more symmetrical-centralized and prearranged pattern in their overall disposition of elements, eventually giving birth to a unique style of Buddhist monastic architecture in the region.

5.3 BUDDHIST MONASTIC STYLE IN BENGAL – AN INDEX

The following inventory characterizes an overall scenario in which Buddhism emerged into the region and flourished, and consequently acquired its own dialectic terms in their built structures through the remarkably extensive process of evolution of almost a thousand years in the subcontinent. And at the same time, the inventory also helps define the boundary of this study and narrows down its focus to the interpretation of a consolidated functional entity which is conveniently known as the '*viharas* of Bengal' (Plate XVII) – the highest form of development in the entire evolutionary process.

⁶¹ See explanation: chapter-4, subsection-4.5.3, pp.86-90.

Timeline /Political Eon	Buddhist Monasteries – Samatata	Buddhist Monasteries – Varendra	Compositional Aspects
c.6th AD <i>Khadga</i> dynasty (high period) Post- <i>Gupta</i> transition	Rupban <i>mura</i> , Comilla Kutila <i>mura</i> , Comilla	Gobinda <i>bhita</i> , Bogra Vasu <i>vihara</i> , Bogra	Dispersed arrangement of elements – both arbitrary and ordered in basic organizational principles are identified
c.7th AD <i>Khadga</i> dynasty (low period) <i>Deva</i> dynasty (high period) Post- <i>Gupta</i> transition	Itakhola <i>mura</i> , Comilla Salban <i>vihara</i> , Comilla Ananda <i>vihara</i> , Comilla	Sitakot <i>vihara</i> , Dinajpur - -	Dispersed arrangement of elements – initial impetus for a combined-consolidated ordering principle traced Combined-consolidated arrangement of elements – highly centralized organizational principle realized and executed
c.8th-9th AD <i>Pala</i> dynasty and its territorial influence (high period) <i>Deva</i> dynasty (low period)	-	Halud <i>vihara</i> , Naogaon Odantapuri <i>mahavihara</i> , Bihar Vikramsila <i>mahavihara</i> , Bihar Somapura <i>mahavihara</i> , Naogaon	<i>Vihara</i> component(s) not yet traced – freestanding multipart temples found Combined-consolidated arrangement of elements – highly centralized organizational principle realized and executed <u>Note:</u> The <i>mahaviharas</i> in Bihar (presently in West Bengal) are not fully excavated yet; and locations still in dispute
c.9th-10th AD <i>Pala</i> dynasty and its territorial influence (low period) <i>Chandra</i> dynasty (high period)	Pandit <i>vihara</i> , Comilla Bhoja <i>vihara</i> , Comilla	Satya Pir <i>bhita</i> , Naogaon	Combined-consolidated arrangement of elements – highly centralized organizational principle realized and executed
c.11th AD <i>Pala</i> dynasty and its territorial influence (revitalized) <i>Chandra</i> dynasty (low period)	-	Jagaddala <i>vihara</i> , Naogaon	Combined-consolidated arrangement of elements – further experimentations in the <i>vihara</i> form identified

Table 07: Buddhist monastic style in Bengal – an index.

5.4 COMPARATIVE ANALYSIS – BUDDHIST MONASTIC ARCHITECTURE IN BENGAL

The Buddhist monasteries in Bengal can be classified into three major chronological groups. These groups primarily denote a specific pattern of development throughout the region, and while doing so, represents the status of Buddhism – its philosophical bias – with each succeeding phase in history. Moreover, as in the latest trends of Nalanda, the analysis in this section recognizes two basic elements in the Buddhist monasteries of Bengal both in terms of their morphological and behavioral functionalities – the *vihara* component and the temple component – with both having equivalent contributions in the overall development paradigm. The discussion below also interprets the symbolic manifestations of Buddhism in these dated monastic establishments.

5.4.1 The Early Developments

The earliest examples in Samatata during the *Khadgas* (c.6th-c.7th AD) are almost analogous in intent and nature, and simultaneously express a flexible variation both in their behavioral and morphological tendencies. In this phase of development, the form of the temple assumes the dominant character in the whole composition, while *stupas* are conventionally seen to be supporting and/or accentuating the form of the temple in their orientation or approach, or vis-à-vis. It appears that the housing units in some of these cases were built during much later phases, possibly around c.10th AD; and by means of which assuming the role of *viharas* in their ultimate expression (Plate XVIII; Alam, 1976). The earliest examples in the Lalmai range include – Rupban *mura* (c.6th AD), Kutila *mura* (c.6th AD) and Itakhola *mura* (c.7th AD).

On the other hand, the Gobinda *bhita* temple complex to the northeast of the Mahasthangarh citadel and Vasu *vihara* on its northwestern hinterlands from c.6th AD fit in to the mainstream developments of Buddhist architecture in the Indian mainland. Here in Varendra, both the forms of the principal temple and

its associated *viharas* take up their primary-parallel positions in an attempt to form a unified totality (Plate XVIII; Ahmed, 1984; Smith, 2001).

The Elements of Buddhist Architecture:

The elements of Rupban mura (23°26'11.17"N-91°07'45.22"E) in Samatata include a multi-directional semi-cruciform temple prime (92'-6"X92'-6"; c.6th AD) on a raised platform, two votive *stupas* on the temple foreground defining the main access to its east, and a rather small *vihara* (c.6th-7th AD) on the southeast turning at a right angle with the temple. Unlike its equals in post-*Gupta* period, the temple had a square central shaft rising straight up from its base into the ground and probably once supported a considerably heavy and towering *shikhara* as its superstructure. It might have originally had four inner sanctums with *antaralas* up front in four cardinal projections from the core shaft. The eastern projection was most possibly later converted to tripartite sanctums further defining the temple's frontal orientation to the east. All the *antaralas* lead to a *pradakshina* passage around the temple, which is in turn enclosed with a thick peripheral wall echoing its core volume. It is a possibility that the peripheral wall with its *pradakshina* might have formed an indoor podium level for the main spire.

The *vihara* of the Rupban *mura*, measuring 115'-8"X85'-4", is rectangular in shape and had a protruding entrance passage on its north wing flanked with two outer chambers that ensured seclusion. It had been initially built with 16 residential cell blocks of irregular dimensions surrounding a central courtyard, but was most possibly extended on the southern end with 9 more additional chambers during the subsequent period of time. The largest chamber on the northeast corner once had a stairway leading to the upper floor or to the roof level of the *vihara* (Alam et al., 2000). The existing partial section of the roof on the western sanctum of the temple and the details in the *vihara* drainage indicate that the early builders might have relied on a system of corbelling in order to provision their shorter horizontal spans.

The elements of Kutilla mura (23°27'28.77"N-91°07'24.17"E) in Samatata are placed on the highest terrace in the northeastern part of the Lalmai ridge and include three enormous *Triratna Stupas*⁶² sitting side-by-side in a north-south linear order (c.6th AD), three temples with their backs to these *stupas* (c.6th-7th AD), and an array of nine votive *stupas* on the western extent of the site. In this case, the three main *stupas* and their respective temples assume a primary-parallel role in the overall composition. As in the traditions with post-Gupta shrines in India, the foundations of these temples indicate provisions for three rectilinear detached single-sanctum temples facing east with their *antaralas* opening up to the corresponding *pradakshinas* around the inner enclosure. Similar to the Rupban *mura* temple, the *pradakshinas* might have been further contained within thick peripheral podium walls echoing their core volumes.

The ruins of the three *stupas* presently have their empty circular drums on high square platforms still *in situ*, but their hemispherical superstructures are reduced to rubbles through centuries of decay. These *stupas* are presumed to be one of the two celebrated *ratnatraya* memorials in the Samatata region as mentioned in a number of epigraphic records (Rashid, 2008). The central *stupa* among the trio had a total of 8 markers radiating outwards from its core in representation of Buddha's *dharmachakra* or the 'Wheel of Truths' as previously seen in the Dharmarajika *stupa* in Taxila.⁶³ Although, the site has not been fully exhumed yet, there is a possibility of an undiscovered *vihara* within the compounds of the temple complex.

The elements of Itakhola mura (23°26'20.09"N-91°07'45.43"E) in Samatata are comprised of a rectilinear temple prime (136'-6"X78'-8"; c.7th AD) and its primary-parallel *vihara* sitting sideways to an expanse of 138'-0" north (c.10th AD). There are also five semi-cruciform votive *stupas* accentuating the steep

⁶² *Triratna Stupa* – The three *stupas* represent the '*Ratnatraya*' or the three fundamentals of Buddhism – the Buddha (knowledge/person), the *dharmma* (morality/religion) and the *sangha* (discipline/group); thus popularly retaining its title as the '*Triratna Stupa*'.

⁶³ See explanation: chapter-4, subsection-4.4.4, pp.73-74.

upward flight of the main entrance to the peripheral temple compound (Imam, 2000; Rahman, 1997). The Itakhola *mura* temple has an enormous square shaft, indicative of a missing superstructure in the form of a *shikhara* at its western end. On the east of the shaft, there is an inner sanctum (*i.e.* the exact center of the temple grounds) with a mutilated Aksobhya figure still *in situ*; but for some unknown reason the sanctum was blocked and shifted a few feet forward towards the east. More intriguingly, archaeological evidences suggest that the eastern front originally had tripartite sanctums, as in the Rupban *mura* temple, but these too were later modified leaving only the central passage cutting deep into the form of the temple from the east. Typically, the core volume is surrounded with an 8'-6" wide enclosed *pradakshina* with open-paneled podium walls that probably allowed natural light into the ambulatory passage. The north and south walls of the core volume has image niches at regular intervals. The prime structure of the temple is cordoned within a spacious walled-in compound with regular panel design, accessed from the eastern stairways – as mentioned earlier – having two more votive *stupas* on its northeast and southeast corners and another semi-cruciform one at the back of the solid shaft.

The *vihara* of the Itakhola *mura*, measuring 128'-6"X128'-6" square, once also had a protruding entrance passage on its eastern wing flanked with two outer chambers that ensured seclusion from the outside. Unlike its contemporary in the Rupban *mura* complex, the *vihara* appears to be more ordered in its basic organizational principles and the inner circulation more oriented towards the philosophical symbolisms of Buddhism.⁶⁴

Situated some 5-kilometers northwest of the Mahasthangarh citadel, the ruins of Vasu *vihara* (24°58'58.42"N-89°17'50.89"E) include a semi-cruciform temple prime, and its two accompanying primary-parallel *viharas* from no later than c.6th AD; all placed in a rather sporadic accumulation similar to the earliest

⁶⁴ See explanation: chapter-5, subsection-5.6.1, p.112.

development phase at Nalanda *mahavihara*. The spatial organization of the temple and the basic functional arrangements of the *viharas* in this case also corroborate to their western counterparts in broader compositional aspects.⁶⁵ But unlike its contemporaries in India and Bengal, the temple of Vasu *vihara*, for the first time in history, breaks away from the traditions of eastern frontage and turns its entrance towards the north – a pattern that would soon become archetypical with the *vihara* architecture in Bengal. Typically, the temple has an inner core volume that contains the sanctum within; which in turn, directly opens up to the first *pradakshina* defined by the envelops of the surrounding enclosure. With its entrance to the north, the other three sidewalls of the outer shell most conceivably had three image chapels protruding outwards from the surfaces, ultimately giving it the character of a semi-cruciform structure in its ground plan. The temple prime measures 125'-0"X86'-6" and sits on a raised platform, and might have once surrounded with low boundary walls with its only access from the north.

The larger of the two *viharas* is rectangular in shape and measures tentatively about 184'-0"X161'-0". The smaller *vihara*, on the other hand, measures more or less a square of 160'-0"X152'-0". Both the *viharas* have outward projecting pillared entrances flanked on the either sides with guard rooms that lead to their respective vestibules inside. These vestibules are further connected with the continuous circuit of the inner verandah facing the central courtyards in each. In both of the cases, the *viharas* have defined provisions for religious functionalities in the wings on the opposite side of their courtyards facing the entrance halls. The antechambers for these sanctums protrude into the inner courtyards and provide access by means of descending steps. These *viharas* probably had individual staircases in each.

The terracotta plaques in the Vasu *vihara* complex are made out of finer clay and are better executed in terms of their artistic merits (Ahmed, 1979). These

⁶⁵ See explanation: chapter-4, subsection-4.5.3, pp.86-90.

burnt panels depict the everyday life of the commoners, numerous natural conditions and elements, and the folk art of Bengal in a highly expressive manner.

Sitakot *vihara* (25°24'50.46"N-89°03'02.40"E) in Nawabganj upazila, Dinajpur deserves much consideration because of its unique nature that represents an intermediate phase of experimentations and adaptations before the *viharas* in Bengal gradually assimilated the character of a centralized and consolidated-compact scheme as in Somapura *mahavihara*, Paharpur during the ensuing periods of time. Unlike anywhere before, the post-*Gupta* builders in the late-c.7th and the early-c.8th AD have had made an attempt to incorporate all the functional elements into the singular volume of a domestic monastic structure, commonly categorized as the '*vihara*'. Other than its typical housing cells, the flanking entrance chambers with inner vestibule and a defined staircase on its northeastern corner, the form of this *vihara* (213'-3"X213'-3") simultaneously accommodates the following salient features within its quadrangular compact volume:

- An integrated temple on the south wing facing north towards the entrance hall across the central courtyard, complete with its adjoining *pradakshina* and a pillared antechamber serving as its forward *mandapa*; consequently, accentuating the form of the *vihara* with the northern and the southern cardinal axes;
- Two additional sanctums on the middle of its eastern and western wings demarcating the eastern and the western cardinal directions;
- Two linear congregation halls on the eastern wing flanking the sanctum on both sides, probably for general assembly and/or as the dining hall;
- An outward annex towards the southeast corner of the *vihara*, connected by means of the projecting eastern corridor; most possibly serving as the lavatory for the resident monks; and
- There appears to be a secondary access to the *vihara* on its northeastern corner beside the staircase.

Spatial Organization – Accessibility, Orientation and Symbolism:

The following table illustrates a brief comparative explanation of the Buddhist *viharas* in terms of their spatial organization throughout the earliest phases of development in Bengal (Plate XVIII):

Buddhist Monasteries – Samatata			
	Accessibility	Orientation	Symbolism⁶⁶
Rupban mura , Comilla	The temple is accessed from the <u>east</u> ; while the <i>vihara</i> is accessed from the <u>north</u>	The temple assumes a <u>static position</u> with its four cardinal directions; while there are ambiguities in the <i>vihara</i>	The temple represents the <i>Dhyani Buddhas</i> , and its eastern projection signifies the <i>Ratnatraya</i> ; while there are ambiguities in the <i>vihara</i>
Kutila mura , Comilla	The temples are accessed from the <u>east</u> ; while the <i>stupas</i> are accessed via the <i>pradakshinas</i> of the temples	The morphological arrangement of the temples and the <i>stupas</i> denote an east-west <u>axial direction</u>	All the elements represent the <i>Ratnatraya</i> ; while the central <i>stupa</i> signifies the <i>Dharmachakra</i> of eight noble truth/path
Itakhola mura , Comilla	Both the temple and the <i>vihara</i> in this complex are accessed from the <u>east</u>	The rectilinear temple assumes an east-west <u>axial direction</u> ; while the <i>vihara</i> conforms to a centralized <u>clockwise rotation</u>	The final form of the temple represents only <i>Akshobhya</i> ; while the <i>vihara</i> signifies the <i>Dharmachakra</i>
Buddhist Monasteries – Varendra			
	Accessibility	Orientation	Symbolism
Vasu vihara , Bogra	The temple is accessed from the <u>north</u> ; while the larger of the two <i>viharas</i> from the <u>south</u> , and the smaller one from the <u>east</u>	The temple assumes a <u>static position</u> with its four cardinal directions; while both the <i>viharas</i> conform to a centralized <u>clockwise rotation</u>	The temple represents the <i>Dhyani Buddhas</i> , and simultaneously signifies <i>Amoghasiddhi</i> , ⁶⁷ while the <i>viharas</i> signify the <i>Dharmachakra</i>
Sitakot vihara , Dinajpur	The <i>vihara</i> is accessed from the <u>north</u> ; and with it, the main sanctum inside also opens up to the <u>north</u>	The <i>vihara</i> accommodates a juxtaposed condition of the <u>static</u> , a north-south <u>axial direction</u> and a centralized <u>clockwise rotation</u>	The <i>vihara</i> represents the <i>Dhyani Buddhas</i> and/or the <i>Ratnatraya</i> ; while signifying the <i>Dharmachakra</i> at the same time

Table 08: The early developments in Bengal – spatial organization.

⁶⁶ See explanation: chapter-2, subsection-2.4.1, p.30; and chapter-5, subsection-5.4.1, pp.106-109.

⁶⁷ Confusion remains regarding the original representation/symbolism of the northern access; and meanwhile Amoghasiddhi's (one of the five *Dhyani/Wisdom Buddhas*) position is in the north of the *mandala*, symbolizing attainment of the Buddhist path and of the destruction of the negativity of envy; his *Shakti*/consort is 'Tara'.

5.4.2 The Matured Developments

The more matured examples in Samatata during the *Devas* (c.7th-9th AD) are analogous in intent and nature, and at the same time, express a consolidated-compact arrangement in their morphological and behavioral predispositions. Here, the form of the temple takes up a bold central status defined within the quadrangular periphery of the *vihara*, and in the process of which assumes a more dominant character than ever before. The container of the *vihara*, on the other hand, grows more accentuated and becomes a primary-parallel element in the whole composition. And the abrupt increase in its quantitative volume in this phase rightfully entitles these monasteries the designation – ‘*mahavihara*’ (*i.e.* a great *vihara*) – signifying the beginning of the new archetypical order in Bengal (Plate XIX). Some of the examples still extant in the Lalmai-Mainamati tracts are – Ananda *vihara* (c.7th AD), Salban *vihara* (c.7th-8th AD) and Bhoja *vihara* (c.9th AD) – all of the monuments being placed in close proximity with one another (Ahmed et al., 2015; Ahmed, 1984; Alam, 1976).

Odantapuri *mahavihara*, Vikramsila *mahavihara* and Somapura *mahavihara* (c.8th-9th AD) in Bihar and Varendra are considered to be the highest form of development of these Buddhist monasteries. While archaeological specifics of the first two are rather lacking, the latter example offers with the opportunity to render a comprehensive interpretation of this particular archetype in Bengal quite sufficiently. The details of the Somapura *mahavihara*, Paharpur will be presented in the ensuing section of this chapter.

The Elements of Buddhist Architecture:

The major elements of Salban *vihara* (23°25'34.29"N-91°08'15.73"E) include a massive quadrangular monastery with 115 housing cells facing its open inner courtyard expanse, a considerably large multi-angular cruciform temple prime with four corner recesses and a medium-sized shrine resembling the earlier development phases at the left flank of the main entrance to the compact-consolidated institution of the *vihara* (late-c.7th AD to early-c.8th AD). Once

celebrated as '*Sri Bhavadeva Mahavihara Arya Bhikshu Samghasya*' during its time, Salban *vihara* complex represents the other *mahaviharas* of its similar stature in Samatata (Rashid, 2008).

The enclosed periphery of this monastery is slightly tilted in its arms and does not form a perfect right-angular square, measuring tentatively 550'-0"X550'-0". The *vihara* had its only entrance from the north and was once approached by a 174'-0" long and 3'-6" wide brick paveway. There is a 74'-0" wide entrance block on its north wing having a narrow vertical slit at the middle as its only access inside. Led by a flight of steps, the 32'-0"X23'-0" entrance chamber is flanked on both the sides by a pair of small admission rooms. Another flight of steps leads to the double pillared inner vestibule that opens up to the 8'-6" wide verandah running about the central courtyard. The continuous outer wall of the monastic cells, which forms the boundary of the *vihara* as well, is 16'-6" thick. Some of the cells in the northwestern wing are set deeper into the mass of the brick, leaving a width of about 10'-0" on the external periphery. Wooden door panels with iron hinges once secured the privacy of the monks inside their cells. The cells are almost uniform in shape, each typically gauging 12'-0"X12'-0", with the exception of a few that measured up to 16'-6"X10'-0" in dimension. Generally, there were built-in corbelled niches in the private cells and small brick alters were also found in several of these housing units. The archaeologists in their efforts have verified four rebuilding phases in Salban *vihara* where some major alterations and extensions were carried out. In the second rebuilding phase, the original plinth level was raised by means of brick fillings; while in the third, staircases were devised in the corner chambers.

The central temple of Salban *vihara* stands almost in the axial midpoint of the quadrangular periphery and also denotes four rebuilding phases as its housing component. Originally cruciform in its ground plan with its longest projections measuring not less than 160'-0" each, the intersecting point quite elegantly develops a square spatial volume with its necessary envelops; which in turn,

creates recessed corners within the right angles of the two. At the preliminary stages, a brick paveway leading directly from the northern vestibule created the main entrance for the temple to the north. A flight of steps from the brick paveway rose up to a terrace that circumambulated the form of the monument in all the directions around. At its present ruinous condition, it is quite difficult to ascertain whether it rose up into more terraces, but it has been confirmed that the original scheme had four sanctums around a square core facing the four cardinal directions as in the traditions of a typical *Vajrayana* temple.

Most fascinatingly, this prominent geometry was abandoned during the third rebuilding phase where its northern projection, including half of its intersecting center, was transformed into or rather superimposed with a rectangular form having a grid-iron plan over it. Almost all of the cruciform temples in Samatata (built during c.7th-8th AD) having cruciform ground plans were modified in the same department; excepting for Bhoja *vihara* (c.9th AD), where the original cruciform remained the same (Plate XIX). In the final reconstruction, the form of the rectangular volume was reduced from the north, leaving the previously four-pillared *mandapa* in its place as a vestibule for the new twelve-pillared *mandapa* in front of the main sanctum. A narrow 5'-0" *pradakshina* surrounds the inner *mandapa* and also the sanctum with its large brick-built alter for the statue of the Buddha or his *bodhisattva*. On both sides of the *mandapa*, there were four chambers with wooden doors and deep-set niches probably for the use of the monks.

The lower portion of the temple, in particular, had been profusely decorated with ornamental brickworks and terracotta plaques. These burnt tiles faithfully illustrate the folk art of the period, with their subjects varying from animals to human figures, and even foliage of southeastern Bengal. Among numerous other votive *stupas*, shrines and service forms lying about and inside the enclosures of Salban *vihara*, most notable is the medium-sized temple on the northwest corner outside its compound. The remains of the solidly built

square temple is approached from the east by a flight of steps leading to a terrace in front of the sanctum. A 6'-6" *pradakshina* runs around the sanctum-core, having circular pillars and corner bracket walls defining its exterior façade. The approach to this temple is further accentuated by means of a pair of votive *stupas* on each side.

There are minor deviations in the planning arrangement of Ananda *vihara* and Bhoja *vihara* with Salban *vihara* regarding the following aspects (Plate XIX):

- The entrance block;
- The corner chambers of the residential component;
- The housing cells; and
- The central temple.

Spatial Organization – Accessibility, Orientation and Symbolism

The following table examines Salban *vihara* in terms of its spatial organization during the matured phase of development in Samatata (Plate XIX):

Buddhist Monasteries – Samatata			
	Accessibility	Orientation	Symbolism
Salban <i>vihara</i>, Comilla	The <i>vihara</i> is accessed from the <u>north</u> ; and with it, the central temple also opens up to the <u>north</u> in its final form, although initially it accommodated the four cardinal directions	The <i>vihara</i> complex accommodates a juxtaposed condition of the <u>static</u> , a north-south <u>axial direction</u> and a centralized <u>clockwise rotation</u>	The <i>vihara</i> complex primarily represented the <u>Dhyani Buddhas</u> , but later concentrates on only one and/or the figural representation of <u>Buddha</u> himself and/or his <u>Bodhisattva(s)</u> ; while signifying the <u>Dharmachakra</u> at the same time

Table 09: The matured developments in Bengal – spatial organization.

5.4.3 The Later Developments

The later examples in Varendra during the *Palas* (c.11th AD) are a very few in number and denote evidences of a declining countenance of Buddhist art and architecture in Bengal in terms of stylistic singularity. From a good number of moderately (or incomplete) excavated sites, it appears that the *Palas'* area of

concentration during this period was positioned in and around the districts of present-day Rajshahi and Dinajpur, besides Bogra. These sites also indicate earlier stages of building activities that date back as far as c.5th AD; implying that the Buddhists might have been using the basements and foundations or even the superstructures of these monuments in some of the cases for their monasteries and other edifices (Alam and Yasmin, 2005; Hossain, 1998; Reza, 2008; Reza et al., 2015; Zakariah, 2011). Furthermore, it has been also observed that the later Buddhist sites in these localities are badly vandalized and rendered almost illegible – one of the reasons behind this might have been the region's strategic position with the neighboring north Indian territories that instigated a volatile political situation in the hands of the *Sena*⁶⁸ invaders (c.11th-13th AD).

The Elements of Buddhist Architecture

The eminence of *Jaḡaddala vihara* (25°09'32.19"N-88°53'15.19"E) in Naogaon as a Buddhist institution has been well endorsed in various ancient texts and references. Beside its association with a number of well-reputed Buddhist and non-Buddhist scholars, it has been also observed that the Tibetan translations of a good few *Sanskrit* literary works being developed and cultivated in this particular monastery (Hossain and Biswas, 2015). Architecturally, its similarity to the Sitakot *vihara* in Dinajpur in terms of both functional compatibility and scale demonstrates the marked retreat of the Buddhist builders in Bengal to the earlier traditions. On the other hand, the employment of several key morphological features, such as the assimilated sanctum on the west wing of the *vihara* (strongly resembling the *mihrab*)⁶⁹ and the engaged corner turrets, are evocative of the imminent/potential Muslim influences in the region (Plate XX). Another feature that must be mentioned here is the use of stone members as/in pillars, lintels, doorsills, steps, and alters, and in every probable occasion excepting for the main structural walls. It suggests that the

⁶⁸ *Sena Dynasty* – The *Senas* – originally belonging to Karnata in South India, and the upholders of the Brahmanic principles – supplanted the *Palas* in Bengal during the late-c.11th AD and reigned over West Bengal and other regions of Varendra, Vanga and Samatata up until the early-c.13th AD.

⁶⁹ *Mihrab* – '*Mihrab*' is the semicircular niche in the wall of a mosque that demarcates the prime cardinal direction of the *Quibla* (i.e. towards the *Quaaba* in Mecca).

Buddhists might have also played the role of scavengers in assembling stone members from not one, but from a good number of earlier monuments belonging to other ethnical or functional origin (Elahi, 2008).

In brief, Jagaddala *vihara* is rectangular in shape (255'-0"X239'-6") having a central courtyard surrounded in all the four sides by its continuous passage. The housing cells (so far, 28 have been traced) are directly linked to the passage as in the traditions of Buddhist architecture in the subcontinent; but are rather spacious and takes up a unique shape with deep-set niches in their rear walls. There are four stone pillars marking the main vestibule of the monastery, but no entrance chambers were found during the initial digs. Two supplementary sanctums in the middle of the northern and southern arms are elaborately arranged with *mandapas* leading to the core prayer chambers by means of narrow *antaralas*. The main sanctum on the western wing retains its frontage towards the east – along with the *vihara* itself – similar to the earlier development periods; and includes an enclosed inner core volume wrapped within the cordons of a *pradakshina* passage around it. The enclosing outer walls in the north, south and west have ornamental niches with pedestals in each for their respective deity. There are eight more stone pillars (two are not *in situ*) accentuating the *mandapa* for the western sanctum.

The four corners of the Jagaddala *vihara* are the most fascinating parts in the entire scheme. Led through doors, each corner has a juxtaposed multilateral chamber that is linked to a circular space within the cylindrical corner turret by means of an extremely constricted passage. The use of these spaces within the turrets remains undetermined.

Spatial Organization – Accessibility, Orientation and Symbolism:

The following table examines the compact arrangement of Jagaddala *vihara* in terms of its spatial organization during the later phases of development in Varendra (Plate XX):

Buddhist Monasteries – Varendra			
	Accessibility	Orientation	Symbolism
Jagaddala <i>vihara</i> , Naogaon	The <i>vihara</i> is accessed from the <u>east</u> ; and with it, the main sanctum inside also opens up to the <u>east</u>	The <i>vihara</i> accommodates a juxtaposed condition of the <u>static</u> , an east-west <u>axial direction</u> ; but the passageway does not maintain a centralized clockwise rotation	The <i>vihara</i> represents the <u><i>Dhyani Buddhas</i></u> and/or probably the <u><i>Ratnatraya</i></u>

Table 10: The later developments in Bengal – spatial organization.

5.5 ARCHETYPE MAHAVIHARA – SOMAPURA MAHAVIHARA, PAHARPUR

Somapura *mahavihara*, Paharpur (25°01'51.94"N-88°58'36.60"E) in Naogaon not only represents the highest form of development of Buddhist monastic architecture in the entire South East Asian subcontinent, but also denote a rich and vibrant era of peace and prosperity in the history of the deltaic landmass of Bengal. Built by Dharmapala (c.770-c.810 AD), its reputation as a *Vajrayana* institution was celebrated even far beyond its regional boundaries. Dharmapala's legacy was taken up by his son Devapala (c.810-850 AD) and the *mahavihara* continued to thrive during the ensuing decades. The monastery appears to have had played a crucial role in the development of *Vajrayana* Buddhism from the early days of its inauguration under the royal sponsorship of the *Palas* up until late-c.12th AD (Ahmed et al., 2015; Ahmed, 1984; Dikshit, 1991). But with the turning of the next century, Somapura *mahavihara* somehow suddenly disappeared from the face of the earth; and it was not until the late-c.19th and the early-c.20th AD that the world would come to rediscover its once glorious existence.

The outstanding and geometrically defined grandness of this compact-consolidated monastic institution in Varendra – with its majestic central temple accentuated within the quadrangular periphery of the *vihara* – is often misunderstood by academics as a

'defensive monastery'; as its first 'raider' Ikhtiyar al-Din Muhammad Bakhtiyar Khalji⁷⁰ presumably did on its contemporary Odantapuri *mahavihara* in Bihar during a 'daring' assault (Dutt, 1962; Phuoc, 2010). On the contrary, it guarded the sanctity and seclusion of the contemplative minds inside, and was actually the exponent of almost a thousand years of evolution synthesized in experimentations and adaptations of the morphological and behavioral necessities of the Buddhists throughout the region. Except for the condition of a major political upheaval, there was in reality no motive for any kind of vandalism in these *mahaviharas* as these were under the constant protection of the imperial guards, together with several villages from the neighboring community in service and security of the inhabitants.

Moreover, there are also insinuations regarding Somapura *mahavihara*'s originality as a novel Buddhist structure. Scholars often argue that the land originally belonged to a Brahmanic family and/or there are stylistic evidences of a c.5th AD Hindu or perhaps a Jain temple under the superstructure of the central monument (Asher, 2002; Gupta, 1961; Hossain and Alam, 2004). While the claims might have been partially true, the preceding structure(s) certainly did not have the unique planning scheme in terms of the morphological execution of the temple; and were most probably much smaller in scale (Dikshit, 1991). Besides, its striking resemblance to the *viharas* in Samatata that were conceived slightly more than a fifty years ago, clearly indicate that Somapura *mahavihara* had been originally tracing a stylistic trend that was already in practice by the Buddhists in Bengal; but definitely in a much grander scale.⁷¹

It must be cited in this connection that Somapura *mahavihara*, Paharpur had several rebuilding phases during the entire length of its active years; where some alterations were carried out with conscious realizations of functional necessity. Some functions were also added and extended when and where it was found necessary (Dikshit, 1991).

⁷⁰ *Ikhtiyar al-Din Muhammad Bakhtiyar Khalji* – the man held responsible for bringing Bengal to the attention of the Muslim rulers and the settlers in mainland India during c.13th AD; also the first Muslim to conquer Nadia and Gaur, and later extending his dominion over almost the entire North Bengal territories.

⁷¹ See explanation: chapter-5, subsection-5.4.2, pp.113-116.

5.5.1 Physical Anchorage of Somapura *Mahavihara*

Somapura *mahavihara*, Paharpur was set in a strategically important junction between the then *Pala* strongholds of Mahasthangarh, Kotivarsa and Gauda – almost in the midpoint of the three flourishing *janapadas*, leaning somewhat east towards the first (Alam, 2004). Its positioning amply demonstrates the significance of this institution to the ruling party. In the local milieu, the monastery can be further represented in its positioning with respect to the other establishments of its contemporary time and/or historical connotation. Within an assortment of 12km to 18km, Halud and Jagaddala *viharas* were constructed; and these are assumed to be tracing the course of the river or a canal that flowed during the *Palas* in Bengal (Plate XVII; Alam, 1938). Dikshit (1991) argues that there might have been a broad canal that ran initially almost parallel to the southern wing of the *mahavihara* and a *bil* (i.e. a considerably large waterbody) to the northeast vicinity of the complex connected with this canal (Hossain, 2004). His claims are sufficiently justified with the find of a bathing *ghat* on the southeastern corner some 200'-0' away; of which, only the masonry foundation filled with riverine sand remains. A close examination of the area and its existing web of canal systems, in comparison with the most probable course(s) in the past around the *mahavihara* have suggested that the latter might have dried away as the main channel maintained a more constant direction leaving an 'oxbow lake'⁷² behind (Plate XXI).⁷³

Furthermore, several settlements surrounding the establishment of Somapura *mahavihara* has been located within the range of 1000m (1km) during the first reconnaissance in the locality that might have had some historic connotation with the Buddhist hermitage (Akhtar and Oyasu, 2012).⁷⁴ Of these, the names of the Goala *bhita* and the Dharmapuri villages are worth mentionable (Plate

⁷² *Oxbow Lake* – Generally forming in flat and low-lying plains close to where the river empties into another body of water, an oxbow lake starts out as a curve or meander in a river; and a lake forms as the river finds a different and/or shorter course – the meander becomes an oxbow lake along the side of the river.

⁷³ In consultation with **Dr. Sabiha Sultana**, Professor (former), Department of Geography and Environment, Jahangirnagar University, Savar, Dhaka; and **Dr. K. Maudood Elahi**, Professor, Department of Environmental Science, Stamford University Bangladesh, Dhaka; and tool: **Google Earth** image (2018).

⁷⁴ See explanation: chapter-5, subsection-5.2.4, pp.103-104.

XXI). These villages on the north – bearing their names in reference to the celebrated years of the *Palas* – might have been exempted from taxes in exchange of their servitude to the institution and its inhabitants. The influence of the *mahavihara* further extends beyond its quadrangles with the founding of Satya Pir *bhita*, originally denoted to the goddess Tara, during c.10th AD.

5.5.2 The Elements of Somapura *Mahavihara*

The titanic volume of the Somapura *mahavihara*, once officially celebrated as ‘*Sri Somapure Sri Dharmapaladeva Mahavihariyarya Bhikshusanghasya*’, has a multitude of elements within and even beyond its basic physical enclosures (Phuoc, 2010). The major components of this hermitage are, however, none other than the primary-parallel central temple and the *vihara* that draws the bold peripheral extent around it. The other elements were the later additions and alterations, and are therefore, considered as subsidiary or secondary. These elements, therefore, does not contribute to the original scheme of the *mahavihara*’s composition (Plate XXI).

The Residential Element: The Somapura *mahavihara*, Paharpur is accessed from the North. The entrance complex at the middle of the flat and horizontal façade on the north wing is protruding outwards from the main quadrangular form. A single flight of steps at the center leads to a vertical opening slit and then to its six-pillared main entrance hall (Ahmed et al., 2015; Dikshit, 1991). There are two votive *stupas* defining the main opening and a small sanctuary on the left, most probably built for the laity, the pilgrims and the visitors who sought admission within the premises of the main complex. Six more pillars are engaged with the side walls, three against each of the eastern and the western enclosures. The six pillars within the entrance chamber further accentuates the 8’-0” wide opening to the inner vestibule, once furnished with a substantial double swing wooden door which could be locked by a large timber bolt from the inside. The four-pillared inner vestibule then directly gets merged with the main verandah that encloses the central courtyard and

encircles it on all the four sides. Crossing the passage from the vestibule, a set of parallel walls visually construct a grand vista for the magnificent rise of the temple prime sitting at the center of the courtyard. From darkness of the entrance complex to the lighted courtyard with its jewel in it – the experience must have been awe-inspiring to the visitors during the days of its glory.

Furthermore, cell no.1, 2, 3, 4 on the immediate left, and cell no.176, 177, 178 on the right side of the vestibule, accessed directly from the verandah, most possibly formed part with the entrance complex as its basic functional units. Cell no.2 and 176 on either sides had communication tunnels running inside the thick volume of bricks on both the sides of the form that protrudes outside (Plate XXI). Cell no.2 was found with the richest antiquities so far until now (Dikshit, 1991).

