# MEANING IN ARCHITECTURE: AN INVESTIGATION OF THE INDIGENOUS ENVIRONMENT IN BANGLADESH

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Saif-ul- Haq

## ABSTRACT

A meaningful environment forms a necessary and essential part of a meaningful existence. Meaning is an interpretive problem, and meaning in architecture is difficult to grasp. Theoretical insights into meaning have to be based on analysis of existing and historical environments. The history of great architecture is a description of man's search and discovery of meaning under different conditions. This, in turn, may be used to help improve today's understanding of architecture.

This study is triggered by a fundamental need to understand the architecture of Bangladesh. It finds validity by contrast with the narrow focus of existing studies. As a broad-based approach, this study looks at historical development, vernacular architecture, monumental buildings and, to some extent, at sources from peripheral areas. From these, it attempts to define what could be termed the essential theme of Bangladeshi architecture. In this regard, it argues that, contrary to popular belief about the bent roof shape or the introvert courtyard houses, the beginning and hence the essential constituent of Bangladeshi architecture is in the relationship between simple free-standing structures and their yards. The facades of the structures are the element from which the yards derive their quality. This primordial concept forms the model by which a meaningful environment is produced in Bangladesh.

*To **Nanubhai**,*
*I wish I had your wisdom....*

## ACKNOWLEDGMENTS

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# PREAMBLE

The comprehension and clarification of any architecture possibly involves the simultaneous understanding of two things: the related theoretical works and the architectural artifacts themselves.

For Bangladeshi architecture, there were in existence, two kinds of theoretical discussions. One of these considered only the rural hut in isolation, and focused on how its elements determined factors of identity in architecture. This discussion propagated the wide-spread belief in the bent roof shape being one important identifying characteristic of Bengal architecture.[1]

The approach of the second argument was an anthropological one. With tools developed from Amos Rappoport's work, the spaces and activities of the house were studied. This distinguished differences among the created spaces in functional, social and religious terms and advocated the introvert courtyard type as the essential characteristic of Bangladeshi architecture.[2]

However, from the point of view of the practicing architect, both discussions fail to inform possible strategies which may yield a contemporary architecture that would embody some sense of the local identity. This study stems from an attempt to respond to this problem. Therefore, it is more comprehensive in its scope and considers diverse sources in its quest for the fundamental elements. Its intention is an attempt to identify the basic characteristics of Bangladeshi architecture, which may serve to allow architects to work with or against questions of local 'meanings' in Bangladesh.

[1]. Scholars like Percy Brown, (1956) A.D King, (1973) etc. developed this idea which was accepted and used by Hitearanjan Sanyal, Perween Hasan etc.

[2]. Iftekhar Mazhar Khan (1982) and Dewan M. Hasan (1985) refer to this idea.

Fig. 0.0.1
A contemporary rural hut

Fig. 0.0.2
Nineteenth century reproduction
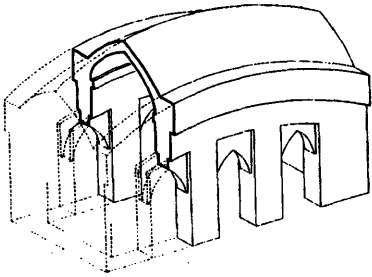of a Bengali peasant hut.

# THE ARCHITECTURE OF BANGLADESH

For scholars in architecture, Bangladesh is known as the place of origin of the 'bungalow' type of residential building. As A.D. King puts it, "...bungalow is a corruption of the word now internationally known in the form of *Bangla Desh.*" [3]



Fig. 0.0.3
A *Bangla* vault

Understandably, for outsiders, the distinctive form of a structure can and did have a particular impact. This is manifested in numerous replications in manifold ways all over the world.[4] Bungalow is possibly the only dwelling type which, both in form and in name, can be found in every continent of the world.[5] The word 'bungalow' has been accepted into the principal languages of the world and is incorporated as a foreign originated word in more than 17 major languages.

The indigenous 'bunggolo' as understood by the scholars is the common rectangular hut of the Bengali peasant. This has a peculiarly curving roof "resembling an upturned boat"[6]. Perhaps due to the characteristics of the construction material--bamboo, both the roof and the ridge is curved. As Volwahsen remarks, "... a type of roof which gave the impression that all its planes were curved. The ridge and the eaves were upturned; also the bamboo rafters placed perpendicular to the ridge were curved."[7]According to the number of the slopes or *Chala* the roofs were two-sloped *(Do-Chala)*, four sloped *(Chau-Chala)* , eight slopes *(Aat-Chala)* etc.[8]

Early references to this unusual house type were seen in the mosques of Bengal built in the independent Sultanate period from the mid 14th to the mid 16th centuries. Later on, reproductions were seen in the Hindu architecture of the region. The Mughals were also influenced by this provocative bent form and imported it to their capitals

3. A.D. King, "The Bungalow", Part I, in *Architectural Association Quarterly,* Vol. 5, No. 3, Jul./Sept., 1973

4. For a detailed account see A.D King, *The Bungalow The production of a Global Culture,* 1984.

5. ibid., p. 02

6. Quoted by Francis Buchanan, op. cit. A.D King, 1984

7. Andreas Volwahsen, *Living Architecture : Islamic Indian,* 1970, Pg. 178 & 179

8. See A.D. King, "The Bengali Peasant Hut: Some Nineteenth Century Accounts", 1977

and incorporated it to their imperial architecture. Similarly it was also reproduced in many other parts of India. Vivid images and descriptions of these houses in the early 19th century are found in the work of early British writers, artists and photographers.[9] In form at least, they show remarkable similarities. Such portentous prevalence is but an indication of its symbolic value to the Bengali people.

This visually inspiring structure was quickly accepted by the English and it was through them that it got transferred to different continents. In Bengal it remained in its original form in the rural areas, mostly ignored and unstudied by the professionals for whom westernization had become the sign of progress. Little research that was undertaken by the local researchers were socio-anthropological in approach and they studied the layout of the house which were introverted around a central courtyard.

The success of the Grameen Bank Housing Scheme can possibly be taken as an indicator of the strength of the symbolic attachment the people have to their houses. The Aga Khan Award fittingly recognizes this fact. It serves to reiterate the idea of the Bangladeshi 'house' as a powerful sign and a stimulus of the society. The award has, in a certain way, exposed the associative qualities of an architecture which lies dormant in the landscape of Bangladesh and possibly in a remote corner of the mind.

Is it merely the form of these houses that wield such an indicative quality? Is it the relationship they have with man and with the surrounding elements that is responsible? Or is it something else? What is the specificity of the Bangladeshi house? What and how can architects learn from these? These are the kinds of
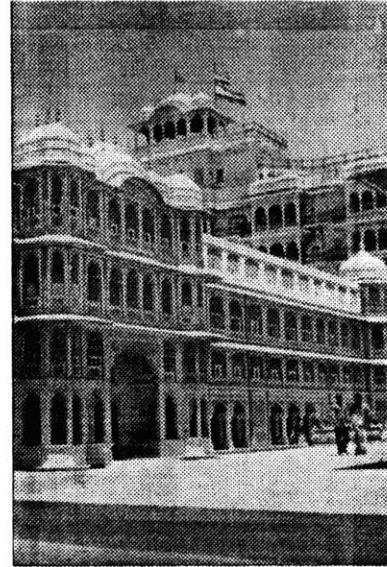


Fig. 0.0.4
Curved element of Bengal in a North Indian Palace.

9. See for example, George Michell (1983 & 1984) and Grant Colesworthy (1984)

queries with which this thesis is launched. The question to be asked in regard to the esoteric problems is, "what does it mean ?"

## APPROACH TO THE THESIS

The first step seems to be understanding the character and attitudes of the people so that one is clear about the many cultural layers within. The subsequent task is to examine their architecture.

The approach adopted in this thesis is inductive. Since it is an attempt to comprehend the architecture of Bangladesh, an anthropological approach based on phenomenology in relation to the lay perspective seems to be a possible procedure. However, for clarification in places, semiological concepts may be used. Rationality produces verifiable theory while intuitive insights produce new ideas. As the author has the advantage of belonging to the culture in question, this shall also include intuitive reactions where these might be valuable.

The task has been divided into three parts. The first introduces the theoretical material this thesis relies upon, and then proceeds to an extensive look into the cultural layers constituting the Bangladeshi psyche with a special interest in the background shaping forces. The second part presents case studies of the local architecture with examples from both the monumental as well as the vernacular. The final part evaluates the indigenous architecture in terms of the possible sources of influence developed in the preceding discussion, while, in a parallel manner, peripheral as well as historic evidence is introduced.

This thesis relies on observation, therefore it is empirical. Observations are supplemented by experiences and emotions; in this way it is phenomenal. Lastly, it attempts some general principles from particular observations -- in this way it is inductive. If a term be proposed for the method used here, then 'hermaneutics' come closest. This is only suggested because serious attempts are made to understand the situation and circumstances behind production of the architectural artifacts. However, problems of validity as a consequence of attempting to posit oneself in a different temporal framework then arise. Gadamer's ideas about the constant change of meaning[10] through time acts here as a cautionary signal and shall be borne in mind.

By this method of research, unique features in the architecture of Bangladesh which might be said to endow it with a local significance is identified. These conclusions are then experimentally tested in the final chapter by relating them to some contemporary architecture there.

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[10.] Gadamer, Hans-Georg, *Truth and Method*, 1975

# PART ONE
# INTRODUCTION

# 1.

# THEORETICAL CONSIDERATIONS

This chapter shall study some relevant aspects of the existing theoretical discussions on the comprehension of architecture. Since the aim is developing an understanding of, and not a critical discussion on, the theories, the following shall be introductory in nature.

## 1.1. THEORETICAL APPROACH TO 'MEANING'.

The determination of meaning in architecture is a very perplexing task and has been studied in many ways. Approaches extend from consideration of the 'conception' of the designer to that of the 'perception' of the observers, Appropriate methodology, on the other hand, ranges in a spectrum from scientific rationality to intuitive understanding .

Meaning is defined in the linguistic sense as something that is conveyed by language. It involves the logical denotation and connotation of a word or phrase.[1] Meaning has a very wide range of use, embracing everything from specific denotation to a general suggestiveness. In the discourse of art and architecture, 'meaning' is usually associated with semiology. This is essentially the classification of signs and symbol systems based on the concepts they evoke. When transferred to architecture, meaning applies more to the physical aspects of the built form.

The term 'meaning' is used in this thesis in a much wider sense. Taking Clifford Geertz's words, it is that which is "intuitively sensed, but not consciously interpreted"[2] 'Meaning' is here transposed from the second definition of the dictionary, i.e. a logical denotation and connotation of the architectural environment.

[1]. *Webster's Ninth Collegiate Dictionary,* 1987

[2]. Clifford Geertz, *The Interpretation of Cultures,* 1973, p.128

For the purposes of this investigation, two ways of looking at architecture shall be considered. One is to study the physical appearance of the artifact and the other is to look at its possible symbolization. Contrary to the appearance of a straight-forward methodology, many complexities are involved here which are discussed later.

The first step will be to examine the factors influencing the design of buildings, such as social needs, religious dictates, climatic and topographical considerations, building techniques, production, economy, etc., and to attempt to explain the architecture as a logical, scientific response to them. This is perhaps, an explanation in a physically deterministic manner. Meaning here relies on logic and science. For example, if a house faces the prevailing wind direction, then the desire of comfort in catching the breeze becomes one logical assumption. If houses are found to be clustered together, then meaning is ascribed to a religious factor -- the *purdah* system in Islam, for instance.

But it is also observed and shall be again pointed out later in this study that different religious groups observe similar practices. Thus comprehension becomes complex and leads to the assumption that the shaping forces are multifarious in nature.

Different scholars have tackled this problem in many ways. In Christian Norberg-Schulz's terms, 'architecture' is what results from an environmental image of the people. This image comes from their "existential space". Therefore architecture is the "concretization of existential space".[3] This idea takes into account an extensive mental relationship between people and their environment. It provides an understanding of basic symbolization and

[3] "Existential space" is not a logic-mathematical term, but comprises the basic relationship between man and his environment. See Christian Norberg-Schulz, *Existence, Space and Architecture,* 1971, Chapter 02.

describes how these are related to create an architectural language on a higher level of abstraction. "As a work of art, architecture concretizes higher objects or 'values'. It gives visual expression to ideas which mean to man because they 'order' reality".[4] This is a way of looking at architecture as a part of a symbol system which expresses the characters and spatial relationships of the man-environment association of a particular society.

A similar wide-ranging approach is also undertaken by Amos Rappoport in his study of vernacular architecture. The 'vision' of an ideal life is of paramount importance in architectural creation. To him, buildings and settlements are the visible expression of the relative importance attached to different aspects of life and the varying ways of perceiving reality.[5]

Henry Glassie also speaks of two distinct modes of study. Taking about a paper delivered in Turkey he said, "Americans are working to answer cultural needs by expanding the historical record through attention to material documents, while Turks are working to answer social needs by learning how to improve architectural practice through study of the vernacular."[6]

Because of Bangladesh's relatively recent start in search of identity, both directions of study mentioned by Glassie are required. This thesis relies on existing documentation and intends to provide an understanding of basic symbolization and hopes to determine how such elements are related to create an architectural language on a higher level of abstraction. The essential task here is to try to understand the overlapping of the manifest and non-manifest characteristics with all existential possibilities. As choice depends on values, so a proper insight based on

4. Christian Norberg-Schulz, *"Meaning in Architecture"*, in *Architecture: Meaning and Place*, 1988, p. 22.

5. Amos Rappoport, *House Form and Culture*, 1969

6. Henry Glassie, "Vernacular Architecture and Society" in *Material Culture*, 1984

them needs to be developed. This should then point towards 'meaning' in architecture.

There is also a third dimension which becomes important and must be mentioned: the common man. Everything discussed so far becomes superfluous if its meaning is not comprehensible to the lay person. This brings up the concept of the lay perspective. It is assumed that the ideas and values of lay people are different from those of the formally educated, and so attempts must also be made to take their ideas into consideration. This involves understanding them in their own terms. Christopher Alexander, in his work *The Pattern Language*, deals with the lay perspective of conception as does Amos Rappoport and Gaston Bachelard.

Bachelard's approach is to investigate how the poetic image, that "sudden salience on the surface of the psyche", react on minds other than the poets[7] One can well imagine his efforts to comprehend culture as a prerequisite to his work. In contrast, Norberg-Schulz, with his concept of 'existential space', speaks of the image of the environmental structure. When he talks about phenomena, he shifts the whole issue of architecture from the professional to the lay mind. Taking the Heideggerian attitude of phenomenology, he rejects conventional rational attitudes and hence strives for another kind of comprehension. He believes he will come to know the values of the people by knowing the artifacts "in themselves".[8]

The study of social relationships as a methodology in architectural investigation was probably demonstrated for the first time by Gottfried Semper.[9] In his search for underlying similarities and relationships with the hope of uncovering some synthetic unity in architecture, he

7. Gaston Bachelard, *The Poetics of Space,* 1969

8. See Christian Norberg-Schulz, *Architecture: Meaning and Place,* 1988, p. 07

9. See Gottfried Semper, *The Four Elements of Architecture and other Writings,* Cambridge University Press, 1989

started from, what Rosemarie Haag Bletter[10] calls, a communal prerequisite -- the hearth. To Semper, the fire represented a social nucleus, a gathering point for the family and hence, the 'germ of civilization'.[11]

Attempting architectural investigation from this angle led Semper not only to very different assumptions than were then entertained in architectural thinking, but the acceptance of his theories, gave credibility to his methodology. In this manner of investigation, the beginning is a non-spatial, social-significance-bestowing component from which there stem logically the concept of the architectural elements. Similarly in this thesis, non-spatial concepts are taken as points of departure.