The most interesting feature is the three sanctums on the middle portion of the remaining three wings, showing signs of several stages of reconstructions and alterations in their compositional style; but eventually holding the general conceptual scheme of a basic tripartite temple that represented the *ratnatraya* of the Buddhist ideology (Plate XXI). These sanctums have three inner core chambers in each with provisions for the accommodation of the Buddhist figural symbols within their constricted spatial volumes. The sanctums face the verandah in front of them, and are paired together by means of walled-in *pradakshinas* running around. The verandah that eventually formed an elevated platform in these areas, with corbelled tunnels passing beneath them allowing the verandah to run uninterrupted, gets merged with their respective *mandapas* across towards the courtyard-ends. The *mandapas* with these sanctuaries have undergone numerous alterations.

The quadrangular container of the *mahavihara* measures 919'-0" east-west and 922'-0" north-south having a total of 178 housing cells of 190 square feet each on an average. Of these private cells, 92 were provided with solid stone

pedestals for images of the Buddha or his *bodhisattvas*, some from the early stages, while most of the others from the later development periods; implying their significance as other than housing accommodation (Phuoc, 2010). It is often presumed that these pedestals were provisioned because the number of monks were reducing during the final years of the *mahavihara*; but on the contrary, these cells might have designated significance regarding some key events with the Buddhist religious belief; for example, in celebration or commemoration of a monk's attainment of *nirvana*. While on the other hand, the other 86 cells without pedestals might have actually housed more than one devotee within their volume.

As in any other *vihara* in the subcontinent, the cells open up to a 9' wide continuous verandah running around the contained courtyard space within. These verandah was most probably supported with brick piers in its original construction, but these were replaced with stone members within a very short period of time. The verandah was elevated several feet above the ground level and balustrades were probably employed as a measure for safety and protection. The brick-built rear wall, forming the outer periphery of Somapura *mahavihara*, is generally 12'-0" in thickness (Dikshit, 1991; Phuoc, 2010). In some areas on the north and east, the 16'-0" dense brick wall that are drawn in the plans until now, actually have a few feet of added outward projections from the partition walls of the inner cells. These lateral extensions at the foundations were probably needed with the exterior walls because of the natural north and northeast downwards contour of the site, rendering the grounds in these areas loosely settled due to frequent ground water discharge during heavy rainfalls (Plate XXI).

The outward projection of the annex to the southwest corner, connected by means of an elevated gangway, most possibly served as the privy block for the resident monks of the *mahavihara* (Plate XXI). Unlike Sitakot *vihara* in Nawabganj, the gangway does not extend outside from the clockwise rotation

of the interior verandah, but rather traverses cell no.102 without maintaining a proper compositional order (Dikshit, 1991).⁷⁵ It is interesting to note that there was actually a slight projection of the rotating verandah on the southeast corner – implying that the privy block might have been originally intended on the other corner instead of its current position; but the plan was abandoned probably because of its conflicting proximity with the bathing *ghat*.⁷⁶ There is also a slight notch protruding on the extreme northeast corner of the quadrangle, facing towards the north. It might have been provided as a guarding platform for the service entry adjacent to its left and/or might have held a bell-post mentioned in the following paragraph.

Some of the major alterations that were carried out with the primary-parallel form of the Somapura *mahavihara* during the later years are mentioned below (Plate XXI). These alterations demonstrate its adaptability with the changing behavioral necessity and situated context.

- The rear enclosing wall of cell no.16 was punctured and its doorway was widened to make way for a secondary service entrance with an inward swing door on the northeastern portion of the north wing – enabling the laity from the neighboring villages to bring in daily necessities and other services – an argument that is very well corroborated with the find of a few copper vessels, grain storage jars and grinding stones in the cells nearest to the service access; and at the same time, a jar full of ‘cowrie shells’⁷⁷ were also found on the western wing, right beside the western sanctums – meaning that these cowrie shells were not necessary in the exchange of everyday commodities; and
- Another alteration was carried out by converting the intermediate sanctum of the eastern wing to a passageway by barricading the *pradakshina* on either sides and making an opening on the exterior wall – most likely to provide an easier connectivity with the Satya Pir *bhita*, which was erected

⁷⁵ See explanation: chapter-5, subsection-5.4.1, p.111.

⁷⁶ See explanation: chapter-5, subsection-5.5.1, p.121.

⁷⁷ *Cowrie Shells* – A medium of exchange or currency used in the financial transactions in the region of Bengal during the reign of the *Palas* in Varendra and *Chandras* in Samatata.

some 1000'-0" to the east during c.10th AD for the service of the pilgrims visiting Somapura *mahavihara* (Alam, 2004; Dikhit, 1991).

The Sacred Central Element: The central temple of Somapura *mahavihara*, measuring 359'-0" east-west and 395'-0" north-south, is a majestic cruciform in its plan arrangement with four corner recesses in between the right angles of its arms. Most interestingly, the 'central shrine' was not placed in the exact center of the quadrangular *vihara*, but was rather shifted to the south (Ahmed et al., 2015; Dikshit, 1991). Such spatial planning is indicative of a conscious realization of the monument's sheer volume and multidirectional property; and the maturity of the builders in handling a thoroughly worked-out preconceived idea in the real setting. By shifting the temple southwards, they have secured a sense of grandeur upon entering the *mahavihara* through its northern gateway complex – providing with the setback that was required for capturing the full view of the monument bathed in sunlight. This design scheme was merged with the complex outlines of the three receding *pradakshina* terraces – one set high above the other – ultimately giving the monument an upward skybound course. The first terrace breaks the echoing offset of the main form and projects towards the north, creating a welcoming approach towards the temple from the main entrance complex of the *mahavihara*. This first *pradakshina* terrace generates, in terms of conceptual meanings, the approximate center for the temple (Plate XXI).

There were five votive *stupas* accentuating the main approach to the temple from the north. A steep flight of steps leads straight towards the northern *mandapa*, with cessations on both the second and the third terraces before entering into the square four-pillared *mandapa*. The third *pradakshina* terrace, probably having corbelled enclosures on the overhead, circumambulates the shrine in all the directions keeping the entrance hallways on their outer sides; while the four *mandapas* denoting the four cardinal axes on the inside. The four-pillared *mandapas* are connected to four inner sanctums each, and must

have been adorned with the statues of the *Dhyani Buddhas* on pedestals (Hoque and Hoque, 2004). There is a central hollow shaft with a square ground plan having an inner hollow core (left thickly compacted with mud) at the center of the cruciform temple – its vertical volume must have once supported an outstanding finial-form of considerable proportions.

The temple prime was once richly embellished with cornice projections having decorative motifs and burnt terracotta tiles fixed on the surfaces of the walls and running throughout the entire length. These plaques generally portrayed the folk art of the Bengal delta – both Buddhist and Brahmanic iconographies and symbols, mythologies, commoners engaged in regular activities, flora and fauna, and so on. The bottom section of the first *pradakshina* terrace, which is now buried almost 5'-0" under the ground level, had stone base-reliefs at most of the projections and recesses (Phuoc, 2010). Most of these stone articles embody Brahmanic iconographies and are from early-c.7th AD. There are evidences of stonework gargoyle heads with the *pradakshina* terraces that once allowed the excess rainwater to be discharged in a systematic manner.

5.5.3 Functionalities and Zoning of Somapura *Mahavihara*

Somapura *mahavihara* too, with the passage of time, have had accumulated various functional necessities within its grand scheme. Like any other *viharas* of its standing in *Pala*-Bengal, the original morphological components of this monastery clearly expresses limitations in response to these unavoidable and later growths. Fundamentally, the key functionalities of such monasteries of the Buddhists incorporate a temple prime and its primary-parallel *vihara*(s), but there seem to be no conscious realizations regarding functionalities that involve the other essential dimensions of basic human experience, such as: the administration, the community cooking and the dining facilities, lavatories, guest accommodations, and components that could relate these institutions to the local communities, and so on.

The archaeological excavations of Somapura *mahavihara* have revealed the involvement of various user groups, who did actually impart direct physical changes to its basic composition by means of an assortment of scattered installations within the central courtyard space. They were (Dutt, 1962):

- The resident monks, holding different ranks among them;
- The disciples or the resident students, comprising the main population; and
- The visitors – laities (from the nearby localities), pilgrims (generally from afar) and the donors (also from afar, requiring special attention).

While the quadrangle of Somapura *mahavihara* housed the resident monks and their disciples most conveniently, having the object of their contemplation at the nearest center, the primary adaptation of other functional inevitabilities were negotiated in the following manner (Plate XXI):

- Area 1 – on the northwest corner of the central courtyard, having a large walled-in open space with a few small structures grouped together on one end – denoting the main administration and the academic block, general congregation for the monks and the disciples, and/or the library section, and so on;
- Area 2 – on the northeast corner of the central courtyard, to the nearest proximity of both the entrance complex and the temple, having a group of structures clustered around its introvert space – denoting the provisional lodging facilities for the donors, the imperial officials and/or the pilgrims with higher social status;
- Area 3 – on the extreme northeast corner of the central courtyard, having a smaller walled-in extent of a few buildings – denoting the reception area for the everyday commodities and services, and/or community gatherings of the laities;
- Area 4 – on the central courtyard along the entire length of the eastern verandah; having replicas of the temple prime, numerous votive *stupas*, small sanctums, one *tantra*-temple (later demolished), and including the

alterations and modifications of the eastern shrine from c.10th-11th AD – denoting the influence of Satya Pir *bhita* for the goddess Tara near about 1000'-0" east of the monastery (Alam, 1938);

- Area 5 – on the south-by-southeast verge of the central courtyard; once having a large rectilinear pillared hall (over 120'-0" long) and its adjacent ruins, including the four water wells (three are in a row) – denoting the community dining and kitchen facilities respectively; and
- Area 6 – on the southwest corner of the central courtyard; having water wells, brick-on-edge platforms and steps connecting to the verandah, and the area's close proximity with the lavatory zone – denoting the in-*vihara* bathing and hygiene facility; and there are water wells having brick-on-edge treads descending from the verandah in all the quadrangular corners of the *mahavihara*, except for the northeast.

In the light of the enquiry above, it can be very well assumed that Somapura *mahavihara* had a more complex subconscious system of zoning in terms of its environment behavior characteristics. Therefore, the basic zones are:

- The northern half is the semi-public and the more public zone;
- The northwestern quarter is the administrative and the academic zone;
- The northeastern quarter is the zone in transition with the near-immediate community externalities;
- The eastern half is the zone in transition with the religious externalities;
- The southeastern quarter is the private community zone;
- The southwestern quarter is also the private community zone; and
- The western half is the more private zone.

5.5.4 Spatial Organization of Somapura *Mahavihara*

Somapura *mahavihara* conveys an organizational principle of form and space that is predominantly centralized in scheme. The whole composition is stable, comprising of a bold primary-parallel peripheral devise that is arranged about a large and dominant central feature, *i.e.* the temple prime within the monastic

complex. Here, the peripheral devise – the quadrangular geometry enclosing the whole – defines an overall pattern that is compositionally both regular and symmetrical in its two cardinal axes. The conditions of approach and entry is specified by the conscious articulation of the peripheral form by means of its entrance portal on the north. The pattern of circulation within the monastery is defined as a simple loop that eventually accentuates the central form in terms of both visual and corporeal understandings. This geometrically balanced and compact-consolidated composition eventually terminates its axial orders, and at the same time, denotes the vocabulary of a self-defining and unified whole forming within its own compositional dimensions (Plate XXI).

The following table briefly examines the compact-consolidated arrangement of Somapura *mahavihara*, Paharpur in terms of its spatial and morphological organization in Varendra (Plate XXI):

Buddhist Monasteries – Varendra			
	Accessibility	Orientation	Symbolism
Somapura <i>mahavihara</i>, Naogaon	The <i>vihara</i> is accessed from the <u>north</u> ; and with it, the central temple also opens up to the <u>north</u> , but it simultaneously accommodates all the cardinal directions	The <i>mahavihara</i> complex accommodates a juxtaposed condition of the <u>static</u> , all the four <u>axial directions</u> , and at the same time, a centralized <u>clockwise rotation</u>	The <i>mahavihara</i> complex represents the <u>Dhyani Buddhas</u> , while its southern, eastern and western sanctums accommodate the <u>Ratnatraya</u> ; signifying the <u>Dharmachakra</u> at the same time

Table 11: Somapura *mahavihara*, Paharpur – spatial organization.

5.5.5 Material Components of Somapura *Mahavihara*

Structurally, Somapura *mahavihara* is thickly built with processed brick units, formed with the locally obtainable clay, and burnt adequately for the use in such construction works. These brick units were laid in mud-mortar in dense courses, eventually giving shape to the enclosing structural walls. Brick used in these structural walls were completely unadorned, while the surface bricks were often highly ornamented with a diverse variety of indigenous patterns. Stone blocks and/or members were also employed when and where required;

for example: as stone pillars, lintels, doorsills, brackets, steps, and monolithic pedestals/altars, and gargoyle heads (Dikshit, 1991; Phuoc, 2010). Full stone pillars probably held heavy wooden rafters that structured the overhead enclosures. The use of iron clamps was conventional in the joints of different members. However, for a *mahavihara* complex of such an immense proportion, stone members found in this site appear to be quite inadequate and often employed as later alterations and in replacement of wooden members. The floor of the verandah and the cells were probably finished with lime concrete.

From the finds of burnt charcoal from palm wood rafters in several cells, it is assumed that the *mahavihara* was most probably roofed with the same (Dikshit, 1991). It is now a matter of conjecture about the definite form of its roofing system. The roof might have been flat with thick layering of mud over planks supported on rafters, or maybe also pitched.

5.6 BUDDHIST MONASTIC STYLE IN BENGAL – IMPLICATIONS

The outstanding architectural endeavor of the Bengal-delta Buddhists, in particular, not only contributed to the subsequent developments in building art within the local boundaries, but also its influence in the form of an accumulated singularity through a long and remarkable process of evolution can be traced throughout the greater South East Asian region. But to address to the questions of its contributing features/factors, the overall stylistic character of the Buddhist monastic architecture in Bengal has to be underlined first (Plate XXII). In doing so, the attempts that have been furnished in order to visually reconstruct Somapura *mahavihara*, Paharpur as an epitome in the overall evolutionary paradigm – with refurbished efforts on its cruciform central temple – must be recognized at this stage.

5.6.1 The Basic Morphology

Being one of the primary-parallel elements of Buddhist monastic architecture in Bengal, the *vihara* component observes and accommodates the changing necessities of Buddhism from its *Mahayana* practices to the *Vajrayana* ethics before the religion itself was almost entirely uprooted from the region as a whole (Plate XXII). And in doing so, the *viharas* might have played a more crucial role than it is commonly credited for. The evolution of this component part – from Nalanda in Bihar to Somapura *mahavihara* in Varendra – has given rise to the necessity of a central feature that eventually corresponded to its strong axial commands; and certainly not the other way around. This housing component remained true to its purpose, and concurrently retained a constant behavior throughout the entire length of its history in the subcontinent – and therefore, eventually representing the Buddhist *sangha* by its moniker – ‘*viharas*’ and/or ‘*mahaviharas*’.

The Residential Element: The first two *viharas* in Nalanda (Nos.1A and 1B) accommodate the clockwise rotation of the Buddha’s *dharmachakra* or the ‘Wheel of Truths’ as a symbolic representation of the *dhamma* being radiated across the four corners of the universe in the arrangement of the semi-outdoor verandah that surrounds the volume of the central courtyard space.⁷⁸ This countenance can also be traced in the earliest housing components of Rupban *mura*, Vasu *vihara* and Sitakot *vihara* within Bengal, although the gyratory orientation of the *dharmachakra* was somewhat disturbed in the first one by means of a wide-ranging extension-work.⁷⁹

While in the latter *viharas*, a single-sanctum shrine was emphasized with the linear axis of the entrance block, complete with their designated *mandapas* in each. Gradually, this pattern was further experimented in both the ground plans of Salban *vihara* and Ananda *vihara* in Samatata as the *Vajrayana*

⁷⁸ See explanation: chapter-4, subsection-4.5.3, pp.86-90.

⁷⁹ See explanation: chapter-5, subsection-5.4.1, pp.106-112.

doctrines of Buddhism gained momentum in the Bengal delta.⁸⁰ In Somapura *mahavihara*, the *dharmachakra* not only maintained its clockwise rotation, but also relieved the monotony of its long and tedious verandah with the insertion of more engaged and elaborate tripartite sanctums in the middle of the other three arms of the *vihara* form; while the north accommodated the entrance block.⁸¹ This being implemented as a conscious realization of all the symbolic manifestations of Buddhism, the coordination of the central temple naturally followed the lead of its enclosing *vihara* and responded accordingly. In Jagaddala *vihara* in Varendra, the absence of the central component was attempted to be mitigated by giving prominence to the peripheral shrines both in terms of their functional and morphological capacities,⁸² proving once again the role of the *viharas* as one of the major determining factors in defining the form of the Buddhist temples in its most matured phase of development.

The system of overhead enclosures in these *viharas* did not generate debate among the scholars, primarily because this particular element in the Buddhist architecture has been long since neglected. Moreover, travelers and pilgrims visiting this region during and after c.7th AD does not report anything on the *viharas*' vertical composition, although their chronicles sufficiently document the number of Buddhist monasteries and monks, and the rituals and customs that were in practice in the *janapadas* of Varendra and Samatata (Ahmed and Asaduzzaman, 2015; Devahuti, 2001; Ling, 1980). However, in the reports of I-Tsing, the *viharas* at Nalanda were recorded as several stories high, generally having flat overhead enclosures, but corbelled or semi-circular vaults were also employed.⁸³ In Bengal, the nearest archaeological evidences which have been unearthed (*i.e.* burnt charcoal from palm wood rafters and holes high on the terrace walls for the provisioning of the same) during the successive excavations of Somapura *mahavihara*,⁸⁴ amply indicate that the

⁸⁰ See explanation: chapter-5, subsection-5.4.2, pp.113-116.

⁸¹ See explanation: chapter-5, subsection-5.5.2, pp.122-127.

⁸² See explanation: chapter-5, subsection-5.4.3, pp.116-119.

⁸³ See explanation: chapter-4, subsection-4.5.3, pp.86-90.

⁸⁴ See explanation: chapter-5, subsection-5.5.5, pp.130-131.

roof of the *vihara* might have been generally flat, covered with thick mud layer over boarded planks, or even pitched – both equally feasible in this context; although pitched roofs were probably more traditional due to the characterized heavy rainfall of the region.

Furthermore, the corner stairways in the Bengal *viharas* indicate that there were provisions for upper stories (*i.e.* in Vasu *vihara*, Itakhola *mura*, Sitakot *vihara*, Salban *vihara*, and so on), although there seems to be a complete lack of evidence in the accounts of Hsuan-Tsang regarding this matter – for a man who had the practice of recording everything and anything on his way. He tallies 20 monasteries in Varendra with a population of almost 3000 (also specifying that about 700 monks were attached to Vasu *vihara*), 30 or more monasteries in Samatata (with an Asokan *stupa* near its capital) but does not mention anything about their population, and around 10 monasteries in the vicinity of Tamralipti (the port city of western Bengal) with about 1000 monks. A quick deduction leads to the hypothesis that the Buddhist *viharas* in this region during the second quarter of c.7th AD were generally multi-storied, having provisions for stairways in each; although exceptions might also be there. As for the later developments (*i.e.* in Somapura *mahavihara*, Paharpur), where the form of the quadrangular periphery evidently reaches well over an outstanding 900'-0" in the horizontal dimensions, the *mahaviharas* might have resorted to single-storied provisions for the conveniences of both construction and material feasibility. Both the factors of inadequate stone members in the verandah section and the absence of corner stairways strongly implies these *mahaviharas* being single-storied constructions.

The Sacred Central Element: The only form of cruciform temple that is still in existence to this day from the early development stages is the temple at Rupban *mura* complex. It shows that the Buddhists might have conceived the idea of a shrine that accommodated all the *Dhyani Buddhas* including its *ratnatraya* manifestations from as early as c.6th AD. Other than that, most of

the temples of the Buddhists in Bengal had single sanctum within the cores of their volumes, representing *Akshobhya* or *Amoghasiddhi*, or any other forms in the Buddhist ideology. *Stupas* forming the centerpiece in a Buddhist complex in Bengal or assuming a frontal role in the whole composition, on the other hand, is rather uncommon. Moreover, Hsuan-Tsang's accounts also do not emphasize the practice of the Buddhist *stupas* in the mainstream religious system, but often records 'light and roomy' *viharas* and *vihara* complexes with 'lofty towers and pavilions' being common throughout the region (Devahuti, 2001; Ling, 1980).

The next generation of cruciform temples also appear first in Samatata (*i.e.* Ananda *vihara* and Salban *vihara*), but these were subject to major alterations during the later development phases; probably denoting confusions in the process of transition from the earlier *Mahayana* trends to the later *Vajrayana* practices in Bengal delta.⁸⁵ However, the ultimate form of the cruciform is seen in the ruins of Somapura *mahavihara*, Paharpur; where the four cardinal directions remain entirely undisturbed and with all the *Vajrayana* symbols represented in its basic planning organization.

It is more probable that the finial-form of the Somapura *mahavihara* central temple was a simple and vertically tapering *shikhara* that resembled both the immediate preceding and the prevailing practices of Sarnath, Bodhgaya and Nalanda (Mitra, 1980).⁸⁶ These temples were typically built with locally available/produced bricks, having the elongated pyramidal spire of the *shikhara* resting on the heavy walls of the sanctum, with their four leaning planes gradually truncated near the top and crowned by an *amalaka* piece as a finial. Miniature replicas of the main spire were often set over the four corners of the sanctum core. Most interestingly, this feature corresponds to Alexander Cunningham's visit to the site in 1879, where he records the find of a large number of wedged-shaped bricks on the dilapidated terrace of the

⁸⁵ See explanation: chapter-5, subsection-5.4.2, pp.113-116.

⁸⁶ See explanation: chapter-4, subsection-4.5.3, pp.83-90.

temple (Dikshit, 1991). These type of bricks generally held the *amalaka* piece firm in its designated position; stylistically indicating that the superstructure of the temple prime being a *shikhara*, and definitely not a *stupa*. On the other hand, *Pala* copperplates and inscriptions suggest that Dharmapala visited both Bodhgaya and Nalanda on several occasions, and also commissioned for a monument at Nalanda with stone blocks imported from Bodhgaya (Bagchi, 1993). It seems more likely for Dharmapala to replicate the stylistic traditions of the Mahabodhi temple at Bodhgaya than to look for inspirations in some far off practices in Asia.

Contradicting with the existing body of literature/investigations in the above-mentioned aspects, it can be argued that the superstructure of the Somapura *mahavihara* temple prime had nothing to do with *stupas*, as suggested by Myer (1961), Rashid and Rahman (2007 and 2016); and certainly was not conceived in the aspect/style/form of a c.12th AD development outside the physiographical boundaries of Bengal (*i.e.* Ananda Temple, Myanmar – with a vertically lengthened *stupa*-form as its *shikhara*), as recommended by Naqi and his team (2000 and 2004); and therefore, should not be addressed as such (Plate XXII).⁸⁷ And unlike the hollow vertical spire of the Mahabodhi temple, the thick brick-built enclosures of the hollow shaft might have held the four vertical planes of the tapering *shikhara* leaning against them, rising straight up with the core, and reaching up to a colossal height that fits appropriately to the podium of the temple.

5.6.2 The Intraregional Inspirations

Influence of the Buddhist architectural style and building art on its subsequent Hindu and Muslim developments in Bengal are amply evident. Some of the outstanding features are:

⁸⁷ See explanation: chapter-5, subsection-5.5.2, pp.126-127.

Architecture and Environment: It was typical of the Buddhist builders across Bengal to excavate water tanks and/or irrigation canals in the vicinity of their construction sites as the clay from these *dighis* and *nalas* could be very well transformed into burnt bricks that served as the primary building material for these monuments (Elahi, 2008; Smith, 2001). Beside their key functionality, these artificial water tanks have had a profound impact on the neighboring physical environment; as in most cases, serving as a convenient source of water for the local populations. This characteristic feature can be observed in Nalanda *mahavihara* (c.5th AD), in the hinterlands of Mahasthangarh (c.8th AD), and in Gaur (c.15th AD).

Use of Composite Structure: The Buddhist builders in the Bengal delta were notable for their practice of composite materials in basic structural systems. Right through the 400-years of their building activity, it became customary to use spoils from the Hindu and/or Jain monuments as construction materials in Buddhist monastic establishments (Elahi, 2008; Grover, 1981). Most of the *Pala* built-forms in the region, that are still extant, are generally composed with a heavy exterior envelop of brick-bonded masonry wall, and an orderly arrangement of indoor and semi-indoor pillars, pilasters, lintels and doorsills, etc. made out of stone members from dismembered buildings. Often the basements of an earlier construction were also reused in this purpose. This characteristic feature can be observed in Somapura *mahavihara* (c.8th AD) and in Kusumba mosque (c.16th AD) – both in Naogaon.

Plastered Terracotta-work: The tradition of sculpted terracotta plaques on the exterior wall surfaces, used in the form of burnt tiles, has its roots into the earliest Buddhist building practices in this particular region of the subcontinent (Ahmed, 1984; Elahi, 2008). This inexpensive plastic medium represented the popular folk-art of *Palas-Bengal* (*i.e.* Somapura *mahavihara*, c.8th AD). These plaques were coarsely put up and arranged without any sequential order; whereas, the Hindu builders and craftsmen displayed much sophistication in

their temples by achieving great refinements in terms of both quality and quantity (*i.e.* Kantanagar temple, c.18th AD). The extensive use of terracotta plaques on wall surfaces were not only confined within their aesthetic limits, but also served as a shield against the distinctive warm-humid climate of the locality. The pre-Mughal Muslims, on the other hand, preferred floral and/or intricate geometric patterns as terracotta detailing for their mosques and other monuments (*i.e.* Dhunichak mosque, c.15th AD).

Continuity of Structural Style: It is widely acknowledged that the Buddhist builders under the territorial power of the *Palas* across Bengal conventionally employed corbelled vaults and arches in their *viharas* and *mahaviharas* in order to negotiate shorter spans (*i.e.* in drains, niches, small passageways, etc.). The brickworks in these corbelled installations were often found to be laid vertically with a slight inward indent. Most curiously, vaults and archways with larger spans were probably never practiced in this region although they were aware of the principles of the true arch. But as an influence, corbelled pendentives were popularly employed in the subsequent Muslim monuments to support the domes above (Ahmed, 1984; Dikshit, 1991; Elahi, 2008). This characteristic feature can be observed in Somapura *mahavihara* (c.8th AD) and also in Dhunichak mosque (c.15th AD) at Gaur and other archaeological sites in Bengal.

5.6.3 The Interregional Inspirations

In its long and tedious journey, the philosophy of Buddhism became familiar to many other regions across Asia. It is historically understood that Buddhism appeared in the Indonesian archipelago by way of the maritime silk route with mainland India during c.1st-2nd AD. While on the other hand, the present-day Myanmar was most probably introduced to the ideologies of Buddhism since c.3rd AD, although there are sources claiming that Asoka, the greatest of all the *Mauryas*, might have sent emissaries in this locality during his reign as early as c.3rd BC. Cambodia has almost identical claims regarding the spread

of Buddhism into their territories (Conze, 2007). However, the following are some examples where the Buddhist building trends/traditions of the *Palas* might have influenced the architectural developments in and around Central Java, Myanmar and Cambodia during the subsequent period of time (Plate XXII):

Candi Sewu, Indonesia (c.8th AD): The peripheral organization of Candi Sewu in Central Java, Indonesia has indistinct similarities with the geometric characterizations of Salban *vihara* (c.7th AD) in Bengal; and in execution, the functionalities of the *vihara* form had also been perceived differently. However, the cruciform plan of the Candi Sewu central temple is remarkably analogous to the central cruciform form of Somapura *mahavihara* (c.8th AD).

Ananda Temple, Myanmar (c.12th AD): Ananda Temple in Bagan, Myanmar has hallmark features that corroborates well to the temple prime of Somapura *mahavihara* (c.8th AD) in both the two-dimensional and the three-dimensional aspects; but lacks the boldness of the peripheral enclosure of the *vihara* from the latter. In this case, the cruciform in its plan had been volumetrically given a retreating character like its predecessor in Bengal and also was surmounted with a *shikhara* that includes local influences (as derivatives from Gandhara) and emphasizes a vertically elongated *stupa* as its finial.

Angkor Wat, Cambodia (c.12th AD): Angkor Wat at Cambodia, originally built as a Hindu temple complex in representation of Mount Meru, was gradually converted for the use of the Buddhists during late-c.12th AD and early-13th AD. Meticulously symmetrical in its spatial and morphological articulation, it traces the unique conceptual scheme of the highly centralized *mahavihara* complexes in Bengal in its utmost perfection. The southward shift of the central temple in Somapura *mahavihara* was also emphasized within the complex geometry of its masterplan.

5.7 CONCLUDING REMARKS

In this chapter, the affiliation between the Buddhist monastic architecture in Samatata and in Varendra have been systematically compared and characterized in terms of their physical dispositions. And in doing so, the chronology of its development has been identified, which appear to correspond and correlate to the metamorphosis of Buddhist architectural style in its broader social-cultural scenario of the subcontinent. The apparent resemblances between the two major *janapadas* delineate a singular stylistic tradition that can only be defined by the conditions of deep-rooted contextual belonging.

This chapter also defines the stylistic tradition of the Buddhist monastic architecture in Bengal in its most mature form. Here, the archetypical characteristics of style have been underlined in terms of its physical anchorage, component parts that form the unified whole, and the basic functionalities and the zoning aptitudes in the changing dynamics of the society in which it belongs. It is evident that the builders of Bengal during the *Palas* were well aware of their material technology and culture; which not only incorporates the symbolic complexities of their religion, but also allocate the morphological elements in terms of both personal and peripheral associations. Furthermore, the chapter also addresses to the issue of probable physicality of the *viharas* and *mahaviharas* in the Bengal delta by means of a number of suggestive interpretations.

REFERENCES

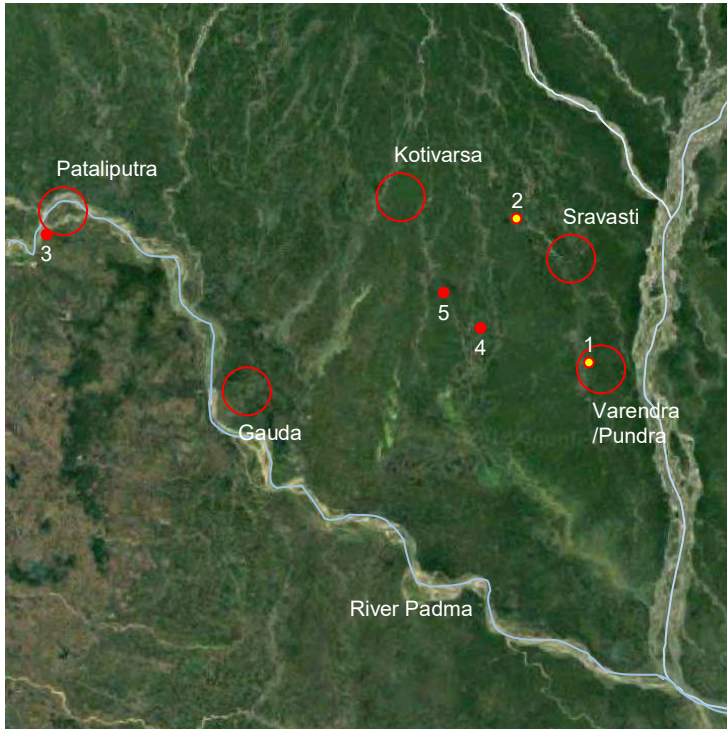
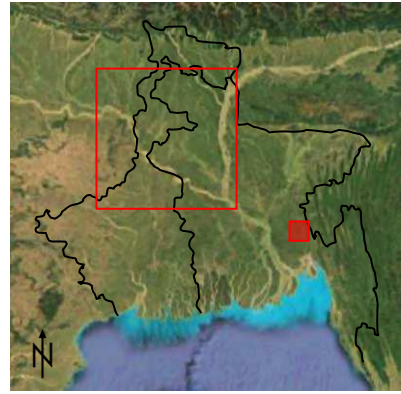
- Ahmed, Bulbul and Asaduzzaman, Md.** (2015)
'Pilgrim Accounts', in: *Buddhist Heritage of Bangladesh*, (ed.) Bulbul Ahmed, Dhaka: Nymphaea Publication.
- Ahmed, Bulbul, Hasan, M.A.A., Amiruzzaman, Md., Rahman, M.A. and Alam, K. Mahfuz** (2015)
'Ancient Sites and Settlements', in: *Buddhist Heritage of Bangladesh*, (ed.) Bulbul Ahmed, Dhaka: Nymphaea Publication.
- Ahmed, Nazimuddin** (1984)
Discover the Monuments of Bangladesh – A Guide to Their History, Location and Development, Dhaka: The University Press Ltd.
- Ahmed, Nazimuddin ed.** (1979)
Bangladesh Archaeology (Vol.1, No.1), Dhaka: Department of Archaeology and Museums, Ministry of Education and Religious Affairs, Sports and Cultural Division, Government of People's Republic of Bangladesh.
- Akhtar, Shirin and Oyasu, Kiichi ed.** (2012)
'Section-4 – Spatial Planning', in: *Training and Capacity Building for Long-term Management and Best Practice Conservation for the Preservation of Cultural Heritage Sites and World Heritage Properties in Bangladesh*, Dhaka: UNESCO, and Department of Archaeology, Ministry of Cultural Affairs, Government of People's Republic of Bangladesh.
- Alam, A.K.M. Shamsul** (1976)
Mainamati, Dhaka: Department of Archaeology and Museums, Ministry of Education and Religious Affairs, Sports and Cultural Division, Government of People's Republic of Bangladesh.
- Alam, A.K.M. Shamsul** (1938)
Varendra Anchaler Itihash, Rajshahi: Shampadana Parishad.
- Alam, Md. Shafiqul** (2004)
Paharpur and Bagerhat – Two World Cultural Heritage Sites of Bangladesh, Dhaka: UNESCO, and Department of Archaeology, Ministry of Cultural Affairs, Government of People's Republic of Bangladesh.
- Alam, Md. Shafiqul, Dewan, M.T.A., Quadir, M.A. and Miah, M.A.H.** (2000)
Excavation at Rupban Mura, Mainamati, Comilla, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, Government of People's Republic of Bangladesh.
- Alam, Md. Shafiqul and Yasmin, Lovely** (2005)
"Shalibahan Rajar Bari", in: *Pratnacharchha*, Vol.1, Dhaka.
- Asher, Frederick M.** (2002)
Art of India – Prehistory to the Present, London: Encyclopedia Britannica.
- Bagchi, Jhunu** (1993)
The History and Culture of the Palas of Bengal and Bihar - cir.750AD-cir.1200AD, New Delhi: Abhinav Publications.
- Banglapedia**
Chandra Dynasty, accessed on: 2018, web: http://en.banglapedia.org/index.php?title=Chandra_Dynasty.
Khadga Dynasty, accessed on: 2018, web: http://en.banglapedia.org/index.php?title=Khadga_Dynasty.
- Conze, Edward** (2007)
Buddhism – A Short History, New York: Oneworld Publications.
- Devahuti, D. ed.** (2001)
The Unknown Hsuan-Tsang, New Delhi: Oxford University Press.
- Dikshit, K.N.** (1991)
Memories of the Archaeological Survey of India – No.55, Delhi: Swati Publications.
- Dutt, Sukumar** (1962)
Buddhist Monks and Monasteries in India – Their History and Contribution to Indian Culture, London: George Allen and Unwin Ltd.
- Elahi, K. Taufiq** (2008)
"Mosque Architecture during the Independent Sultanate of Bengal: A Comparative Review on Gaur Mosques", *The Journal of the Institute of Bangladesh Studies*, Volume 31, Rajshahi.
- Grover, Satish** (1981)
Buddhist and Hindu Architecture in India, New Delhi: CBS Publishers and Distributors.

- Gupta, Charu C. Das** (1961)
Paharpur and Its Monuments, Calcutta: K.L. Mukhopadhyay.
- Hoque, Seema and Hoque, M.M.** (2004)
'Understanding the Paharpur Temple Architecture in New Perspective', in: *International Seminar on Elaboration of an Archaeological Research Strategy for Paharpur World Heritage Sites and its Environment*, UNESCO: Dhaka.
- Hossain, Md. Mosharraf** (2004)
'An Explanation in the Surrounding of the Monastery of Paharpur – An Appraisal', in: *International Seminar on Elaboration of an Archaeological Research Strategy for Paharpur World Heritage Sites and its Environment*, UNESCO: Dhaka.
- Hossain, Md. Mosharraf** (1998)
Pratnatattva – Udvav o Bikas, Dhaka: Bangla Academy.
- Hossain, Md. Mosharraf and Alam, Md. Shafiqul** (2004)
The World Cultural Heritage, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, Government of People's Republic of Bangladesh.
- Hossain, Md. Mosharraf and Biswas, S. Kumar** (2015)
'Iconographical Survivals', in: *Buddhist Heritage of Bangladesh*, (ed.) Bulbul Ahmed, Dhaka: Nymphaea Publication.
- Imam, Abu** (2000)
Excavations at Mainamati – An Exploratory Study, Dhaka: The International Center for the Study of Bengal Art.
- Jung, Carl G.** (1968),
'Approaching the Unconscious', in: *Man and His Symbols*, (ed.) Carl G. Jung, New York: Dell Publishing.
- Ling, Trevor** (1980)
Buddhist Revival in India – Aspects of the Sociology of Buddhism, New York: St. Martin's Press.
- Mitra, Debala** (1980)
Buddhist Monuments, Sahitya Samsad: Kolkata.
- Myer, Prudence R.** (1961)
"Stupas and Stupa-Shrines", *Artibus Asiae*, Volume XXIV, Zurich.
- Naqi, M. Ali and Mollick, Falguni** (2004)
'Form and Morphology of Paharpur Vihara – A Conjectural Virtual Reconstruction', in: *International Seminar on Elaboration of an Archaeological Research Strategy for Paharpur World Heritage Sites and its Environment*, UNESCO: Dhaka.
- Norberg-Schulz, Christian** (1991)
Genius Loci – Towards a Phenomenology of Architecture, New York: Rizzoli.
- Phuoc, Le H.** (2010)
Buddhist Architecture, New York: Grafikol.
- Rahman, Habibur** (1997)
Excavation Report on Itakhola Mura, Mainamati, Comilla, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, Government of People's Republic of Bangladesh.
- Rashid, M. Harunur** (2008)
The Early History of South-East Bengal in the Light of Archaeological Material, Dhaka: Itihash Academy.
- Rashid, M. Mizanur** (2007)
"From Stupa to Stupa Shrine – The Changing Morphology of Buddhist Religious Edifice per Excellence", *Protibesh*, BUET, Volume 11(01-2007), Dhaka.
- Rashid, M. Mizanur and Rahman, Hafizur** (2016)
"Revisiting the Past through Virtual Reconstruction – The Case of the Grand Monuments of Paharpur, Bangladesh", *Virtual Palaces*, Part 1, Leuven.
- Reza, Habib Md.** (2008)
"Bengal Gupta Viharas – Did Such Phenomenon Exist?", in: *The International Journal of Interdisciplinary Social Science*, <http://www.SocialSciences-Journal.com>, Melbourne: Common Ground Publishing Pty. Ltd.
- Reza, Habib Md., Bandyopadhyay, Soumyen and Mowla, Azizul** (2015)
"Traces of Buddhist Architecture in Gupta and post-Gupta Bengal – Evidence from Inscriptions and Literature", in: *Journal of Eurasian Studies*, Vol-VII, Issue-3, Hanyang University: Elsevier.

Roy, Atul C. and Chattaroy, Pranab K. (2007)
Bharater Itihash, Calcutta: MoulikLibrary.

Smith, Monica L. (2001)
'The Archaeological Hinterlands of Mahasthangarh – Observations and Potentials for Future Research', in:
France-Bangladesh Joint Venture Excavations at Mahasthangarh – First Interim Report (1993-1999), (eds.)
Md. Shafiqul Alam and Jean-Francois Salles, Dhaka: Department of Archaeology, Ministry of Cultural
Affairs, Government of People's Republic of Bangladesh.

Zakariah, A.K.M. (2011)
The Archaeological Heritage of Bangladesh, Dhaka: Asiatic Society of Bangladesh.



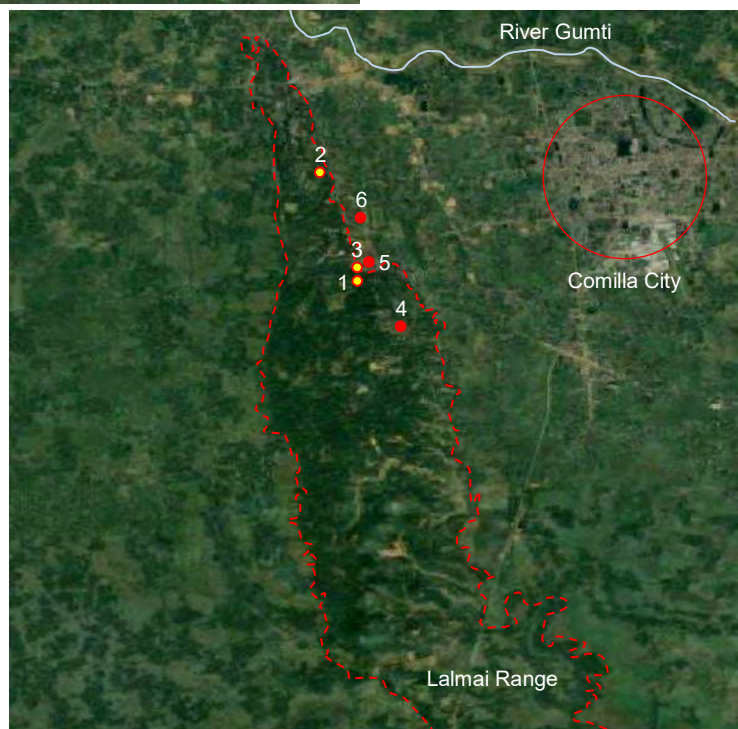
Source:
<https://www.Google.com/earth>
 Edit: **Author**

**Buddhist Monasteries –
 Varendra, Bengal**



● Post-Gupta monasteries
 ● Pala monasteries

1. Vasu *vihara*
2. Sitakot *vihara*
3. Vikramsila *mahavihara*
4. Somapura *mahavihara*
5. Jagaddala *vihara*



**Buddhist Monasteries –
 Samatata, Bengal**

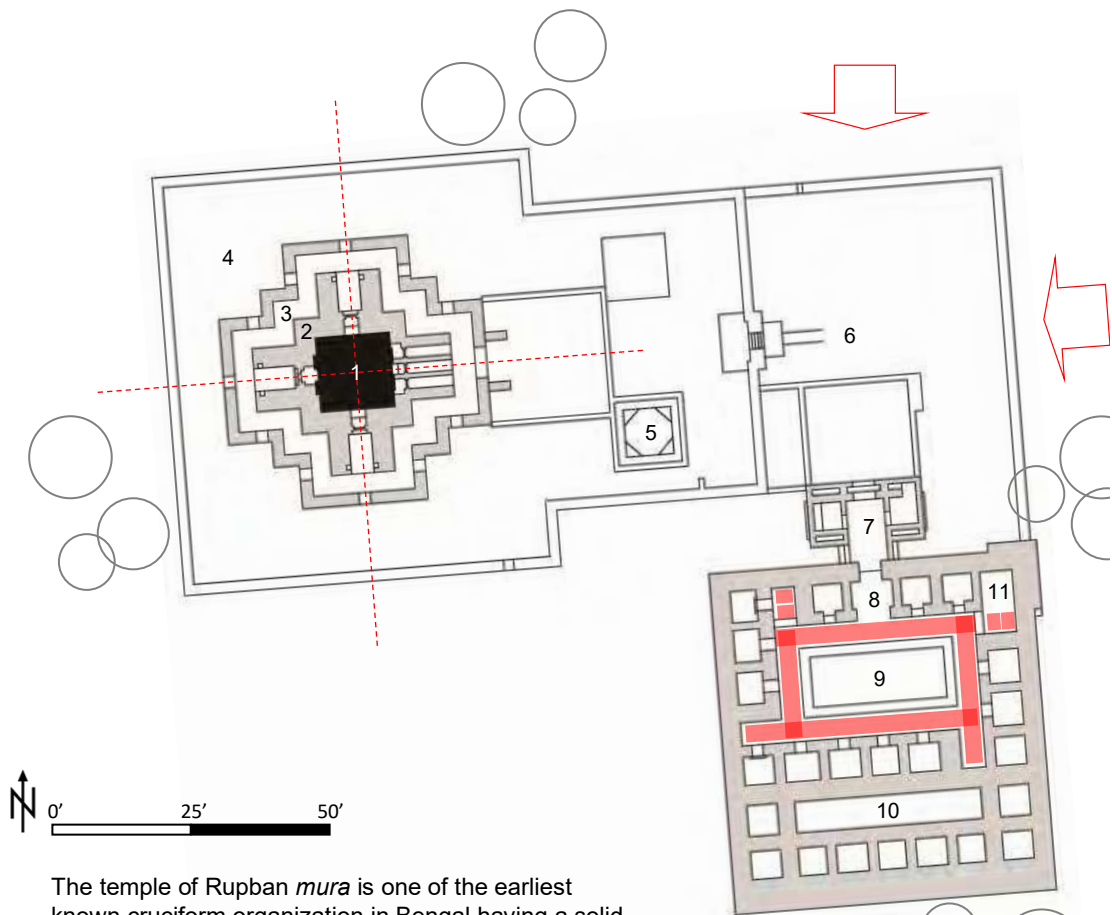


● *Khadga* monasteries
 ● *Deva-Chandra* monasteries

1. Rupban *mura*
2. kutila *mura*
3. Itakhola *mura*
4. Salban *vihara*
5. Ananda *vihara*
6. Bhoja *vihara*



Rupban *Mura*, Samatata
 Photograph and drawing: **Author**
 Edit: **Author**

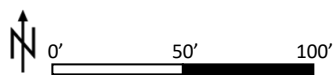
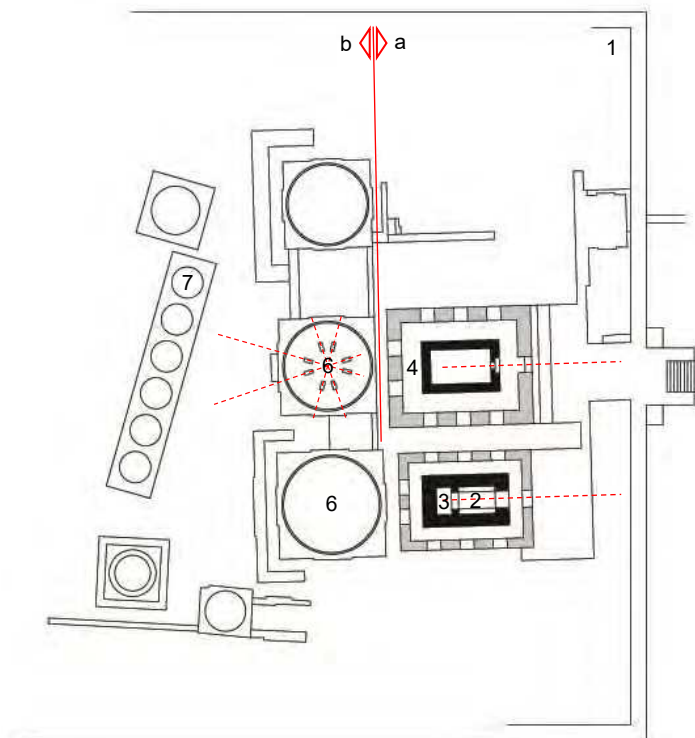


The temple of Rupban *mura* is one of the earliest known cruciform organization in Bengal having a solid inner core at its center, against which the four sanctums are placed in the four cardinal directions. The temple represents the *Dhyani Buddhas* – its eastern projection signifying the *Ratnatraya* – while the *Dharmachakra* is accommodated with the primary circulation of the *vihara*.

1. The solid central core shaft
2. The main body of the temple with sanctums and *antaralas*
3. The enclosed *pradakshina*
4. The open *pradakshina* platform
5. The votive *stupas*
6. The lower platform/terrace
7. The entrance chambers
8. The vestibule
9. The open courtyard
10. The annex courtyard
11. The stairway chamber



Kutila *Mura*, Samatata
 Photograph: <https://Wikipedia.org>
 Drawing and Edit: **Author**



In the Kutila *mura* complex, the three unidirectional temples take up a primary-parallel position with their three main *stupas* – apparently being the only example of a *Ratnatraya* memorial still in existence today. The central *stupa* signifies the Buddhist *Dharmachakra*.

- a. The temple front
- b. The *stupa* rear

- 12. The elevated platform
- 13. The *mandapa*
- 14. The inner sanctum
- 15. The enclosed *pradakshina*
- 16. The *dharmachakra stupa* – the Dharmarajika *stupa*
- 17. The flanking *stupas* forming the *ratnatraya* with the central *stupa*
- 18. The votive *stupas*

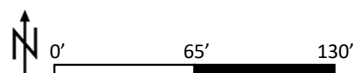
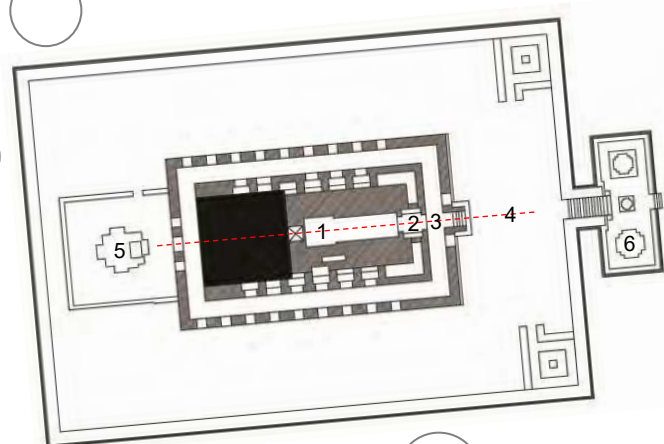
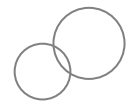
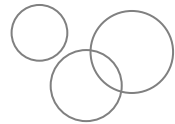
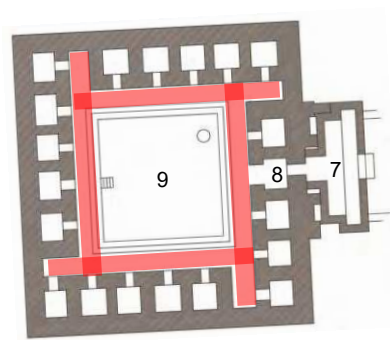


Itakhola *Mura*, Samatata
 Photograph and drawing: **Author**
 Edit: **Author**

The bold east-west linear configuration of the Itakhola *mura* temple is analogous to its contemporary Kutila *mura* complex in the Lalmai-Mainamati range; but the commemorative *stupa* on the west of the temple becomes much reduced. The final form of the temple represents Akshobhya; while the associated primary-parallel *vihara* signifies the *Dharmachakra* in its main circulation scheme.

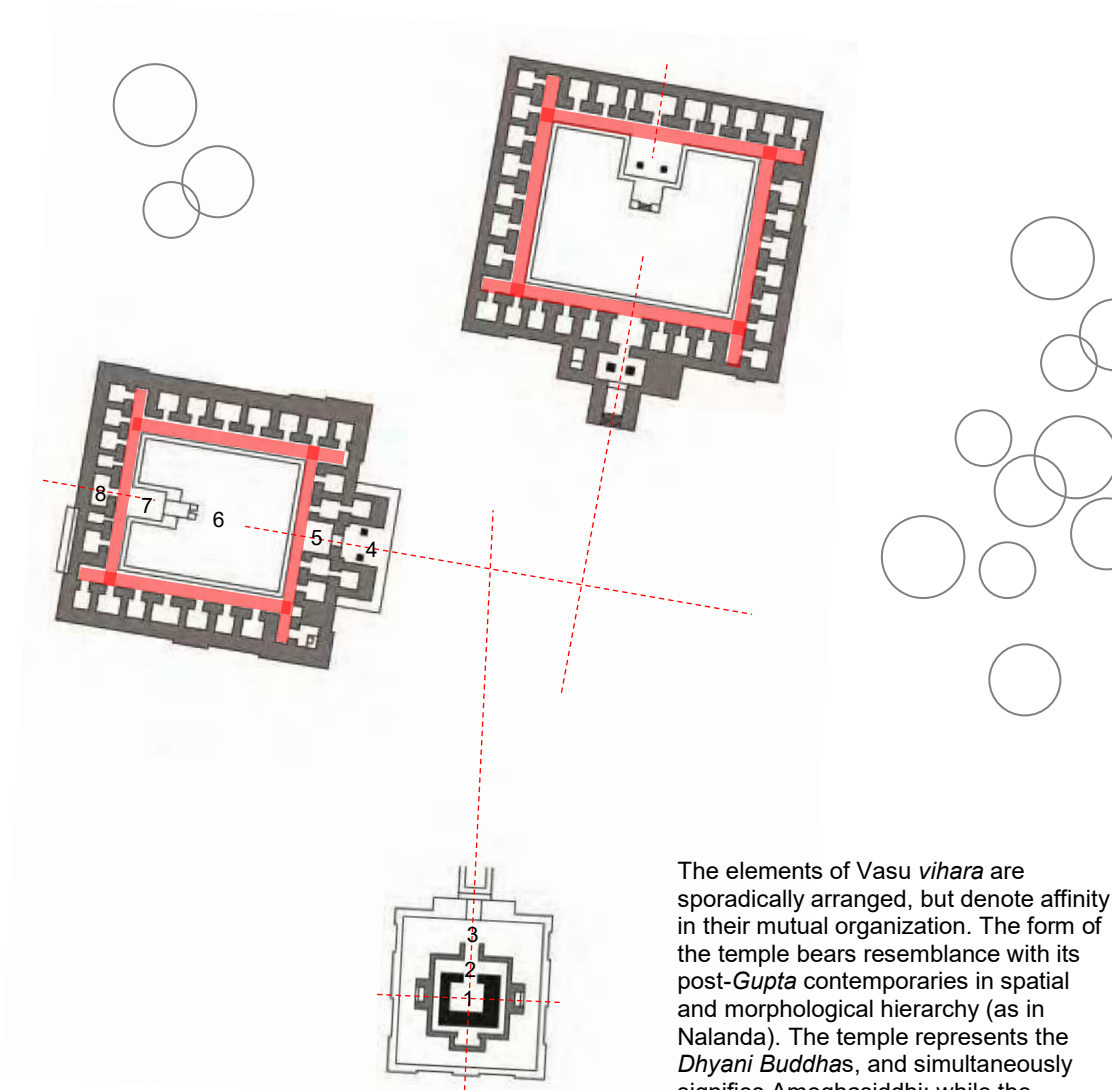
The enclosed *paradakshina* of the temple was once enriched with a series of image chapels facing north and south against its temple-core within.

19. The inner sanctum
20. The *antarala*
21. The enclosed *pradakshina*
22. The open *pradakshina* platform
23. The commemorative *stupa*
24. The votive *stupas*
25. The entrance chamber
26. The vestibule
27. The open courtyard



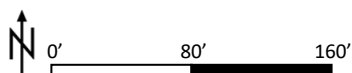


Vasu Vihara, Varendra
 Photograph and drawing: Author
 Edit: Author



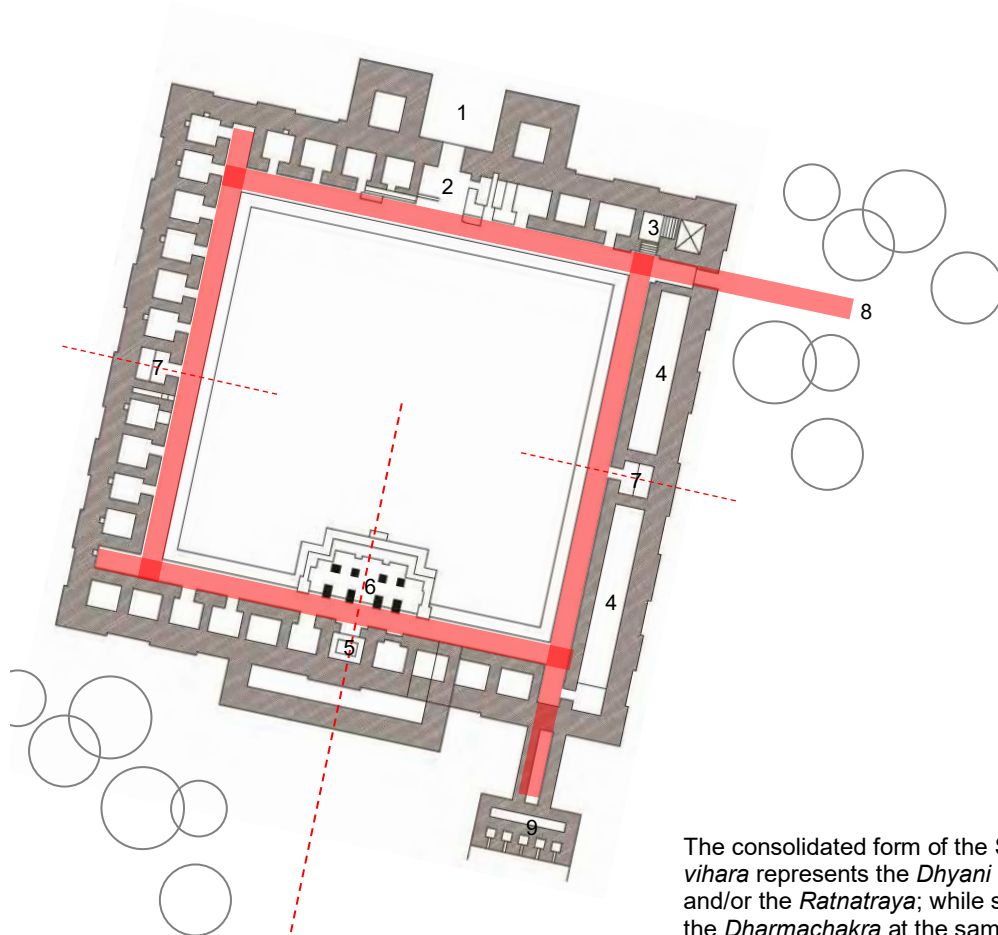
The elements of Vasu *vihara* are sporadically arranged, but denote affinity in their mutual organization. The form of the temple bears resemblance with its post-*Gupta* contemporaries in spatial and morphological hierarchy (as in Nalanda). The temple represents the *Dhyani Buddhas*, and simultaneously signifies Amoghasiddhi; while the primary-parallel forms of the *viharas* accommodate the *Dharmachakra* with the main circulation. The incorporation of religious sanctums with these *viharas* are well defined by means of strong axial orientation/appropriation.

1. The temple sanctum
2. The enclosed/inner *pradakshina*
3. The open *pradakshina* platform
4. The entrance chambers
5. The vestibule
6. The open courtyard
7. The *vihara* sanctum
8. The antechamber



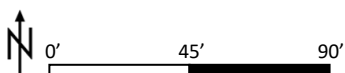


Sitakot Vihara, Varendra
 Photograph and drawing: **Author**
 Edit: **Author**



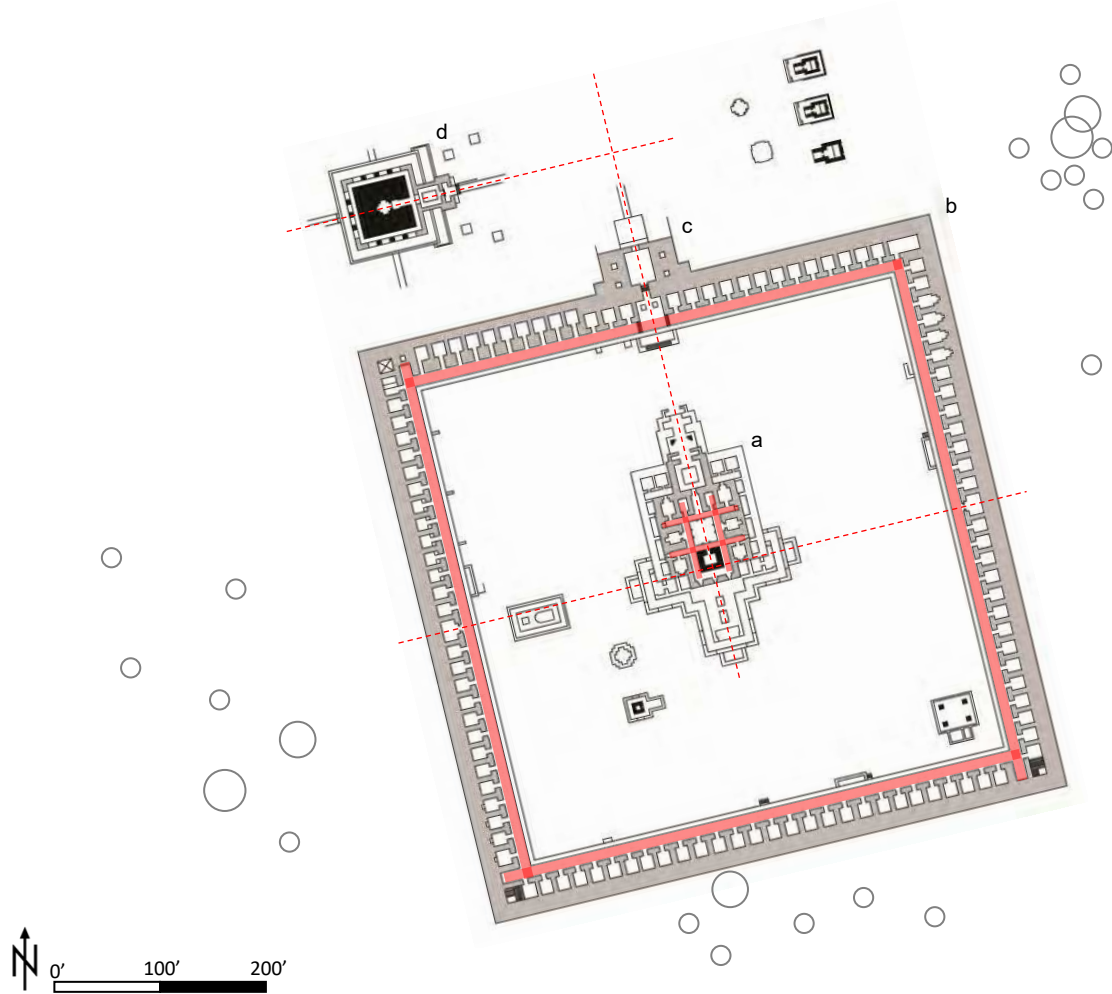
The consolidated form of the Sitakot vihara represents the *Dhyani Buddhas* and/or the *Ratnatraya*; while signifying the *Dharmachakra* at the same time. Here in this example, the *vihara* stands complete with all the functional requirements of Buddhism during the pre-*Pala* times, both sacred and secular. The sanctum with the southern wing initially had a *paradakshina* circumambulating its tripartite cells, but was converted into a single-cell sanctum as additional sanctums were amended to its eastern and western wings during the later periods.

9. The entrance chambers
10. The vestibule
11. The stairway
12. The congregation halls
13. The main sanctum
14. The *mandapa*
15. The additional sanctums
16. The secondary/service entrance
17. The lavatory



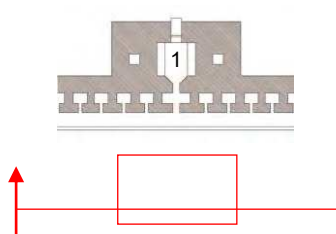


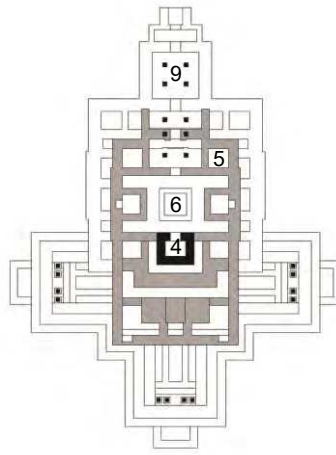
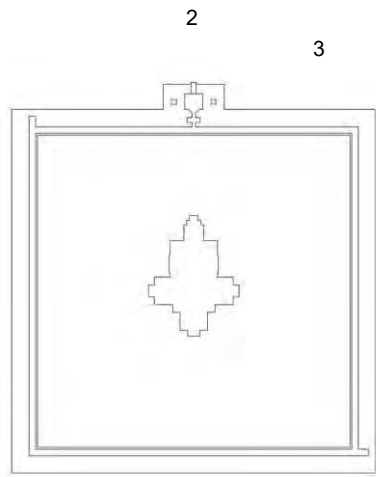
Salban *Vihara*, Samatata
 Photograph and drawing: **Author**
 Edit: **Author**



For the first time in the history of Buddhism, the temple sits at the center of the whole composition; while the *vihara* acts as its consolidated container. The temple at the center of Salban *vihara* complex represented the *Dhyani Buddhas* in its initial organization by means of a cruciform plan; but later on, the scheme was altered to accommodate the same and/or the *Bodhisattvas* by converting the original cruciform plan to a nine-grid square through a process of experimentations and adaptations. The *Dharmachakra*, manifested in the primary circulation of the containing *vihara* form is discontinued in the north-east corner.

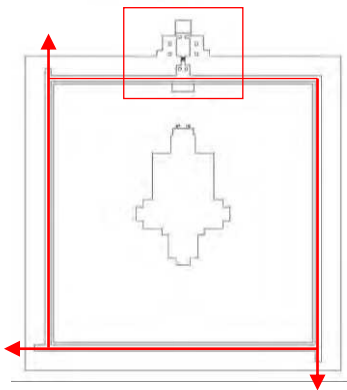
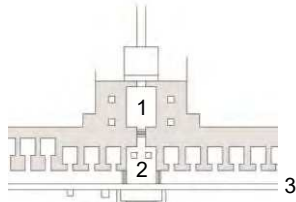
- a. The central temple
- b. The *vihara*
- c. The gateway complex
- d. The outer temple





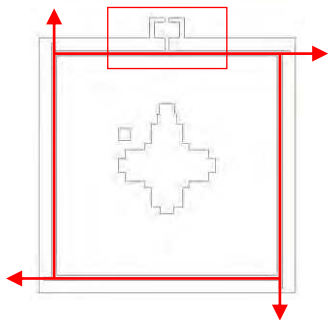
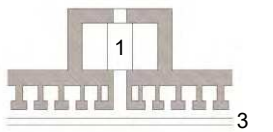
1. Entrance hall
2. Vestibule
3. Primary circulation
4. Core sanctuary
5. Additional chambers
6. *Mandapa*
7. *Pradakshina*
8. *Outer pradakshina*
9. *Ardhamandapa*

Ananda *vihara*
Drawing: **Author**



1. Entrance hall
2. Vestibule
3. Primary circulation
4. Core sanctuary
5. Additional chambers
6. *Mandapa*
7. *Pradakshina*
8. *Outer pradakshina*
9. *Ardhamandapa*

Salban *vihara*
Drawing: **Author**



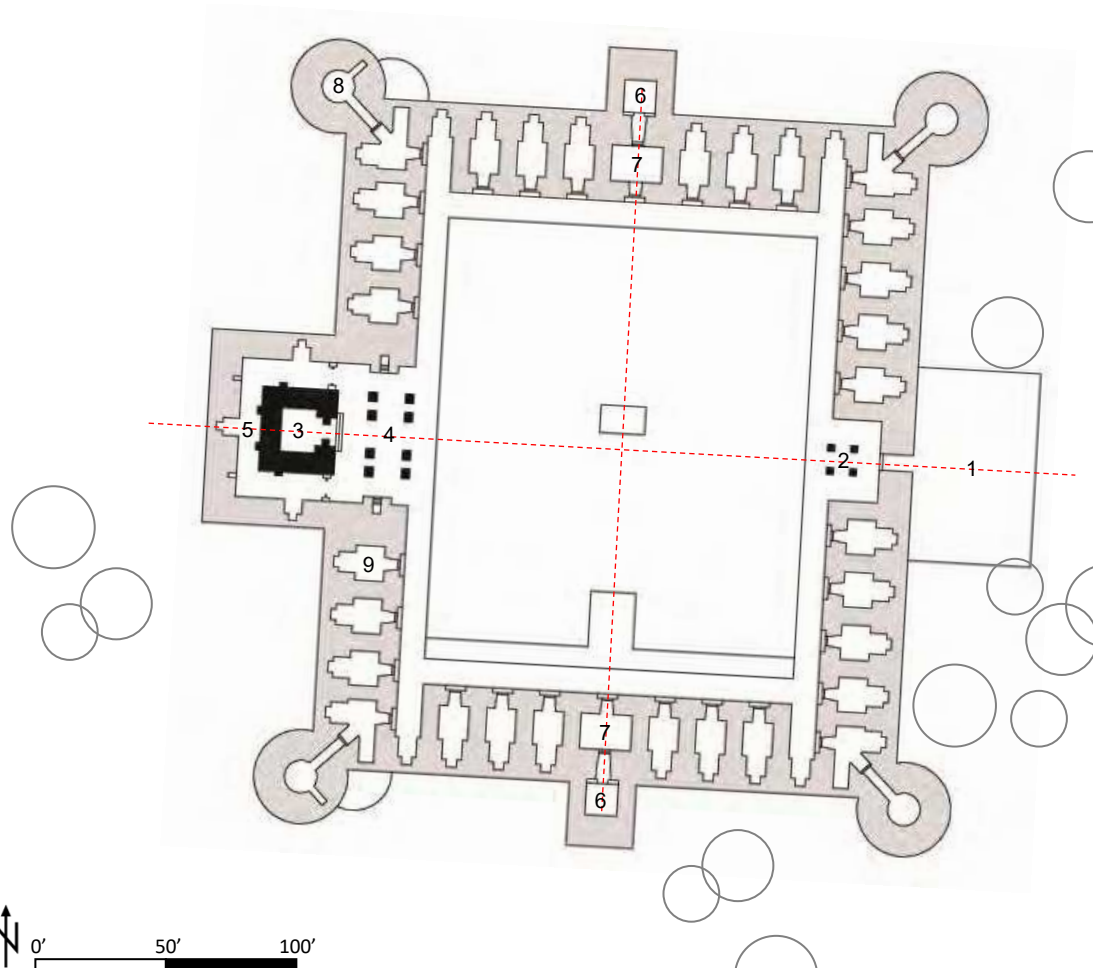
1. Entrance hall
2. Vestibule
3. Primary circulation
4. Core sanctuary
5. Additional chambers
6. *Mandapa*
7. *Pradakshina*
8. *Outer pradakshina*
9. *Ardhamandapa*

Bhoja *vihara*
Drawing: **Author**

Note: The drawings are comparatively proportionate, but are not in scale.



Jagaddala Vihara, Varendra
 Photograph and drawing: Author
 Edit: Author



Jagaddala *vihara* represents the *Dhyani Buddhas* and/or the *Ratnatrayas*. This particular example probably signifies yet another transformation of Buddhism in Bengal by means of its physical manifestation, which had been discontinued rather abruptly due to the changing political dynamics of the region. However, the basic functional elements of this *vihara* can still be traced in its ruins.

1. The entrance chambers (not in existence)
2. The vestibule
3. The main sanctum
4. The *mandapa*
5. The *pradakshina*
6. The additional sanctums
7. The *antaralas*
8. The hollow corner turrets with antechambers
9. Cells with deep-set niches

Somapura *Mahavihara*, Paharpur

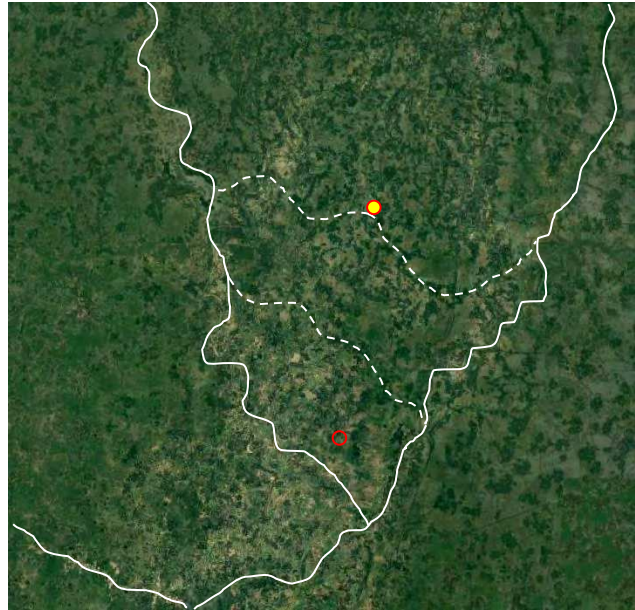
– Physical Anchorage

<https://www.Google.com/earth>

Edit: **Author**

- The live streams
- - - The dead streams
- Somapura *mahavihara*
- Halud *vihara*

- 1. Dharmapuri village
- 2. Goala *bhita* village
- Satya Pir *bhita*
- Bathing *ghat*



Dikshit argues that there might have been a canal that ran almost parallel to the southern wing of the Somapura *mahavihara* during c.8th-13th AD (above). A close examination of the geology of the area also validates his claim as there are traces of dead water systems that might have once vitalized the Buddhist establishment.