Beside its methodology, the theory of Semper is particularly important because it established the fundamental notions of architecture from ideas of the basic hut. These ideas were further developed to the concept of symbols and meanings which could not be ignored or willfully altered with loss of context. His source was a realistic instance provided by ethnology and from this, concepts of high architecture were evolved.

Semper's notion of architectural beginnings were not far removed from that of another very important contemporary architectural theoretician, Eugene Viollet-Le-Duc. At the end of a fascinating book dealing exclusively with dwellings, he writes, " The time has come for us to say to humanity: ·investigate thy beginnings: thou wilt thus learn thy aptitudes, and wilt be able to pursue that path of true progress to which thy destiny calls thee.... · "12

To sum up the forgoing discussion, functionality and symbolism are two possible methods of inquiry into the

10. Rosemarie Haag Bletter, "On Martin Frohlich's Gottfried Semper", 1975, p. 147

11. ibid. p.147

12. Eugene Viollet-Le-Duc, *The Habitations of Man in all Ages,* 1971.

meaning of architecture. While rational answers are relatively less difficult, symbolism, to be understood, needs extensive background research. One way to do that is to examine the people who create architecture. This needs to encompass cultural development across time and so in such a study, history logically becomes included.

## 1.2 VERNACULAR ARCHITECTURE

The term 'vernacular' is much misunderstood and been defined by many scholars in diverse ways. In language, it is explicitly defined as that "which is spoken or written naturally at a particular period"[13] In architecture, however, definition becomes difficult. In this field, it is an adjective used to refer to an indigenous type of fine building that is largely untutored in the conventional sense, but thought to be of considerable virtue . Distinguishing it from the 'high' architecture, Bernard Rudofsky coined the term "non-pedigreed" architecture.[14] His proposed synonyms were -- vernacular, anonymous, indigenous, rural etc. Amos Rappoport classified vernacular as a part of the folk tradition. "The folk tradition, on the one hand, is the direct .... translation into physical form of a culture, its needs and values -- as well as the desires, dreams and passions. ... It is the world view writ small, the "ideal" environment of a people expressed in buildings and settlements, ... . The folk tradition is much more closely related to the culture of the majority and life as it is really lived...."[15]

The rural vernacular tradition of building is one which has no conscious academic stylistic pursuits. For the lay people, the word suggests something countrified, homemade, traditional. When used in connection with architecture, it indicates, for them, the traditional rural or small town dwelling, the dwelling of the farmer or a

[13]. See *Webster's Third International Dictionary*.

[14]. Bernard Rudofsky, *Architecture Without Architects — A Short Introduction to Non-Pedigreed Architecture*, 1964

[15]. Amos Rappoport, *House Form and Culture*, 1969, p. 02

craftsman. Current definitions of the word suggest that the vernacular dwelling is usually designed by a craftsman and not an architect, that it is built with local techniques, local materials, and with the local environment in mind : its climate, its traditions, its economy and its artistic and symbolic sensitivities. "Such a dwelling does not pretend to stylistic sophistication. It is loyal to local forms and rarely accepts innovations from outside the region. It ... is little influenced by history in its wider sense. That is why the word timeless is much used in descriptions of vernacular buildings"[16] Although this concept has been refuted in consideration of European vernacular,[17] one may still find some validity in the context of Bangladesh. In the villages, life and living was always sluggish and monotonous, broken only by the change of seasons, celebrations of the life cycle or by calamities. Major political upheavals was mostly at a distance from the peasants. Even if the villager had the desire for a better life, it was thwarted by his illiteracy, absence of rewards for hard work, the lack of technology and mostly, the neglect of the formal institutions of the society.

In the view of Norberg-Schulz, vernacular architecture brings out the immediate meanings of the local earth and sky into presence. In his words, it matches the 'Genius-Loci' of the place.[18] However, despite being functionally circumstantial, it does become an expression of the inner meaning of the people. Vernacular tradition usually has only a relatively few models which are constantly being adjusted and readjusted. By this variation, individual houses gain their uniqueness.

In vernacular architecture, the expressive power of aesthetics and of correct formalization are very important. There is always a 'right' way and a 'not right'

16. See John Brinckerhoff Jackson, *Discovering the Vernacular Landscape*, Yale University, 1984,

17. ibid.

18. The term is used by the author to denote a certain abstraction from the flux of phenomena in direct recognition of stable relationships. It is an emotional quality which, perhaps in a poetic manner, imparts the sense of belonging. See Christian Norberg-Schulz, *Genius Loci Towards a Phenomenology of Architecture,* 1980

way of doing things. Therefore, architecture follows a theory. We are only aware of theories when they either become part of grand religious traditions -- as in Hinduism, or are published in the conventional manner. But such theories also exist in folk culture. Examples of such folk building theories may be found, among others places, in Yemen, Sri Lanka, Malaysia, Java and Bali.

Although vernacular houses have limitations in the range of expressions possible, they do indeed fit different situations, as the case studies presented in this thesis confirm. This limitation of expression may be regarded as a socially accepted norm, as the collectively understood way of doing things. Therefore, just as the sounds in linguistic communication, the created form is understood by the people of that society. Consequently, communication is established and houses become meaningful.

# 2.
# THE SETTING

Dwellings are man's reaction to natural forces. They are most often conditioned by his culture and therefore, by history. Hence, a background is pertinent for an understanding of culture and its many layers that may consequently lead to a comprehension of architecture. This is also necessary to generate new ideas and to place arguments and insights in proper perspective.

Political history helps to explain the current trends of a particular period, while implicit in social history is a deep awareness of the attitudes of the people. In architecture too, monuments express power while dwellings express the popular milieu.

Throughout centuries Bengal has been subjected to differing political forces. Sometimes the area was independent, sometimes not. In social and ideological arenas too, there were changes due to external influences. All these perhaps found their compatible parallel in the climate of Bengal which is both charitable and cruel. Climatic changes here go to the extremes and even the terrain is shaped and reshaped by the shifting waters of the mighty rivers.

In this unique condition of continuous change, as extreme as anywhere in the world, the philosophy of man developed in a special manner. It was something that evolved from within. Based on existential experiences which led to concepts of divinity, this consciousness was of harmony and autonomy. It had, within itself, a strong sense of identity that perhaps was the collective factor, understood and shared by the common people. Such was

Fig. 2.1.1
Present Bangladesh in context of
historical kingdoms.
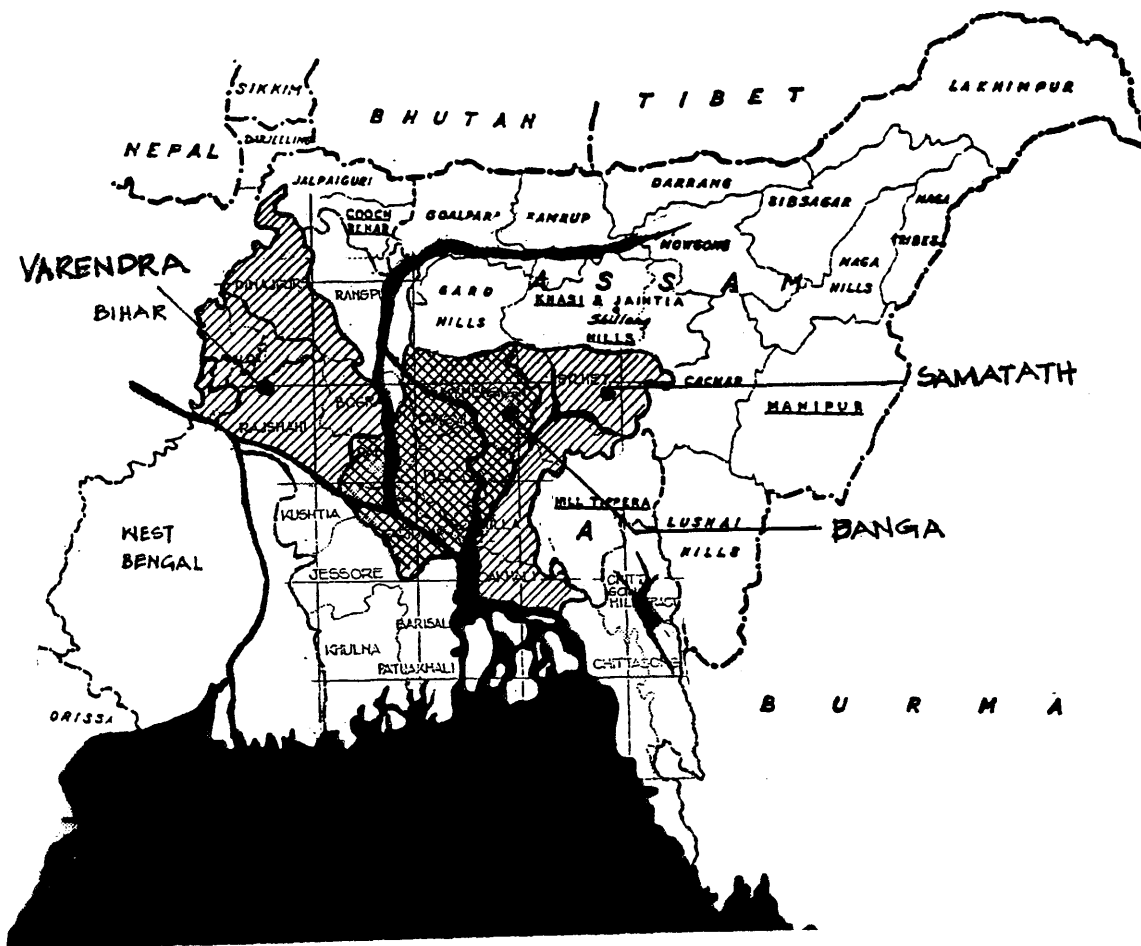
the influence of this ideology that it could find ways of representation in many things: among them, architecture.

It is the hypothesis here that, despite external changes, certain underlying attitudes deep within the psyche of the general people remained unchanged. This bought new elements of experience, knowledge, value, will and behavior which was perhaps engendered as a common thing in all the individual subconsciousness within the constraints of collective conditions. This is what may be called collective consciousness.[1] What is aimed here, is not only the study of this identity, but also an understanding of its formation. It is also presumed that the inherent characteristics of this distinct psyche may point towards notions of the identifying elements of architecture in Bangladesh. For this reason, before settling down to a consideration of the actual architecture, a portrayal of its background is warranted.

Such a task, by itself, requires lengthy discussion, but due to restrictions of time and space, only occurrences that are thought to be of relevance are included here. It is intended to demonstrate the resilience of the collective consciousness of the people of Bangladesh as it rides the ebbs and flows of history.

[1]. See *The Fontana Dictionary of Modern Thought* for more details and references.

[2]. See Barrie M. Morrison, "Region and Sub region in Pre-Muslim Bengal", 1969

## 2.1 BANGLADESH : POLITICAL FRAMEWORK

The area known politically today as Bangladesh is, in fact, a part of greater Bengal. The western portion, now known as West Bengal, is a province of neighboring India. Historically, this was not always a single entity. Barrie M. Morrison, studying copper plates from 433 AD to 1285 AD finds reasons to list at least four kingdoms contained within greater Bengal. These are Varendra, Samatath, Banga and Rarh.[2] Although demarcating lines differ

marginally, most historians agree about these divisions. (See Map 2.1.1)

In the 3rd century AD, all of these later demarcations were part of the great Mauryan empire. They became separately ruled Hindu kingdoms thereafter. Buddhists conquered Banga and Samatath in the 7th century and Varendra in the 8th century. They were again overcome by the Hindu powers in the 11th century. However, their reign was overthrown within a century by the Muslims.

Northern Bengal ,being nearest on the road from Delhi, was the first to come under Muslim rule.[3] Since then, and up to the Mughal annexation, the entire region of Bengal was administered by various independent and semi-independent Muslim rulers. It is imperative to mention here two extremely significant factors of this period. Firstly, the tendency to break away with imperial Delhi whenever the occasion presented itself,[4] and secondly, the unification of all the parts of Bengal by Sultan Shamsuddin Ilyas Shah in the mid 14th century.[5] Together, these resulted in the independent Sultanate of Bengal. This was an important period in history because it allowed the deep rooted ideologies of the region to surface. The monuments created during this period are an early manifestation of the expression of Bengal identity. This is a meaningful issue for this thesis and shall be discussed in Chapter 4.

After this period of political independence, Bengal was annexed and made into a Mughal *Suba* (province) in 1576 AD and the Mughal feudal system was instituted. People loyal to the crown were given the *Lakheraj Taluk* and *Zamindary*. Since the Bengalis generally did not cooperate with the feudal authority, usually it were the foreigners who were given this privilege.[6]

[3.] Ikhtiyaruddin Mohammed Khalji in 1204 AD defeated the Hindu king Lakshmansen and brought Islam to this corner of India.

[4.] Bengal was known at this time as 'Bulghampur 'or rebels land. Perween Hasan, Sultanate Mosque-Types of Bangladesh Origins and Development, Doctoral Dissertation, Harvard University, 1984,p. 07

[5.] See Perween Hasan, 1984, p. 6

[6.] See Kamruddin Ahmed, *The Social History of East Pakistan*, Dhaka, 1967, p. 32

Before the formation of Pakistan, Bengal was a single, large, province of a two hundred year old British India.[7] When Pakistan and India was created in 1947, the distinction between the two countries was achieved by the sole factor of religion. Hence Bengal was divided according to the distribution of religious groups. Because of the Muslim majority, the eastern part of Bengal became what was then known as East Pakistan. However, economic, social, cultural, and differences of language, among other things, soon created incompatibility with the other part of the then unified Pakistan. So, in 1971, after a war of independence, East Pakistan, previously the East Bengal of the British, became again an independent country called Bangladesh -- the land of the language *Bangla*.

The people of Bengal were always fiercely independent. Although it had been at various times a province of the Delhi based Sultans and the Colonial powers, yet the land was never known as Bangla *prodesh*, meaning the province of Bengal. Rather it was always Bangla *desh*, which means the country of Bengal.

The present political boundaries of Bangladesh incorporate the older kingdoms of Pundravardhan (North Bengal) and Samatath (Eastern Bangladesh) and Banga (Central Bangladesh). The other ancient kingdom of Bengal i.e. Rarh (West Bengal) lie in the present day India.

## 2.2 BANGLADESH : SOCIAL SETTING

Knowledge of the prehistory of the country is extremely nebulous. However, a few artifacts collected from Comilla/Samatath area indicate a Neolithic presence. Probably the earliest known inhabitants of the land were the dark-skinned Dravidians. The most favored theory about their origins is that they migrated from Chinese

[7.] Bengal was subdivided once by the British authorities in the beginning of this century. However, it was an administrative decision and made little impact in the villages.