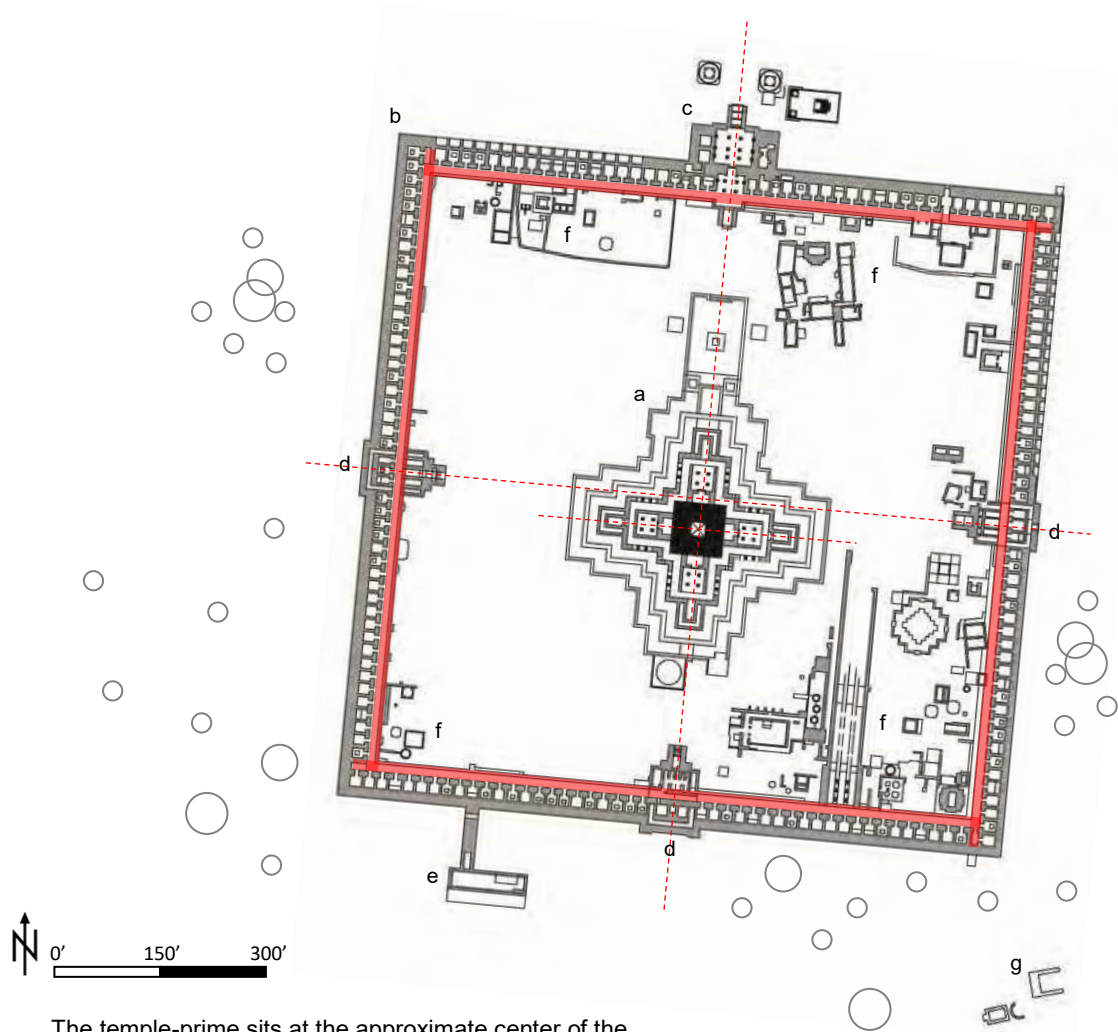




Somapura Mahavihara, Varendra

Photograph: Naheed Mehedi Rehman

Drawing and edit: Author

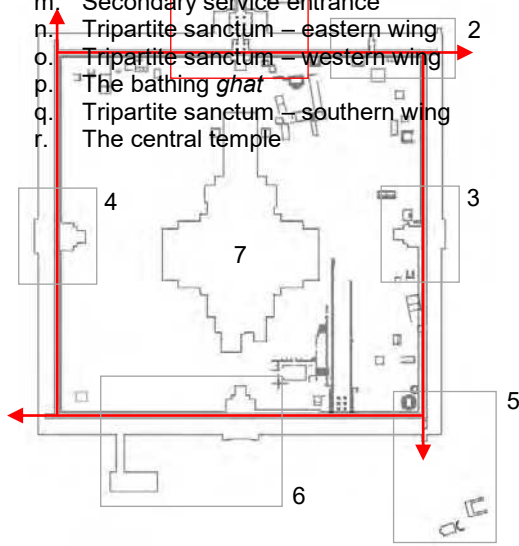


The temple-prime sits at the approximate center of the whole composition – its volume being visually appropriated with the other compositional elements of the *mahavihara* complex. The temple boldly represents the *Dhyani Buddhas* corroborating to the key cardinal directions; and with it, the additional sanctums at the southern, eastern and western wings of the *vihara* also accommodate the *Ratnatraya*. The primary circulation with the *vihara* enclosure accommodates the *Dharmachakra* at the same time.

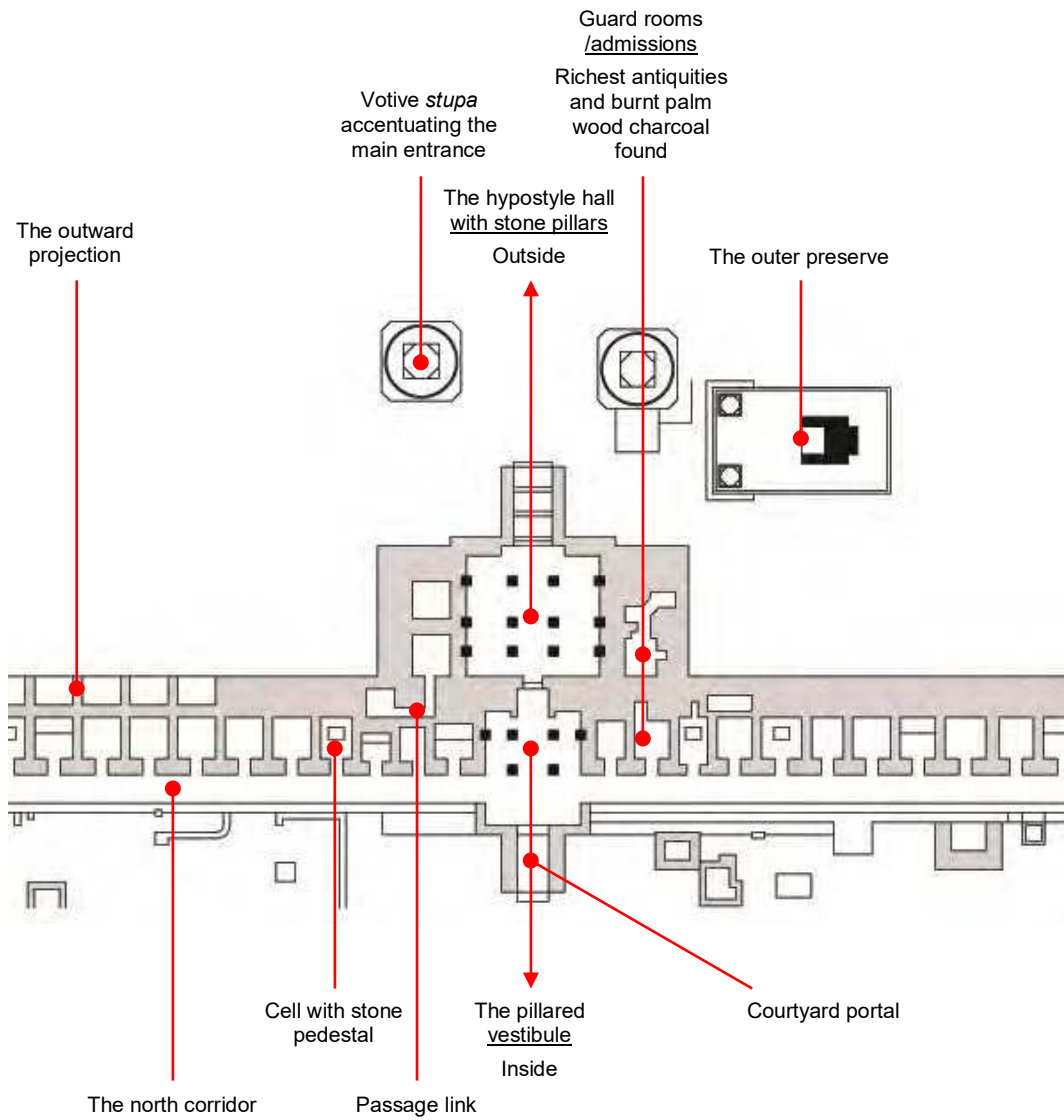
- e. The central temple
- f. The *vihara* enclosure
- g. The gateway complex
- h. The additional sanctums
- i. The annex – the lavatory extension
- j. The later/scattered additions
- k. The bathing *ghat*

I. The gateway complex

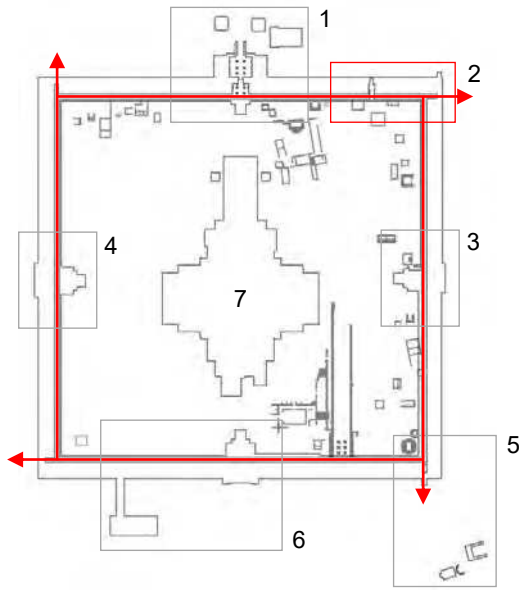
- m. Secondary service entrance
- n. Tripartite sanctum – eastern wing
- o. Tripartite sanctum – western wing
- p. The bathing *ghat*
- q. Tripartite sanctum – southern wing
- r. The central temple



The key components
 Drawings: **Author**
 Edit: **Author**

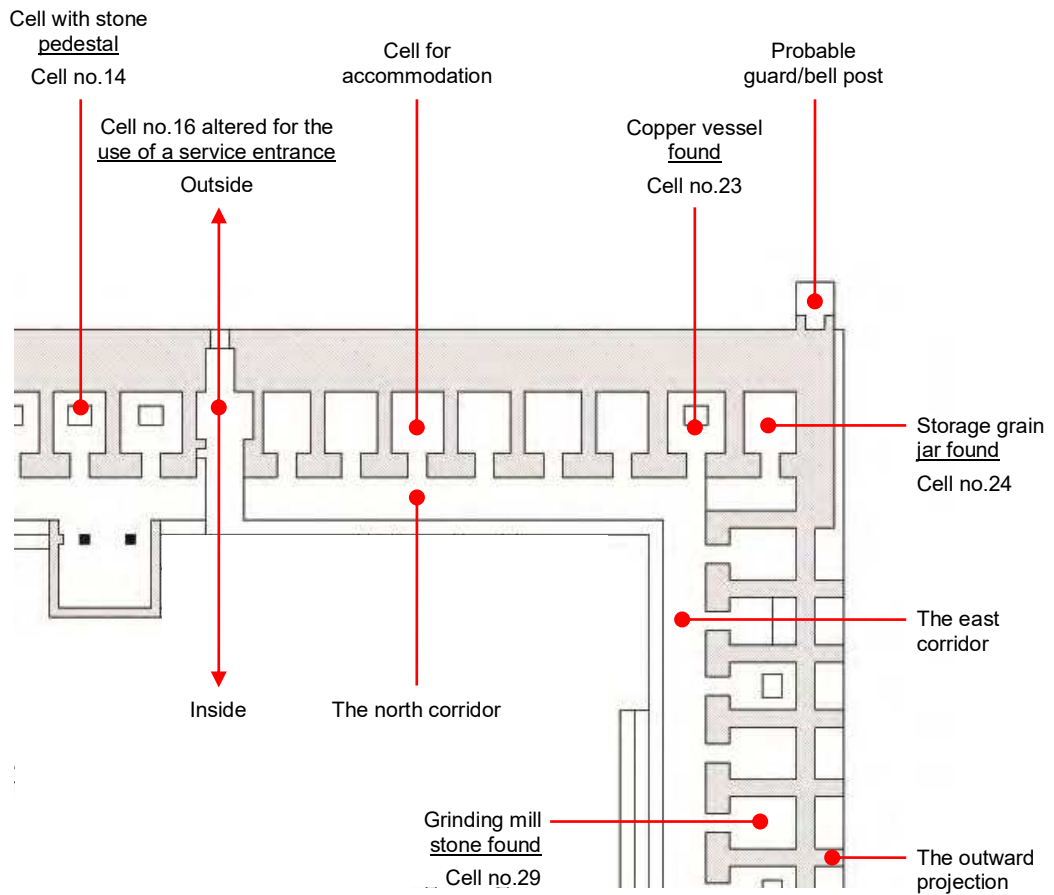


Note: The drawings are not in scale.

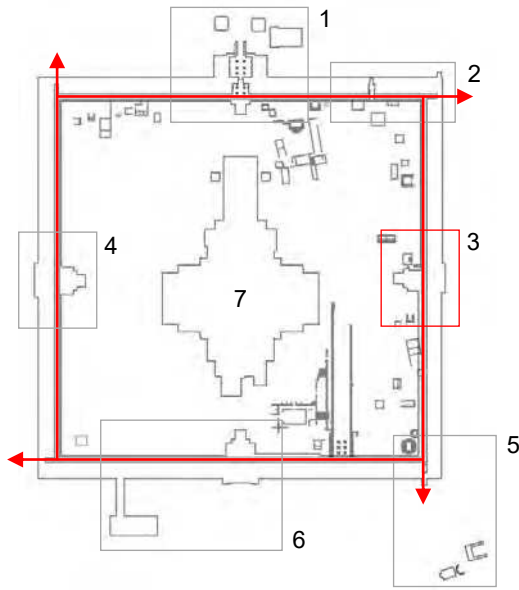


1. The gateway complex
2. **Secondary service entrance**
3. Tripartite sanctum – eastern wing
4. Tripartite sanctum – western wing
5. The bathing *ghat*
6. Tripartite sanctum – southern wing
7. The central temple

The key components
 Drawings: **Author**
 Edit: **Author**



Note: The drawings are not in scale.

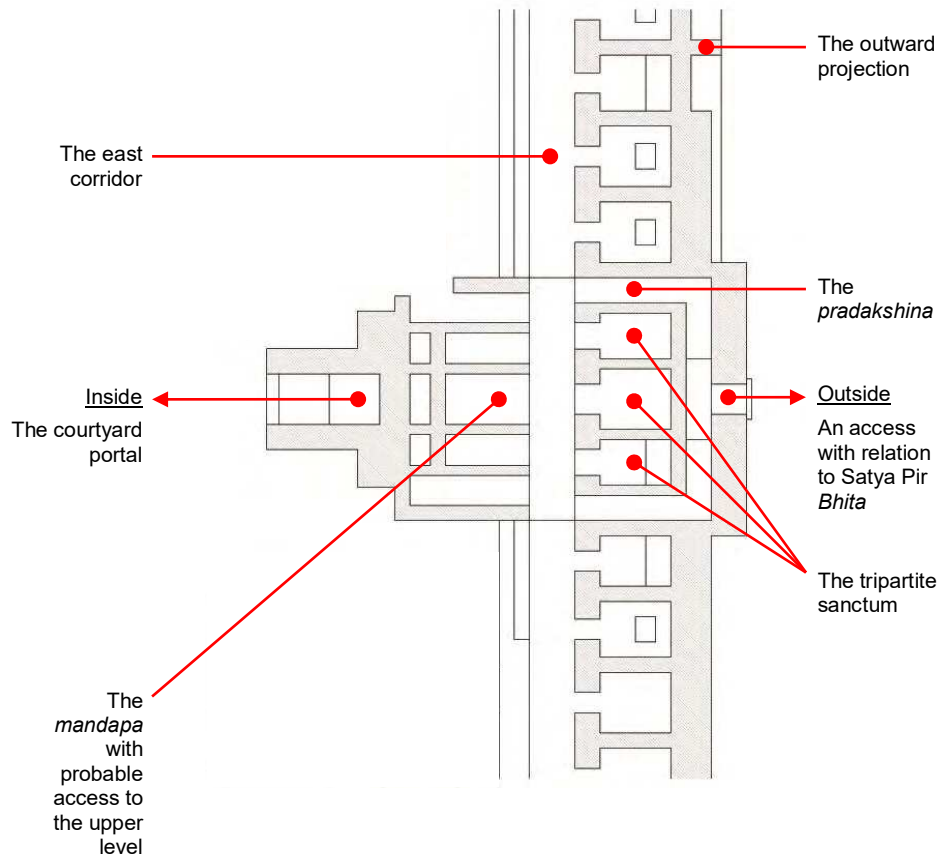


1. The gateway complex
2. Secondary service entrance
3. **Tripartite sanctum – eastern wing**
4. Tripartite sanctum – western wing
5. The bathing *ghat*
6. Tripartite sanctum – southern wing
7. The central temple

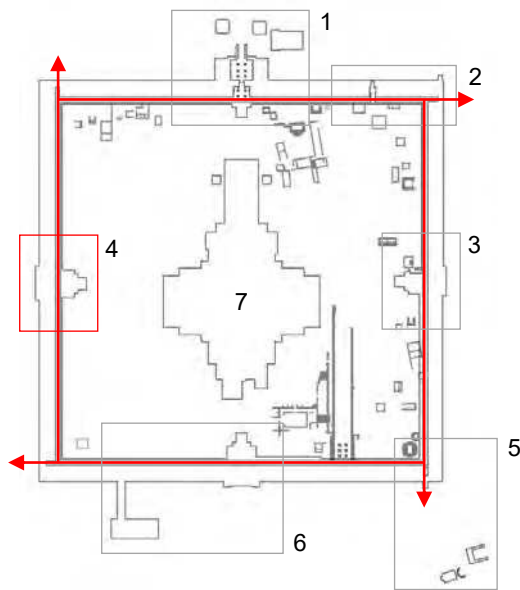
The key components

Drawings: **Author**

Edit: **Author**



Note: The drawings are not in scale.

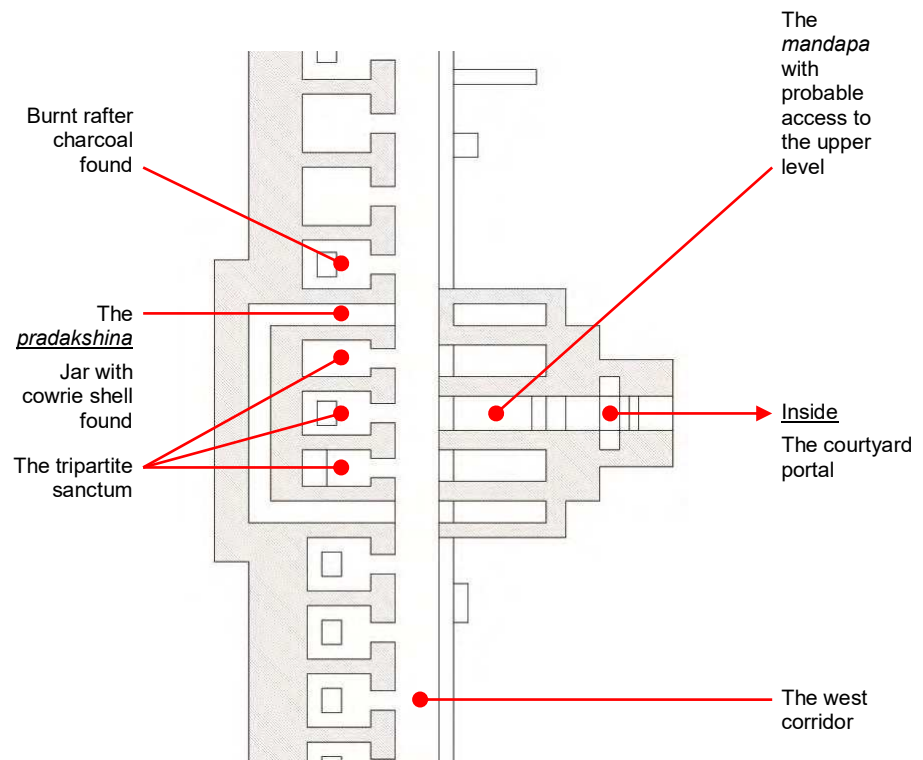


1. The gateway complex
2. Secondary service entrance
3. Tripartite sanctum – eastern wing
4. **Tripartite sanctum – western wing**
5. The bathing *ghat*
6. Tripartite sanctum – southern wing
7. The central temple

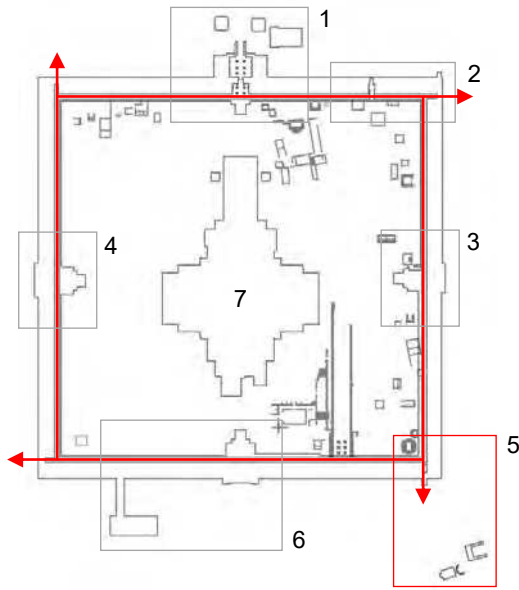
The key components

Drawings: **Author**

Edit: **Author**

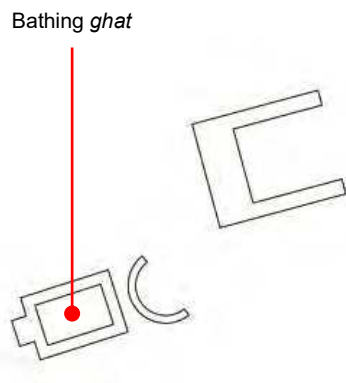
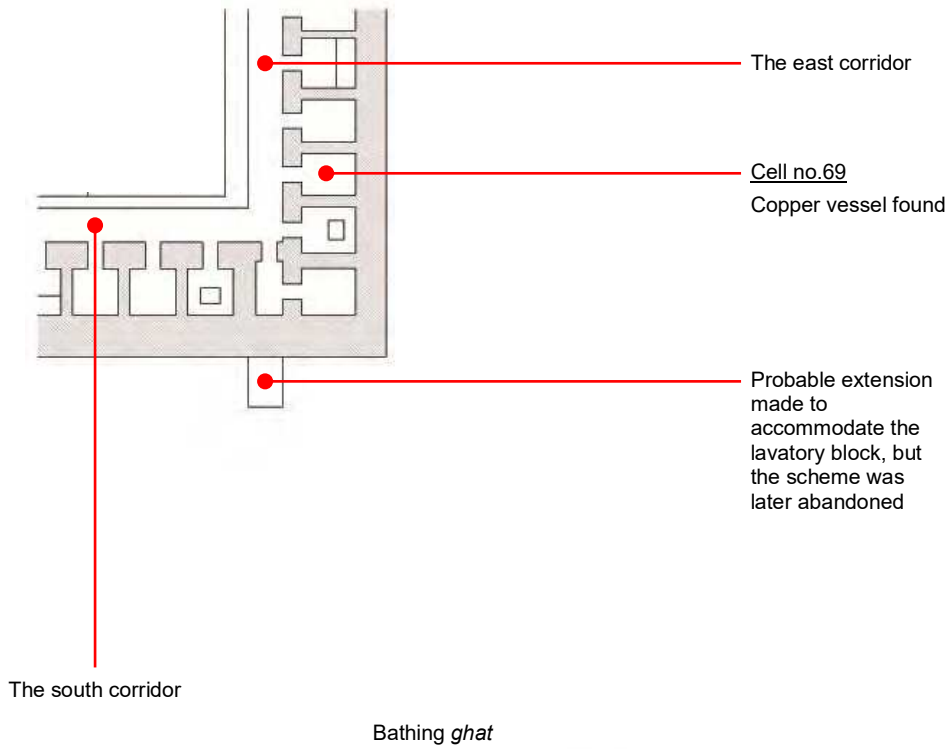


Note: The drawings are not in scale.

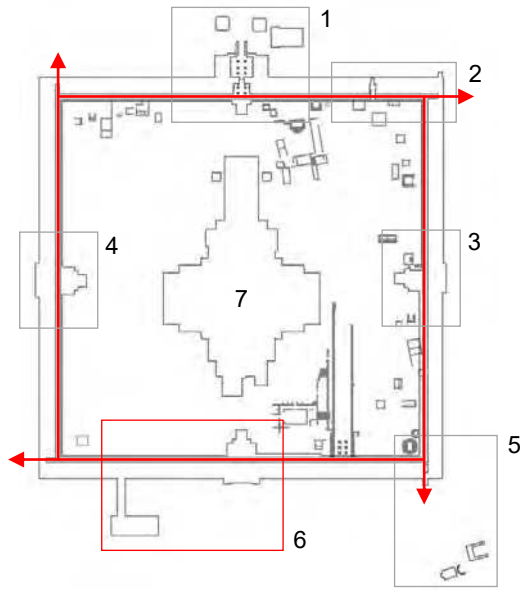


1. The gateway complex
2. Secondary service entrance
3. Tripartite sanctum – eastern wing
4. Tripartite sanctum – western wing
5. **The bathing ghat**
6. Tripartite sanctum – southern wing
7. The central temple

The key components
 Drawings: **Author**
 Edit: **Author**



Note: The drawings are not in scale.

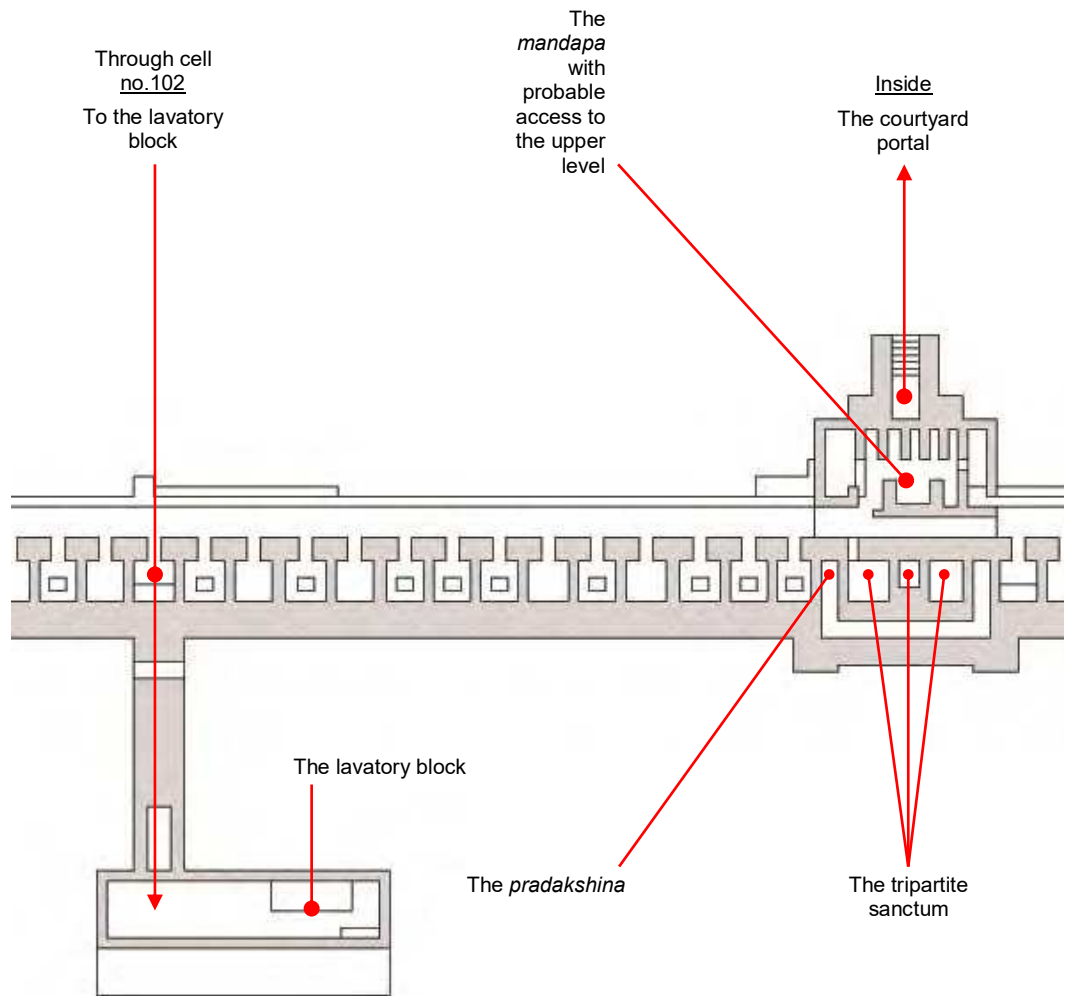


1. The gateway complex
2. Secondary service entrance
3. Tripartite sanctum – eastern wing
4. Tripartite sanctum – western wing
5. The bathing *ghat*
- 6. Tripartite sanctum – southern wing**
7. The central temple

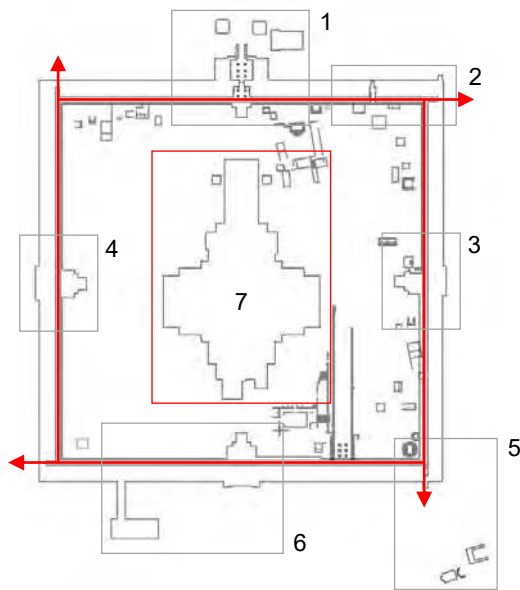
The key components

Drawings: **Author**

Edit: **Author**



Note: The drawings are not in scale.

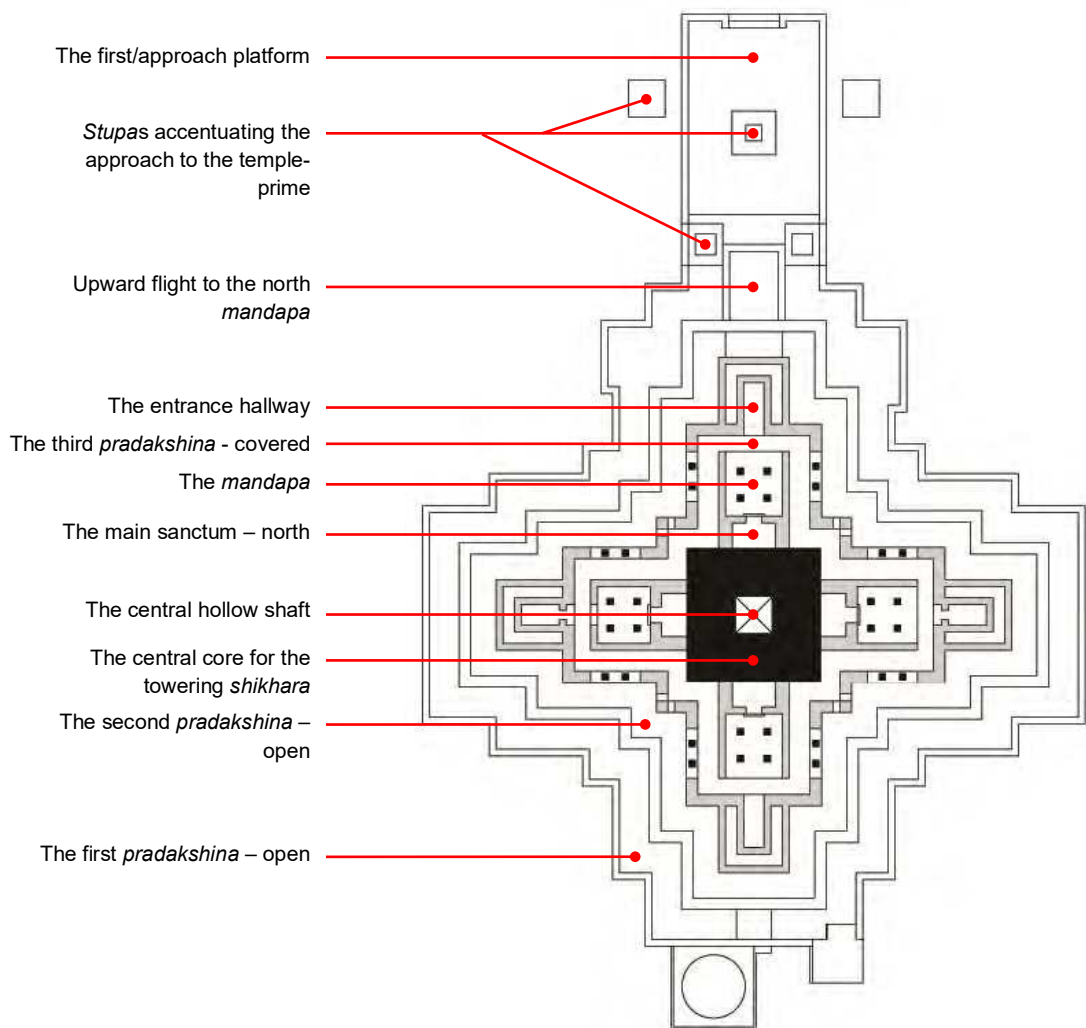


1. The gateway complex
2. Secondary service entrance
3. Tripartite sanctum – eastern wing
4. Tripartite sanctum – western wing
5. The bathing *ghat*
6. Tripartite sanctum – southern wing
7. **The central temple**

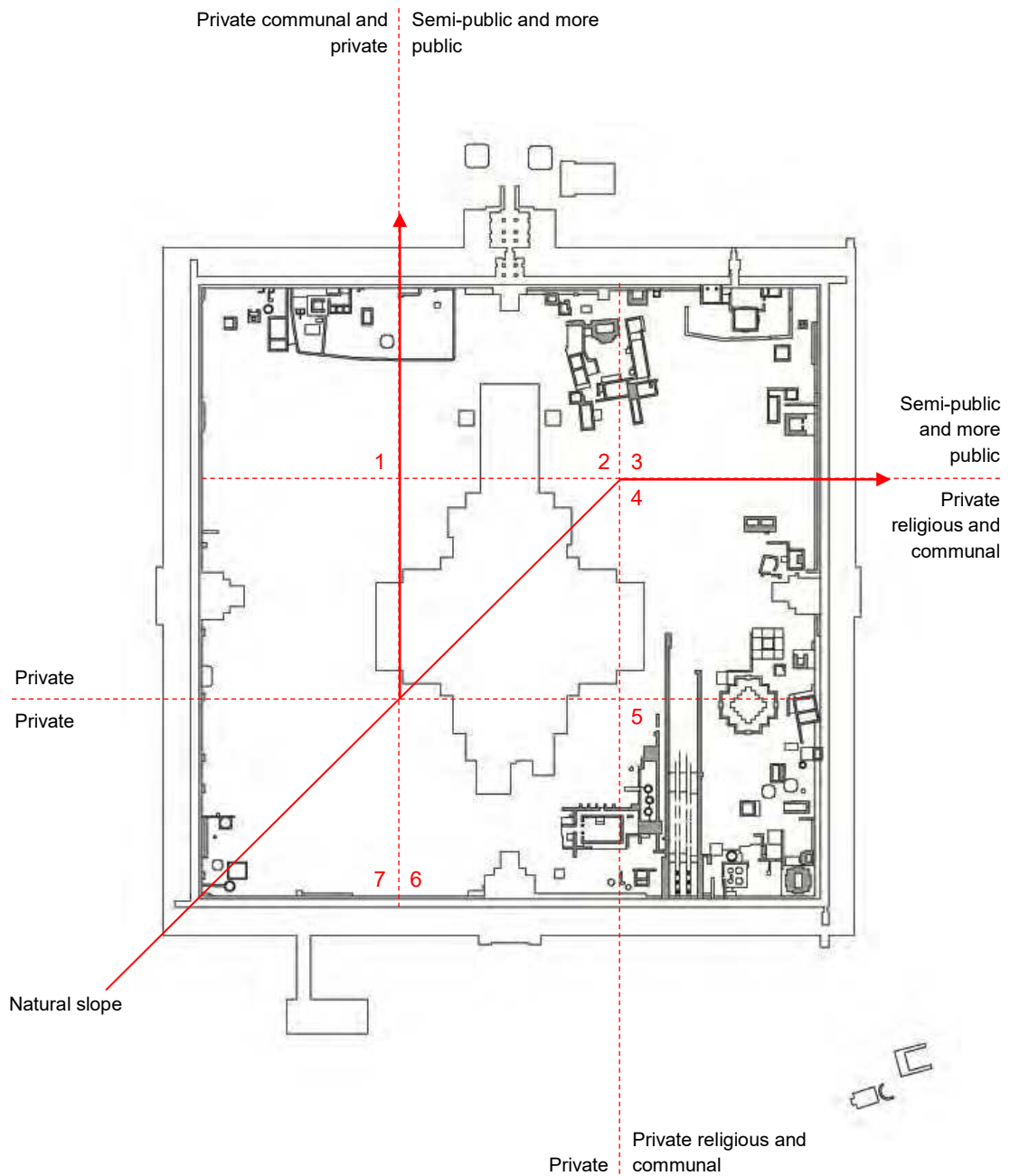
The key components

Drawings: **Author**

Edit: **Author**



Note: The drawings are not in scale.



The key functionalities and zoning

Drawing: **Author**

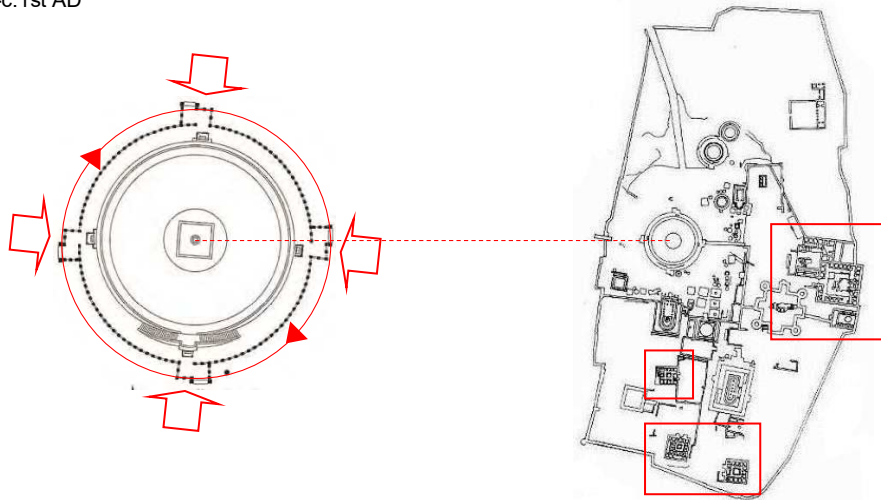
Edit: **Author**

Area 1 (1 and 2) – Administration, academic and congregation of resident monks and disciples; **Area 2 (2 and 3)** – Provisional lodging facilities; **Area 3 (3)** – Reception area for everyday commodities, and/or community gathering; **Area 4 (3, 4 and 5)** – Votive *stupas*, sanctums, additional temples and replicas of the temple-prime – connectivity with the Satya Pir *bhita* on the east; **Area 5 (5 and 6)** – Community dining, kitchen and water wells; and **Area 6 (7)** – Water wells, bathing and hygiene facilities

Note: The drawing is not in scale.

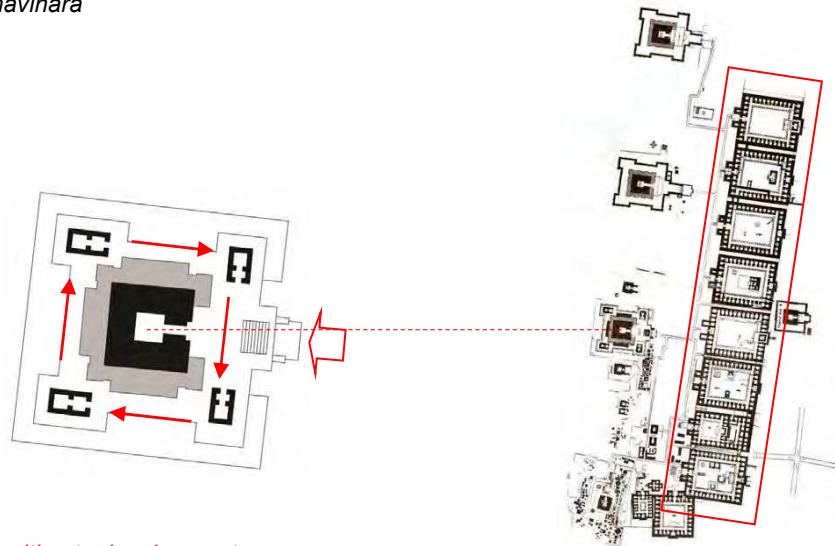
Stage 1 – the formative inspiration

The Sanchi *Stupa*-Settlement
c.2nd BC-c.1st AD



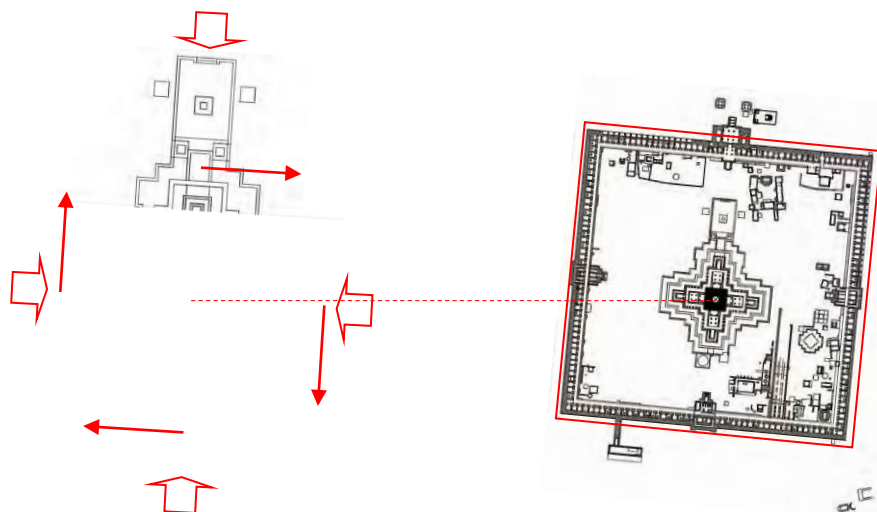
Stage 2 – the transformative inspiration

Nalanda *Mahavihara*
c.7th -8th AD

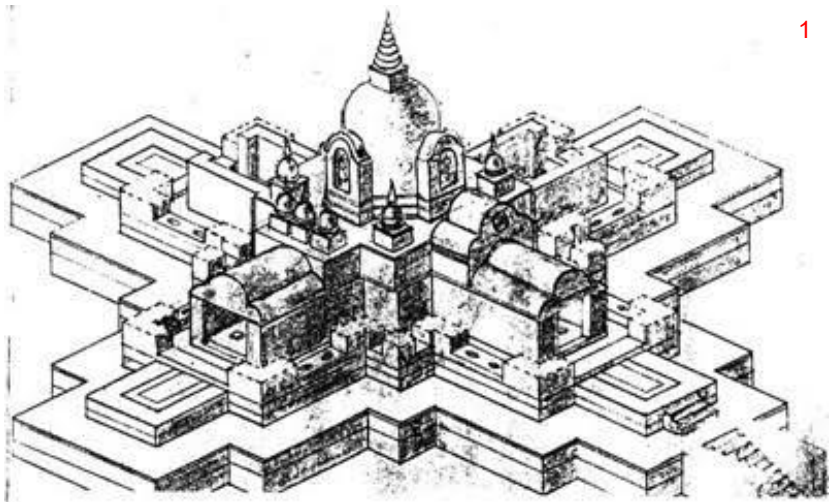


Stage 3 – the ultimate development

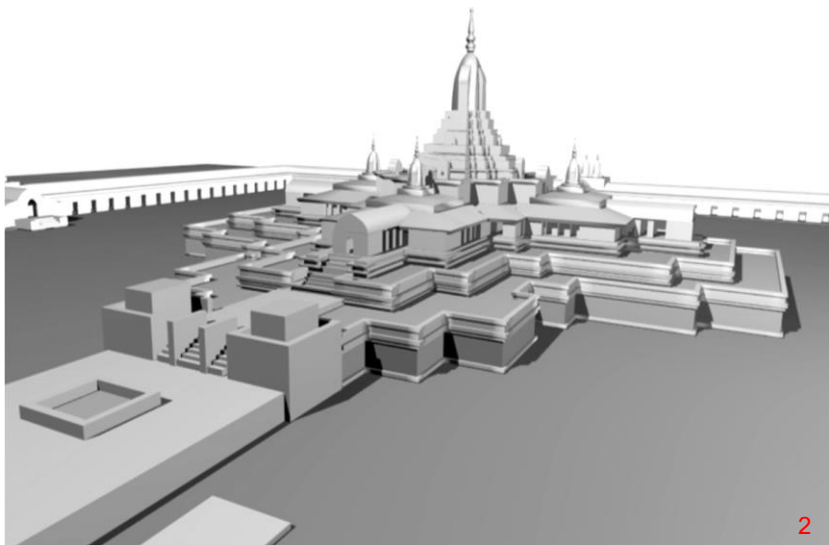
Somapura *Mahavihara*, Paharpur
c.8th -9th AD



Note: The drawings are not in scale.



1



2

1. Prudence R. Myer's hypothetical illustration (1961) on the central temple of Somapura *mahavihara*, Paharpur suggests the form of the *stupa* as its missing superstructure;
2. M. Ali Naqi and his team (2000 and 2004) have identified the form of the *shikhara* as its terminating feature, associating its morphology with a much later (c.12th AD) development in Myanmar; while
3. M. Mizanur Rashid and his team (2007 and 2016), maintaining consistency with Myer's explanations, have rendered the sacred central element as a *stupa*-temple.

Conjectures – temple-prime; Somapura *mahavihara*, Paharpur

See sources: chapter-5, subsection-5.5.2, pp.154-155; and chapter-5, section-5.6, pp.160-161.

Edit: **Author**

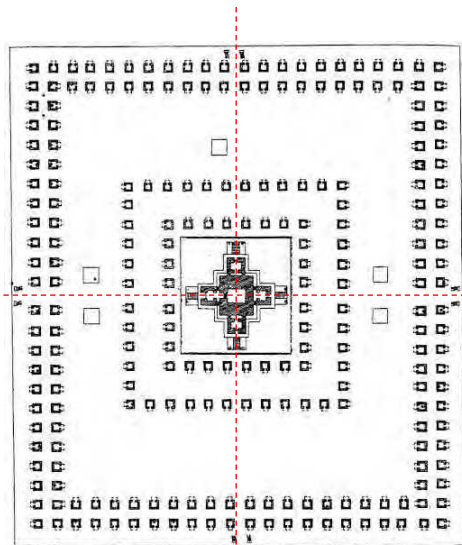


3

Candi Sewu

Indonesia
c.8th AD

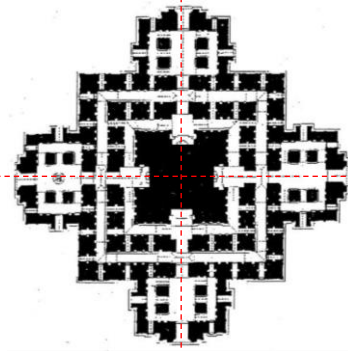
Source: <https://www.Flickr.com>
Edit: **Author**



Ananda Temple

Myanmar
c.12th AD

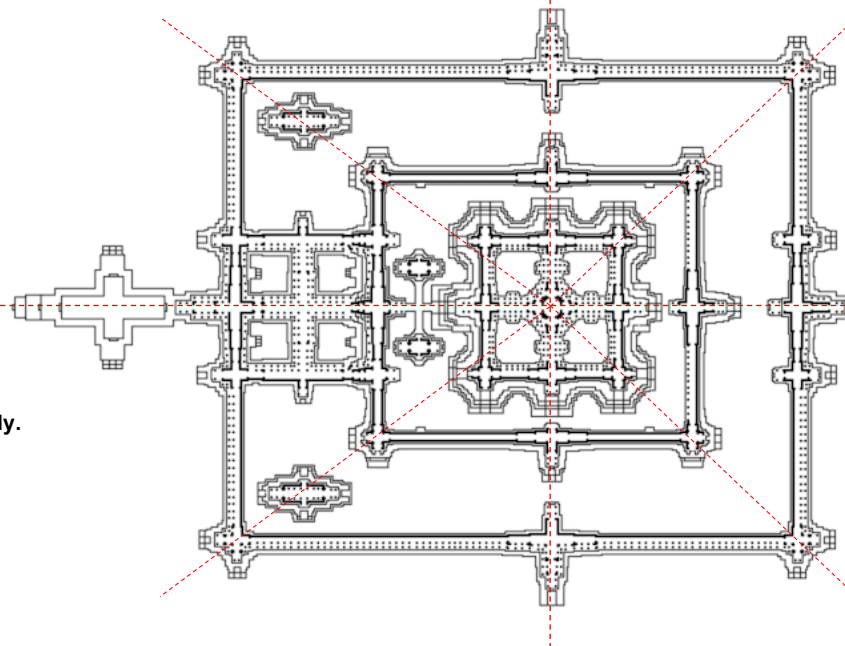
Source: <https://www.HiddenArchitecture.com>
Edit: **Author**



Angkor Wat

Cambodia
c.12th AD

Source: <https://OrdinaryMostly.Wordpress.com>
Edit: **Author**



Note: The drawings are comparatively proportionate, but are not in scale.

Chapter 6: CONCLUSIONS

- 6.1 Introduction
- 6.2 Summary of the Study

6.1 INTRODUCTION

This study preliminarily scrutinizes the Buddhist architecture since its earliest functionalities in history and traces its development stages in the undercurrents of its broader cultural and political setting until it reaches the deltaic landmass of Bengal. It has been witnessed that the style which was generated through the process of this evolution, eventually represents a much altered comportment than it was expected to have conveyed since the beginning. The key elements of the Buddhist architecture, thus substantiated through the synthesis of a deep-rooted investigation, were then verified and analyzed in comparison to the building style and technology within the contextual boundaries of Bengal and even beyond.

6.2 SUMMARY OF THE STUDY

The findings of the study are well underlined in chapters 4 and 5 in relation to its key objectives and probable outcomes. With the key objectives properly addressed through an interpretative-historical approach, the following subsections present a summary of the present initiative.

6.2.1 Physical Anchorage in Different Contexts

Buddhist art and architecture in the mainland India has undergone numerous changes since its commencement. It has been recognized that with change in every political dynasty/reign, the architectural manifestations of the *dhamma* and the *sangha* had to reorient and readjust within their own capacity in order to adapt to the fluctuating circumstances every now and then. A distinctive pattern in such adaptive trend has been identified in this study, where the Buddhists attempted to establish their monastic settlements out in the open and in the midst (or possible vicinity) of the local communities. While on the

other hand, they appear to have formed shelters within the natural terrains when there was no patronage in favor of them, or the time was not in their favor. In such cases, seclusion and/or isolation was preferred, visibly connoting that Buddhism was not anchored with the mainstream population, and faced hardship, if not persecution, from the authoritative bodies and/or other religious sects prevailing during those periods of time.

The Buddhists' response to this phenomenon had been remarkable both in terms of artistic and architectural values. The forms and visual adaptations that represented the religious ideology of Buddhism – the sacred elements in their architecture (*i.e.* the *stupas* and the temples) – seem to have responded in harmony to the changing political and philosophical demands of the society; whereas the basic morphology of their settlements – the secularities (*i.e.* the *viharas*) – remained almost unchanged until it became an absolute necessity during the post-*Gupta* period. In Bengal, the pattern of development in Buddhist architecture appears to be more or less steady, probably due to the prevailing conditions of contextual consistency of the region, at least under the territorial influence of the *Palas*.

6.2.2 The Elements of Buddhist Architecture

The architecture of the Buddhists began as a *sangha* and gradually acquired numerous practices of the *dhamma* in its earliest manifestations; implying that there were basically two elements that originally embodied the philosophical structure of Buddhism at the beginning. The morphological representations of the *sangha* remained largely consistent and true to its purpose throughout the various political frontiers in mainland India for quite a length in history, up until it emerged in the realms of Bengal – and acquiring only a few technological advancements of the time and the circumstance. While on the other hand, the morphological adaptations of the *dhamma* had experienced more dynamic metamorphoses and constant adjustments against a multitude of contextual synergies in which these were exposed to. The *dhamma* began its journey

with the form of the *stupa* as an object of veneration; in its actual functionality as a reliquary and also as a commemorative shrine/object to the Buddhists. Experimentations involving its form and content had been numerous as it was agglomerated in the one hand, and emphasized and accentuated by various means on the other during the subsequent periods. The major shift from its original practice was most definitely during the sovereignty of the *Kushans* in Gandhara, where the form of the *stupa* experienced extreme transformations, and possibly due to the process of which, eventually lost its place from the mainstream Buddhist philosophy and became secondary to other functional entities.

Nevertheless, whatever the morphological properties might have been, these two elements of the Buddhist architecture appear to be always developing a definite form of settlement that identified the Buddhists from the rest of the community; regardless of the circumstance in which they were subjected to. These settlements in mainland India basically maintained an open pattern in their fundamental organizational tendencies. In Bengal, the communal and/or collective nature of the settlements were seemed to have been altered, rendering the Buddhist *sangha* more secluded and often even isolated from the society; denoting a sharp shift towards ritualistic bias of Buddhism from the basic/original doctrines of humanity.

6.2.3 Functionalities and Zoning of Buddhist Architecture

The earliest settlements of the Buddhists primarily required *viharas* to house the monks and the disciples, relic *stupas* as the sacred object of veneration, and chaitya-halls and/or temples as the place for the ritualistic performances of Buddhism – inside the forms of which, commemorative *stupas* were usually placed. These basic forms were primarily set rather spontaneously, without any guiding order in their arrangement during the first few centuries in the subcontinent; but whenever Buddhism had suffered a setback of some sort, these functions seemed to have developed a unique semblance of zoning in

correspondence to the natural hillside formations of the Western Ghats. It was during the *Kushans* that the physical manifestations of Buddhism for the very first time had conceived a definite form of zoning, which can be explained in terms of the conscious realization of the Buddhists in their functional behavior and the disposition of ordering principles. However, the functionalities kept on evolving until it was in the newer settlements, as in Nalanda *mahavihara*, that the development of the two primary-parallel elements (*i.e.* the *vihara* and the temple) in Buddhist architecture began to personify the two basic zones in the overall compositional scheme.

In Bengal, the elements of function and zoning were further integrated to form an assimilated whole – a development that appears to be rather uncommon anywhere else in Asia. This particular archetype of the Buddhists had been adopted in many other localities beyond where the philosophy of Buddhism gained popularity during the subsequent period of time.

6.2.4 Symbolic Manifestations of Buddhist Architecture

As an object of worship, the form of the *stupa* had long since played a crucial role in the philosophy of Buddhism in the South Asian terrains, and its sanctity, almost in its original dimensions, is still revered in Nepal, Myanmar and many other neighboring localities to Bengal. Within a very short span of time, the symbolic manifestations of the *stupa* then took on Buddha's figural motif during the high tide of the *Mahayana* Buddhism in India, only to be substituted subsequently (or consequently) by numerous anthropomorphic characters that represented various aspects of the religion. With the primary element replaced, henceforward came the necessity of the practice of temple-forms in Buddhism.

The temples, during the post-*Gupta* periods, were less complicated in nature and retained the simplest manifestations of the religion in general; but these were dependent on the *viharas* to ensure sustenance in the new political and

social dynamics of the region. It was in such enslavement that the fresher currents of *Vajrayana* doctrines began to surface under the patronage of the *Palas*.

In Bengal, the major symbols of the *Vajrayana* Buddhism were:

- The *Dharmachakra* or the 'Wheel of Truths' – represented in the principal circulation of the *viharas*;
- The *Ratnatraya* – represented in the freestanding temples, and also in the shrines that were incorporated with the form of the *vihara*; and
- The *Dhyani Buddhas* and their extended families – represented in various assortments with the main form of the temple.

6.2.5 Material Components of Buddhist Architecture

The Buddhists were frequently exposed to a diverse range of practicalities during the formative years of the religion as they had to migrate from one location to another with the change of almost every political dynasty. But it appears that they were perfectly capable of negotiating with new material contexts and physiographical situations they were put into. Their motive and the style remained focused, while the mode or the method of expression went through a continuous process of trialing and adaptation. Even through their hardest times in the caves of the Western Ghats, the Buddhists seem to be replicating the exact models of their elements in the outside world.

Predominantly, the Buddhists relied on timber and clay in the construction of their building forms. Stone had been, almost always used or incorporated with the main structural body for added durability and strength. In the Gandhara proper, the availability of stone (and the unavailability of wood and clay) made them the masters of the craft – a trend in building art, which would continue to contribute to the traditions of Indian architecture (*i.e.* the Hindu temples in the South and the Mughal monuments in the North) during the subsequent years. In Bengal, timber and clay in the form of burnt brick were largely practiced.

In conclusion, it is to be duly noted that the architecture of the Buddhists in the deltaic landmass of Bengal was developed in such a setting that it demands constant care and attention. In this scenario, the need for generating widespread awareness for the conservation of these heritage sites is highly imperative and it has become crucial to bridge the gap between our past and the present, and also to generate newer angles of thought before the students, the researchers and the practicing architects of the present generation.

Keeping this in mind, the general population are to be made aware of the cultural, political and architectural significance of these glorious creations. In this movement, the architect should assume a central role in order to develop a more communicative term for the proper understanding of their value beyond the boundaries of textbooks and research papers.

BIBLIOGRAPHY

Reference Books and Official Reports

Chapters, Articles and Proceedings

Websites

12 **REFERENCE BOOKS AND**
13 **OFFICIAL REPORTS**

14

15

16 **Ahmed, Khondkar I.** (1994)

17 *Up to the Waist in Mud – Earth-based Architecture in Rural Bangladesh*, Dhaka: University
Press Ltd.

18

19 **Ahmed, Nazimuddin** ed. (1979)

20 *Bangladesh Archaeology (Vol. 1, No. 1)*, Dhaka: Department of Archaeology and Museums,
Ministry of Education and Religious Affairs, Sports and Cultural Division, Government
of People's Republic of Bangladesh

21

22 **Ahmed, Nazimuddin** (1984)

23 *Discover the Monuments of Bangladesh – A Guide to Their History, Location and Development*,
Dhaka: University Press Ltd.

24

25 **Ahmed, Nazimuddin** (1975)

26 *Mahasthan – A Preliminary Report of the Recent Archaeological Excavations at*
Mahasthangarh, Dhaka: Department of Archaeology and Museums, Ministry of
Education and Religious Affairs, Sports and Cultural Division, Government of People's
Republic of Bangladesh

27

28 **Alam, A.K.M. Shamsul** (1976)

29 *Mainamati*, Dhaka: Department of Archaeology and Museums, Ministry of Education and
Religious Affairs, Sports and Cultural Division, Government of People's Republic of
Bangladesh

30

31 **Alam, A.K.M. Shamsul** (1938)

32 *Varendra Anchaler Itihash*, Rajshahi: Shampadana Parishad

33

34 **Alam, Md. Shafiqul** (2004)

35 *Paharpur and Bagerhat – Two World Cultural Heritage Sites of Bangladesh*, Dhaka: UNESCO,
and Department of Archaeology, Ministry of Cultural Affairs, Government of People's
Republic of Bangladesh

36

37 **Alam, Md. Shafiqul and Miah, M.A.H.** (1999)

38 *Excavations at Ananda Vihara, Mainamati, Comilla – 1979-1982*, Dhaka: Department of
Archaeology, Ministry of Cultural Affairs, Government of People's Republic of
Bangladesh

39

40 **Alam, Md. Shafiqul, Dewan, M.T.A., Quadir, M.A. and Miah, M.A.H.** (2000)

41 *Excavation at Rupban Mura, Mainamati, Comilla*, Dhaka: Department of Archaeology, Ministry
of Cultural Affairs, Government of People's Republic of Bangladesh

42

43 **Alam, Md. Shafiqul and Salles, Jean-Francois** eds. (2001)

44 *France-Bangladesh Joint Venture Excavations at Mahasthangarh – First Interim Report (1993-
1999)*, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, Government of
People's Republic of Bangladesh

45

46 **Asher, Frederick M.** (2002)

47 *Art of India – Prehistory to the Present*, London: Encyclopedia Britannica

48

49 **Bagchi, Jhunu** (1993)

50 *The History and Culture of the Palas of Bengal and Bihar – cir. 750AD-cir. 1200AD*, New Delhi:
Abhinav Publications

51

52 **Baker, Kathleen M. and Chapman, Graham P.** (1992)

53 *The Changing Geography of Asia*, New York: Routledge

54

55 **Basham, Arthur L.** (2005)

56 *The Wonders that was India*, New Delhi: Rupa & Co.

57

- 58 **Brown, Percy** (2003)
59 *Indian Architecture – Buddhist and Hindu Periods*, Mumbai: Taraporevala Sons & Co. Pvt. Ltd.
60
- 61 **Chatterjee, Rama** (2985)
62 *Religion in Bengal during the Pala and Sena Times*, Calcutta: Punthi Pustak
63
- 64 **Ching, Francis D.K.** (1996)
65 *Architecture – Form, Space, and Order*, New York: Van Nostrand Reinhold
66
- 67 **Chodron, Thubten** (2001)
68 *Buddhism for Beginners*, New Delhi: Sambhala Publications
69
- 70 **Chomsky Noam** (2002)
71 *Syntactic Structures*, New York: Mouton de Gruyter
72
- 73 **Cole, Emily** (2002)
74 *The Grammar of Architecture*, Boston: Bulfinch Press
75
- 76 **Conze, Edward** (2007)
77 *Buddhism – A Short History*, New York: Oneworld Publications
78
- 79 **Devahuti, D.** ed. (2006)
80 *The Unknown Hsuan-Tsang*, New Delhi: Oxford University Press
81
- 82 **Dikshit, K.N.** (1991)
83 *Memories of the Archaeological Survey of India – No.55*, Delhi: Swati Publications
84
- 85 **Doxiadis, Constantinos A.** (1968)
86 *Ekistics – An Introduction to the Science of Human Settlements*, London: Hutchison and Co. Publishers Ltd.
- 87
- 88 **Duroiselle Charles** (1991)
89 *Memories of the Archaeological Survey of India – No.56*, Delhi: Swati Publications
90
- 91 **Dutt, Sukumar** (1962)
92 *Buddhist Monks and Monasteries in India – Their History and Contribution to Indian Culture*, London: George Allen and Unwin Ltd.
- 93
- 94 **Eaton, Richard M.** (1996)
95 *The Rise of Islam and the Bengal Frontier – 1204-1760*, California: University of California Press
- 96
- 97 **Fisher, Robert E.** (1993)
98 *Buddhist Art and Architecture*, NY: Thames & Hudson
99
- 100 **Fletcher, Banister** ed. (1996)
101 *Banister Fletcher's A History of Architecture*, London: Routledge
102
- 103 **Gallion, Arthur B. and Eisner, Simon** (2000)
104 *The Urban Pattern – City Planning and Design*, New Delhi: CBS Publishers and Distributors
105
- 106 **Groat, Linda and Wang, David** (2002)
107 *Architectural Research Methods*, NY: John Wiley & Sons.
108
- 109 **Grover, Satish** (2003)
110 *Buddhist and Hindu Architecture in India*, New Delhi: CBS Publishers and Distributors
111
- 112 **Grover, Satish** (1981)
113 *The Architecture of India – Islamic (727-1707 A.D.)*, New Delhi: Vikas Publishing House Pvt. Ltd.
- 114
- 115 **Gupta, Charu C. Das** (1961)
116 *Paharpur and Its Monuments*, Calcutta: K.L. Mukhopadhyay
117
- 118 **Haque, Saif UI, Ahsan, Raziul and Ashraf, Kazi K.** ed. (1997)
119 *Pundranagar to Sherebanglanagar – Architecture in Bangladesh*, Dhaka: Chetana Sthapatya Unnoyon Society
- 120 **Hasan, Syed M.** (1987)
121 *Muslim Monuments of Bangladesh*, Dhaka: Islamic Foundation Bangladesh

- 122
123 **Hossain, Md. Mosharraf** (1998)
124 *Pratnatattva – Udyay o Bikas*, Dhaka: Bangla Acedemy
125
- 126 **Hossain, Md. Mosharraf and Alam, Md. Shafiqul** (2004)
127 *The World Cultural Heritage*, Dhaka: Department of Archaeology, Ministry of Cultural Affairs,
Government of People's Republic of Bangladesh
- 128
129 **Husain, A.B.M.** ed. (2007)
130 *Architecture – A History Through the Ages (Cultural Survey of Bangladesh Series-2)*, Dhaka:
Asiatic Society of Bangladesh
- 131
132 **Imam, Abu** (2000)
133 *Excavations at Mainamati – An Exploratory Study*, Dhaka: The International Center for the
Study of Bengal Art
- 134
135 **Jain, Jagdish C. and Bhattacharyya, Narendra N.** (1994)
136 *Jainism and Prakrit in Ancient and Medieval India – Essays for Prof. Jagdish Chandra Jain*,
Calcutta: Manohar
- 137
138 **Jones, Robert W.** (2011)
139 *Applications of Palaeontology – Techniques and Case Studies*, New York: Cambridge
University Press
- 140
141 **Jung, Carl G.** ed. (1968)
142 *Man and His Symbols*, New York: Dell Publishing
143
- 144 **Koenigsberger, Otto H., Ingersoll, T.G., Mayhew, Alan and Szokolay, S.V.** (2011)
145 *Manual of Tropical Housing and Building – Climatic Design*, New York: Universities Press
146
- 147 **Kramrisch, Stella** (1976)
148 *The Hindu Temple – Vol.1*, New Delhi: Motilal Banarsidass
149
- 150 **Levi-Strauss, Claude** (1963)
151 *Structural Anthropology*, (trans.) C. Jacobson and B. Schoepf, New York: Basic Books
152
- 153 **Ling, Trevor** (1980)
154 *Buddhist Revival in India – Aspects of the Sociology of Buddhism*, London: St. Martin's Press
155
- 156 **Miah, M.A.H. and Musa, A.** (2001)
157 *A Preliminary Report on Excavations at Halud Vihara*, Dhaka: Department of Archaeology,
Ministry of Cultural Affairs, Government of People's Republic of Bangladesh
- 158
159 **Mitra, Debala** (1980)
160 *Buddhist Monuments*, Kolkata: Sahitya Samsad
161
- 162 **Mukherji, Ramaranjan and Maity, Sachindra K.** (1967)
163 *Corpus of Bengal Inscriptions Bearing on History and Civilization*, Calcutta: K.L.
Mukhopadhyay
- 164
165 **Murthy, K. Krishna** (1987)
166 *Glimpses of Art, Architecture, and Buddhist Literature in Ancient India*, New Delhi: Abhinav
Publishers
- 167
168 **Norberg-Schulz, Christian** (1991)
169 *Genius Loci – Towards a Phenomenology of Architecture*, NY: Rizzoli
170
- 171 **Phuoc, Le H.** (2010)
172 *Buddhist Architecture*, NY: Grafikol
173
- 174 **Rahman, Habibur** (1997)
175 *Excavation Report on Itakhola Mura, Mainamati, Comilla*, Dhaka: Department of Archaeology,
Ministry of Cultural Affairs, Government of People's Republic of Bangladesh
- 176 **Rapoport, Amos** (2005)
177 *Culture, Architecture, and Design*, Chicago: Locke Science Publishing Co. Inc.
178
- 179 **Rashid, Haroun Er** (1991)
180 *Geography of Bangladesh*, Dhaka: University Press Limited
181

- 182 **Rashid, M. Harunur** (2008)
183 *The Early History of South-East Bengal in the Light of Archaeological Material*, Dhaka: Itihash
Academy
- 184
185 **Roy, Ajoy** (1997)
186 *Adi Bangali – Nritattik o' Shomajtattik Bishleshon*, Dhaka: Bangla Academy
187
- 188 **Roy, Atul C. and Chattaroy, Pranab K.** (2007)
189 *Bharater Itihash*, Calcutta: MoulikLibrary
190
- 191 **Roy, Niharranjan** (1993)
192 *Bangalir Itihash – Adiparba*, Kolkata: Dey's Publishing
193
- 194 **Shafer, Robert** (1954)
195 *Ethnography of Ancient India*, Wiesbaden: Otto Harrassowitz
196
- 197 **Sharma, Ram S.** (1987)
198 *Urban Decay in India – c.300-c.1000*, New Delhi: Munshiram Manoharlal Publishers
199
- 200 **Singh, S. Kumar** (1982)
201 *History and Philosophy of Buddhism*, New Delhi: Associated Book Agency
202
- 203 **Smith, Vincent** ed. (1983)
204 *The Oxford Student's History of India*, Delhi: Oxford University Press
205
- 206 **Snodgrass, Adrian** (2007)
207 *The Symbolism of the Stupa*, New Delhi: Motilal Banarsidass
208
- 209 **Strayer, Joseph R. and Gatzke, Hans W.** (1979)
210 *The Mainstream of Civilization*, New York: Harcourt Brace Jovanovich, Inc.
211
- 212 **Sultana, Sabiha** (1993)
213 *Rural Settlements in Bangladesh – Spatial Pattern and Development*, Dhaka: Graphosman
214
- 215 **Thapar, Romila** (2003)
216 *The Penguin History of Early India – from the Origin to AD1300*, New Delhi: The Penguin Press
217
- 218 **Tosh, John** (1984)
219 *The Pursuit of History – Aims, Methods and New Directions in the Study of Modern History*,
New York: Longman Group
- 220
221 **Walsh, Judith E.** (2006)
222 *A Brief History of India*, New York: Facts on File Inc.
223
- 224 **Watson, Adam** (2002)
225 *The Evolution of International Society*, London: Routledge
226
- 227 **Zakariah, A.K.M.** (2011)
228 *The Archaeological Heritage of Bangladesh*, Dhaka: Asiatic Society of Bangladesh
- 229
- 230
- 231
- 232
- 233
- 234 CHAPTERS, ARTICLES AND**
235 PROCEEDINGS
- 236
- 237

- 238 **Ahmed, Bulbul and Asaduzzaman, Md.** (2015)
239 'Pilgrim Accounts', in: *Buddhist Heritage of Bangladesh*, (ed.) Bulbul Ahmed, Dhaka: Nymphaea
Publication
- 240
241 **Ahmed, Bulbul, Hasan, M.A.A., Amiruzzaman, Md., Rahman, M.A. and Alam, K. Mahfuz** (2015)
242 'Ancient Sites and Settlements', in: *Buddhist Heritage of Bangladesh*, (ed.) Bulbul Ahmed,
Dhaka: Nymphaea Publication
- 243
244 **Akhtar, Shirin and Oyasu, kiichi** (2012)
245 'Section-4 – Spatial Planning', in: *Training and Capacity Building for Long-term Management
and Best Practice Conservation for the Preservation of Cultural Heritage Sites and
World Heritage Properties in Bangladesh*, UNESCO, and Department of Archaeology,
Ministry of Cultural Affairs, Government of People's Republic of Bangladesh: Dhaka
- 246
247 **Alam, Md. Shafiqul and Yasmin, Lovely** (2005)
248 "Shalibahan Rajar Bari", in: *Pratnacharchha*, Volume 1, Dhaka
249
- 250 **Attoe, Wayne O.** (1979)
251 'Theory, Criticism, and History of Architecture', in: *Introduction to Architecture*, (eds.) James C.
Snyder and Anthony J. Catanese, New York: McGraw Hill Publishing Company
- 252
253 **Eaton, Richard M.** (1984)
254 'Islam in Bengal', in: *The Islamic Heritage of Bengal*, (ed.) George Michell, UNE-UNESCO:
Paris
- 255
256 **Elahi, K. Maudood** (1984)
257 'Urbanization in Bangladesh – A Historical Perspective', in: *Seminar on Urbanization*,
Bangladesh Unnayan Parishad: Dhaka
- 258
259 **Elahi, K. Taufiq** (2008)
260 "Mosque Architecture during the Independent Sultanate of Bengal – A comparative Review on
Gaur Mosques", in: *The Journal of the Institute of Bangladesh Studies*, Volume 31,
Rajshahi
- 261
262 **Haque, Enamul** (2015)
263 'Mainamati – A Parallel to Nalanda!', in: *Buddhist Heritage of Bangladesh*, (ed.) Bulbul Ahmed,
Dhaka: Nymphaea Publication
- 264
265 **Hoque, Seema and Hoque, M.M.** (2004)
266 'Understanding the Paharpur Temple Architecture in New Perspective', in: *International
Seminar on Elaboration of an Archaeological Research Strategy for Paharpur World
Heritage Sites and its Environment*, UNESCO: Dhaka
- 267
268 **Hossain, Md. Mosharraf** (2004)
269 'An Explanation in the Surrounding of the Monastery of Paharpur – An Appraisal', in:
*International Seminar on Elaboration of an Archaeological Research Strategy for
Paharpur World Heritage Sites and its Environment*, UNESCO: Dhaka
- 270
271 **Jung, Carl G.** (1968)
272 'Approaching the Unconscious', in: *Man and His Symbols*, (ed.) Carl G. Jung, New York: Dell
Publishing
- 273
274 **Mafizuddin, Mirza** (1992)
275 'The Physiography of Bangladesh – An Overview', in: *Bangladesh – Geography, Environment
and Development*, (eds.) K. Maudood Elahi, A.H.M. Raihan Sharif and A.K.M. Abul
Kalam, Dhaka: Bangladesh National Geographical Association
- 276
277 **Myer, Prudence R.** (1961)
278 "Stupas and Stupa-Shrines", in: *Artibus Asiae*, Volume XXIV, Zurich
279
- 280 **Naqi, M. Ali, Islam, Ziaul, Bhuiyan, M.S. and Gomes, C.D.** (2000)
281 "The Virtual Reconstruction of Paharpur Vihara", in: *Khulna University Studies*, Volume 1(1),
Khulna
- 282
283 **Naqi, M. Ali and Mollick, Falguni** (2004)