Turkistan and followed the rivers in search for food and for better conditions of living. These people were agriculturists and settled in the upper Ganges.[8]

By about 2000 BC, the light-skinned Aryans encroached into the continent. Some authorities suggest their roots to be in Persia, while others argue for Central Asia. However, they too followed the river *Ganga* [9]. Numerous references to this river in the Ved[10] makes the basis for the presumption.

The most remarkable thing about the Aryans was their social structure. Theirs was a hierarchic tripartite society with the three groups of Brahmins, Kshatryas and Vaishyas divided according to social functions.[11] They gradually conquered northern India and transformed the people there into a fourth class of their own, called the Sudras. These converted non Aryans were the untouchables, condemned to do menial labor not only through their lives but through their generations too. In the process of Aryan expansion, the Dravidians were gradually pushed towards the south and the east.[12]

At about 1000 BC the 'Bang' tribe of Dravidian stock were driven off by the Aryan invasion. This group of people moved east and settled in the delta region of the two mighty rivers, the Ganges and the Brahmaputra. The rulers of the tribes raised huge earthen mounds measuring about ten yards in height and twenty in breadth to protect and possibly identify their borders. These they called Al [13]. The word Bengal would appear to have been derived from the two words *Bang* and *Al*. In the *Bangla* language, *Bangal* means the people of Bengal. The etymology of the English word 'Bengal' which denotes the country, may possibly lie here.

[8] op. cit. Kamruddin Ahmed, 1967.

[9] *Ganga* is the Bangla term for the river known as the Ganges.

[10] Ved is the religious book written by these early Aryans and it forms the authoritative canon for all subsequent forms of Hinduism. In the singular, it is actually a collective term for the four Vedas. These four are, the Rig, Yajur, Sama and Atharva. Each of these four today survives in several recessions. Essentially, these are a collection of sacred hymns and invocations to Aryan deities.
For further information, see Francis Robinson Ed. *The Cambridge Encyclopedia of India, Pakistan, Bangladesh and Sri Lanka.*

[11.] The caste system may be corroborated by the fact that the Sanskrit word for caste means 'color'. See Andreas Volwahsen, *Living Architecture, Indian*, p. 10

[12.] op. cit., Kamruddin Ahmed, p. 07

[13.] Abu'l-Fadl, in his A'in-i Akbari, mentions these facts and is quoted in *The Encyclopedia of Islam.*
The concept is seen even today in little raised mounds of earth called 'Al' used for subdivision of the agricultural fields. These also serve as water barriers and as firm paths to cross the wet fields in rural Bangladesh.

## 2.3 FORMATION OF CONSCIOUSNESS : RELIGIOUS INFLUENCE

There were no images of gods in Brahmanism, the ancient Aryan religion. All their gods were of nature -- the sun god, wind god, god of thunder and lightening etc. The agriculturist Dravidians on the other hand, had plenty of idols and fertility symbols.

Hinduism, which developed later, may be inferred as the synthesis of these two. Ritualistic concepts of Hinduism probably developed from the fusion of the Aryan belief in natural phenomenon and the Dravidian world of spirits and demons.[14] From one point of view, Hinduism is a philosophy which is characteristic of an Indian view of man and his place in the universe. The first philosophical treatises, called 'Upanishads', as a supplement to the Vedic hymns were composed in about 800 BC. At that time too, the personified gods went to the background, and the people endeavored to understand the laws governing the cosmos and to look upon all existence and activity as causally related.[15] Hindu philosophy concerns itself with four principle human goals, but only one is dominant. This is deliverance from the continual rounds of rebirths so that *moksha*, or liberation is attained. The religion is divided into the followers of three main deities: Brahma, the creator, Vishnu the maintainer and Shiva the destroyer. Various sects project these three functions upon any one of the three deities mentioned. Shivaites regard Shiva and Vishnuites regard Vishnu as simultaneously creator, preserver and destroyer. The Hindus in Bengal are mostly followers of Vishnu.

Buddhism may be considered a religion which came as a protest against the social inequalities of Hinduism. Prince Gautam, later to become Lord Buddha, in the 6th century BC, formulated his philosophical doctrines in Gaya, Bihar.

14. . See Andreas Volwahsen, *Living Architecture : Indian*, p. 07
15. See Andreas Volwahsen, *Living Architecture : Indian*, p. 11

33

Fig 2.2.1
Thousands of Muslims travel to the three day religious gathering near Dhaka, called *Biswa Ijtema*. Organizers predicted that nearly one million pilgrims from 60 nations participated in 1992.
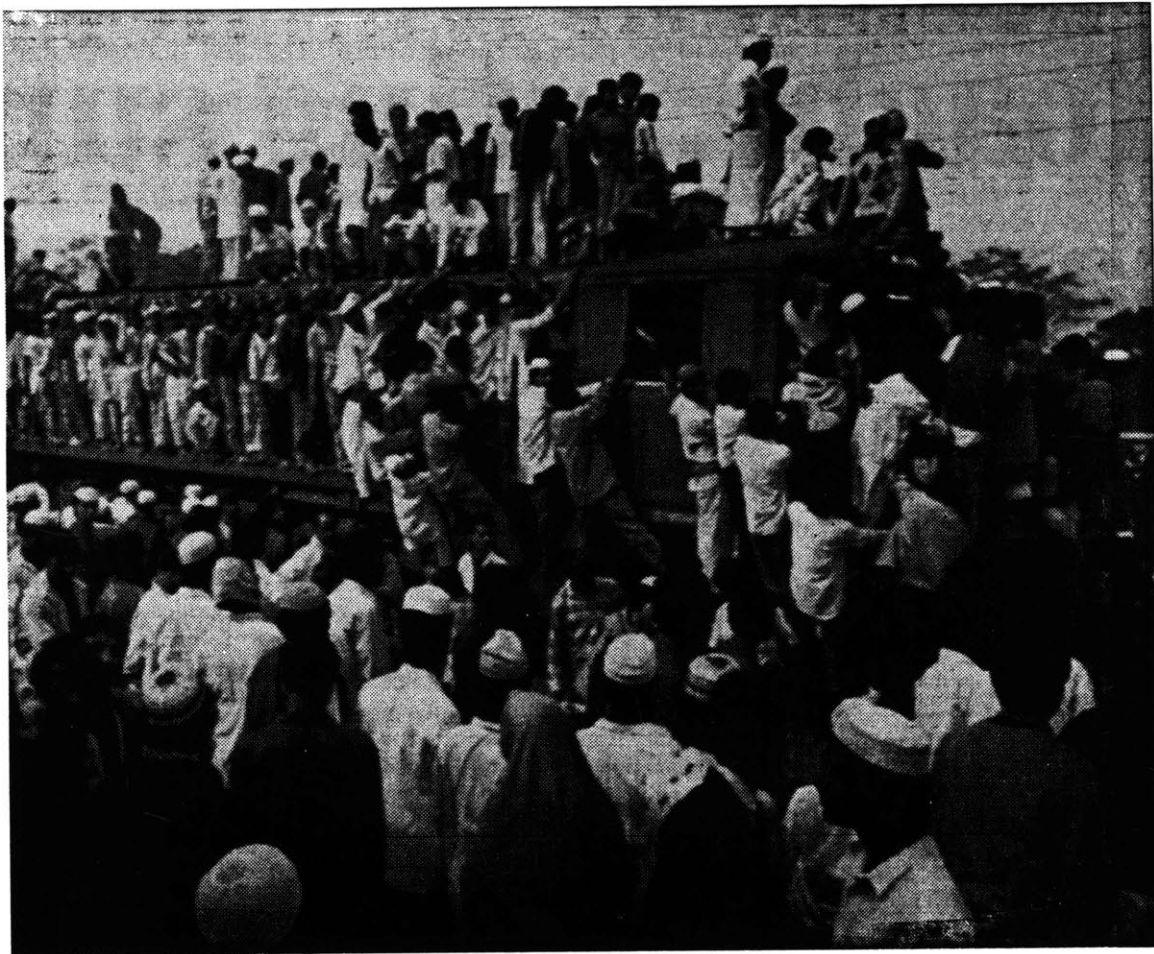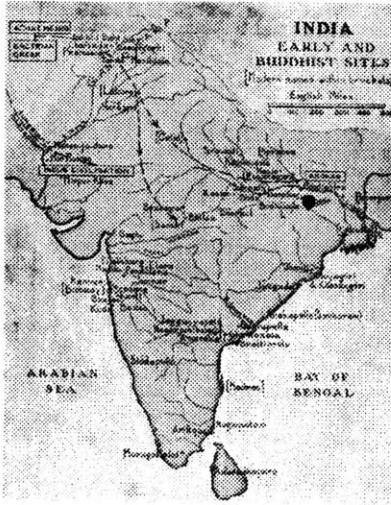
Fig 2.2.2
The closeness of Gaya to Bengal is a indicative of its influence here.

He had chosen this place most probably because it was a good location to feel the pulse of both the Aryans and the non-Aryans. In the process, he had discovered for himself, the sufferings of the Dravidians under Aryans. His philosophy specially appealed to the oppressed people because it assured them of their dignity. Buddhism was preached in the simple language which was easily understood by the common people. The domination of Sanskrit, the language of the Aryans, was avoided. In this manner it may also be considered a systematic movement against oppression and all kinds of exploitation - religious, social, cultural and economic. Also, the tool for this movement, language, needs to be emphasized. This was a representative of the common man and it was thus that he retrieved his sense of identity. It is hence not surprising that this religion became extremely popular and well accepted by the masses .

Later on, however, Buddhist *vikhus* (monks) fell to the lure of their counterparts - the Aryan Brahmins. They led an easy life which was supported by their segregated society, and it was the comfort of this easy life, to which the *Vikhu's* succumbed. This happened first in Northern India. In Bengal, however, Buddhism survived for a longer time. Here, it was concentrated mainly in Varendra and Samatath. Eminently famous scholars like Shilabhadra and Dipankar contributed to this strength. When Hiuen Tsang visited Bengal in the early 7th century, there were more than 20 monasteries in Samatath alone and more than 20 Viharas in Pundravardan.[16]. During the reign of Gopala, (mid 8th Century) there was stability in his kingdom of Varendra which helped the flourishing of Buddhism. The Buddhist kings were however, plagued by the invasions which brought the Hindu kings to power. Some orthodox rulers of the Hindu religion mercilessly

16. See Nazimuddin Ahmed, *Discover the Monuments of Bangladesh,* UNESCO, Dhaka, 1984, p. 45 and 46.

persecuted the people who followed the Buddhist faith. Thus Buddhism was pushed further towards the far east.

It is remarkable that although Delhi has a very long history of Muslim rule, the majority in and around it are not Muslims. On the other hand, in Bengal, or rather in Bangladesh, most of the population follow the Islamic faith. This factor may be understood in light of the earlier Hindu - Buddhism clashes. The people of Bengal were dissatisfied with both the Hindu religion as well as the substantially changed Buddhism. It was only to be expected that the liberal faith of the Muslims would appeal to them. Thus a mass conversion to Islam happened in the twelfth century.

Today, the world's second largest Muslim ethnic group, after the Arabs, is the Bengali people[17] Islam in Bengal did not come by conquest and force, unlike North India, but came quietly through the medium of saints. As was pointed out before, the rulers were more concerned with political dueling with Delhi. As a consequence, they sought more to woo the masses than to force on them a new religion. The chief agents of mass conversion were thus not the rulers, but the Sufi missionaries. Numerous Sufi *Shaikhs* spread the seeds of Islam in Bengal, which being the last outpost of the syncretistic popular Buddhism at that late date, was ripe for a religiously mystical and social egalitarian appeal.[18] Even today, several Sufi orders, notably the Chistiyya and the Qadiriyya flourish in Bangladesh. The Bengalis practice saint worship and this is apparent in innumerable tombs scattered all over the country and widespread participation in *Urus* or commemorative gatherings at saints tombs. Bangladeshi people are largely Sunni Muslims. Although the five pillars of Islam are very deeply embedded, earlier convictions are still existent. Popular belief in supernatural powers and

17. See Richard V. Weekes, ed., Muslim Peoples : *A World Ethnographic Survey,* Connecticut, 1984,

18. ibid.

their magical efficacy or harmful potency is perhaps the most influential example about Bengali conceptions to the superhuman forces of the world.

## 2.4 ELEMENTS OF FUSION LITERATURE, SUFISM, VAISHNAVISM, SOCIAL AVERSION

Islam in Bengal was very tolerant. Muslim rulers encouraged literature, specially that written in the Bengali language. This helped to create a dialogue between the power and the people of different faiths. In this process, a distinct sense of identity was created. Although Persian, as a court language did come into the land, yet it could not gain a firm foothold.[19] In many cases, even the official language was *Bangla*. In the later period, similar acts by the Pakistani authorities to introduce Urdu as a language or even to interject specific words were not successful. In fact, the movement which ultimately led to independence from Pakistan was started as a revolt against the imposition of a foreign language. Such strong sentiments perhaps speak in an allegorical manner, of the people for whom it had a strong emotional tie.

In Bengal, the most common Hindu sect is Vaishnavism. This probably goes back to the 15th or the 16th century.[20] To the Vaishnavas, the immediacy of God, felt in the *Bhakti*, or devotion, and not the standards set by man is the measure of acceptable behavior. Vaishnavism theory states that "The ideal man, or the true *bhakta* is a man of considerable mettle. He has for himself, no desire for material things, or for the gratification of himself. The true *Bhakta* is humble and unassuming as a blade of grass; ... , he is pure; he is charitable, gentle, holy, lowly and humble, ... , he is free from desire, moderate in taking food ... : he honors all things other than himself, he is humble,

19. Chisti Nur Qutb-i-Alam of Pandua (d. 1416) invented a mixed style of poetry which alternated Persian with Bengali lines, but apparently could not reach the common people. On the other hand, religious epics in *Bangla* like *Rasul Bijay* became extremely popular. See Annemarie Schimmel, *Islam in the Indian Subcontinent*, 1980, P. 48

20. See *The Cambridge History of India, Pakistan, Bangladesh and Sri Lanka,*, P. 336

grave, compassionate, friendly, poetic, skillful and silent"[21]

From a social point of view, there were many similarities between Vaishnavism and Sufi Islam. This is most adroitly expressed in the Baul, a religious mendicant found in all parts of the rural areas, whose attire, song and speech all consciously mix symbols from both Vaishnavism and Islam. Hindus and Muslims have lived for centuries side by side in Bengal sharing pastoral and other festivities. The many similarities of devotional Sufi doctrines and Hindu *Bhakti* made it but a short step from one religion to the other. This is most apparent in the works of Muslim Vaishnava poets who easily bridge the gap between the two religions.[22]Also, the mutual interchange of religious symbol and practices between these two faiths represent their syncretism.[23] The Sufis and the Vaishnavas both believe that man is the microcosm and God can be found in the heart. Body and Soul of the Sufi is easily explained by Radha and Krishna of Vaishnavism.