- 284 'Form and Morphology of Paharpur Vihara – A Conjectural Virtual Reconstruction', in:
*International Seminar on Elaboration of an Archaeological Research Strategy for
Paharpur World Heritage Sites and its Environment*, UNESCO: Dhaka
- 285
- 286 **Rapoport, Amos** (1979)
- 287 'Cultural Origins of Architecture', in: *Introduction to Architecture*, (eds.) James C. Snyder and
Anthony J. Catanese, New York: McGraw Hill Publishing Company
- 288
- 289 **Rashid, M. Harunur** (1979-81)
- 290 "The Geographical Background to the History and Archaeology of Southeast Bengal", in: *The
Journal of the Asiatic Society of Bangladesh*, Vol-XXIV-VI, Dhaka
- 291
- 292 **Rashid, M. Mizanur** (2007)
- 293 "From Stupa to Stupa Shrine – The Changing Morphology of Buddhist Religious Edifice per
Excellence", in: *Protibesh*, BUET, Volume 11(01-2007), Dhaka
- 294
- 295 **Rashid, M. Mizanur and Rahman, Hafizur** (2016)
- 296 "Revisiting the Past through Virtual Reconstruction – The Case of the Case of the Grand
Monuments of Paharpur, Bangladesh", in: *Virtual Palaces*, Part 1, Leuven
- 297
- 298 **Reza, Habib Md.** (2008)
- 299 "Bengal Gupta Viharas – Did Such Phenomenon Exist?", in: *The International Journal of
Interdisciplinary Social Science*, <http://www.SocialSciences-Journal.com>, Melbourne:
Common Ground Publishing Pty. Ltd.
- 300
- 301 **Reza, Habib Md., Bandyopadhyay, Soumyen and Mowla, Azizul** (2015)
- 302 "Traces of Buddhist Architecture in Gupta and post-Gupta Bengal – Evidence from Inscriptions
and Literature", in: *Journal of Eurasian Studies*, Vol-VII, Issue-3, Hanyang University,
Elsevier
- 303
- 304 **Smith, Monica L.** (2001)
- 305 'The Archaeological Hinterlands of Mahasthangarh – Observations and Potential for Future
Research', in: *France-Bangladesh Joint Venture Excavations at Mahasthangarh –
First Interim Report (1993-1999)*, (eds.) Md. Shafiqul Alam and Jean-Francois Salles,
Dhaka: Department of Archaeology, Ministry of Cultural Affairs, Government of
People's Republic of Bangladesh
- 306
- 307
- 308
- 309
- 310
- 311
- 312
- 313
- 314
- 315
- 316
- 317 **WEBSITES**
- 318
- 319
- 320 **Ancient World History**

- 321 *Pataliputra*, accessed on: 2017, web:
<http://earlyworldhistory.blogpost.com/2012/02/pataliputra.html?m=1>
- 322
- 323 **Art Encyclopedia**
- 324 *Hellenistic Art*, accessed on: 2018, web: <http://visual-arts-cork.com/antiquity/hellenistic-art.htm>
- 325
- 326 **Banglapedia**
- 327 *Bengal Delta*, accessed on: 2015, web: http://en.banglapedia.org/index.php?title=Bengal_Delta
- 328 *Chandra Dynasty*, accessed on: 2018, web:
http://en.banglapedia.org/index.php?title=Chandra_Dynasty_The
- 329 *Deva Dynasty*, accessed on: 2018, web:
http://en.banglapedia.org/index.php?title=Deva_Dynasty
- 330 *Devapala*, accessed on: 2015, web: <http://en.banglapedia.org/index.php?title=Devapala>
- 331 *Dharmapala*, accessed on: 2015, web: <http://en.banglapedia.org/index.php?title=Dharmapala>
- 332 *History*, accessed on: 2015, web: <http://en.banglapedia.org/index.php?title=History>
- 333 *Khadga Dynasty*, accessed on: 2018, web:
http://en.banglapedia.org/index.php?title=Khadga_Dynasty
- 334 *Mainamati*, accessed on: 2016, web: <http://en.banglapedia.org/index.php?title=Mainamati>
- 335 *Samatata*, accessed on: 2018, web: <http://en.banglapedia.org/index.php?title=Samatata>
- 336 *Sena Dynasty*, accessed on: 2018, web:
http://en.banglapedia.org/index.php?title=Sena_Dynasty
- 337
- 338 **British Library**
- 339 *Lomas Rishi Cave*, accessed on: 2018, web:
<http://www.bl.uk/onlinegallery/onlineex/apac/photocoll/e.html>
- 340
- 341 **Buddhist Art News**
- 342 *The Buddhist Heritage of Pakistan – Art of Gandhara*, accessed on: 2018, web:
<http://www.buddhistartnews.wordpress.com/2011/08/23/the-buddhist-heritage-of-pakistan-art-of-gandhara/>
- 343
- 344 **Buddhist Studies – Buddha Dharma Education Association and BuddhaNet**
- 345 *The Theory of Karma*, accessed on: 2017, web: <http://www.buddhanet.net/e-learning/karma.htm>
- 346
- 347 **Chinese Buddhist Encyclopedia**
- 348 *Mantrayana and Vajrayana*, accessed on: 2018, web:
http://www.chinabuddhismencyclopedia.com/en/index.php?title=Mantrayana_and_Vajrayana
- 349
- 350 **Encyclopedia Britannica Online**
- 351 *Buddhism*, accessed on: 2016, web:
<http://www.britannica.com/EBchecked/topic/83184/Buddhism/68665Southeast-Asia>
- 352 *Indus Civilization*, accessed on: 2018, web: <https://www.britannica.com/topic/Indus-civilization>
- 353
- 354 **Encyclopedia Iranica**
- 355 *Gandharan Art*, accessed on: 2018, web: <http://www.iranicaonline.org/articles/gandharan-art>
- 356
- 357 **Flickr**
- 358 *A map of Candi Sewu complex, near Prambanan (Indonesia)*, accessed on: 2018, web:
<http://www.flickr.com/photos/quadralectics/4308600515>
- 359
- 360 **Great Buildings Collection – The Architecture Week**
- 361 *Architecture of India*, accessed on: 2018, web:
<https://www.greatbuildings.com/places/india.html>
- 362
- 363 **Hidden Architecture**
- 364 *Ananda Temple*, accessed on: 2018, web: <https://www.hiddenarchitecture.net/2015/10/ananda-temple.html?m=1>
- 365
- 366 **Indian Museum**
- 367 *Gandhara Gallery*, accessed on: 2018, web:
<https://cp.indianmuseumkolkata.org/gallery/details/MTU%3D>
- 368
- 369 **Insight – The Practicing Dharma Expounder for Today**
- 370 *Rajgir – India*, accessed on: 2018, web: https://www.buddhaviews.com/rajgir_india.htm
- 371
- 372 **KPBS – News**

- 373 *Secrets of the Dead – Bones of the Buddha*, accessed on: 2018, web:
<https://www.kpbs.org/news/2013/jul/18/secrets-dead-bones-buddha/?amp=amp>
- 374
- 375 **National Geographic Society**
- 376 *Oxbow Lake*, accessed on: 2018, web:
<https://www.nationalgeographic.org/encyclopedia/oxbow-lake/>
- 377
- 378 **Ordinary Mostly**
- 379 *Angkor Wat*, accessed on: 2018, web: <https://ordinarymostly.wordpress.com/tag/angkor-wat/>
- 380
- 381 **ResearchGate**
- 382 *Priene*, accessed on: 2018, web: <https://www.researchgate.net/figure/Priene-Aydin-Turkey>
- 383
- 384 **Thanhsiang – Articles**
- 385 *Medicinal Plants*, accessed on: 2018, web: <https://thanhsiang.org/ki/articles/mp/mp-06sala.htm>
- 386
- 387 **The Buddhist Forum**
- 388 *Buddhist Stupa Dharmarajika – Taxila*, accessed on: 2018, web:
<https://thebuddhistforum.com/buddhist-stupa-dharmarajika-taxila>
- 389
- 390 **Tuepfli's Global Village Library**
- 391 *Quellenkunde zur indischen Geschichte bis 1858 (Zum Beispiel – Taxila)*, accessed on: 2018,
web: <https://www.payer.de/quellenkunde/quellen051.htm>
- 392
- 393 **UNESCO – WHC**
- 394 *Bangladesh – UNESCO World Heritage Center*, accessed on: 2015, web:
whc.unesco.org/en/statesparties/bd
- 395
- 396 **Vishvkosh – Wordpress**
- 397 *Post-Mauryan Period*, accessed on: 2018, web: <https://vishvkosh.wordpress.com/post-mauryan-period/>
- 398
- 399 **Wikipedia**
- 400 *Bengal*, accessed on: 2015, web: <https://en.m.wikipedia.org/wiki/Bengal>
- 401 *Greco-Buddhist Art*, accessed on: 2018, web: https://en.m.wikipedia.org/wiki/Greco-Buddhist_art
- 402 *Marzabotto*, accessed on: 2018, web: <https://en.m.wikipedia.org/wiki/Marzabotto>
- 403 *Piprahwa*, accessed on: 2018, web: <https://en.m.wikipedia.org/wiki/Piprahwa>
- 404 *Shaji-ki-Dheri*, accessed on: 2018, web: <https://en.m.wikipedia.org/wiki/Shaji-ki-Dheri>
- 405 *South Asia*, accessed on: 2015, web: https://en.m.wikipedia.org/wiki/South_Asia
- 406
- 407 **World Atlas**
- 408 *What is the Indian Subcontinent*, accessed on: 2017, web:
<https://www.worldatlas.com/articles/what-is-the-indian-subcontinent.html?>

APPENDICES

Appendix-A	Brahmanic Practice
Appendix-B	Jainism
Appendix-C	<i>Vajrayana</i> Buddhism
Appendix-D	Mahasthanagarh
Appendix-E	Mainamati
Appendix-F	Harappa and Mohenjo-Daro
Appendix-G	Hellenistic Classicism

APPENDIX-A

BRAHMANIC PRACTICE

i.e. Vedic Hinduism

Quotation(s) from:

Singh, S. Kumar (1982), *History and Philosophy of Buddhism*, Patna: Associated Book Agency

[p.4]

“In Indian society the intellectual aristocracy of the Brahmins, who afterwards claimed to direct the religious life and thought of India, had less extensive influence in those days.⁸⁸ The Aryans divided the then existing society into four social grades (*Varnas*) the Brahmanas, the Ksatriyas, the Vaisyas and the Sduras including non-Aryans. The Brahmanas claimed their descent from the sacrificing priests and the Ksatriyas from the nobles. Both of them were proud of their high birth and fair complexion. Below this were the peasantry (*Vaisyas*) and the lowest of all, the Sduras who worked for hire, were engaged in handicrafts, or service and were darker in color. Besides these there were *Hina-Jatiyo* or low tribes who were hereditary craftsmen, and *Hina-Sippani*, i.e., low trades. Last of all were most despised aboriginal tribes, *Candalas* and *Pukkusas*. There were also predatory slaves who were not ill-treated.

There were restrictions as to inter-marriage and eating together. Marriage depended upon the *Gotra* or lineage among Aryans and among other people either on the tribe or on the village. There is no instance of marriage among two parties of the same native village. The elements, the foundations of the caste system were there; but the system itself did not yet develop. What we know of the period, 800-600 BC, with which we are concerned, is most due to the Brahmanic literature. The Brahmanic view, which is mostly accepted is that the Brahmins were then socially the highest class and the repository of religion and culture.”

Quotation(s) from:

Walsh, Judith E. (2006), *A Brief History of India*, New York: Facts on File Inc.

[p.23]

“**Vedic Hinduism:** As the once nomadic peoples who produced the PGW pottery settled into agrarian life in the Gangetic region, the religion they had originally practiced changed and adapted. Key concepts of Hinduism, such as reincarnation, karma (actions, fate), dharma (duty), and the four *varnas* (classes) developed during this time. These new ideas were well adapted to agrarian (or even urban) settled life; they explained and justified the social and economic divisions of the Gangetic society in terms of and individual's good or bad conduct in former lives. Taken together these concepts created the basic worldview assumed by all indigenous religions in India.

The Vedic Hinduism (or Brahmanism) that developed out of the religion of the Rig-Veda in the period (c.1000-400 BC) was as different from modern Hinduism as the ancient Old Testament Hebrew religion was from today's Christianity. Vedic Hinduism centered on rituals addressed to Vedic

⁸⁸ Before and during the birth of Gautama Buddha (c.8th-6th BC).

gods, performed by Brahman priests around a sacred fire. Some gods represented the natural elements – Agni, the fire; Surya, the sun; or Soma, the defined hallucinogenic plant used in rituals. Others had human characteristics or were associated with a moral or ethical principle: the god Indra was a mighty warrior, while Varuna stood for cosmic order (*rita*). In later Hinduism some of this Vedic gods (Indra, Agni, Surya) would become minor figures in the Hindu pantheon, while others, like Varuna, would disappear entirely. Gods barely mentioned in the Vedic texts – such as Vishnu – would later assume much greater importance.”

[pp.25-26]

“*Karma and Reincarnation*: All Vedic sacrifices, from daily domestic offerings to the great Horse Sacrifice, were predicted on the assumption that their rituals produced consequences. But it was only in the Upanishads (c.600 BC) that the idea appeared that humans also would experience the consequences of past acts. At death, one Upanishadic passage explains, the most virtuous would go to ‘*the worlds of brahman*’. Others – after the effects of their good deeds on Earth were used up – would return to Earth and ‘take birth in the fire of woman ...[and] circle around the same way’. The least virtuous would ‘become worms, insects, or snakes’.

These new ideas of reincarnation and karma (the effect of past actions on future lives) were also linked to the four classes, or *varnas*, of human society. These classes had first been mentioned in the late Rig-Vedic hymn. There they were created (as was the entire universe) out of the sacrifice of the first man (*purusha*): ‘His mouth became the brahman his two arms were made into the *rajanyas* (Kshatriyas), his two thighs the *vaishyas*; from his two feet the *shudra* was born’.

In later Vedic texts (as in Rig-Vedic verse) the four classes were both hierarchically ranked and occupationally defined. Brahmans performed the ritual sacrifices. They were the teachers, readers, and preservers of the sacred texts. Kshatriyas were the warriors and the kings, whose duty was to protect the society. Vaishyas were the farmers and merchants. The Sudras were the servants. Rebirth into a higher class showed that one had been virtuous in the past lives; rebirth at a lower level showed the opposite. *Moksha*, or escape from the cycle of reincarnation entirely, was the ultimate goal of the Hindu religious tradition (as also of Buddhism, in which it is called ‘*nirvana*’, and Jainism). But *moksha* was too difficult for most to achieve. For most Hindus the goal of life was the fulfillment of the religious and social duties (dharma) of one’s *varna* so as to acquire good karma and rebirth into a higher class: ‘Those whose conduct has been good’, says the *Chandogya Upanishad*, ‘will quickly attain some good birth, the birth of a Brahman, or a Kshatriya, or a Vaisya. But those whose conduct has been evil, will quickly attain an evil birth, the birth of a dog, or a hog, or a Chandala (an Untouchable)’.

In the *Mahabharata* and the *Ramayana* – the great epic poems whose composition had begun by 500 BC – these ideas form the moral backdrop against which human lives and events play out. The fulfillment of the duties (dharma) of one’s class determined what happened in the future lives. ‘A Shudra’, says the old grandfather in the *Mahabharata*, ‘should never amass wealth ...By this he would incur sin’. This outline of a social system – and the concepts associated with it – remained fundamental to both Vedic and later Hinduism, as well as the heterodox religions indigenous to India.”

APPENDIX-B

JAINISM

i.e. The Jaina Belief

Contemporary to Buddhism, the philosophy and religion of Jainism is one of the major reactionary movements against the authority of the Brahmanic principles of the late-Vedic rulers in Ancient India. Vardhaman Mahavira, the founder of Jainism, is considered to be the twenty-fourth and the last *Tirthankara* (meaning, the savior and spiritual teacher of the righteous path), who himself accomplished the most rigorous asceticism and attained *kaivalya*⁸⁹. As in the doctrines of Buddhism, Jainism before them also focuses on the negativity of the *karmic* influences that binds man to the repetitive cycles of reincarnation and emphasizes largely on *ahimsa* or nonviolence. Monastic practices are given priority in its philosophy.

Historical references suggest that Jainism was once in a while in the social-cultural mainstream of the Indian territories, but Buddhism had been more popular in terms of political priority and chronological spread. During the reign of Chandragupta Maurya in the 3rd century BC, Jainism's presence in the royal council seems to be profound as the emperor himself took up its teachings as his own and subsequently arranged the first Jain council at Pataliputra. Later in the 5th century AD, further amendments were made in order to validate its canon with the contemporary social-political setting, and from there, Jainism became separated into two major factions – namely, the *Svetambara* Order and the *Digambara* Order.

In Bengal, Jainism is seen to have been coexisting in peace with Buddhism and other religious philosophies right before the *Palas* claimed their dominion over the region. But contrasting to Buddhism, Jainism somehow survived the Muslim invasion of India and kept itself alive through the centuries that followed.

⁸⁹ *Kaivalya* – The supreme knowledge and the final liberation from the bonds of pleasure and pain.

APPENDIX-C

VAJRAYANA BUDDHISM

i.e. Tantric or Esoteric Buddhism

Quotation(s) from:

Phuoc, Le H. (2010), *Buddhist Architecture*, NY: Grafikol

[pp.22-26]

“1. Introduction:

While the Theravada and Mahayana were the first and second phase of Buddhism, the Vajrayana School, also known as Esoteric or Tantric Buddhism, was the third and last phase of Indian Buddhism. This school appeared as early as the sixth century CE about the same time when the strength of Buddhism in India gradually declined and finally disappeared altogether after c.1200 CE. In this final phase of Indian Buddhism there were many non-Buddhist elements infiltrating Buddhism, particularly from the Tantric branches of Hinduism. The Vajrayana was formerly considered as an offshoot of the Mahayana as many of its philosophical concepts and practices had been adopted from the latter; however, the fusion of Tantricism and Buddhism has led to the recognition of the Vajrayana as a new and distinct Buddhist school. To Buddha and the Theravadians individual self-mastery is the way to *Nirvana* while the Mahayanists insist on intellectual enlightenment through rigorous metaphysical inquiries; the Vajrayana believes in enlightenment that can be attained in the practitioner’s lifetime through symbolic rituals, complex rites and imageries. It is important not to confuse between the Vajrayana and Tibetan Buddhism, or Lamaism, as the former was the latter’s Indian predecessor when Tibet became a Vajrayana stronghold after the demise of Indian Buddhism; the fusion of the Vajrayana and native Bon religion of Tibet gave rise to Tibetan Buddhism around eighth century CE.

2. Religious Foundations:

The Vajrayana generally accepts basic premises of the Mahayana including *Sutra*, *Vinaya*, and *sastras*; however, its religion is a combination of Buddhist and Tantric practices and so it has also developed its own canons over times. The Vajrayanists, like other sectarian Buddhists before them, also believe their special branch of Buddhism even superior to either the Mahayana or Theravada; they adopt most Mahayana tenets such as the *bodhisattva* concept, the pantheon of Buddhas and *bodhisattvas*, the doctrines of the Madhyamikas and the Yogacaras, etc. They further supplement the ideals of *siddha* (the Perfected) or a Tantric Buddhist spiritual adept and guru who has already attained enlightenment and spiritual power and ready to guide unenlightened beings to achieve their religious goals even in their lifetime. The essential difference between the Mahayana and Vajrayana lies in the latter’s transformation of Mahayana doctrines into symbolic terms, in both literature and religious imageries, with the infusion of numerous Tantric elements. These esoteric elements have occasionally surfaced throughout the Vedas, especially the Atharva-veda; however, their reappearance in later Tantric Hinduism and the Vajrayana was advanced versions. In this latest phase of Buddhism, one can clearly discern vast differences in doctrines and practices between the Vajrayana and those of the Theravada and Buddha’s *Dharma*. Some fundamental characteristics of the Vajrayana are:

a. Tantra: Tantras are the foremost canonical literature of the Vajrayana centering on yoga practices, ritualism, iconography, etc.; they are divided into four categories: *kriya-tantra* (Action Tantras), *carya-tantra* (Performance Tantras), *yoga-tantra* (Yoga Tantras), and *anuttarayoga-tantra* (Supreme Yoga Tantras). *Kriya-tantras* and *carya-tantras* emphasize magical incantations or spells to achieve personal benefits and gain merits while the *yoga-tantras* are instructions on attaining Buddhahood through a series of consecratory rites; the *anuttarayoga-tantras*, the highest class, prescribe ritualized consecrations involving symbolic sexual union (*yuganaddha*) with members of the opposite sex. The first three categories of *tantras* are scattered throughout late Mahayana *sutras* and some deities in these *tantras* also belong to the Mahayana. The *anuttarayoga-tantras*, and particularly the *yogini-tantras* since these emphasize females and involve sexual union with the female *yoginis*, were mainly the products of the wandering *yogins*, and non-celibate monks loosely associated with Buddhism. These Tantric Buddhist saints are collectively known as the *siddhas*; they were a class of highly unconventional individuals who were obviously not bounded by established religious conducts of a traditional Buddhist monastery or moral sanctions of the society.

b. Mantra, Dharani, Mudra: In sacred Vajrayana ceremonies, Tantricists often employ the *mantra* (an incantation invoking a particular deity) and *mudra* (a hand gesture often associated with the *mantra*) calling upon the presiding deities for protection and services; *dharanis* are also *mantras* but they are generally longer from a sentence to several pages. The most well-known of all *mantras* is 'Om Mani Padme Hum' calling upon Avalokitesvara for blessings and protection. It is important to distinguish between the Tantric *mudras* and simple hand gestures in early Buddhist sculptures; the latter were the sculptors' inventions to associate the depicted images with the particular events in Buddha's life and they did not appear to have any supposedly magical powers as in the Vajrayana *mudras*. The employment of *mantras* and *mudras* in religious rites could be traced back to the Vedic Hinduism; however, many *mudras* in Vajrayana sculptures were iconographically derived from early Indian Buddhist sculptures.

c. Symbolism: Symbolism is a very important component of the Vajrayana and in the process of spiritual enlightenment; the manifestations of divinity and religious states would often be transformed into symbolic objects in Vajrayana practices and imageries. Thus the *vajra* (thunderbolt, diamond, unbreakable) symbolically represents *upaya* (Skillful Means), male, and the sun while the *ghanta* (bell) or *padma* (lotus) symbolizes *prajna* (Wisdom), female, and the moon. The symbolic sexual union (*yuganaddha*) between these two opposite elements in the *anuttarayoga-tantras* personifies the ultimate state of Enlightenment (*Vajra*) and this concept is literally and graphically depicted in Vajrayana religious imageries. Scholars have also noticed the highly symbolic, deliberately incomprehensible, and even offensive language in many Vajrayana *tantras*, especially those in the *anuttarayoga-tantras*; the beginning of the Guhyasamaja-tantra states:

Thus have I heard. At one time, the Lord was residing in the vaginas of the women who are the adamantine body, speech, mind, and heart of all the Tathagatas [possibly denoting sexual yoga ritual].

And the Buddhakapala-yogini-tantra-rajā says:

The Bhagavan – having correctly explained the mantras and all the tantras of adamantine words in the great adamantine site – this lord of all the Tathagatas placed its vajra [phallus] in his consort's lotus [vulva], and promptly entered final nirvana in the lady's vagina [possibly denoting sexual copulation ritual and enlightenment].

The seminal fluid might therefore symbolically be described in a fabulously allegorical term as *Bodhisitta* (Seed of Enlightenment) while the orgasmic experience could be expressed as *Mahasukha* (Great Bliss). Enlightenment, which is ultimately equated with Buddhahood, is achieved in this very moment of non-duality when all conceptual thoughts cease; it also represents the union of the male and the female principle, or *upaya* and *prajna* respectively, in non-dual, empty, and enlightened state called *Sunya* or *Vajra*. Another important icon in Vajrayana religious symbolisms is the *mandala* (circle); in the Vajrayana context, the *mandala* represents the sphere or field of an individual or a group of divinities like Buddhas, *bodhisattvas*, and other Tantric deities. A *mandala*, which is typically presided over by a demiurgic deity in the center, can therefore theoretically interact with one or countless other *mandalas*. In religious imageries, a *mandala* is often depicted as a circle or a set of circles circumscribed inside a square having four gates on the four sides; the main gate faces east which is also the direction Sakyamuni gazed when he attained Enlightenment. Other interpretations suggest the realm within the inner circle of the *mandala* represents *Nirvana* and the world of enlightened Buddhas and *bodhisattvas* while the outer square and periphery symbolize *Samsara* and the world of unenlightened beings. A *mandala* is essentially a ritual device for meditational practitioners to visualize and identify with the deities residing in it who would be manifested during the ritualized consecration; thus it is an important component in the process of enlightenment. There are two important types of *mandalas*, namely the *yoga-tantra mandala* and the *anuttarayoga-tantra mandala*; the former is usually administered by a single male deity like Vairocana who is accompanied by male or female *prajnas* or *saktis* whereas the latter typically involves a purely Tantric pair of male and female deities like Hevajra and Nairatmya in *yuganaddha* and their attendants can be all females in many cases.

d. Rites and Rituals: The Vajrayanists emphasis on rituals and ceremonies means that a spiritual preceptor or teacher is crucial for a student in the realization of *Vajra*. Besides this requirement, a novice also has to go through a series of highly elaborate consecrations (*abhiseka*) full of symbolic and complex rites under the strict guidance of his guru to be initiated into the Vajrayana inner circles; the ultimate outcome of these consecratory rituals is the promise of a speedy enlightenment in one's lifetime.

e. Vajra: The Vajrayana derives its name from *Vajra*, the highest state of enlightenment when the practitioner attains *Mahasukha*; once one realizes this non-dual *Vajra* state, which is also equated with *Sunya*, one attains Buddhahood. The practitioner can realize *Vajra* through a series of ritualized *abhiseka* involving esoteric symbolisms, complex imageries, and magical incantations. During such ceremonies, a religious belief is that a chosen Tantric deity, Buddha, or *bodhisattva* would descend, manifest, and merge with the practitioner to accelerate in his advancement toward enlightenment; once the *Bodhicitta* has been manifested during the consecration, the practitioner attains the state of *Mahasukha*. David Snellgrove lucidly summed up the complex Vajrayana philosophy pertaining to the attainment of enlightenment, which radically differs from the rigorous self-discipline of the Theravada and the compassionate selfless sacrifice of the Mahayana:

The essence of Tantric practice may be described as the visualization of a certain 'chosen divinity', [often identified with a certain *mandala*] believed to be the very essence of Buddhahood, and the deliberate identification of oneself with this divinity. Once this state of self-identification is realized, one achieves the state of enlightenment which the chosen divinity embodies.

Thus during the *abhiseka*, the Vajrayana practitioner would summon the chosen Tantric deity, *bodhisattva*, or even Buddha by performing precise rites in conjunction with the *mantras*, *mudras*, *mandalas*, etc. These will greatly amplify the potency of the rituals and facilitate the merger of the deity's 'enlightened essence' with that of the practitioner who subsequently also becomes enlightened or embodies enlightenment. The ultimate outcome is the realization of a transcendental and non-dual state between the practitioner and the 'other' power, the inner and outer, etc. since all are in essence *Sunya*; ordinary humans, however, still differentiate because of their unenlightened nature. Thus the Vajrayana radically differs from other Buddhist schools in that it employs a highly convoluted ritualized method to achieve rapid enlightenment even in one's lifetime. The orthodox Theravada, on the other hand, relies on a lifetime of self-discipline, as Buddha did, to attain their perfect state of *Nirvana* while the Mahayana emphasizes compassion and selfless sacrifice alongwith rigorous metaphysical and intellectual inquiries to attain Buddhahood. Despite their different methodologies, they all share similar traits that (a) they recognize gods, *bodhisattvas*, and Buddhas as medium or guidance to their enlightenment and not to be passively worshipped, (b) all living beings are capable of attaining the highest enlightened state and exalting status just like Buddhas, *arhats*, and *bodhisattvas*, and (c) *Nirvana* and all phenomena in the absolute sense is of a non-dual and insubstantial nature. Thus the Buddha's view and the Theravada's 'All *dharmas* are without self' and the Mahayana 'All is *Sunya*', the Vajrayana essentially affirms an individual view that 'The absolute essence is *Vajra* and *Sunya*' which is indestructible but they use an object, the *vajra*, to symbolically represent this state.

f. Vajrayana Pantheon: Important Mahayana *bodhisattvas* like Avalokitesvara, Maitreya, Manjusri, etc. are also found in the Vajrayana pantheon but they are significantly marginalized. Vajrapani, a preeminent *bodhisattva* of the Vajrayana who previously appeared in Mahayana *sutras* and Gandhara arts as a *yaksa* chief and Buddha's constant attendant, became the ultimate symbol of enlightenment wielding the *vajra* in his hand. His powerful and rising career evolved since the first century CE chronologically from a simple *yaksa* attending Buddha (Gandhara), one of Buddha's chief acolytes (Mathura), a powerful *bodhisattva* in Buddha's *mandala* (Deccan caves), as a separate deity (Orissa and Pala arts), and finally attaining his fully independent demiurgic status equal that of a Buddha in the final phase of Vajrayana arts as Trilokavijaya and Samvara. Vajrayana deities appear both in peaceful and wrathful miens and are generally divided into two categories: the *dharmapala* (Tibetan *chos-skyong* or protecting deities) and *istadevata* (Tibetan *yi-dam* or deities associated with Tantric initiation and consecration). The *dharmapala* includes Mahakala, Yamantaka, Acala, etc. while the *istadevata*, who often appears in the symbolic sexual posture *yuganaddha* (Tibetan *yab-yum*) with his female *prajna* or alternatively represents aniconically as the *ghanta* and *vajra*, includes important deities like Mahavairocana, Heruka, Hevajra, Kalacakra, Samvara/Chakrasamvara, and Vajrabhaivara; these purely Tantric deities belong to the *anuttarayoga-tantra* class. Many Vajrayana practitioners probably would not engage in sexual yoga literally but the practice was widely reported since King Yeshe-O (r.967-1040 CE) of Guge once issued an edict banning such unBuddhist ritual. The deities of the *yoga-tantra* class, as listed in the Vajradhatu Mandala below, are also the *istadevata* type but they do not involve *yuganaddha*; the principal deity is Vairocana Buddha seated in the center of the *mandala* and surrounded by thirty-six other lesser deities, each occupying their proper directional positions:

- (1) Jina Buddha: Vairocana (center).
- (4) Jina Buddhas: Aksobhya (east), Amitabha/Amitayus (west), Amoghasiddhi (north), Ratnasambhava (south).
- (4) Buddha *prajnas*: Locana (southeast), Mamaki (southwest), Pandaravasini/Pandara (northwest), Tara (northeast).
- (16) Vajra *Bodhisattvas* surrounding the four Jina Buddhas: Aksobhya (Vajradhara/Vajrapani/Vajrasattva, Vajrakarsa, Vajradhanu, Vajraharsa), Amitabha/Amitayus (VAjranetra/Avalokitesvara, Vajranuddhi/Manjusri, Vajramanda, Vajravaca), Amoghasiddhi (Vajravisva, Vajramitra, Vajracanda, Vajramusti), Ratnasambhava (Vajragarbha/Vajraratna/Ratnapani, Vajraprabha, Vajrayasti, Vajrapriti).
- (4) *Devis* (Goddess of Offering) in the inner circle: Vajradhupa (Incense), Vajrapuspa (Flower), Vajraloka (Lamp), Vajranrtya (Dance).
- (4) *Davarapalas* (Door Guardians) on the outermost square: Vajrankusa (east), Vajrasphota (west), Vajravesa/Vajraghanta (north), Vajrapasa (south).

Theravada and Mahayana iconographies consist exclusively of male Buddhas and *bodhisattvas* that are depicted independently; however, in the Vajrayana they are frequently accompanied by female *prajnas* or *saktis* and have *bodhisattva* emanation. Aksobhya (Locana, Vajrapani), Amitabha (Pandaravasini, Avalokitesvara), Amoghasiddhi (Tara, Vajravisva), and Ratnasambhava (Mamaki, Ratnapani); these are known as the Five Jina/Dhyani Buddhas, each administering his own *mandala*. Each Jina Buddha is also assigned with a color and a distinct *mudra*: Vairocana (white, *dharmacakrapravatana-mudra*), Aksobhya (blue, *bhumisparsa-mudra*), Amitabha (red, *dhyana-mudra*), Amoghasiddhi (green, *abhaya-mudra*). The pantheon of the early *anuttarayoga-tantra* deities encompass those listed above but it also added a sixth Buddha, namely Vajrasattva, Vajradhara, or Adi-Buddha, with Aksobhya now occupying the center of the *mandala* instead of his usual eastern position on the *yoga-tantras*. With the appearance of the sixth Buddha, Vairocana seems to have been demoted and also given a *prajna* Vajradhatvisvari or Prajnaparamita like the other Jina Buddhas. This sixth Buddha is theoretically identical with the great *anuttarayoga-tantra* deities like Mahavairocana (not to be confused with the fifth Jina Buddha Vairocana), Heruka, Hevajra, Kalacakra, Samvara/Chakrasamvara, and Vajrabhaivara. In the early years, as in Orissa sculptures (ninth century CE), he was depicted alone holding the *vajra* and *ghanta* in his hands; however subsequently in the sculptures of Bihar and Bengal (eleventh-twelfth centuries CE), he too would be accompanied by a *prajna* in *yuganaddha* with him. In the *anuttarayoga-tantras*, the Five Jina Buddhas are also the personification of the five *skandhas* while the supreme sixth Buddha symbolizes *Vajra* and/or *Sunya*. Thus on the philosophical level, the Vajrayana seems to have embraced the pan-Buddhist idea that all manifested phenomena in the absolute reality are Non-*atman* and *Sunya*. In the *anuttarayoga-tantra* class Aksobhya, whose emanations are the Five Jina Buddhas and manifestations identified with the sixth Buddha, Mahavairocana, Heruka, Hevajra, etc., occupies the center of the *mandala*; this Buddha is synonymous with Sakyamuni with his *bhumisparsa-mudra* which further demonstrates the Vajrayanists' implicit homage to the historical Buddha."

APPENDIX-D

MAHASTHANGARH

i.e. Mahasthan or Pundranagara

Quotation(s) from:

Ahmed, Nazimuddin (1984), *Discover the Monuments of Bangladesh – A Guide to Their History, Location and Development*, Dhaka: The University Press Limited

[pp.31-36]

“The extensive ruins of Mahasthangarh, sprawling along the western bank of the moribund Karatoya river in Bogra district (about 8 miles north of Bogra town), represent the earliest city-site in Bengal. The present name Mahasthan means a ‘Great place’. The spectacular site – an imposing landmark in the area – consists of a fortified, irregular oblong enclosure measuring 5000 feet long by 4500 feet broad, with an average height of 15 feet from the surrounding paddy fields. The citadel is encircled on three sides by old artificial moats and by the river Karatoya on its fourth side to the east. Beyond the fortified area, other ancient ruins fan out within a semi-circle of about a five-mile radius, testifying the existence of the city’s extensive suburbs. The present extent of the citadel and suburbs is unparalleled by any other ancient site in Bengal. The ruins of Mahasthan have been identified with the ancient city of *Pundranagara* familiar in Maurya, Gupta, Pala and Sena literary and other epigraphic records.