The most meaningful outcome of all this is that eventually the importance went back to the common man. Whatever ideology came into the country, it was always distilled and transposed into an acceptable form for the commoners.

Yet another reason for the unity may be the general threat that the country always faced from outside. The common people of Bengal were, except for the period of the independent Sultanate, always ignored and humiliated. The Mughals never tried to better the life of the people nor improve their safety and were interested only in financial gain. They made no effort to help protect them from Arakanese and Portuguese pirates who regularly looted Bengal, because they depended on the latter for the supply of arms and ammunitions. In fact, the imperial army

[21.] See Edward C. Dimock. Jr. "The Ideal man in Society in Vaishnava and Vaishnava-Shajiya Literature" in *Bengal, Literature and History,* , 1967

[22.] See Edward C. Dimock, "Muslim Vaishnava Poets in Bengal", in David Kopf, ed., *Bengal Regional Identity,* Asian Studies Center, Michigan, 1969

[23.] Some elements of this syncretism is discussed in Ralph W. Nicholas, "Vaishnavism and Islam in Rural Bengal," in David Kopf, ed., *Bengal Regional Identity,* Asian Studies Center, Michigan, 1969

cracked down on the people if they tried to arm themselves. Thus the pirates, locally known as *Mugs* and *Harmads* were free to plunder and loot. During the reign of the Mughals, the present day areas of Chittagong and Sandwip remained under the control of these pirates. It was only Aurangzeb, who, because of his desire to gain revenge for the murder of his brother by the Arakanese king, recovered Chittagong and Sandwip from the Portuguese.[24] In this unjust system where no one could be sure of the situation, architecture could not be expected to flourish. Instead, literature, arts, devotional music, and philosophy took its place. After the death of Aurangzeb, Nawab Alivardi Khan of Bengal renounced the suzerainty of Delhi, but he proved powerless against the Marhattas, or *Bargis*[25] who regularly plundered Bengal. Thus the people lost faith in their Nawabs too. When the British came, it was repetition of the same story.

## 2.5 THE INFLUENCE OF NATURE

Early man in the Ganges river basin depended on the fertility of the land he cultivated, the strength of the animals he domesticated for the purpose, and of course, on the elements. Therefore there evolved the idea of a mother-god and a sky-god. Even today, the earth in Bangladesh is referred to as *Ma* meaning mother.

An interesting feature one may note in the early Vedic period was religious concern with and hence the importance of, nature. Many of the deities of Brahmanism, the religion of the Aryans, were co-related with natural phenomenon.[26]

The Rigveda gives the place of honor of all animals to the lion. The horse represented the sun and the bull stood for the sungod. Hence even in the new religion developing

[24] .op. cit. Kamruddin Ahmed, P 35

[25]. They were from Maharastra and followers of the chief Shivaji

[26] "Surya, Dyaus, Savitri and Aditya are all connected to the sun; The name of the goddess Ushas means 'dawn'; the god Vayu is also the 'wind'; and the chief deities of the sacrificial cult, Agni and Soma, are also manifested in fire and the soma plant, respectively. Vedic deities often doubled as natural entities and forces, and worship of the gods could often be understood as worship of nature." From Francis Robinson ed., *The Cambridge Encyclopedia of India, Pakistan, Bangladesh and Sri Lanka.*

Fig 2.5.1
Bangladesh : River view
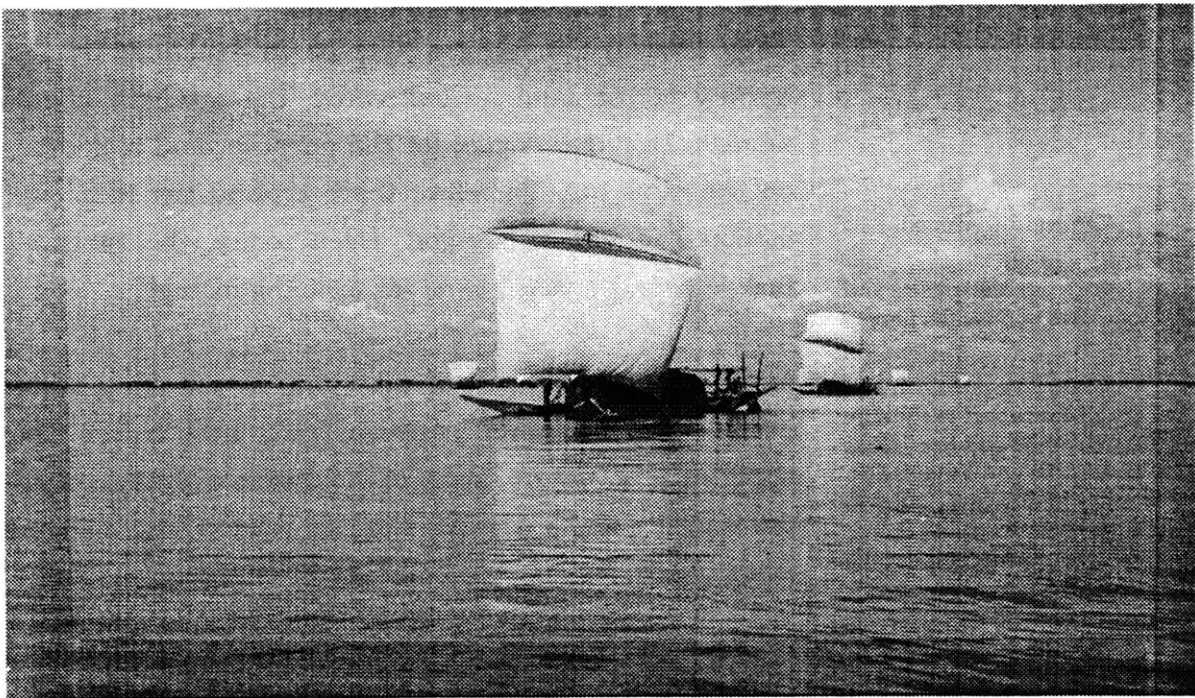
from Brahmanism, efforts were being made for reverence to nature.

There are as many as six distinct contributions of the Buddhist school to the art and architecture of India. The most significant is the thirty monolithic pillars which were erected throughout the land by King Ashoka "Each pillar consisted of a plain unornamented shaft, circular in section,......, and arising straight out of the ground without any suggestion of a base, tapering like the *trunk of a tall palm tree.*"[27] " Most of the superstructures consists of figures of *animals*, each of which has a mythological meaning. Together they symbolize the four quarters of the universe, the elephant being the guardian of the east, the horse of the south, the bull,.....,of the west and the lion,....., of the north"[28] (author's italics) Thus, here too, nature is found as the main element in the religion.

It was only in Islam that nature and the elements were not strong symbolic components of the belief system. But, as has been observed, many factors involving an attitude to nature were incorporated in Muslim culture to suit the specificity of Bengal.

## 2.6 SOME INFERENCES

The preceding sections, might appear to be rash generalizations, but it should be understood that they are included because until they are read and understood first, what is stated in the following pages might appear unintelligible, and the scope and purpose of the work can neither be understood or appreciated.

Whatever might have been the significance of these external influences, whatever names might have been given to the waves of new thought that swept over the

[27] See Percy Brown, *Indian Architecture (Buddhist and Hindu Periods)* p.09

[28]. Ibid., p. 12

country at different periods, the underlying philosophy of the common man remained constant. It was centered on man and was propagated by himself. As Rabindranath Tagore, speaking about popular rural songs says, "Their religious emotions had its spring in the depth of a philosophy that deals with fundamental questions, --with the ultimate meaning of existence. That may not be remarkable in itself; but when we find that these songs are not specially meant for some exclusive pundits' gathering but that they were sung in villages and listened to by men and women who are illiterate, we realize how philosophy has permeated the life of the people in India, how it has sunk deep into the subconscious mind of the country."[29]

The eternal quest of man is freedom of the soul, in the union of the self with the divine. That divine is all pervading--everywhere, yet it is elusive. Man spends his whole life trying to find it. Man is related to this superpower, he is part of it, yet his consciousness comes in between and he is distracted. This is his greatest disappointment. The abiding cause of all misery is not so much in the lack of life's furniture, as in the obscurity of life's significance. Such philosophies exist in all spheres of life led by the general people. As in the lyrics of rural singers,

> "Nobody can tell whence the bird unknown,
> Comes into the cage and goes out.
> I would feign put around its feet the fetter of my
>     mind,
> Could I but capture it"[30]

All these varying and sometimes esoteric elements really point to the existence of a strong and resilient theme which follows throughout in an underlying stream of consciousness. The components from which one may endeavor to seek out this are -- **independence and unity,**

29. Rabindranath Tagore, "The philosophy of our People", in *The Calcutta Review*, Vol. XVIII, No. 1-3, Jan.-Mar, 1926.

30. Ibid.

and, **man and nature.** Somehow they are all enclosed in a very special manner within the essence of the people.

With this background, it is now possible to proceed to the discussion of the character of Bangladeshi architecture.

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# SECTION TWO
# **TRADITIONAL BANGLADESHI ARCHITECTURE**

In this section, case studies shall be considered both from historic and from contemporary sources. It will begin with rural houses, arguably the most long lived building type in the region. Mosques and temples from and after the independent Sultanate period are then dealt with. These may hopefully highlight the architectural priorities of the people and their architecture. Finally an examination will be made of the vernacular urban dwellings.
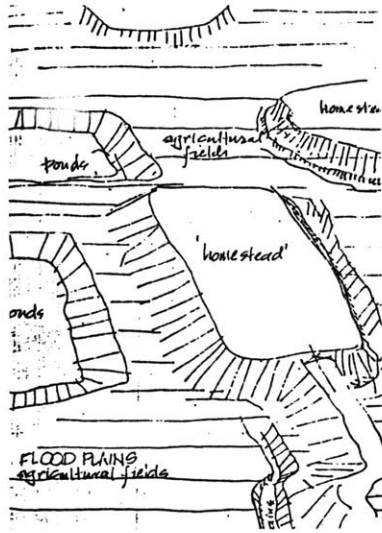
**Fig. 3.0.1**
Massive Earthwork is necessary to
create the earthen mounds

"The architecture without
architects of the peasant hut, is a
miracle of achievement. The
neatly plastered, slightly tapering
mud walls, with windows like the
souls of women looking out of the
sequestered shades, are topped by
thick sloping thatched roofs, with
graceful tapering corners."

Mulk Raj Anand, 'Bangla desh
Heritage', *Marg*, Mar, 1974.

1. Although some regard the
actual plinth of the huts as the *vita,*
the term will be used in this study
to denote the earthen mound.
The term was also used by Iftekhar
Mazhar Khan in his study,
*Alternative Approach to the
Redevelopment of Old Dhaka,*
1982

# 3.
# RURAL HOUSES

Architecture is always to some extent a reflection of the collective consciousness of a people. In studying the meaning of architecture in Bangladesh, rural vernacular dwellings offer a logical starting point, as they most directly reflect the communal feeling.

The Bangladeshi act of creating a homestead starts with the raising of a mound -- a mud platform that demarcates a place for the house from the surrounding landscape. This is called *vita,*[1] which means plinth. It demarcates the area of the entire house and has more significance for the people than the structures that are built on it. Thus raising of the mound is a social phenomenon and it connotes a place to live, an address. So strong is this sense, that even the homeless, when asked about their background, speak of their *vita.*

The creation of this platform requires large excavations which results in ponds, tanks, ditches etc. They are used for water supply and drainage for the house. Beside that, they also creates a sense of privacy by distancing the house on it from others.

This phenomenon of the *vita* is ubiquitous in Bangladesh and can be understood as a logical response not only against the annual floods but also for creating dry places to contrast with the wet rice fields. Besides that, it also helps in the surface runoff.

On this *vita* various huts and open areas are arranged to create the house or the *bari*. In its basic form, the house is a cluster of small huts arranged around a central courtyard[2] called *uthan* in *Bangla*. Each of these huts are functionally separate. Ordinarily they are sleeping huts, kitchen huts, *katchari*,[3] and a cowshed. When subdivision takes place, the huts of the *bari* retain their individuality. They may be transported to new locations or new huts may be added to the cluster, but generally they are not enlarged.

The huts are relatively small and rectangular in plan with the length varying from 12 feet to 24 feet, and the width varying from 9 feet to 15 feet. They are built on the ground with the floor raised about 1 foot to 1.5 feet from the ground level ostensibly to safeguard them from the temporary water logging of the site in times of torrential downpour. Each plinth is usually made with rammed earth. The height of the hut is quite low with minimal openings in the walls which are protected by a sloping, stooping, overhanging roof structure. [4]

Walls can be of three types. Firstly, they may be constructed of bamboo panels, jutesticks or other local reeds , secondly, they could be of compacted mud: in layers or in blocks; and thirdly the walls could be of corrugated iron sheets. The roof may also be of three materials; jute sticks, thatch or corrugated iron sheets. Most often, the wealth of the owner determines the material to be used. The huts are often single roomed, but partitions are not uncommon, although these are more for visual reasons then anything else. They are normally free-standing and do not reach the ceiling.

Commonly, extensive planting is done all around the house to define it from the larger environment. The
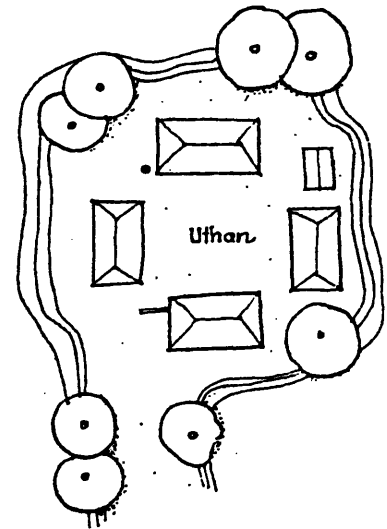


Fig. 3.0.2
Typical Rural Layout

[2] See M.A. Muktadir and Dewan M. Hasan, "Traditional House Form in Rural Bangladesh: A case for Regionalism in Architecture" in Participants' Paper, *Architecture and the Role of Architects in Southern Asia, Dhaka*, 1985
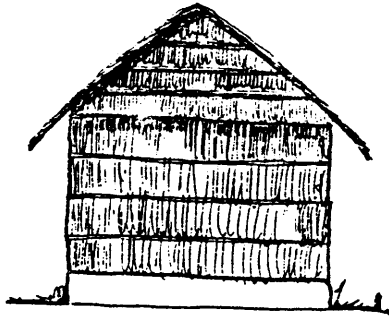
[3] *Katchari* is the place where male guests are entertained. In affluent houses, it is the place where the owner "held court".