It has not been possible to ascertain when Mahasthan came under Muslim occupation. The most widely current legend centers around the saint Shah Sultan Balkhi Mahisawar and a certain obscure but traditionally known Khsatriya king, Parasurama, who is said to have been defeated and killed by the Muslim saint. A plain masonry grave, occupying the south-eastern high mound within the citadel, is popularly believed to be the last resting place of the saint. Close to it, possibly on the earlier remains of a Siva temple, stands a single-domed square mosque which has now been largely modernized. According an inscription over its entrance, it was built by a certain Khodadil in 1718 during the Mughal emperor Farrukh Siyar’s reign.

During excavations in 1928-34 and 1960-66, the earliest tapering mud rampart of the citadel was found to be superimposed by the Pala defense wall. It was strengthened with a brick-wall core with watch towers and bastions at certain intervals, all now furrowed by heavy rainfall.

Excavations inside the fort and on the forecourt of the so-called Govinda Bhita temple overlooking the bend in the river outside, have revealed four building and rebuilding phases. The earliest phase is represented by nondescript building remains with which are associated cast and punch marked silver and copper coins, northern black-polished ceramic ware and several excellent plaques from the 3rd and 2nd centuries BC.

The latest phase was represented by a semi-circular bastion opposite the Govinda Bhita temple and the foundation walls of a medieval pre-Mughal Mosque inside the fort, together with many fragments of green-blue Muslim glazed pottery associated with these buildings. The intermediate Gupta period buildings are represented by regular walls of uniform tile-sized bricks, especially marked by the two massive parallel walls extending from the semi-circular bastion towards the Govinda bhita temple. The Pala period buildings which overlie the Gupta phase, in fact form the major portion of the exposed remains and were often found in a poorly built and highly damaged condition.

The semi-circular bastion in the northern rampart partially covers a porch of the Pala period and indicates a gateway which later seems to have been blocked by a series of brick pitching. These were enclosed within huge boulders of stone, probably intended to ward off the seasonal inundation of the river. The magnitude of this seasonal flooding was apparent on exposed walls of the rampart which were found either to have been completely swept away or in a badly damaged state. Thick deposits of river sand and silt were found overlying the eroded tops and sides of these walls.

Apart from the imposing temple remains of the *Govinda Bhita* mound outside the fort, several other isolated mounds, separated by low lying fields, cover the entire eastern half of the fortified city. Each is known by its local name, e.g. the *Khodai Pathar Mound*, *Mankalir Kunda*, *Parasuramer Badi*, *Jiyat Kunda*, *Bairagir Bhita*, *Munir Ghon*, *Narasimher Dhap*, etc. Excavation on all these mounds has revealed important building remains.

Govinda Bhita Temple: During the excavations on this mound, set on the steep bank of the river, two sets of temple remains were exposed which may be conveniently called the 'eastern temple' and the 'western temple'. They were both of different periods but were enclosed within the same 6'-0" thick boundary walls. Although tradition identifies this temple complex with the temple of Govinda or Vishnu, no association of its Vaishnavite character was ever revealed in the excavation. The original western temple, erected in about the 6th century, is larger than the eastern one which was built partially on the ruins of the former in about 11th century. The main shrine in both the temples seems to have been built on a high central square shaft, solidly filled and rammed with earth. The shaft is enclosed by three graded terraces, each buttressed by a series of blind cells packed with earth which was no doubt intended to strengthen the foundation of a massive super-structure. The approach to the original temple was from the west, whilst the latter was from the east.

This important but isolated temple complex, perched picturesquely on the high river bank, obviously had to face the perpetual onslaught of annual flooding of the Karatoya. A series of revetment-walls, including a heavy semi-circular retaining wall, had therefore to be built for its protection at different levels.

Bairagi Bhita Temple: Earlier excavations on this mound, between 1928 and 1929, within the citadel in the north-eastern sector, exposed two temple remains together with a number of derelict ancillary buildings belonging to the early 8th and 11th centuries respectively. The earlier oblong temple, of which only the plinth remains, had a central sanctum measuring 98'-0"X42'-0". An interesting drain which probably carried the libation water into a soak-jar nearby was found in the temple area, partly constructed in brick, but mostly formed out of two massive black stone columns salvaged from earlier buildings. These stone columns, beautifully adorned with half-lotus medallions and floral scroll moldings in low relief, are of typical Gupta style. The later rectangular temple, measuring 111'-0"X57'-0", was partly built on the ruins of the earlier temple and was found in a highly disintegrated condition. Discovery of a number of finely chiseled pillar bases and stone door jambs in the northern wing indicate the existence of a porch in the middle of the wing. A large area adjacent to the Bairagi Bhita on the north, seems to have been used as an enclosed courtyard of the temple where a few cells, a small shrine and a row of oblong apartments were accommodated. Of special interest here are a group of five rectangular and circular *Kundas* or reservoirs, built with paved bricks and lined with one or two rows of slanting brick-on-edge. The purpose of these is unknown, but it could be that they are associated with some religious rite of libation.

Another small temple measuring 39'-0"X34'-0", situated about 200 yards south-east of the Bairagi Bhita and dating from the 9th/10th century, was also exposed in the earlier excavations. Access to this temple was from the east, by five brick steps flagged with black stones which were improvised from earlier buildings. They are delicately carved in low relief with a row of *Kirtimukha* heads disgorging garlands of pearls.

A curious solid brick platform, 19'-0" high, was also exposed about 30 yards to the east of this temple. Although it was no doubt related to the temple, its exact purpose remains uncertain. It was found encircled with five ring-wells, all of about 3'-0" in diameter.

Khodai Pathar Mound: This mound is about 200 yards north-east of the *Dargah*, or tomb, of the Muslim saint and derives its curious name from an enormous granite door-sill lying nearby, which is sculpted with floral patterns and with two sockets for door shutters. The mound was excavated in 1907 to a depth 5'-0" at which level a stone pavement was encountered. The exposed building was identified as a Buddhist temple, measuring 24'-0"X15'-0" with 3'-0" deep stone foundations. It seems that the door jambs, lintels and ornamental sections of its walls were built of stone. A massive stone stella, bearing three images of the Buddha in relief, was discovered during excavations and is now preserved in the Varendra Research Museum, Rajshahi.

Mankalir Bhita: About a hundred yards north of the Khodai Pathar Mound there is a small conical mound, overlooking a shallow ditch, which is known locally as Mankalir Bhita. Excavations have revealed the foundations of a 15th/16th century oblong mosque, 86'-0"X52'-0". Its prayer chamber has been divided into three aisles, separated by two rows of rectangular brick pillars and five bays. The inner western wall accommodated five *mihirabs* decorated with terracotta foliated designs, whilst along the eastern wall five entrances were discovered.

Parasuram's Palace: Excavation at the so-called Parasuram's Palace located about 200 yards north of Mankalir Bhita mound, unearthed the complete plan of a comparatively modern dwelling house consisting of four separate blocks, which was centered around a small courtyard. The building was erected over the ruins of the fort.

Jiyat Kunda: Close to the Palace Mound, to the east, is the famous Jiyat Kunda or the 'Well of Life'. Tradition has it that King Parasurama resuscitated his dead soldiers with the magic water of this well during his encounter with Shah Sultan Balkhi. Learning about the extraordinary life giving power of this well, the Muslim saint caused it to become polluted by having a kite drop a piece of beef into it. This destroyed the powers of the well and eventually the Hindu King was defeated. The well is tapered, with a maximum internal diameter of 12'-8" at the top. A massive rectangular stone block 6'-10" in length incised with floral carving, which may originally have formed part of an early Hindu temple, is placed astride the eastern side of the well to enable water to be raised. A series of other projecting stone blocks, firmly embedded into the masonry of the well, from earlier Hindu temples, form a flight of steps down to the water level. At least two of these stone blocks can be identified as channels attached to *Gauripattas*. Such evidence clearly indicates that the well is of comparatively modern origin and, in all likelihood, is contemporary with the so-called 19th century Parasuram's Palace."

[pp.39-42]

"The Environs of Mahasthangarh:

Parasuram's Sabhabati: After the present road, running between the *mazaar* and the Khodai Pathar mound, emerges from the western ramparts of the fortress, it continues on to Mathura village and eventually leads to *Vasu Bihar*. Just outside the ramparts and not far from the road, there is a small mound which is locally known as the site of Parasuram's Sabhabati or the 'Audience Hall of King Parasurama'. The mound has not been excavated, but a substantial brick building appears to occupy the high embankment running parallel to the western rampart on the far side of the *Gilatola Khal*, which was originally the moat. This embankment is found in places to be brick-lined with narrow openings at intervals which were possibly intended to control the flow and return of water between part of the original moat, the *Kalidaha*, and the *Gilatola Khal*. It is likely that these parallel embankments, alternating with a double line of moats, were originally connected with the defense of the citadel on its more vulnerable side.

Lakshindarer Medh, Gokul: This large excavated mound, suited about a mile south-east of the citadel, is associated, like numerous other mounds in Bengal, with the popular folk-tale of *Behula-Lakshindar* and the angry snake goddess Manasa. Another small mound known as *Netai Dhopanir Pat* or 'Netai, the washer woman's plank' is located along the village road, close to the Medh and seems after excavation to be the remains of an ancient temple. It is also similarly connected with the same folk-tale.

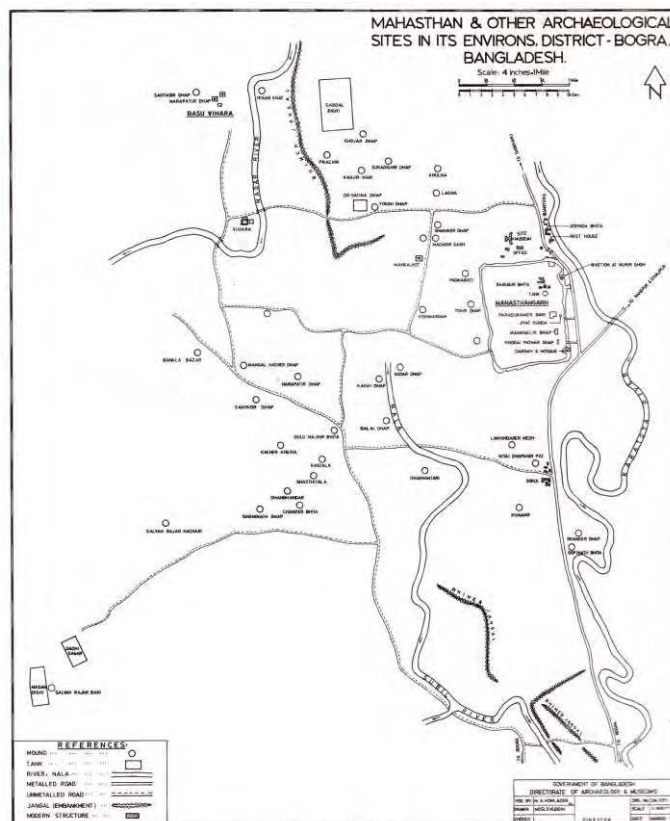


Figure: Mahasthan and other archaeological sites in its environs, District – Bogra, Bangladesh.

Excavations of the ruins of the Medh, have revealed a raised podium of a possible Siva temple. The most striking feature of this gigantic temple-base, still surviving 43'-0" above the surrounding ground, is the elaborate cellular construction. It has the appearance of a honeycomb of 172 blind cells of varying dimensions, which have been arranged indiscriminately around a twenty-four sided plinth of the square shrine, and set on a deep central shaft. The blind cells, built on graded terraces around the extensive podium, were packed solidly with earth so as to form a massive foundation to support an imposing temple or stupa, which has now completely disappeared. This novel

device, comparable to present day pile foundations, was a common practice in Bengal for five centuries preceding the Muslim conquest. This technique was used because of soft alluvial soil as well as to raise the structure to an impressive height so that it would be visible from afar.

The associated antiquities excavated from this site indicate that originally this high sub-structure of a roughly cruciform plan, was probably the base for a stupa built in about the 6th or 7th century. The stupa was replaced during the Sena period, in the 12th century, by a 27'-0" square shrine. A grand staircase gave access to the shrine from the west. Excavations inside the shrine revealed an intrusive small cell containing a human skeleton, probably of an anchorite. Underlying it, a circular 12'-8" diameter brick paved pit was discovered. A small stone slab, placed at the center of the shrine with twelve shallow holes surrounding a larger central hole which contained a tiny inch square leaf of gold, was also found. This gold medallion was embossed with the figure of a recumbent bull, indicating that the later shrine belonged to a worshipper of Siva.

Rajatarangini's romantic but less credible tale in the Kashmir chronicle which describes the wandering Prince Jayapida's incognito sojourn at the *Kartikeya* temple near *Pundranagara* as an honored guest of Kamala the temple dancer, his daring encounter with a man-eating lion which was terrorizing the countryside, and his eventual winning over the hand of princess of *Pundranagara*, are mainly fictitious. However, these tales are vaguely supported by the remains of a small *Kartikeya* temple which is located about a mile south-east of the citadel, perched picturesquely on the river bank, and locally known as Skander Dhap."

Quotation(s) from:

Husain, A.B.M. ed. (2007), *Architecture – A History Through the Ages (Cultural Survey of Bangladesh Series-2)*, Dhaka: Asiatic Society of Bangladesh

[pp.17-20]

"Pundranagar or Mahasthangarh: The Mahasthan citadel is oblong in plan and measures approximately 1350m from north to south and 1050m from east to west. Within it is to be seen isolated small mounds scattered particularly on the eastern side. Some of them are now excavated, and reveal remnants of both secular and religious structures of varying dates, mostly, however, of the Pala Period (c.756-1143 CE). The fortress-wall on the north-eastern corner is fairly preserved. It is about 3m high and 3.3m broad. On both sides for about 60cm the wall consists of brick masonry, but the inner core is built entirely of brick-rubble laid in mud mortar. In the corner are the remains of a tower the inner side of which being attached to a terrace meant probably for stairs to ascend to the tower and the rampart-walk. Nearby are the remains of a gateway, 2.4m wide, flanked by a number of small rooms suggested to have been for the guards. The area around this appears to be extremely complicated and may have consisted of several constructions ranging from the 4th to the 16th century CE. It has been suggested that the temple known as the *Govinda Bhita* to the north-east was originally enclosed within rampart walls which for some lengths are now traceable to the east and north of the temple. The northern wall of the citadel shows several building phases and in average measures about 4m wide and 1.5m high. Beside the gateway on the north-eastern corner which has been dated as belonging to the Pala Period, there are at present several other openings on the eastern side, one on the west, two on the north and one on the south which lead to the inner areas of the citadel. All of them appear to belong to later dates.

The citadel is at present strewn with building remains of various sizes and dates. Needless to say that along with the temples there also must have been residential buildings of great beauty which unfortunately are now unidentifiable. Several reservoirs and wells have been discovered within the fortress. The largest among them near the Bairagi Bhita is a rectangular well-paved structure which measures 3m by 1.5m. It is bordered with one or two lines of slanting bricks on the edge. The circular wells are generally of 90cm to 1.8m diameter and are occasionally bordered at the top with fluted rings.”

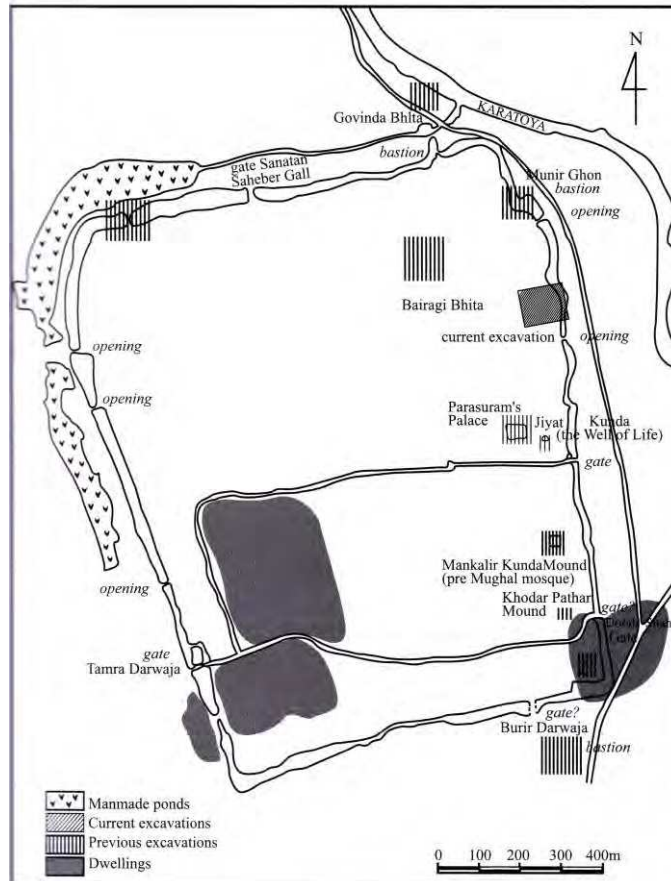


Figure: Mahasthangarh – Bangladesh-France joint venture plan, location of excavation sites.

Quotation(s) from:

Smith, Monica L. (2001), 'The Archaeological Hinterlands of Mahasthangarh – Observations and Potential for Future Research', in: *France-Bangladesh Joint Venture Excavations at Mahasthangarh – First Interim Report (1993-1999)*, (eds.) Md. Shafiqul Alam and Jean-Francois Salles, Dhaka: Department of Archaeology, Ministry of Cultural Affairs, Government of the People's Republic of Bangladesh

[pp.65-66]

“Mahasthangarh’s Relationship to Its Hinterland: Archaeological evidence from the current excavations within the city (in the Eastern Rampart) reveals a rich corpus of material culture. Through the analysis of these artifacts, it is possible to assess the percentage of items that were manufactured locally or were imported. Some items, particularly those of metal and stone, must have been imported to the region as either raw materials or finished products since neither metal nor stone are found naturally in the vicinity of Mahasthangarh. However, the vast majority of artifacts from the site appears to have been locally-made starting in the earliest periods of the site’s occupation.

Studies of Early Historic period finewares such as Northern Black Polished Ware (NBPW) by S. Elaigne have shown that while the forms represented at Mahasthangarh have close parallels elsewhere in the Ganges valley, the fabrics and style of these vessels indicate a local production. The composition of common wares, as studied by D. Allios and V. Serdon, also indicate that these wares were produced locally. This pattern of local production of both finewares and coarse or common wares has been noted elsewhere in the subcontinent for this period, indicating the robust nature of regional economic patterns. Pottery production, which is depended upon the availability of suitable clays as well as other resources such as water and fuel, was unlikely to have been carried out in Mahasthangarh's city center. Other important resources were available only outside the city walls, including agricultural products and forest products such as timber, wild animals, medical plants and famine foods.

While the city relied on its extramural hinterland for finished products and raw materials, the configuration of this relationship appears to have changed over time. The formal boundary of the ancient city of Mahasthangarh, consisting of an earthen rampart topped by a series of baked-brick fortification walls, remained essentially unchanged in shape throughout all occupation periods. The location of sites around the urban core however suggests that there were significant shifts in the location of population in the hinterlands of Mahasthangarh over time. Although chronological indicators such as ceramics as well as the distribution of different types of sites permits a suggestion of the changes in population trends over time."

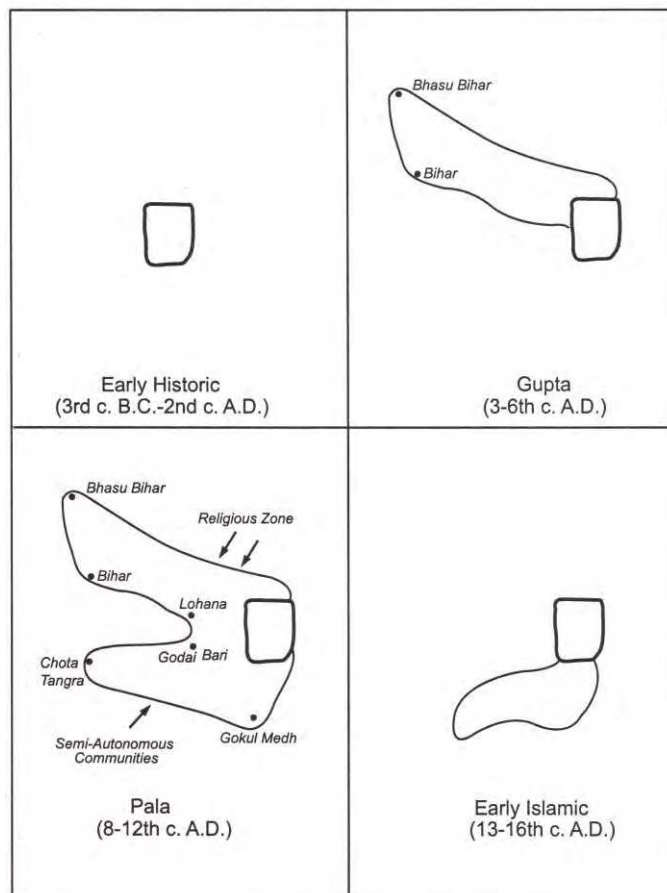


Figure: Fortified site of Mahasthangarh, with hypothesized settlement pattern in the site's hinterland through time.

“Phase III: Pala (8-12th centuries A.D.): Within the walls of Mahasthangarh, the current excavations have shown a resurgence of a relatively rich material culture during the Pala period. In the hinterlands of the urban core, there are numerous archaeological remains that correspond, or are likely to correspond, to this period. The distribution of different site types around Mahasthangarh indicate that the area to the northwest of the city continued to be an area with substantial Buddhist activity, while the area to the south contained habitations and semi-autonomous communities.

The zone to the northwest, already identified as a thriving zone of Buddhist activity in the preceding Gupta period, appears to have received additional and substantial architectural investment in the Pala era. The excavations at Bhasu Bihar show that in this period, two substantial monasteries and a shrine were constructed, the latter decorated with terracotta plaques. These monasteries are in the form of a closed rectilinear building with an interior courtyard; on all four sides, the interior of the building is lined with small rooms that have a single opening facing the courtyard. This striking architectural design is paralleled in at least two cases by other preserved sites to the northwest of Mahasthangarh: Lohana and the westernmost of the two mound groups known as Kanjerhari-Dhap.

Interestingly, these mounds are located between Mahasthangarh and Bhasu Bihar, and may represent an attempt by those who sponsored the construction to bring Buddhist activities closer to the city while still maintaining a symbolic distance between the economic life of the urban core and the contemplative life of a purely religious domain. Within the walls of Mahasthangarh, there are reports of religious structures dating to this period as well. Ahmed’s volume on the site indicates that in 1961, a temple of the 8th century A.D. was excavated near the gateway on the southwest interior corner of the fortifications. A pair of temples, of the 8th century and of the 11th century, were recovered from the site of Bairagi Bhita, also on the interior of the fortifications but located in the northeastern portion of the site.

To the south and southwest of Mahasthangarh, the types of structures found outside the walls of this era are very different from the monasteries found to the northwest. The most distinctive type of architecture is a kind of artificial hill such as that seen at Gokul Medh, about 1.5 kilometers south of the southern rampart of Mahasthangarh. This curious construction was made of a lattice of brick cells solidly filled in with earth, producing a densely-packed mound measuring nearly 100 meters long by 50 meters wide, with the long axis running east-west. The uppermost cells were cleared out in the excavations of 1934-36; excavations also produced terracotta plaques that are reported to date to the 6-7th century A.D. although the construction was greatly enlarged in the subsequent Pala period.

The region immediately around Gokul Medh is surrounded by the vestiges of mounds with structural remains and numerous artificial ponds (tanks). Two other very large mounds to the southwest of Mahasthangarh illustrate a similar pattern of a large structure accompanied by habitation mounds and artificial ponds. One is the site of Godai Bari, located 1.5 kilometers west of the southwest corner of the Mahasthangarh fortifications. The site, excavated by the Directorate of Archaeology in 1998, consists of a complex of solidly-packed brick structures and walls; the combined effect of these constructions is a steep-sided mound in which the long axis runs east-west. In the immediate vicinity of Godai Bari there are numerous other mounds that have structural remains, including the very large site of Kanai Dhap to the southwest, now reduced to about 3 hectares in size and covered to a considerable extent by a modern village.

Another site in which this pattern is repeated is the site of Chota Tangra, located 4 kilometers west-southwest of the fortification walls of Mahasthangarh. This very large mound currently measures 80X40 meters and seven meters high, and has its long axis running east-west. The mound appears to have been the central focus of numerous other constructions in the vicinity, including two large rectilinear artificial ponds and several mounds 0.5 to 1.5 hectares in size. Although unexcavated, there is some indication that it dates to the Pala period, as there is a report that terracotta plaques and stone sculptures of the 8-9th century were found but later thrown into a nearby pond. At Gokul Medh, Godai Bari and Chota Tangra, the archaeological groups of monumental structures, habitation mounds and artificial ponds appear to represent semi-autonomous communities. Monumental hills and other civic architecture such as ponds, serving as the focus of communal social activity outside the walls of Mahasthangarh, may have been the result of a local desire to express autonomy from the central city of Mahasthangarh. The construction of these very labor-intensive structures in outlying areas also suggests the presence of authorities in these smaller population centers who had the resources to sponsor such projects.

Throughout the western portion of greater Bengal, the Pala period was one of growth and prosperity, as indicated by the Pala endowments of religious monasteries (such as Paharpur) and civic improvements (such as the large artificial pond at Dhibor in western Bangladesh). At Mahasthangarh, this period of prosperity was manifested in development of a complex urban hinterland with a distinct division into different zones: to the northwest, a religious area with monasteries, and to the south, a zone of semi-autonomous communities such as the one around Gokul Medh.”

APPENDIX-E

MAINAMATI

i.e. Lalmai-Mainamati

Quotation(s) from:

Alam, A.K.M. Shamsul (1976), *Mainamati*, Dhaka: Department of Archaeology and Museums, Ministry of Education and Religious Affairs, Sports and Cultural Division, Government of People's Republic of Bangladesh

[p.7]

“The name ‘Mainamati’ was coined only a few hundred years ago. But its history goes back to the remote past and is inseparably connected with the history of the surrounding land which was once known as ‘Samatata’, a significant name denoting a land lying almost level to the seashore.”

[p.21]

“An isolated 11-mile-long spur of dimpled low hill range, known as the Mainamati-Lalmai range, runs through the middle of the Comilla district from north to south. Average height of the hills is only 40 feet but some peaks rise up to 150 feet or more. The northern part of the range is locally known as Mainamati, which merely echoes the memory of king Govinda Chandra's mother Mainamati, while the southern part is known as Lalmai or ‘Red Hill’ from the red color (Laterite) of the soil. The accidental discovery of a copper-plate on this hill range in 1803 A.D. for the first time indicated the ancient character of the area.”

[pp.24-33]

“Late T.N. Ramachandran conducted a brief survey of the area along the Mainamati and Lalmai ranges during the war⁹⁰ and detected 18 ancient sites. After the cessation of the war, the area was regularly surveyed which resulted in the discovery of 55 ancient sites of which 20 were declared *protected*. Three of these sites, namely – *Salban Vihara*, *Kutilla Mura* and *Charpatra Mura* have been fully excavated. Test excavations have also been conducted at the Ranir Bungalow mound, located on the northern most tip of the Mainamati hill. The fifth site, locally known as *Ananda Rajar Bari* is now under excavation. A brief description of the 20 protected sites are given below.

Ranir Bungalow Mound (Arch.⁹¹ Site No.20): Situated on the northern most point of the Mainamati Hill, the mound is nearly 40 feet high from the surrounding plain land. It is locally known as the Palace and Temple of *Rani Mainamati*, a well-known figure in Bengali folk-literature, from whom the northern portion of the hill range derived its name.

Small scale excavation here in 1965-66 revealed few derelict building remains within a heavily fortified enclosure.

Mainamati Mounds (Arch. Site No.1):

Mound No.1: Situated on a hillock by the western side of Comilla Brahmanbaria Road and only a furlong or so north of Dacca-Chittagong Road this mound is about 30 feet high from the surrounding plain land. The central portion is higher than the sides. Northern and western sides are steep but the eastern and southern sides rise in easy gradient. The site is now covered with wild vegetation.

⁹⁰ World War II.

⁹¹ ‘Arch.’ is abbreviation for: Archaeology.

Mound No.1A: Situated to the south of Mainamati Mound No.1, this Mound is only a few feet higher than the plain land and close to the Dacca-Chittagong Trunk Road. A narrow road runs north to south through the mound. Eastern edge of the mound is higher than the other sides.

Mound No.1B: This small mound is very close to mound No.1A and its southern side is very close to the Dacca-Chittagong Trunk Road. Old bricks and potsherds are still scattered over it.

Mainamati Mounds (Arch. Site No.2):

Mound No.2: This mound is situated to the west of the Brigadier's bungalow and is approachable by a kutcha road from the metaled Cantonment road which runs south to north, following the eastern slope of the Mainamati Hill. This mound is not only big in size but also about 100 feet high from the surrounding plain land. The top of the mound is almost flat and higher than the sides.

Mound No.2A: This site is situated to the northern side of the Brigadier's Bungalow and is close to the Cantonment road. Northern portion is higher than the other sides but a few new constructions by the Military have reduced its area. The southern slope extends up to the Brigadier's Bungalow.

Charpatra Mura (Arch. Site No.19): Situated near the Brigade Headquarters of the Bangladesh Regiment, the mound is nearly 35 feet higher than the surrounding land. It is fully excavated, a description of which is given in the next chapter.

Bairageer Mura (Arch. Site No.3): This mound is situated in the middle of the Mainamati Hill and about 1 mile north-west of *Kutila Mura*. Presently a big water tank of the C. Company Line stands on the northern fringe of the mound. This portion is comparatively higher than the other sides.

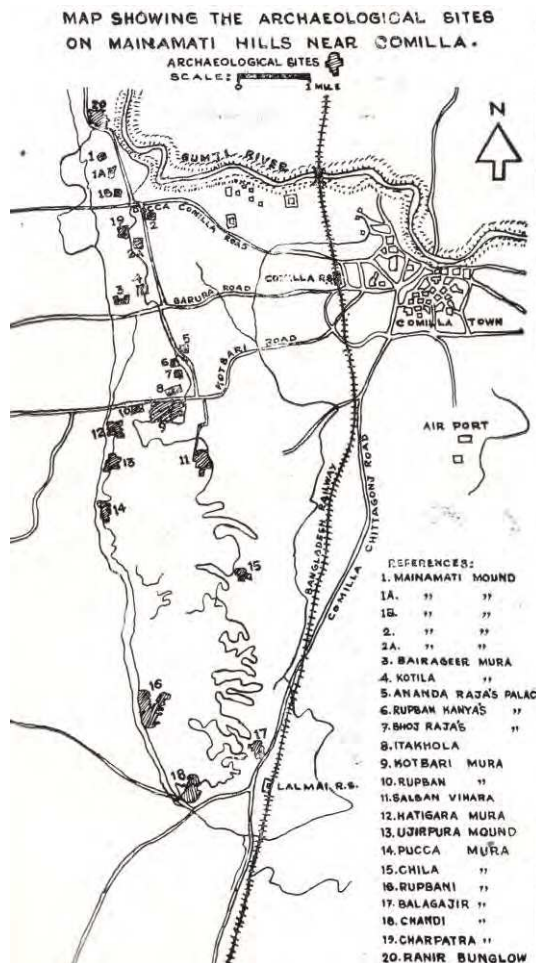


Figure: Map showing the archaeological sites on Mainamati Hills near Comilla.

Kutla Mura (Arch. Site No.4): Situated three miles to the north of Salban Vihara, the site was excavated in 1956-57. Three stupas in a row were exposed here. Full description is given in the next chapter.

Ananda Raja's Palace (Arch. Site No.5): This big mound is situated at the eastern side of the Comilla Cantonment Road and is about a mile north of the BARD complex at Kotbari, Comilla. It is more than 650 feet square in size and about 15 feet higher than the plain cultivated land. It was the scene of heavy depredation for bricks during the Second World War. Cart-loads of bricks were removed from the ancient structures before action could be taken to protect the ancient site.

Though it was popularly known to the local people as *Ananda Rajar Bari*, the ruins reveal, a square monastery enclosing a central shrine of multi-angular form. The site is now under excavation and the results so far achieved would be discussed in the next chapter.

Rupban Kanya's Palace (Arch. Site No.6): This site lies about a furlong south of the Ananda Raja's palace and is adjacent to the western side of the Cantonment Road. It was also badly disturbed by the brick hunters but later on a number of terracotta plaques and ornamented bricks were recovered from the debris. Though highly disturbed, the traces of the central structure and enclosing walls can be made out from the remains of the debris, scattered on the plain surface. The edifice is a square structure measuring 250X250 feet and seems apparently to be a monastery. The eastern side of the mound is higher than the other three sides which are almost level to cultivated land. The area of the site has been considerably reduced by encroachment of the cultivated land.

Bhoj Vihara (Arch. Site No.7): *Bhoj Vihara* or *Bhoj Rajar Bari* as is known popularly, is hardly half a furlong to the south of Rupban Kanya's Palace. The mound is square with 600' sides. Its sides are five to ten feet higher than the surrounding lands but the middle portion is about 10 feet higher than its sides. During the archaeological survey, damaged portions of some massive brick walls covering an area of 400X400 feet was discovered. Here also the walls were built enclosing a square structure, profusely decorated with ornamental bricks and terracotta plaques similar to those found in *Ananda Vihara* and *Salban Vihara*. The site was also greatly disturbed during the Second World War.

Ita Khola (Arch. Site No.8): This mound is situated at the northern side of the Kotbari Road and is about 60 feet higher than the road surface. It was also disturbed by the brick robbers. Traces of old bricks are still noticeable all over the mound.

Rupban Mura (Arch. Site No.10): The mound is situated between the BARD and the Bangladesh Rifle's Office. Northern fringe of the mound meets the Comilla-Kalirbazar Road in a gentle slope but the other three sides are steep. The mound is about 60 feet high from the metaled road. Though bricks were robbed from this site during the Second World War a square monastery measuring 400X400 feet enclosing a 47X41 feet cruciform central shrine with re-entrant angles and recessed corners, richly decorated with terracotta plaques and moldings, could be detected.

During the war, the military contractors disturbed two structures here, but a couple of others escaped spoliation. Probably, a number of ancient structures are now lying hidden under this large mound.

During the preliminary survey by Ramachandran a large number of terracotta plaques were recovered in loose condition and many more were seen *in situ* in the basement of the exposed structures. The plaques were found depicted with scenes drawn from the life of the people, nature and many other subjects from popular folk tales and *Jataka* stories. In addition to

the terracotta plaques, an excellent group of terracotta corner brackets and ornamental bricks were also gathered from here. Unfortunately, those are now lost to us. It is also reported that seven pots, containing hundreds of bronze votive images of Buddha, were discovered from the site by the brick robbers. Only 13 of these images could be recovered from them. These tiny images, only about 2 inches high, represent Buddha in earth-touching attitude. 'The iconographic details and workmanship of these images' to quote late Ramachandran 'are similar to those of the inscribed votive bronzes recovered from Jhewary in Chittagong District, assignable to the ninth-eleventh centuries A.D.' The underlying structures seem to be coeval in date with the antiquities recovered so far.

Kotbari Mura (Arch. Site No.9): This mound is located about a few furlongs west of the *Rupban Mura*. In 1803, the site was first detected during the construction of the Comilla-Kalirbazar Road and erroneously identified as the remains of a fort. This site was also greatly disturbed during the Second World War. The diggings for bricks had been very heavy here resulting in virtual obliteration of the structural remains underneath. One such structure seen by late Ramachandran was a pyramidal temple with re-entrant corners of walls, and surrounded by rows of cells. He thought it to be the remains of a monastery of modest size approximately measuring 300 feet each sides enclosing a cruciform central temple with approximately one hundred feet sides.

The site is fairly large. It appears that more than one building remains may lie buried here. The high land to the north of the Comilla-Kalirbazar Road which passes through the northern part of the mound, probably formed part of this mound. This part of the mound is presently under cultivation. A pucca mosque has also been constructed by some *fakir* at the north-western corner of the site.

Hati-Gara Mura (Arch. Site No.11): This mound is situated on the southern side of the Comilla-Kalirbazar Road and is hardly a furlong or so west of the Kotbari mound. The top of the mound is now covered with tall grass and creepers and is about 40 feet high from the surrounding cultivated land. This site seems to be undisturbed.