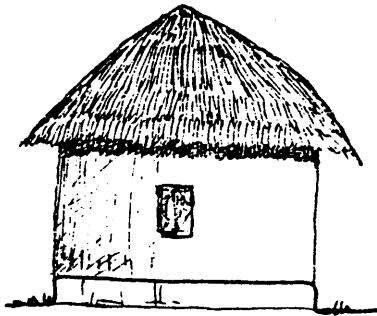[4] See Dewan Mahbub Hasan, *Study of Traditional House Forms in Rural Bangladesh* . 1985
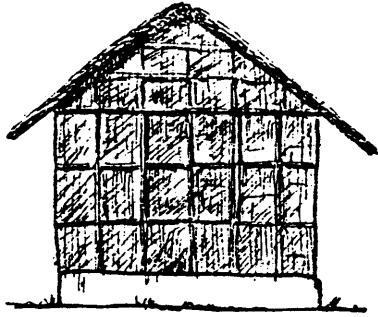
Bamboo panel wall



Reed wall



Mud wall

Fig. 3.0.3
Types of wall construction

4. Dewan Mahbub Hasan, *A Study of Traditional House Forms in Rural Bangladesh*, 1985

latrine is usually separated from this cluster at a distance and is placed at the edge of the mound.

The examples used in the following case studies are taken from an existing source of traditional houses in rural Bangladesh.[5] To inquire into the architecture of vernacular houses, three examples are chosen. They are all taken from the area between the three great rivers of Jamuna, Padma (Ganges) and Meghna; reasons for such a choice being no more than geographical centrality of the country and a longer political stability of the region.

Because this inquiry is intended to identify and understand the quality of architecture which is the fundamental ingredient of Bangladeshi identity, care has been taken to examine the examples diachronically while also trying to identify any unchanging characteristics.

## 4.1 RURAL HOUSE 1

The first example is situated in the village Goaldi, about 18 miles south east of Dhaka city. This house may be considered as typical of the type of that area. Originally built by one person for his family this house was subsequently divided between his three sons. Later on, further subdivisions took place and at present, the married grandsons of the original owner and their offspring live here. Therefore, the homestead had to adopt extensively.

At a glance, the homestead seems to be an agglomeration of numerous huts set in an irregular shaped raised land. It is separated into three distinct areas by bamboo and reed walls. Therefore visually it is three different houses. This reflects the initial subdivision done after the builder/owner had died.
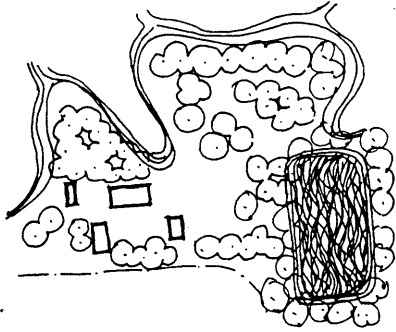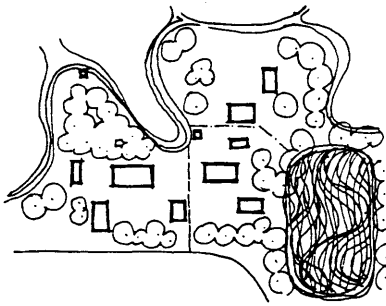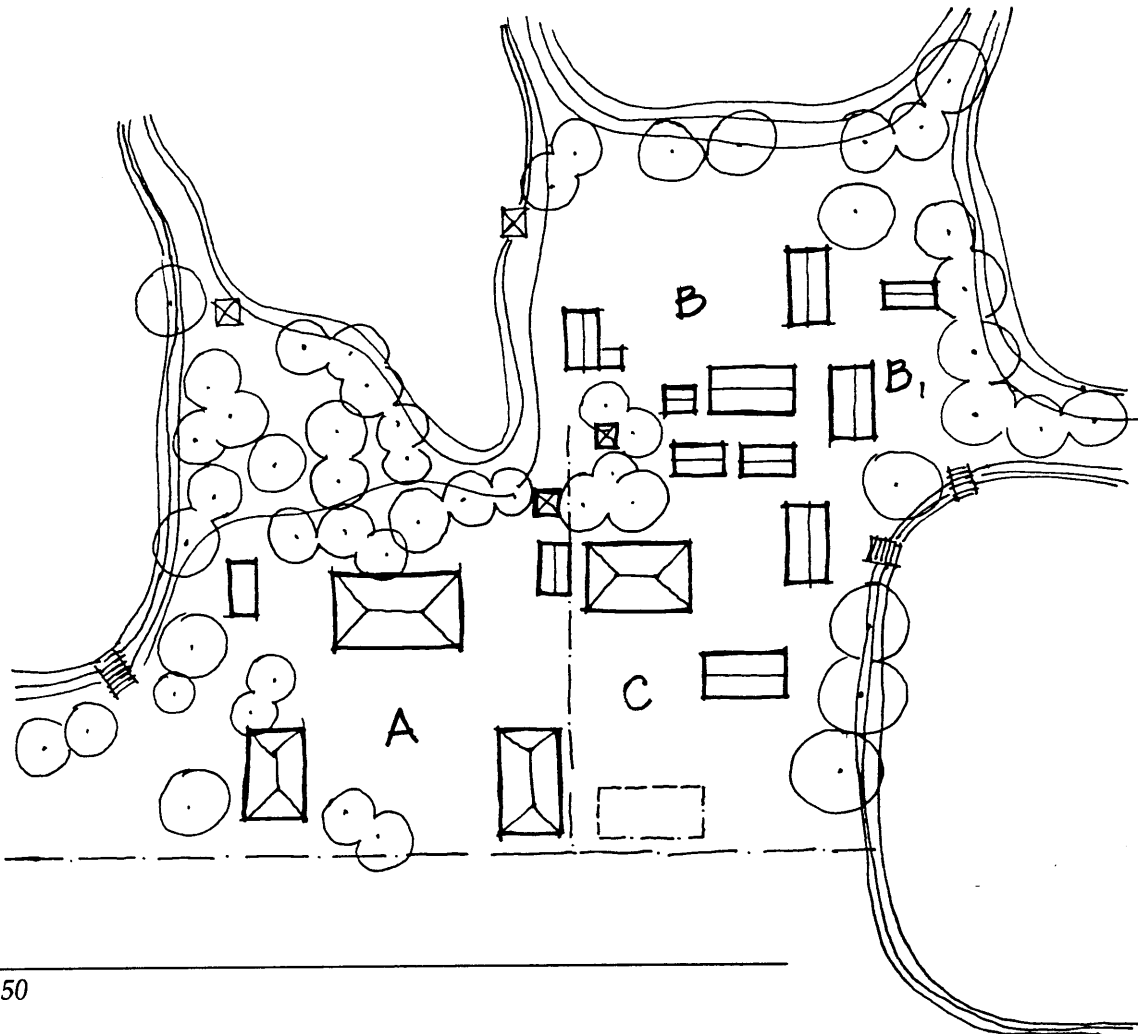
Fig. 3.1.1
Layout on the *viti* as was originally built

Fig. 3.1.2
Plan showing entire viti divided into three houses

Fig 3.1.3
Contemporary situation of the large house.

The house was originally built in 1925. The first operation was the raising of the large mound above the surrounding agricultural lands. On this platform or *vita*, the homestead was developed. It consisted of a *katchari*, a sleeping hut and a kitchen. These huts created a courtyard on one side of the platform. The *katchari* however, had its back to the courtyard and faced an open yard. On one side of this was the cowshed. The latrine was a separate structure at the back of the mound. The rest of the *vita* was filled with fruit trees. (Fig 3.1.1)

After the initial subdivision, the eldest son got the actual area of the paternal huts in the *vita*, while the other two got equal shares in it. Each of the sons also got a paternal hut which they immediately dismantled and transported to their respective areas in the *vita* and constructed their own homesteads. This was done in similar layout as the original one and thus the house was transformed into a cluster of three homes. (Fig 3.1.2)

At present, another generation later, the descendants of the three inheriting brothers occupy the mound. Although they live in their respective areas, their families too have grown and become separated[6] after marriage. The present situation is in fact a cluster of three individual houses. It must be pointed out that all of them are arranged around courtyards.

Considering section A in fig 3.1.3. The present owner is the grandson of the original builder. Being the only son, he inherited the entire property of his father, which represented a third part of the original. His share included not only the house, but also the agricultural lands. Therefore he is relatively well off. His family members are his old mother, wife, three sons, two daughters, a lodging teacher and a seasonal laborer.

6. The term 'separated' is a Bangladeshi notion which means having own kitchen or stove where meals are cooked. It does not denote physical and / or spatial separation.

Fig. 3.1.4
Layout of section A
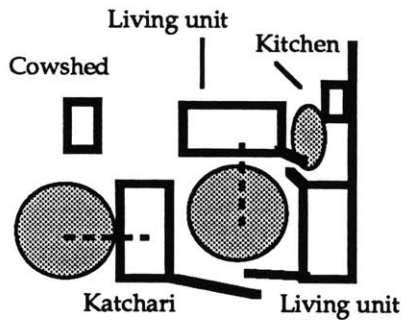
Fig 3.1.5
Isometric view of section A
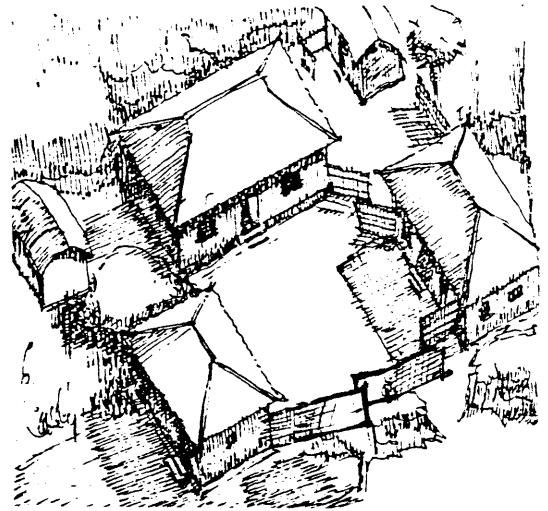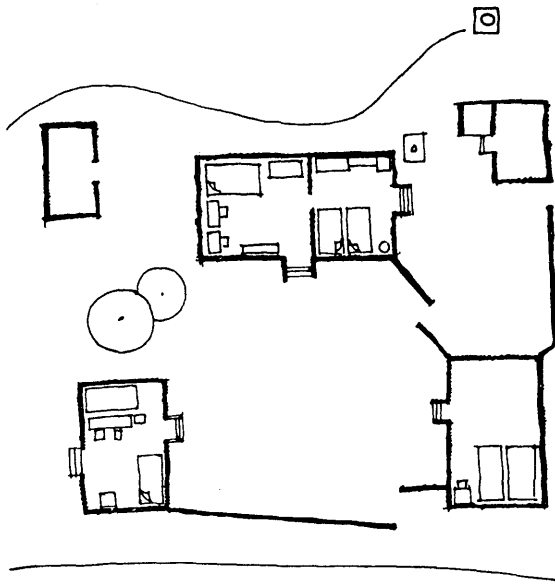
Fig. 3.1.6
Rural House 1A



Fig. 3.1.7



Fig 3.1.8

The layout may be compared to that of a typical rural house. It resembles the original one built by his grandfather. There are three main huts which surround a courtyard, with a high bamboo fence on the fourth side. One of the huts is the *Katchari* which creates and dominates its own exterior courtyard. The cowshed is adjacent to this yard while the kitchen is a separate structure with its own space. This space is again separated from the main interior courtyard with a fence and an indirect entry. The latrine is far back toward the low areas. (See fig. 3.1.4 & 3.1.5) The *katchari* doubles as the sleeping quarters of the teacher and the servant. The main hut is shared by the owner with his mother and daughter, while the other hut is shared by the sons.
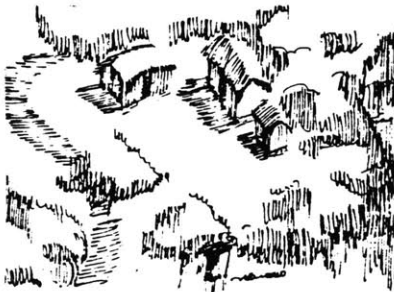
If another section of the house is examined, a totally different picture is seen. Denoted as B in figure 3.1.3 this section of the mound is owned by seven grandsons from a son of the original owner. All seven of them have their claims on this section, and so, the property itself, or rather, another third of the original house have been mutually subdivided into seven portions. Only four brothers have their dwellings in the land, but, because the other three do not stay here, the residents are enjoying the benefits of their absence.

When the house was originally sub-divided, the father of the seven brothers started his own house-building activity. He composed two huts and a kitchen in an attempt to create a courtyard. (Fig. 3.1.7) Being big enough, the *viti* permitted him space to also have a fruit orchards.

As his family members grew, (he did have a large family of seven sons and two daughters) the number of huts increased. (Fig. 3.1.8) When he died, the entire property

Fig 3.1.9
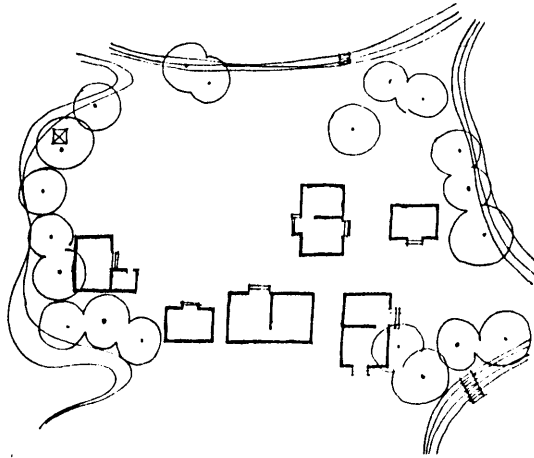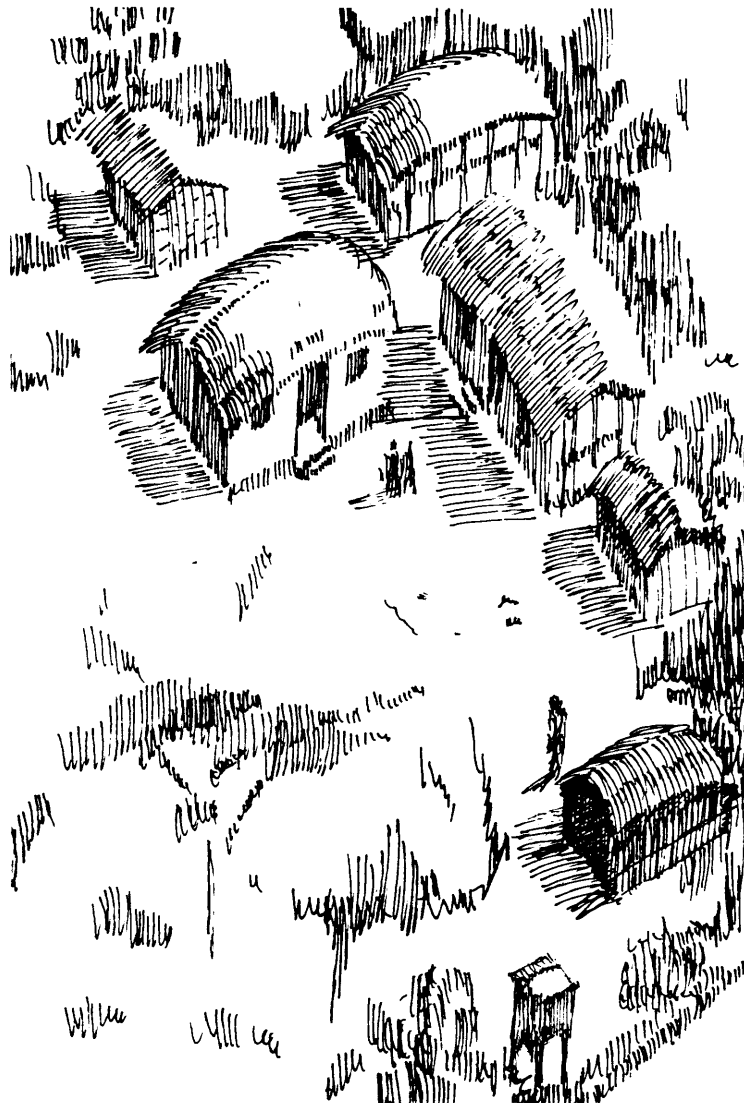Layout of section B after
subdivision

Fig 3.1.10
Isometric view after subdivision

Living    Living
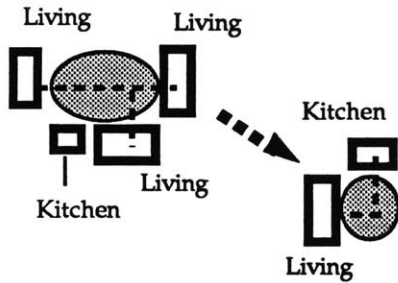
Kitchen

Living

Kitchen
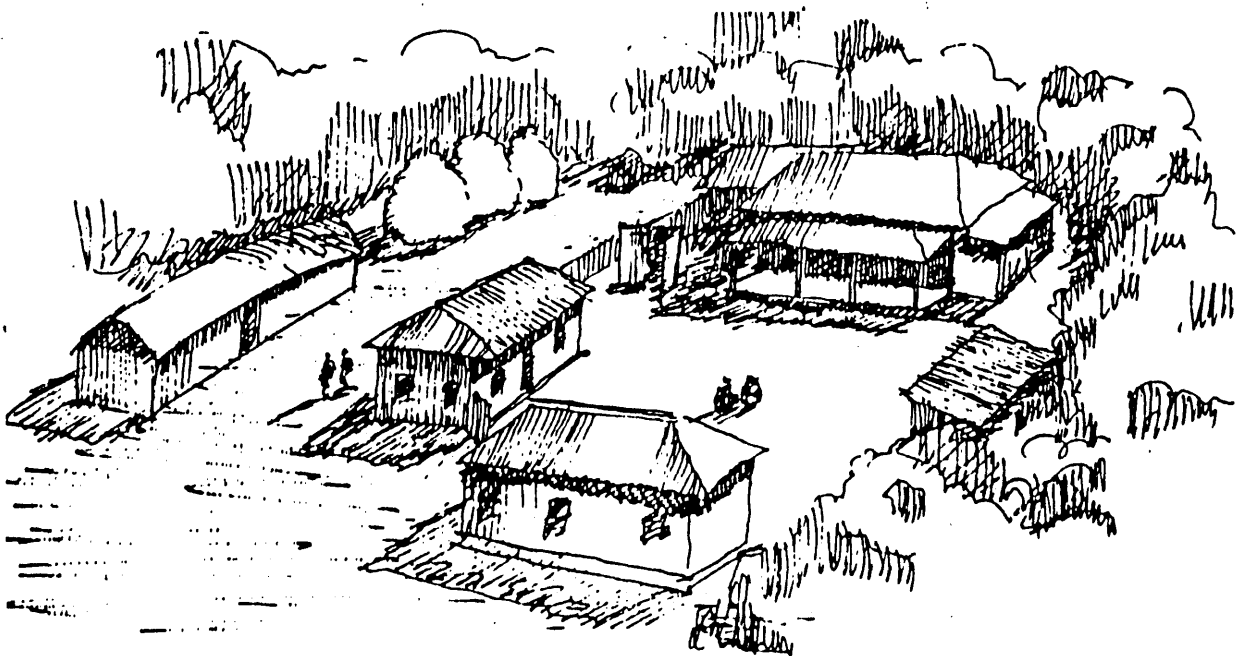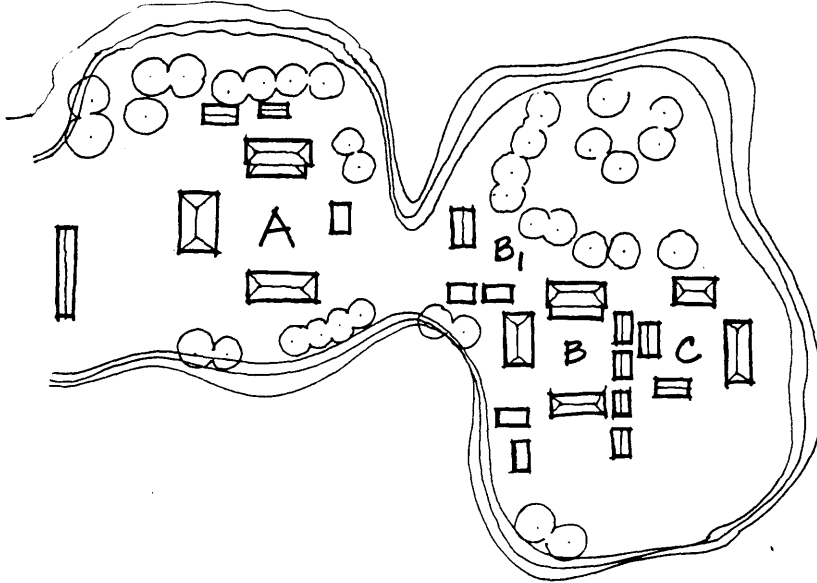
Living

Fig. 3.1.11
Rural House 1B
Existing situation

which he owned, (one third of the original) was again subdivided -- this time into seven divisions. Among the seven, the four currently residing here immediately set up their own houses. Contrary to their father, they could not each have a separate section in the platform and had to be content only with the portion they were living in. Since they needed a minimum of four structures, only one had to be added. But then, since they were, after the death of their father, 'separated', they needed individual kitchens. The courtyard, which till now was the focus of a single, albeit large family became the common property of seven, but enjoyed by only four. Each new nuclear family was reduced to living in one small hut. One of these huts had a cooking area within itself, while the other two huts have separate kitchens. The fourth does not have any. The owner of this hut, probably by reasons of poverty, has to share the kitchen with one of his brothers. (See fig. 3.1.9 and 3.1.10)

The fact that the first act of all the brothers is creation of separate kitchens is significant because in the Bangladeshi society a separate kitchen / hearth is a symbolic indication of segregation.

In the two instances examined so far, one immediately notices a tendency to create courtyards in all the different building phases. In situation A, although the owner has financially flourished, he found no reason to change his house layout. In fact, he followed what his father and grandfather had done before him. In situation B, after the death of the father, there had to be extensive reconsideration and rebuilding. New circumstances necessitated the addition of one hut with *choola* (hearth) and one kitchen hut. Interestingly enough, in the first move i.e. the building of the hut with the *choola*, it served to complete the existing interior courtyard and in the

Fig 3.2.1
Arrangement of the huts , rural
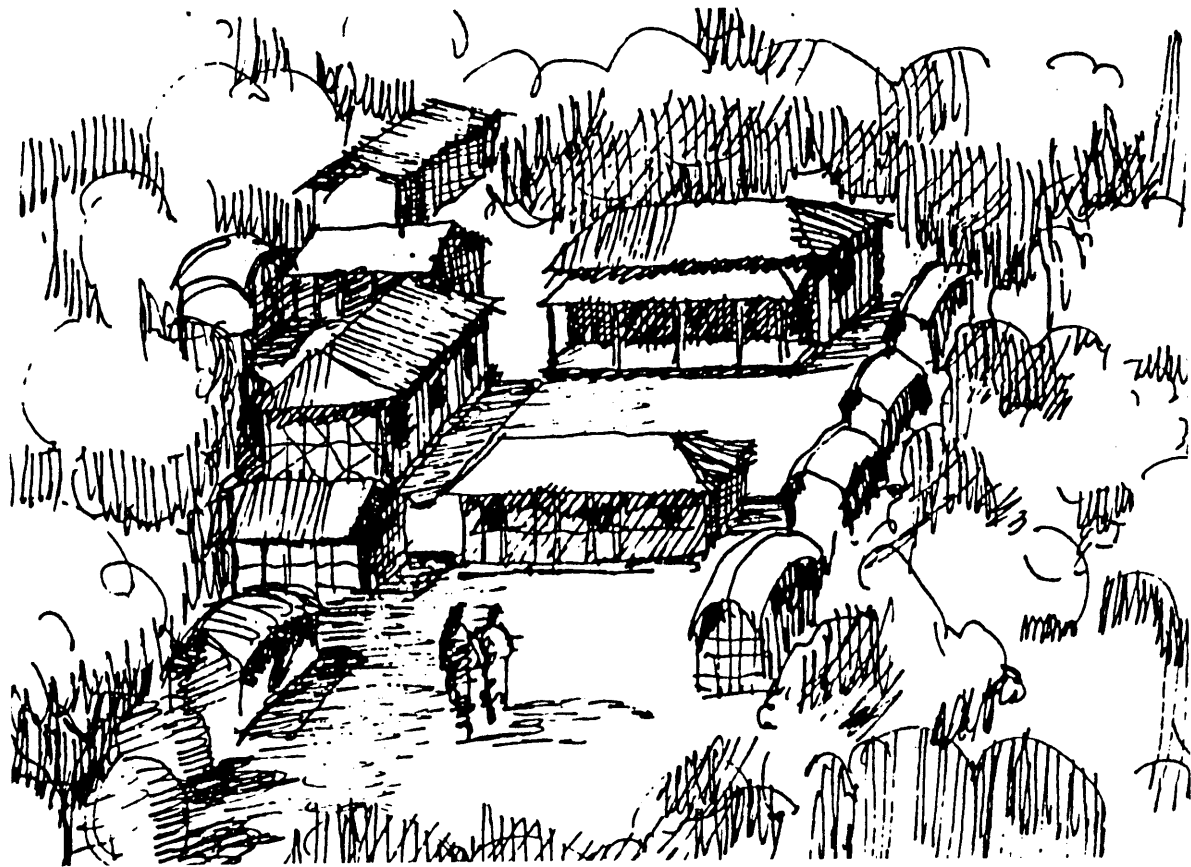house 2

Fig 3.2.2 Isometric view of section A

second case, when the addition became part of an already existing structure, i.e. the old *Katchari*, which became a living unit, it helped to create some sense of an enclosed courtyard related to it. In fact, with the placement of the trees, this addition has almost managed to transform the exterior courtyard into a introverted rural homestead. At the same time it must also be noticed that always an **independent** hut is constructed. An instance contrary to this is rare. Also, in the two cases, although poverty dictated one development and wealth another, the similarity between the two is the most significant feature.

## 3.2 RURAL HOUSE 2

This house is situated in the village called Nayapara Maijta, of Sherpur, Tangail. It is to the north of Dhaka city and is located in the river flood plains. This house too exists today in a subdivided state. The original house was built by the grandfather of a present occupant. As in the case of the previous example, this was constructed on a raised plinth, the *vita*. What started as the dwelling of one family, with time became the home of many. After the death of the original builder, the land was divided between his sons and so the house was extended. It is interesting to note that the land adjacent to the original house was already raised agricultural land, and so the extension did not require extensive earth work for the creation of a platform. The natural land form served the purpose very well. The house as it exists today can be distinguished quite easily as a collection of three obvious and one less obvious house. They are denoted here as A, B, C and B1. (See fig 3.2.1)

The present situation of section A, similar to the previous example, now exists more or less in the same layout as the original one. (See Fig. 3.2.2) The hut in the north is the
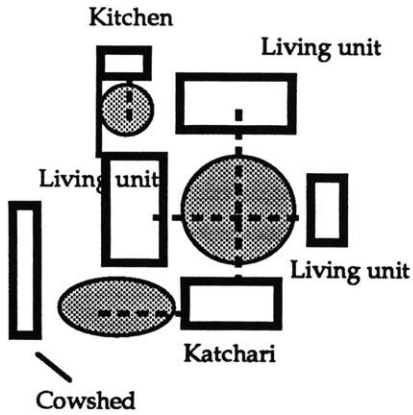
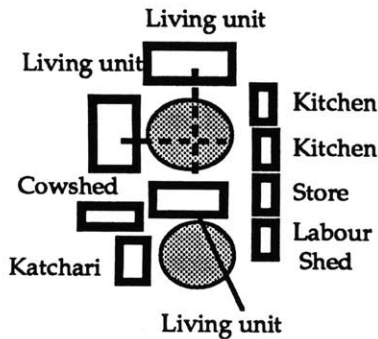Fig 3.2.3
Isometric view of rural house 2,
section B

Kitchen

Living unit

Living unit

Living unit

Katchari

Cowshed

Fig 3.2.4
Rural House 2A



Living unit

Living unit

Kitchen

Kitchen

Cowshed

Store

Labour
Shed

Katchari

Living unit

Fig 3.2.5
Rural House 2B



Fig. 3.2.6
*Dheki* is the apparatus used for
husking rice

7. See appendix for a discussion of
family types in Bangladesh

only remaining original hut. A joint family[7] lives here which comprises of an old man and his wife, four sons, amongst whom two are married with their children, and a school going daughter. There are four main huts in the house and they are arranged around a courtyard. three of these are used for sleeping by the family and the fourth is a *katchari* for guest entertainment This is also used by the seasonal workers to sleep at night. In the back yard there is a kitchen, a storage space, an enclosed bathing space, a poultry coop etc. Attached to the northern dwelling unit, there is a *dheki ghar* or a rice husking space which has a *Dheki* or a husking apparatus.(See fig. 3.2.6) The most noticeable thing to be noticed in this layout is the *katchari* . Although it has its broad side to the courtyard, yet its main entry is at the narrow side. In this manner, by presence and by direction, this indicates two exterior spaces.(Fig. 3.2.4)

The people living in section B are members of an extended family. Two member families share this house , the heads being first cousins in relation. The father of one of the cousins also resides here as does the widowed sister of another. She has been given a place at the back of the house, where she has built a hut and a kitchen for herself and also created a yard in front of her hut. (B-1 in Fig. 3.2.1)

The huts are arranged around a central courtyard. On its three sides are placed sleeping huts while two kitchens make up the fourth. (Fig 3.2.5) There are two exterior huts, and they are shared by both families. One is used as a *Katchari* which also doubles as a lodging place for the in-house teacher, while the other one is a place for the