Salban Vihara (Arch. Site No.12): The site, located almost at the middle of the Mainamati-Lalmal Hill range, was previously known to the local people as *Salban Rajar Badi*. It has been fully excavated by the Department of Archaeology. A brief description of the exposed structures and antiquities is given in the next two chapters.

Ujirpur Mura (Arch. Site No.13): It is situated on the western fringe of the Mainamati Hill, about a mile west of the *Salban Vihara*. This mound is about 100 feet high from the western paddy field. The mound is oblong in shape and gradually slopes towards the west.

Pucca Mura (Arch. Site No.14): This small circular mound, more than 100 feet high from the western paddy field, is situated on the western fringe of the hill range and hardly four furlongs south of the *Ujirpur Mura*. Eastern portion of the mound is under cultivation but less disturbed.

Chila Mura (Arch. Site No.15): *Chila Mura* is situated at *Uttar Bijoypur* on the eastern side of Lalmal Hill, about three miles south of *Salban Vihara*. The mound is only 10 feet higher than the surrounding cultivated land. The area seems to be undisturbed.

Rupbani Mura (Arch. Site No.16): About 5 miles south-west of *Salban Vihara*, *Rupbani Mura* is situated on a high hillock on the eastern fringe of Lalmal hill. The mound seems to be the highest and is about 150 feet above the western paddy field and adjacent to the *Nalua* village.

Balagazir Mura (Arch. Site No.17): This mound is situated about two furlongs north of Comilla-Barura and Comilla-Chandpur Road crossing. The top of this high mound is almost level and scattered with debris of old bricks.

Chandi Mura (Arch. Site No.18): *Chandi Mura* is situated on the southern edge of the Lalmai hill. The mound is very close to Comilla-Barura Road. The height is about 100 feet. On the top of the mound there are two temples standing side by side, facing west, each having an entrance from the west. Bricks from many places have fallen out of the structure due to the growth of bushes and trees on the temples. The walls have shown several cracks due to the penetration of the roots of the trees.

A temple of *Chandi* from which the mound is known as *Chandi Mura* seems to have once stood at the site. Only deep excavation can reveal the fact and may throw further light on *Pattikere Chundavarabhavane Chunda* of *Astasahasrika Prajna Paramita*, dated 1015 A.D., now in the Cambridge University Library.”

Quotation(s) from:

Banglapedia, *Mainamati*, accessed on: 2016

[web: en.banglapedia.org/index.php?title=Mainamati]

“Mainamati – an isolated ridge of low hills in the eastern margins of deltaic Bangladesh, about 8km to the west of Comilla town is a very familiar name in our cultural heritage, where archaeological excavations have revealed very significant materials. A landmark of our ancient history, it represents a small mass of quasi-lateritic old alluvium. The ridge, set in the vast expanse of the fertile lower Meghna basin, extends for about 17km north-south from Mainamati village on the Gumti River to Chandi Mura near the Lalmai railway station. In its widest parts, the ridge is about 4.5km across and its highest peaks attain a height of about 45 meters. These highlands were once thickly wooded with an abundance of wild life, but modern developments have rudely disturbed its serene and idyllic setting. With an ever-expanding Cantonment at Mainamati, in the northern half of the ridge, and a fast growing township at Kotbari in about its center, the fairy-tale beauty of the place is already a thing of the past.

[...]

The twin names – Lalmai-Mainamati – of the place have significant link with the past: Lalmai or the southern part is identical with Lalambi-vana of the Chandra epigraphs, while the northern part recalls the name of the legendary Chandra queen ‘Maynamati’, mentioned in local ballads and folk-songs. The archaeological finds have now established beyond any doubt that the cultural-political center of ancient Vanga-Samatata (southeast Bengal) was located here. The glory and magnitude of that remarkable past is emphatically manifest in the innumerable monuments, mounds and excavated remains, adequately supplemented by an impressive array of stray finds from the area. Mainamati today is, however, better known for its Buddhist remains exposed by excavations. Here, indeed, lies the greatest assemblage of ancient Buddhist remains in Bangladesh.

[...]

Queen Mainamati’s Palace Mound is the largest and highest mound in the northern extremity of the ridge near the village that still bears the name of the queen, just east of Brahmanbaria road. The site is traditionally associated with the legendary Chandra queen Maynamati, mother of the last-known

Chandra king, Govindachandra. Excavations on a limited scale have uncovered here parts of a massive defense wall round different parts of the site, probably a citadel, and the corner of a substantial structure, probably a palace, at the center of the site. This is probably the only site in Mainamati that has revealed structures of secular nature.”

APPENDIX-F

HARAPPA AND MOHENJO-DARO

i.e. The Indus Valley Civilization

Quotation(s) from:

Encyclopedia Britannica Online, *Indus Civilization*, accessed on: 2018

[web: <https://www.britannica.com/topic/Indus-civilization>]

“Indus civilization, also called Indus valley civilization or Harappan civilization, the earliest known urban culture of the Indian subcontinent. The nuclear dates of the civilization appear to be about 2500-1700 BCE, though the southern sites may have lasted later into the 2nd millennium BCE.

The civilization was first identified in 1921 at Harappa in the Punjab region and then in 1922 at Mohenjo-daro (Mohenjodaro), near the Indus River in the Sindh (Sind) region. Both sites are in present-day Pakistan, in Punjab and Sindh provinces, respectively. The ruins of Mohenjo-daro were designated a UNESCO World Heritage site in 1980. Subsequently vestiges of the civilization were found as far apart as Sutkagen Dor in southwestern Balochistan province, Pakistan, near the shore of the Arabian Sea, about 300 miles (480 km) west of Karachi; and at Ropar (Rupar), in eastern Punjab state, northwestern India, at the foot of the Shimla Hills some 1,000 miles (1,600 km) northeast of Sutkagen Dor. Later exploration established its existence southward down the west coast of India as far as the Gulf of Khambhat (Cambay), 500 miles (800 km) southeast of Karachi, and as far east as the Yamuna (Jumna) River basin, 30 miles (50 km) north of Delhi. It is thus decidedly the most extensive of the world’s three earliest civilizations; the other two are those of Mesopotamia and Egypt, both of which began somewhat before it.

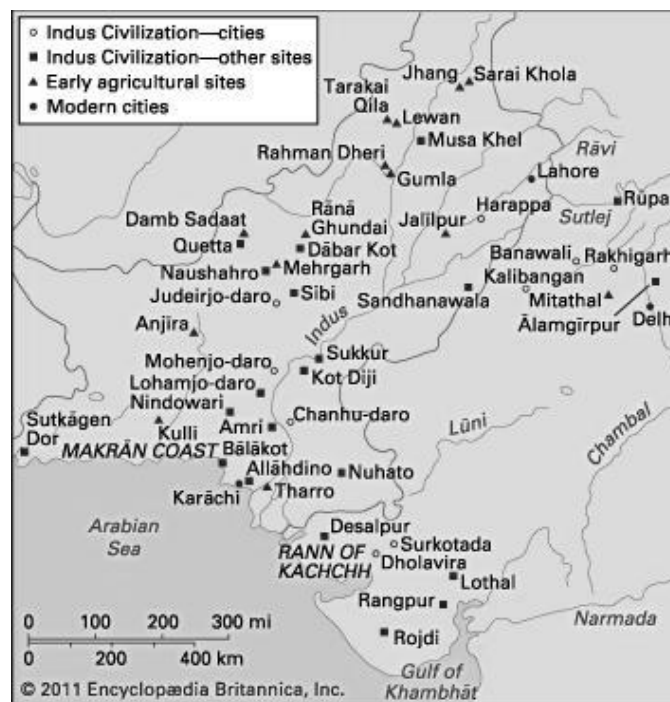


Figure: Indus civilization.

The Indus civilization is known to have consisted of two large cities, Harappa and Mohenjo-daro, and more than 100 towns and villages, often of relatively small size. The two cities were each perhaps originally about 1 mile

(1.6 km) square in overall dimensions, and their outstanding magnitude suggests political centralization, either in two large states or in a single great empire with alternative capitals, a practice having analogies in Indian history. It is also possible that Harappa succeeded Mohenjo-daro, which is known to have been devastated more than once by exceptional floods. The southern region of the civilization, on the Kathiawar Peninsula and beyond, appears to be of later origin than the major Indus sites. The civilization was literate, and its script, with some 250 to 500 characters, has been partly and tentatively deciphered; the language has been indefinitely identified as Dravidian.

The Indus civilization apparently evolved from the villages of neighbors and predecessors, using the Mesopotamian model of irrigated agriculture with sufficient skill to reap the advantages of the specious and fertile Indus River valley while controlling the formidable annual flood that simultaneously fertilizes and destroys. Having obtained a secure foothold on the plain and mastered its more immediate problems, the new civilization, doubtless with a well-nourished and increasing population, would find expansion along the flanks of the great waterways an inevitable sequel. The civilization subsisted primarily by farming, supplemented by an appreciable but often elusive commerce. Wheat and six-row barley were grown; field peas, mustard, sesame, and a few date stones have also been found, as well as some of the earliest known traces of cotton. Domesticated animals included dogs and cats, humped and shorthorn cattle, domestic fowl, and possibly pigs, camels and buffalo. The Asian elephant probably was also domesticated, and its ivory tusks were freely used. Minerals, unavailable from the alluvial plain, were sometimes brought in from far afield. Gold was imported from southern India or Afghanistan, silver and copper from Afghanistan or northwestern India (present-day Rajasthan state), lapis lazuli from Afghanistan, turquoise from Iran (Persia), and jadelike fuchsite from southern India.

Perhaps the best-known artifacts of the Indus civilization are a number of small seals, generally made of steatite (a form of talc), which are distinctive in kind and unique in quality, depicting a wide variety of animals, both real – such as elephants, tigers, rhinoceros, and antelopes – and fantastic, often composite creatures. Sometimes human forms are included. A few examples of Indus stone sculpture have also been found, usually small and representing humans or gods. There are great numbers of small terra-cotta figures of animals and humans.



Figure: Site overview of Mohenjo-daro, eastern Pakistan.

How and when the civilization came to an end remains uncertain. In fact, no uniform ending need be postulated for a culture so widely distributed. But the end of Mohenjo-daro is known and was dramatic and sudden. Mohenjo-daro was attacked toward the middle of the 2nd millennium BCE by raiders who swept over the city and then passed on, leaving the dead lying

where they fell. Who the attackers were is matter of conjecture. The episode would appear to be consistent on time and place with the earlier invaders from the north (formerly called Aryans) into the Indus region as reflected in the older books of the Rigveda, in which the newcomers are represented as attacking the 'walled cities' or 'citadels' of the aboriginal peoples and the invaders' war-god Indra as rending forts 'as age consumes a garment'. However, one thing is clear: the city was already in an advanced stage of economic and social decline before it received the coup de grâce. Deep floods had more than once submerged large tracts of it. Houses had become increasingly shoddy in construction and showed signs of overcrowding. The final blow seems to have been sudden, but the city was already dying. As the evidence stands, the civilization was succeeded in the Indus valley by poverty-stricken cultures, deriving a little from a sub-Indus heritage but also drawing elements from the direction of Iran and the Caucasus – from the general direction, in fact, of the northern invasions. For many centuries urban civilization was dead in the northwest of Indian subcontinent.



Figure (top): Assortment of seals with animal motifs in use during the time of the Indus civilization, 2nd-3rd millennium BCE.



Figure (bottom): Harappan cooking pots in use during the Indus civilization, c.2300-2200 BCE.

In the south, however, in Kathiawar and beyond, the situation appears to have been very different. There it would seem that there was a real cultural continuity between the late Indus phase and the Copper Age cultures that characterized central and western India between 1700 and the 1st millennium BCE. Those cultures form a material bridge between the end of the Indus civilization proper and the developed Iron Age civilization that arose in India about 1000 BCE.”

Quotation(s) from:

Walsh, Judith E. (2006), *A Brief History of India*, New York: Facts on File Inc.

[pp.5-15]

“The subcontinent’s oldest (and most mysterious) civilization was an urban culture that flourished between 2600 and 1900 B.C. along more than 1,000 miles of the Indus River valley in what is today both modern Pakistan

and the Punjab region of the northwest India. At its height, the Harappan civilization – the name comes from one of its cities – was larger than earlier of its contemporary river civilizations in the North East, Egypt and Mesopotamia. But by 1900 B.C. most of its urban centers had been abandoned and its cultural legacy was rapidly disappearing, not just from the region where it had existed, but equally from the collective memories of the peoples of the subcontinent. Neither its civilization nor any aspects of its way of life appear in the texts or legends of India's past; it was completely unknown – as far as scholars can tell today – to the people who created and later wrote down the Sanskrit texts and local inscriptions that are our oldest sources for knowing about India's ancient past. In fact, until India's Harappan past was rediscovered by European and Indian archaeologists in the 19th and early 20th centuries, the civilization had completely vanished from sight.

Who were these Harappan peoples? Where did they come from and where did they go? For the past 150 years archaeologists and linguists have tried to answer these questions. At the same time, others from inside and outside Indian society – from European Sanskritists and British imperialist to, more recently, Hindu nationalists and Untouchable organizations – have all sought to define and use the Harappan legacy. Whatever conclusions may be drawn about the Harappan peoples; they were neither the earliest nor the only human inhabitants of the Indian subcontinent. From as early as 30,000 thousand B.C. through 4000 B.C., Stone Age communities of hunters and gatherers lived throughout India in regions such as Gujrat, Madhya Pradesh, Rajasthan, Uttar Pradesh, and Bihar. Excavations in Baluchistan at the village of Mehrgarh near the Bolan Pass (and close to the Indus River) show that agriculture and the domestication of animals had begun in the region by 7000 B.C. By the time the Harappan civilization became an urban center, around 2600 B.C., the Indus region was home to many different communities – pastoral, hunting and gathering, and farming – and this diverse pattern continued through the post-Harappan period.

Scholars today agree that not one but two great rivers ran through the northwest at this time: The Indus itself (flowing along a course somewhat different from its current one) and a second river, the much larger version of the tiny Ghaggar-Hakra River whose remnants still flow through part of the region today. The course of this second river system paralleled that of the ancient Indus, flowing out of the Himalaya Mountains in the north to reach almost to the Arabian Sea. By the end of the Harappan period, much of this river had dried up, and its tributary headwaters had been captured by rivers that flowed eastward toward the Bay of Bengal. Some suggest this was part of an overall climate change that left the region drier and less able to sustain agriculture than before. Animals that usually inhabited wetter regions – elephants, tigers, rhinoceroses – are commonly pictured on seals from Harappan sites, but the lion, an animal that prefers a drier habitat, is conspicuously absent.

Harappan civilization was at the southeastern edge of an interconnected ancient world of river civilizations that included Mesopotamia in modern-day Iraq and its trading partners further west. Indus contacts with this ancient world were both overland through Afghanistan and by water from the Indus delta region into the Arabian Gulf. Harappan-style artifacts – seals, beads, dice, ceramics – have been found in sites on the Arabian Sea (Oman) and in Mesopotamia itself. Mesopotamian objects (although fewer in number) have also been found at Harappan sites. Mesopotamian sources speak of a land called 'Meluhha' – some scholars think this was the coastal region of the Indus valley.



Figure: Harappan civilization sites.

Harappan Culture: Harappan civilization developed indigenously in the Indus region; its irrigation agriculture and urban society evolved gradually out of the smaller farming communities in the region, made possible by the Indus region's dry climate and rich alluvial soil. Between 2600 and 1900 B.C. Harappan civilization covered more than 263,000 square miles, stretching from the Arabian seacoast up to the northern reaches of the Indus river system and reaching as far south as modern Gujrat. Among the 1,500 Harappan sites known today a small number were urban. Of these the cities of Harappa in the Punjab and Mohenjo-Daro in Sind are the best known. Mohenjo-Daro is the largest site: 200 hectares (494 acres) in size. Its 'lower town' may once have held more than 40,000 people. Harappa is the second largest city, at 150 hectares (370 acres).

Harappan cities were trading and craft production centers, set within the mixed economies – farming, herding, hunting and gathering – of the wider Indus region and dependent on these surrounding economies for food and raw materials. Mesopotamian records indicate that the 'Meluhha' region produced ivory, wood, semiprecious stones (lapis and carnelian), and gold – all known in Harappan settlements. Workshops in larger Harappan towns and sometimes even whole settlements existed for the craft production of traded items. Bead-making workshops, for instance, have been found that produced sophisticated beads in gold, copper, lapis, ivory, and etched carnelian. Excavations have turned up a wide range of distinctive Harappan products: Along with beads and bead-making equipment, these included the square soapstone seals characteristic of the culture, many different kinds of small clay animal figurines – cattle, water buffalo, dogs, monkeys, birds, elephants, rhinoceroses – and a curious triangular shaped terra-cotta cake that may have been used to retain heat in cooking.

Harappan settlements were spread out over a vast region; in fact, the cities of Mohenjo-Daro and Harappa were separated by 400 miles of Indus River. Nevertheless 'their monuments and antiquities' as the British archaeologist John Marshall observed, "are to all intents and purposes identical". It is this identity that allows discussion about Harappan sites as a single civilization. While scholars can only speculate about the nature of

Harappan society, religion, or politics, they can see its underlying unity in the physical remains of the settlements.

Beads of many types and carved soapstone seals characterized this culture. In addition, Harappan produced a distinctive pottery used throughout their civilization: a pottery colored with red slip and often decorated in black with plant and animal designs. They used copper (from nearby Rajasthan and Baluchistan) and bronze to make tools and weapons. Their builders used baked bricks produced in a standard size and with uniform proportions.



Figure: 'Priest-King' from Mohenjo-Daro.

Indus cities and even some smaller settlements show evidence of being planned societies. The city of Mohenjo-Daro was built on a grid pattern, with streets running north-south and east-west intersecting at right angles. Urban Harappan homes were built around central courtyards – as are many Indian homes today – with inner rooms not visible from the street. Harappans also made careful plans for water. At Mohenjo-Daro one out of three homes had a well in an inside room. Latrines were built into the floors of houses, and wastewater was carried out of urban homes through complex brick drainage systems; covered drains carried waste and water along the streets and outside of the settlement areas.

While archaeological excavations have provided a great deal of information on the material culture of Harappan civilization, the absence of oral or written texts still leaves many questions. Without additional sources scholars cannot know how Harappan cities were governed, how they related to the surrounding countryside, or even how they related to one another. At both Mohenjo-Daro and Harappa, the cities are on two levels: a higher level of large buildings and structures (sometimes called the 'citadel') and a lower (perhaps residential?) area. At Mohenjo-Daro the citadel section includes a large, brick-lined bathing structure (the Great Bath). Nearby is a second large building whose function – perhaps a granary or a warehouse? – scholars still debate. Unlike Mesopotamia in the Near East, Harappan civilization had neither monuments nor large statues. Many cities seem to lack defenses.

One of the relatively few surviving human sculptures from Harappa shows a bearded man from the waist up. Is he a merchant, a king, or a priest? Although some have nicknamed this figure the 'Priest-King' we do not know what the image was meant to represent.

The End of Harappan Civilization: By 1800 B.C. Harappan urban centers had either been abandoned or were occupied on a much smaller scale and by communities whose cultures were very different from that of the earlier civilization. Mohenjo-Daro was abandoned and its uppermost archaeological level, unburied corpses have been found. At Harappa city, the settlement shrank in size and was occupied in one section by a people whose pottery and burial customs differed from those of earlier inhabitants. The drying up of the Ghaggar-Hakra River forced many to abandon settlements along it. At many sites in the Indus region in this period older Harappan-style artifacts disappear, replaced by more regionally defined cultural products. Trade both along the length of the Indus region and with the Near East comes to an end. Only toward the south in Gujrat do we find new, growing settlements linked in style to earlier Harappan culture, but with a new, now regionally defined culture.

Interestingly, aspects of Harappan civilization lived on in the material culture of the northwestern region. Full-size wooden bullock carts found in the area today are almost the exact duplicates of the small clay models from Harappan sites. Sewage drains continue to be common features of homes in this part of the north. Small Harappan figurines of large-breasted females remind many of 'mother goddess' figure of more recent derivation. The posture of one broken Harappan statue, the torso of a man, bears a striking resemblance to the stance of the later dancing god Shiva. And a figure on an Indus seal sits cross-legged in a yogic pose common in later Hinduism.

What happened to Harappan civilization? British archaeologists in the early 20th century (and others later) blamed its end on the 'Aryan invasion', the migration into the subcontinent of Indo-Aryan warrior tribes from Central Asia and Iran. Scholars now know these tribes entered the region in large numbers centuries after Harappan civilization was in decline and many cities had already been abandoned. Instead, they debate other possible reasons for the Harappan end – climate change, endemic disease, river flooding – or speculate on how an as-yet-unknown Harappan ideology might have contributed to its demise. Hindu nationalists of the 20th and 21st centuries claim Harappan civilization as the birthplace of Sanskrit and Hindu culture – an 'out of India' idea that many strenuously dispute. In the end we are left with many questions and with speculations, but with few firm answers."

APPENDIX-G

HELLENISTIC CLASSICISM

i.e. The Hellenistic Art

Quotation(s) from:

Art Encyclopedia, *Hellenistic Art*, accessed on: 2018

[web: <https://www.visual-arts-cork.com/antiquity/hellenistic-art.htm>]

"Hellenistic Art:

What is Hellenism?

In Classical Antiquity, the meaning of the term 'Hellenism' can be summed up as: 'an admiration for, or an imitation of, the ideas, style, or culture of classical Greek civilization'. Hellenism was widespread during the 'Hellenistic Age', traditionally defined as lasting from 323 BCE (shortly after the Battle of Actium in 31 BCE and the subsequent conquest of Ptolemaic Egypt). The Hellenistic age was characterized by a profound respect, if not reverence for Greek culture, which was felt throughout the civilized world in the West. Countries and colonies around the Eastern Mediterranean, for instance, were greatly impressed by Greek art – including all types of Greek sculpture and Greek pottery – and Greek architecture, especially the architectural 'Orders'. Generally speaking, Hellenistic type of sculpture and architecture were practiced in all Greek colonies, notably the mainland of Anatolia (present day Turkey), while Hellenistic painting is exemplified by the Egyptian Fayum Mummy Portraits (from 50 BCE). Egypt however did not take to Greek building designs, and the Ptolemaic dynasty (305-30 BCE) which was established in Egypt by the Macedonian Greek general Ptolemy I, adhered to traditional Egyptian designs. On the European mainland, both Etruscan art and Roman art were heavily influenced by Greek styles. This is particularly noticeable in the field of Roman sculpture, although Roman relief sculpture was almost as good as that produced by the Greeks. As for Roman architecture, this was responsible for a number of critical improvements on Greek designs, including the invention of the arch, the vault, the dome and concrete.

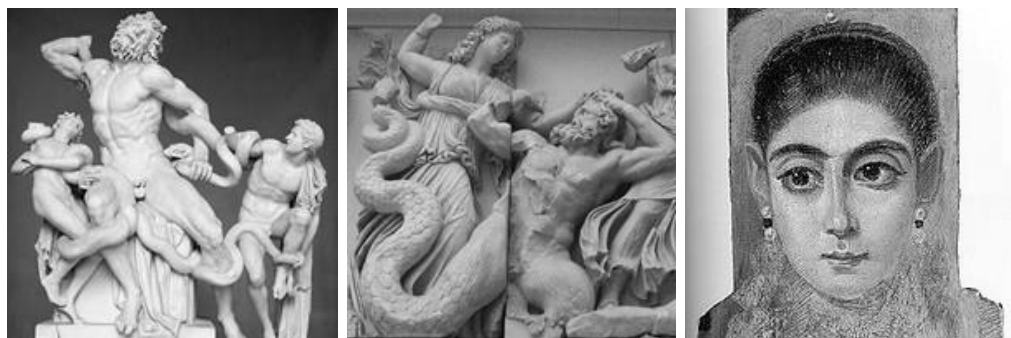


Figure: Laocöon and His Sons, Antiphias and Thymbraeus (c.42-20 BCE), Vatican Museums, Rome (left) is a characteristic example of sculpture from the Hellenistic era of classical antiquity. Alter of Zeus at Pergamon (c.166-156 BCE) – detail from North Frieze – the giant Agrios being clubbed to death (middle). Fayum Mummy Portrait, Louvre (right) is a rare example of painting from the Hellenistic era of classical antiquity.

Death of Alexander the Great

When Alexander the Great died in June, 323 BCE, he left behind a vast empire stretching from the Greece to India. It included parts of Serbia, Bulgaria, Turkey, Syria, Lebanon, Egypt, most of Persia, Afghanistan, and a

chunk of Pakistan. Control of this empire was then fought over by Alexander's principal generals (known as the 'Diadochi'), who duly established a number of ruling dynasties. They included: the 'Seleucids' in Mesopotamia and Syria; the 'Ptolemies' in Egypt, and the 'Attalids' in Pergamon, and so on.

Hellenistic Architecture

This was directly affected by the splitting-up of Alexander's empire, since each of these dynasties had significant patronage, as well as the need to establish themselves in the eyes of their subjects. This combination led to a number of major urban developments, like Antioch, Pergamon, and Seleucia on the Tigris. Pergamon is especially characteristic of Hellenistic architecture. Originally a modest stronghold on an Acropolis, it was redeveloped by the Attalid kings into a colossal architectural complex. It included the monumental Alter of Zeus at Pergamon (c.166-156 BCE), adorned with a 370-foot long marble frieze depicting the Gigantomachy from Greek mythology. Hellenistic architectural gigantism is also exemplified by the (incomplete) second temple of Apollo at Didyma, Ionia (begun around 305 BCE), designed by Daphnis of Miletus and Paionios of Ephesus.

In addition to those works cited above, other notable examples of Hellenistic architecture include the following:

- Temple of Dionysus, Teos, Asia Minor (193 BCE) – Ionic hexastyle temple designed by Hermogenes of Priene.
- Temple of Apollo Didymaeus, Miletus, Asia Minor (310 BCE - 40 CE) – Iconic decastyle temple with Corinthian elements, designed by the architects Paeonius of Ephesus and Daphnis of Miletus.
- Temple of the Olympian Zeus, Athens (174 BCE) – Monumental Corinthian octastyle temple designed by architect Ossutius.

Hellenistic Sculpture

In contrast to the calmness and serenity of High Classical Greek sculpture (450-400 BCE), as exemplified by the statues and reliefs of the Pantheon, Greek sculpture from the Hellenistic era was more exciting, and typically featured more movement and stronger emotion. Hellenistic sculptures no longer restricted themselves to the idealized subjects of Classical sculpture, but portrayed a wider range of personalities, moods and scenes. The best example of the drama of Hellenistic plastic art is the marble relief sculpture at Pergamon, while another famous example is 'Laocoon and His Sons' (42-20 BCE, Museo Pio Clementino) by Hagesander, Athenodoros and Polydorus).

But although more active than classical forms, Hellenistic works retained several classical features such as all-round viewability of statues, meticulous drapery, and suppleness of posture – see, for instance, the twist of the hips on the 'Venus de Milo' (c.130-100 BCE), and the relaxed posture of the sleeping satyr known as the 'Barberini Faun' (c.200 BCE, Glyptothek, Munich). Sensuality was also depicted, in the works of 'Aphrodite, Pan and Eros' (c.100 BCE, National Archaeological Museum, Athens), or 'Aphrodite of Cyrene' (c.100 BCE, Museo delle Terme, Rome). Hellenism also led to an increasing interest in individual psychology: see, for instance, the melancholic statue of 'Demosthenes' (c.280 BCE) by Polyeyktos.

Advances in bronze casting facilitated the creation of monumental bronze sculpture, such as the 32-meter tall 'Colossus of Rhodes' – one of the famous Seven Wonders of the World (192-280 BCE), made by Chares of Lindos (fl. 300-280 BCE). Unfortunately, most Hellenistic bronzes were melted down and used in manufacture of weapons or coins.

Hellenistic Greece also witnessed the widespread use of terracotta sculpture, both for funerary and decorative purposes. New molding techniques enabled artists to create highly detailed miniature statues, with a

high level of naturalism. In contrast to these relaxed figurines, Hellenistic sculptures in Greece and Egypt produced a variety of 'grotesques' – hunchbacks, epileptics and other deformed or tortured characters – which appear to violate most canons of 'Greek beauty'. An early form of caricature art, possibly.

Hellenistic plastic art also had a major influence on Indian sculpture, especially Greco-Buddhist statuary of the Gandhara school in Peshawar, and later at Taxila, in the Punjab.

In addition to those works cited above, other notable examples of Hellenistic sculpture include the following:

- Crouching Hermaphrodite (c.3rd BCE) Louvre. By unknown artist.
- Menelaos with the Body of Patroklos (c.3rd BCE) Louvre. By unknown artist.
- Dying Gaul (c.240 BCE) Musei Capitolini, Rome. By Epigonos.
- Ludovisi Gauls (c.240 BCE) National Museum of Rome. By unknown artist.
- Winged Victory of Samothrace (Nike) (c.220-190 BCE) Louvre. By unknown artist.
- Jockey of Artemision (c.140 BCE) Archaeological Museum, Athens. By unknown artist.
- The Punishment of Dirce (Farnese Bull) (c.2nd BCE). By Apollonius of Tralles.
- The Three Graces (c.2nd BCE) Louvre. By unknown artist.
- The Medici Venus (c.150-100 BCE) Uffizi, Florence. By unknown artist.
- Borghese Gladiator (c.100 BCE) Louvre. By Agasias of Ephesus.
- The Venus of Arles (c.100 BCE) Louvre. By unknown artist.
- Spinario (boy removing thorn from foot) (c.80 BCE) Palazzo dei Conservatori. By unknown artist.

Hellenistic Paintings and Mosaics

Almost no Greek painting has survived. Those few murals or fresco paintings that have survived are typically in bad condition. As a result, it is only through a study of Roman paintings that it is possible to see the influence of Greek Art. Probably the best examples of Hellenistic painting are the 'Fayum Mummy Portraits' – a large series of panel paintings excavated from sites around the Fayum Basin, south of Cairo, dating back to the first century BCE.

Mosaic art gained significant popularity during the Hellenistic period, thanks to mosaicists like Sosos of Pergamon, active in the second century BCE, as cited by Pliny (23-79 CE). His skill at trompe l'oeil works can be seen in the 'Unswept Floor' in the Vatican museum, and the 'Dove Basin' at the Capitoline Museum in Rome.

Hellenistic Pottery

Unlike most other types of art of the Hellenistic period, pottery suffered a decline in standards, notably in the quality of its painting and color. Hellenistic vases are typically black and uniform, with a shiny almost varnished appearance, adorned with motifs of flowers or garlands. Pots with more complex reliefs also appeared, with images of animals or mythological creatures. Hellenistic pottery can be found as far east as the Pakistani city of Taxila, which remains a center of ceramic art to this day."

Quotation(s) from:

Cole, Emily (2002), *The Grammar of Architecture*, Boston: Bulfinch Press

[p.114]

“The death of Alexander the Great in 323 BCE is widely regarded as the end of the Hellenic period (which had begun c.650 BCE) and the beginning of the Hellenistic phase. Under Alexander, the Greek Empire had spread as far as India and Nubia, but the traditional Hellenic influence had remained strong. With Alexander’s death, this vast territory was broken up into independent kingdoms, the lifestyle and arts of which have been turned Hellenistic, for they imitated true Hellenic principles. There was a general move away from earlier forms; the Ionic and Corinthian orders were regularly used in preference to the Doric, which almost fell out of use, and attention was paid to an array of architectural types. This last phase of Greek architecture was to have a vital impact on the Romans, who finally conquered Greece in 30 BCE.”

GLOSSARY

A-M

Amalaka	A truncated elliptical and fluted crown in Hindu and Buddhist <i>shikharas</i> resembling an amalaka fruit.
Bodhi	Enlightenment.
Bodhi-tree	A papal tree or 'tree of enlightenment' under which Buddha became enlightened; also an aniconic symbol of the Buddha.
Bodhisattva	One whose essence (<i>sattva</i>) is enlightenment (<i>bodhi</i>) typically denoting a <i>Mahayana</i> saint, who is often a non-historical and divine being practicing high virtues and countless sacrifices for fellow beings in the past and present lives before ultimately becoming Buddha. Conceptually he is the <i>Mahayana</i> equivalent to the <i>Hinayana</i> (i.e. <i>Theravada</i>) saint and different from the <i>Bodhisattva</i> , or Buddha before 'enlightenment' and an epithet for his past births in the <i>jatakas</i> as a compassionate being.
Brahman	A Hindu concept of a metaphysical absolute or a supreme or cosmic being behind all world phenomena whilst the spirit or being is the absolute reality within a person.
Brahmin	Hindu priests comprising the highest caste in Hinduism.
Chaitya	Any sanctified religious entity, shrine or structure including temples and <i>stupas</i> .
Chaitya-arch	A great horseshoe-shaped arch on a façade of a rock-hewn cave sanctuary in India.
Chityagriha	<i>Chaitya</i> house or <i>chaitya</i> hall is a type of rock-hewn cave or freestanding structure containing a symbolic <i>stupa</i> in the center of a circular plan or at the apsidal end.
Dhamma	Elements, morality, duty, and law; in Buddhism specifically referring to Buddha's teachings.
Dharmachakra	'Wheel of morality' and/or 'wheel of <i>dhamma</i> ', a symbol representing Buddha's <i>dhamma</i> ; also an aniconic symbol of Buddha.
Dharmachakravartin	A universal and religious <i>dhamma</i> 'monarch' who turns the <i>dharmachakra</i> .
Dharmarajika	Monuments of religious piety encompassing <i>chaityas</i> and <i>stupas</i> constructed by Asoka to commemorate the places associated with Buddha's life or inter Buddha's relics, respectively.
Garbha	'Womb' – chamber, receptacle, house – generally the most sacred quarter in a religious structure in India, a sanctum sanctorum.
Gopuram/Gopura	A formal and large pavilion gateway.
Karma/Kamma	'Action', 'deed', popularly a system of rewards-punishments or moral consequences incurred by one's actions upon the surrounding environment in the past, present and future; a good <i>karma</i> will result in a higher rebirth and a bad <i>karma</i> will result in a lower rebirth. A characteristic of religious systems across the Indian subcontinent and a Pan-Asian concept.
Lena	A rock-hewn cave residence for the Buddhist monks; also known as the <i>vihara</i> .
Mahavihara	'Great <i>vihara</i> ', commonly a monastic university.
Mandapa	A hall, often pillared and flat-roofed, preceding a central sanctuary in Indian architecture
Mantra	A tantric incantation invoking and propitiating a particular deity.
Mudra	A hand gesture; in Tantricism it carries additional esoteric meanings.

N-Y

Nirvana	Blowing out, extinction, or enlightenment – the ultimate liberation for all sentient beings and the most important religious goal for the Buddhists.
Pradakshina	A religious processional path around the base of a <i>chaitya</i> or <i>stupa</i> for worship, which is performed by moving in the clockwise direction.
Raja	A king.
Samsara	The cycle of birth and rebirth, the cycle of existence, and the world of unenlightened beings.
Sangha	The community of Buddhist monks and nuns, the Buddhist order.
Sangharama	A permanent monastery.
Shikhara	Commonly, a North Indian Hindu Nagara temple having a curvilinear spire towering above a central cella and preceded by a <i>mandapa</i> .
Stambha	A freestanding pillar.
Stupa	A type of <i>chaitya</i> and Buddhist structure typically interring Buddhist relics and also holy objects.
Sunya	'Emptiness' – a hallmark <i>Mahayana</i> philosophical concept and also the <i>Vajrayana</i> symbolizing enlightenment.
Tantra	The foremost canonized literature of the <i>Vajrayana</i> which is divided into four categories in ascending order, namely – <i>kriya-tantra</i> (action <i>tantras</i>), <i>carya-tantra</i> (performance <i>tantras</i>), <i>yoga-tantra</i> (yoga <i>tantras</i>) and <i>anuttarayoga-tantra</i> (supreme yoga <i>tantras</i>).
Torana	The entrance gateway to an Indian <i>stupa</i> .
Triratna	Three jewels of Buddhism, namely – the Buddha, the <i>dhamma</i> , and the <i>sangha</i> .
Vajra	The ultimate state of enlightenment in the <i>Vajrayana</i> and equivalent of the non-dual and empty state of <i>sunya</i> ; it symbolizes the union of the male and female principles.
Vassavasa	A rain retreat where Buddhist monks and nuns congregate during the rainy season.
Vedika	A railing and protecting barrier, typically stone, enclosing the base of the <i>stupa</i> that physically and symbolically demarcates the sacred and the mundane.
Vihara	A private dwelling for monks and nuns; popularly used with <i>sangharama</i> for a Buddhist monastery.
Yoga	A method of physical discipline and breathing control practiced by Hindu religious seekers to purify the mind and seek the eternal union with the Brahman.