Fig 3.3.1
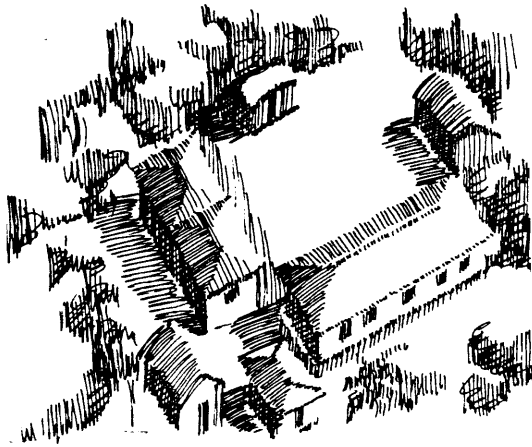Rural house 3. Arrangement when
the family was joint
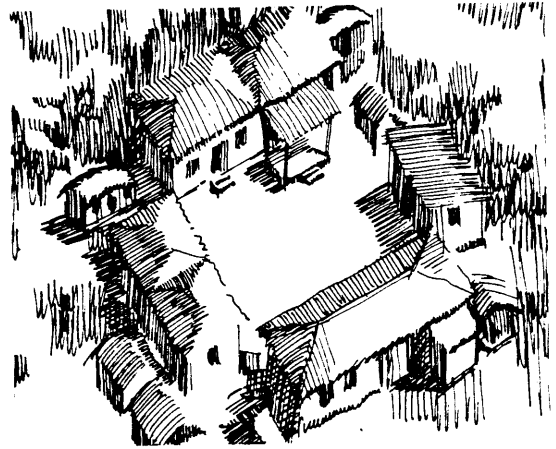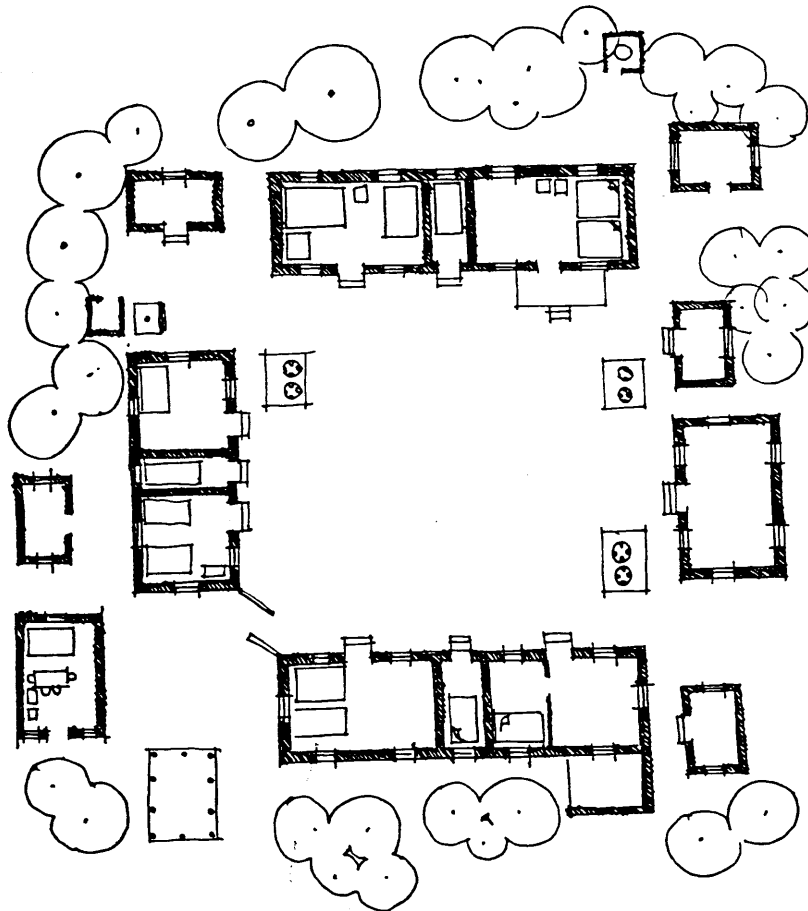
Fig 3.3.2
Arrangement when the family
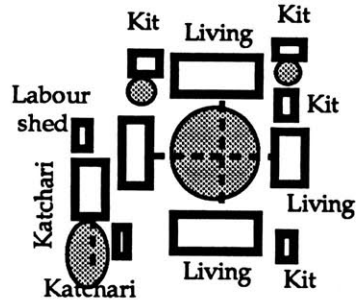became extended

Fig 3.3.3
Contemporary layout

Fig 3.3.4
Rural House 3

seasonal labors to stay. The cowshed is placed at one side of the entry.

## 4.3. RURAL HOUSE 3

This house is located in the village 'Bhangnahati' in Shreepur Upazilla of Mymensingh district. Construction started in about 1935 and the first version consisted of two main dwelling units and other services like kitchen, fuel store, rice husking shelter etc. (Fig. 3.3.1) They were arranged around a central courtyard. Gradually, as family members grew, and the house became a joint family dwelling, huts were added around this courtyard.

Later on, as the joint family gradually increased into an extended family, more huts were constructed. These were carefully placed so that the central courtyard was not disturbed. Service structures were added as were necessary. The *Katchari* opened through its narrow side into a small exterior courtyard from which cowsheds could also be approached. (Fig. 3.3.3)

At present, the house has been divided into four parts. In this case, the inheritors are four brothers and they are each recipient of one side of the *uthan*. This, and the *Katchari* are jointly owned.

Fig 4.0.1
Trees and vegetation overgrows all
built structures
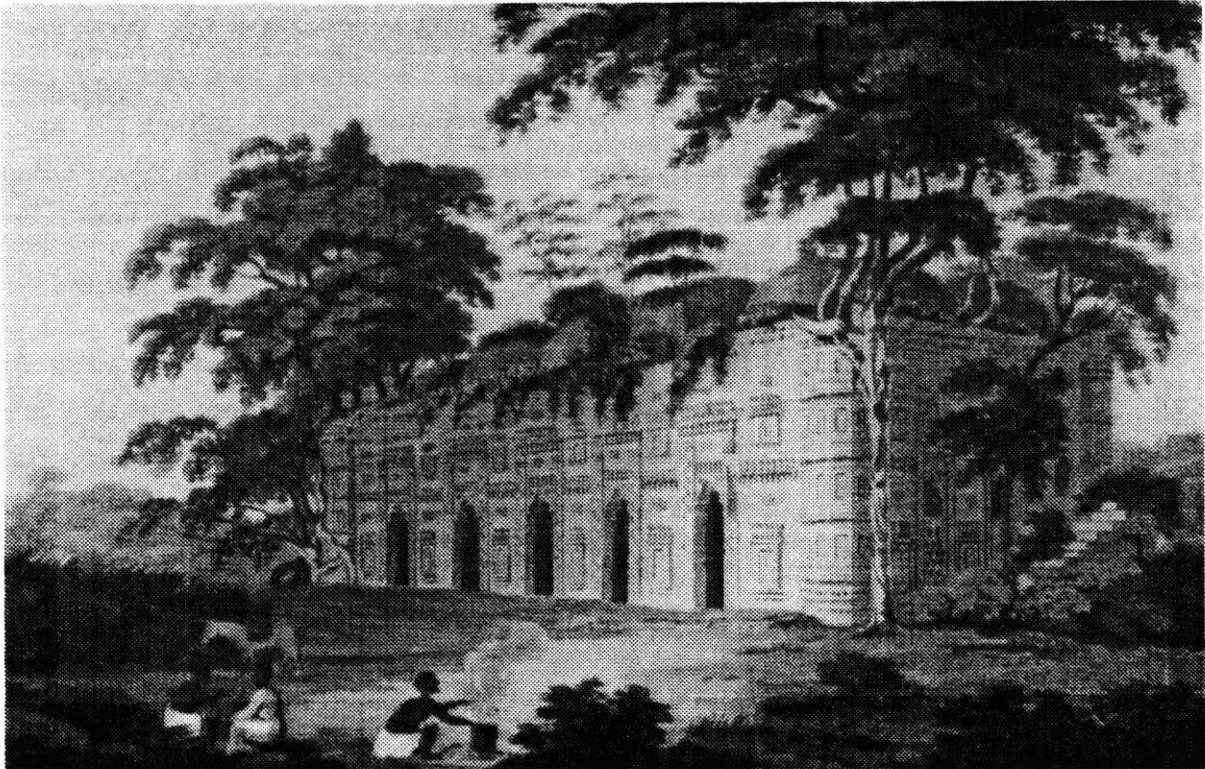
# 4.
# MONUMENTS :
# EVIDENCE OF OLDER ARCHITECTURE

Climate and the forces of nature in Bangladesh are such that they lay to waste all creations of man. The extremely lush vegetation overgrows everything and the shifting rivers wash away all built form.[1] Water in its other manifestations of rainfall and flood is also another factor in this destruction. The relics of the past which one can scrutinize in a search for identity are therefore scant.

## 4.1 ISLAMIC

Vernacular architecture in Bengal had far-reaching effects on the development of the indigenous formal architecture. As mentioned before, the most apparent phenomenon is the style that developed after Bengal gained independence under the Muslim Sultans who severed their ties with the central authority and made Bengal their home. Just as the Mughals in later day Delhi sought new architectural styles, so did these Sultans attempt an indigenous Bengal character. Their desire for independence matched those of their subjects and this synthesis materially reached into the vernacular to bring forth a new architectural expression. The buildings erected at this time combined traditional Islamic techniques (arches, vaults and domes) and types (mosques, tombs, forts) with local materials (brick and terra-cotta) and forms (the hut). Thus domed brick structures incorporating curved cornices was derived from the village hut. Bangla vaults reproduced the roofing system and plans included chambers with open porches in imitation of village huts with verandahs.

1. The river *Pawdda* or the Padma, is locally known as *Kirtinasa* which means destroyer of accomplishments.

Expression of one's culture is the foremost of all the objectives of art. As shall be seen later in this chapter, the
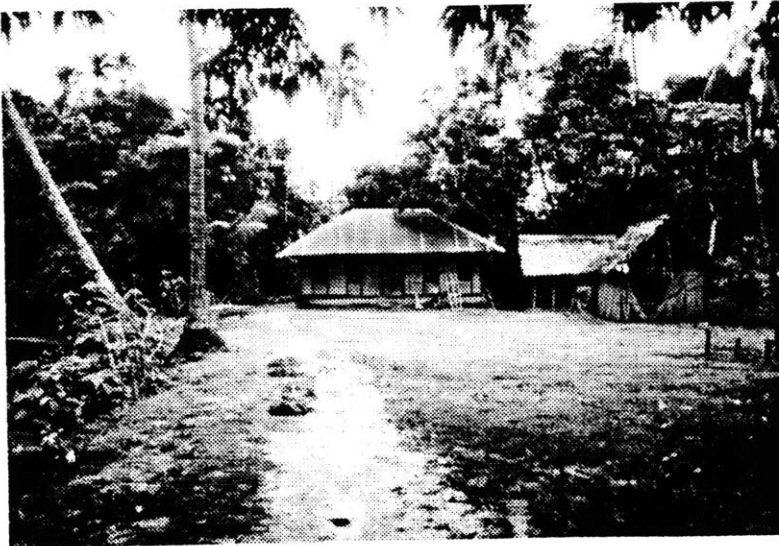
Fig. 4.1.1
A rural mosque, part of which is seen in the left of the picture, resembles the *katchari* of the house to which the road leads to.

Fig. 4.1.2
View of the *Katchari*.

mosques and temples which developed in this period were actually successful in representing the identity of the common people, the bulk of whom was in the rural areas. This alone may be enough for these to be given a high value in architecture. In the current quest for meaning, these monuments are therefore important as evidence because they speak of the meaningful elements of the collective consciousness.

The Bengali *Bari* (House) is a cluster of huts arranged around a courtyard. Each hut is given a definite function i.e. bedroom, storage, kitchen etc. Extending this concept further, it is only natural to erect a special hut for the purposes of worship. Since Islam does not require specific structural types for the purposes of prayer, such small 'prayer huts' could easily be a part of the *bari* of the faithful. (Fig 4.1.1 & 4.1.2)

Bengal, because of its climate, topography and vegetation, restricts or hampers overland travel. Thus small and numerous mosques scattered all over for reasons of proximity makes more sense than large congregational mosques.[2]

These two thoughts contribute to the idea of the mosque in Bengal being small and based on the traditional hut. It is not unlikely that the Sultans, in their attempt at monumentality, developed the indigenous mosque and hence created a 'style' for Bengal. Thus the public mosque may be viewed as a development of the prayer hut of the *bari*. In this manner, public mosques are representations of the original huts. It should be understood that what developed since, in the evolution of communal mosques, represents a derivative of part, and not the entire, homestead of Bengali tradition.

2. See Perween Hasan, *Sultanate Mosque-types in Bangladesh Origins and Development*, 1984, p. 116

Fig. 4.1.3
A representative sample of Bengal mosques. All of them show traces of their origin: the rural hut.
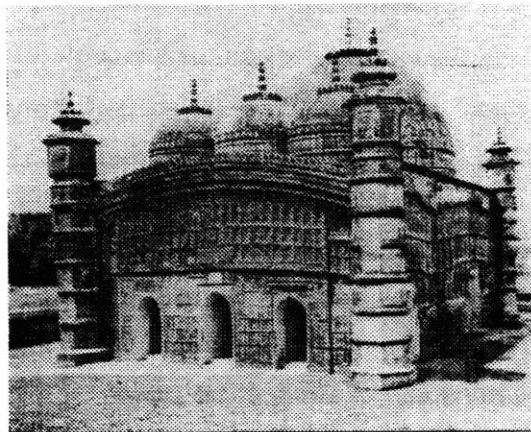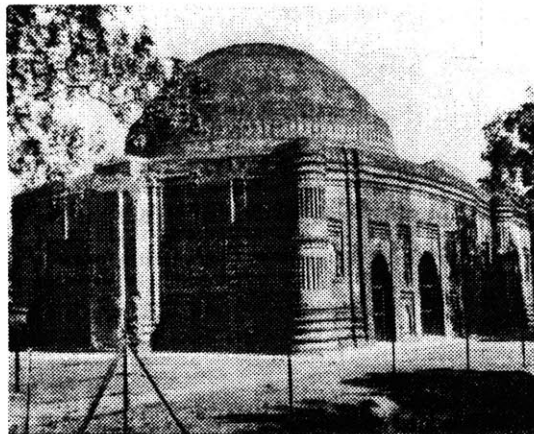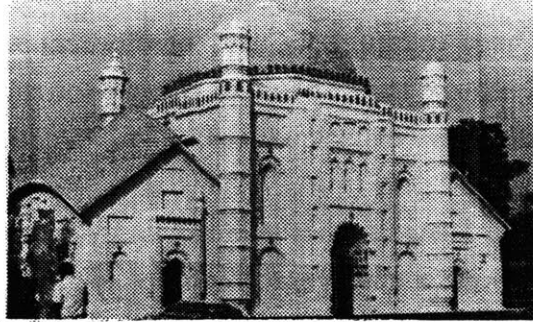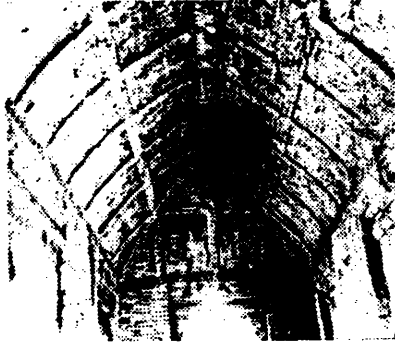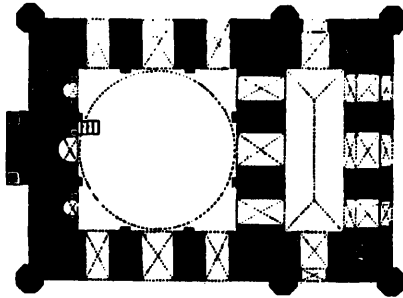
Fig. 4.1.1.a
Masjidbari Mosque Interior View



Fig. 4.1.1.b
Plan, Masjidbari Mosque

The Bengal mosque retained its original unpretentiousness in its subsequent developments. It was a single roomed structure, had curved cornice and *Chala* roof. It could not, in the process, overcome the tremendous power of Islamic symbolization. So domes, as an Islamic motif, appeared. However, in keeping with the local flavor of submission to nature, these domes were never overpowering. Instead, they were restrained and subdued, in accordance with the general tone of the architecture.

The requirements of accommodating a dome slightly modified the plans, however, and so they became either square or derivatives of squares. These geometrical forms in plan were expressed on the roof in the form of one or more domes. Whenever opportunities presented themselves, as in the case of an elongated bay or the rectangular verandah, the Bengal roof made its appearance. It must be mentioned here, that the Bengali *Chala*-roof does not need pendentives, squinches or such intermediate elements. Since its base is square, it can rest directly on the supports. Thus its direct construction added to its appeal.

Two other variations of this type are a small chamber with verandah in front and an extended square building with single or multiple domes.[3]

### 4.1.1 Masjidbari Mosque (1465 AD)

This mosque is in south Bangladesh. It is the second earliest dated mosque of the covered rectangular variety. It is a very small mosque only 21.5 feet square.[4] Built entirely with brick, it has a verandah on its eastern side. The prayer hall is covered by a dome. In the exterior, the cornice has a very slight, almost imperceptible curve. The corners have octagonal buttresses and all the sides, except the western one, have three arched openings.
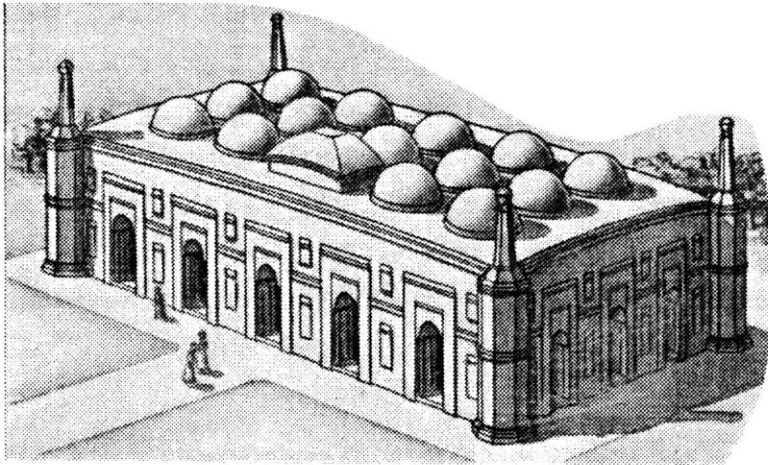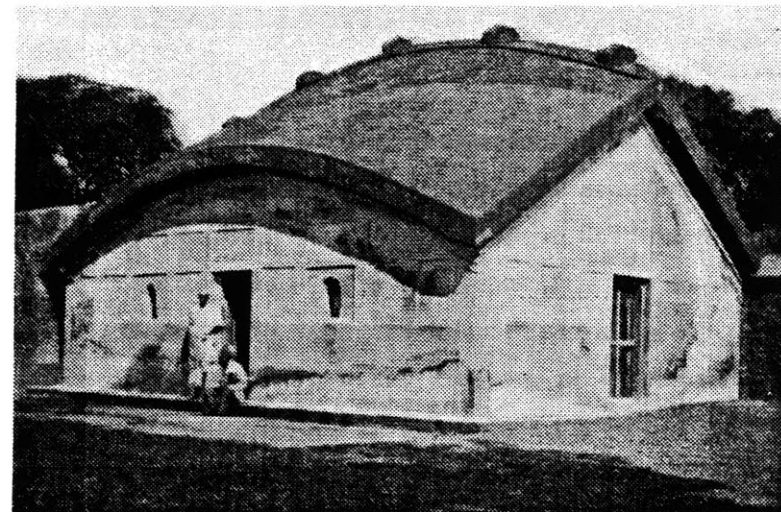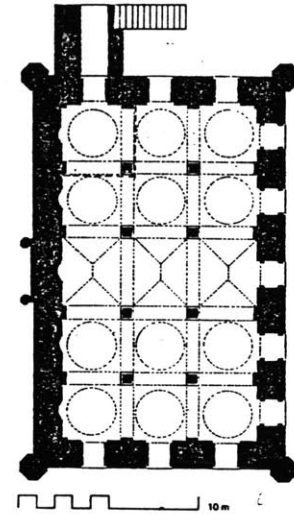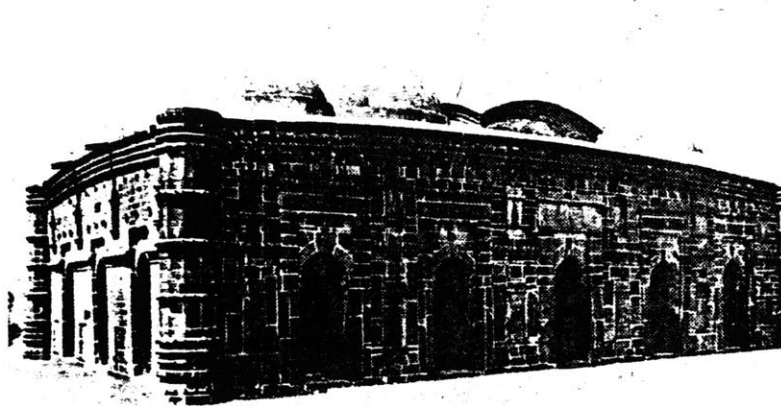
3. ibid
4. op. cit., Perween Hasan

Fig. 4.1.2a
Two views of Chotosona Mosque

Fig. 4.1.2.b
Plan of Chotosona Mosque

Fig. 4.1.3
View of Fath Khan's Tomb

The verandah has a *chau-Chala* or four sloped roof which, from the inside, has the ribs prominently marked out in the brickwork in imitation of the bamboo framework of the original huts. (See Fig. 4.1.1 a) It may be entered by the three entrances on the east and each of the northern and southern sides. Of the three in the east, the central one is the widest.

The building has the quality of bare massiveness with the only decoration being the moldings in the base of the towers, echoing perhaps the plinths of the huts after which they were modeled.

### 4.1.2 Choto Sona Mosque (1493-1519)

This mosque is a rectangular structure with two rows of four pillars running in the north-south direction. Thus the interior is divided into 15 divisions. The central three are rectangular while the remaining ones are square. (See Fig. 4.1.2 a and 4.1.2.b) It thus follows, that the central ones have *chau-Chala* roofs while the others have domes. The exterior corners have elaborate pilasters with horizontal moldings specially emphasized in the plinth. The cornice is gently curving and the surface is broken up by niches and some motifs.

The overall horizontality here is the most marked feature, specially if one has the image of other foreign mosques in mind.

### 4.1.3 Tomb of Fath Khan (17th cent)

This tomb building is in Gopalgang. It has a rectangular chamber with trabeated opening in the north, west and east sides. It is built with bricks and decorated with stucco. The roof is of special importance here because of its direct

imposition of the *do-Chala* roof. Instead of windows, there are niches in the exterior walls and these too recall the small openings of mud houses. (See fig. 4.1.3.)

### 4.1.4 Notes

After even a cursory view of these buildings, the question which comes to mind is -- are they the natural expressions of the people or do they reflect popular taste as **perceived** by the local elite? Basically three principles can be identified from the study of these monuments. First, rectangles are the modulator of the plans, second, the roofs are symbolic elements and third, overall horizontality is the unifying principle. The first speaks perhaps in an allegorical manner, of the basic unit of the *bari.* As the multiplication of a single one roomed hut becomes the Bengali homestead, so does similar multiplication in a different manner create the mosque. The roof signals, quite directly, the common man for whom the structure is created . With reference to chapter 2, it may be argued that horizontality as a symbol of his values is a befitting expression. Since historical times, the Bangladeshi man has taken a modest role in the universe. His religion and philosophy throughout history have taught him to be humble but dignified. This humility also reflects the landscape of the countryside and ensures visual harmony with his surroundings.

There are no minarets in the Sultanate mosques. They were perhaps unnecessary. The tall symbol of the great Qutb Minar at Delhi was a sign of Muslim victory over the non-believers. Such stormy victory did not happen in Bengal. It was a quiet revolution, it was not coercion but was conversion. Victory symbols were therefore unnecessary. Also, as has been argued, verticality is against the nature of the Bangladeshi man. Practical purposes were very well served by delivering the *ajan,* the

call to prayer, from the ground. The mosques as they were, were very near the people, both physically and psychologically.

## 4.2 HINDU

The influence of the locality that was gained from the architecture of the common man was not limited to the Muslims only. The Muslim sultans appealed to the regional spirit of all their subjects and this initiated a period of dynamic interaction between the Muslims and the Hindus. The rulers specifically encouraged literature and even patronized the translation into Bengali of religious and secular stories so that they were easily accessible to the common man.

Bengali Hindus, long under the domination of the North Indian orthodoxy, initiated a new revivalism under this new spirit of tolerance. In the late 16th century, this happened in the form of Vaishnavism led by the saint Chaitanya.(1486-1533) This 'revolt' against Hindu orthodoxy advocated abolishment of the caste system and leaned, in a way, towards monotheism in the sense that it concentrated on one God-- Krishna, worship to whom was based on *Bhakti* or devotion. Its consequence was that it brought all people, irrespective of caste or creed, together. Literature helped to extend this philosophy to all levels of the Hindu society.[5]

The development of the Bengal Hindu temple type took place during the period from the 16th to the 19th century.[6] By this time, the Mughal conquest had occurred and the imperial style replaced that of the local. The task of carrying on the indigenous tradition therefore fell to the Hindu temples. "Nearly all the surviving richly decorated temples of the sixteenth and seventeenth centuries are Radha-Krishna temples, and their terra-
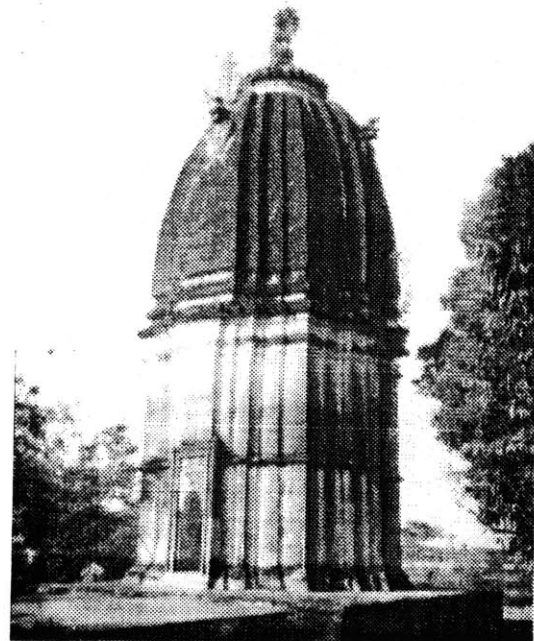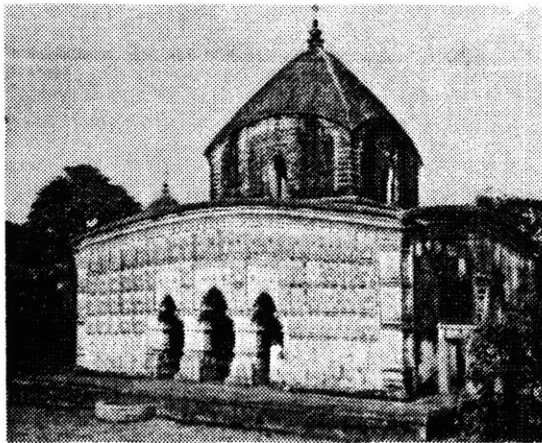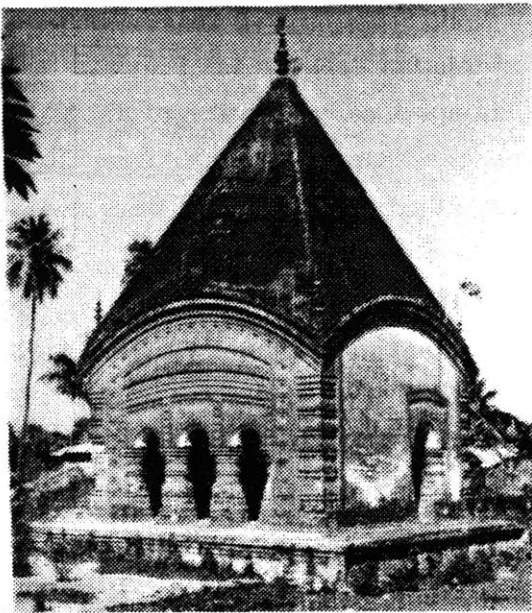
5. This is better discussed in chapter 2

6. . See *Brick Temples of Bengal*, 1983, p. 03

Fig. 4.2.1 Different types of Hindu Temples

a. Chala Type

b. Ratna Type

c. Shikhara Type

cotta decorations is Vaishnava, not merely in subject matter but in spirit..." [7]

Basically the temples may be classified into three types, *Chala*, (Hut shaped), *Ratna* (Pinnacle shaped) and *Shikhara*. [8] (Fig 4.2.1) Among them, "... the *Chala* type which is the imitation of the residential thatched huts of the people of Bengal, is by far the most popular type of temple."[9] Further influences of the *Chala* can be seen in the other two types. Even though the traditional one, the *Shikhara* type, also existed in Bengal, the *Chala* type commanded more popularity. Hence, even the *Shikhara* type became modified to such an extent that it only retained its bare essentials. The *Ratna* type was similar to the form of the Muslim mosques in the sense that it consisted of a low structure surmounted, instead of domes, by one or more pinnacles, called *Ratnas*. Even here, elements of the *Chala* was used. Externally, the lower portion resembled the traditional hut, while the *Ratna* took on the appearance of a modified *Shikhara*.

Almost all the actual variations of the dwelling hut were used in the temples.[10] In some extreme cases, to achieve a squarish plan, two *do-chala* forms were joined together to create a *jorbangla* or a twin hut. However, square plans were usually covered with *chau-chala* or *at-chala* Bengali roof.

### 4.2.1 Gopinath Temple

Built in the early 17th century in the present day Pabna, this temple is composed of two *do-chalas* joined together. Comparable to Fath Khan's tomb in terms of its roof shape, the corners are marked by heavy pilasters. This temple has an extended plinth which is molded as a decorative band. (See Fig. 4.2.2)

[7]. See David Mc Cutchion, in *Brick Temples of Bengal*, 1983, p.16

8. This classification is based on Hitearanjan Sanyal, "regional Religious Architecture in Bengal. A study in the Sources of Origin and Character" in MARG, Vol. XXVII, Mar. 1974, No. 2

[9]. ibid. p. 41

[10] David McCutchion classified 186 temples into 10 different categories. See *Brick Temples of Bengal.*, 1983
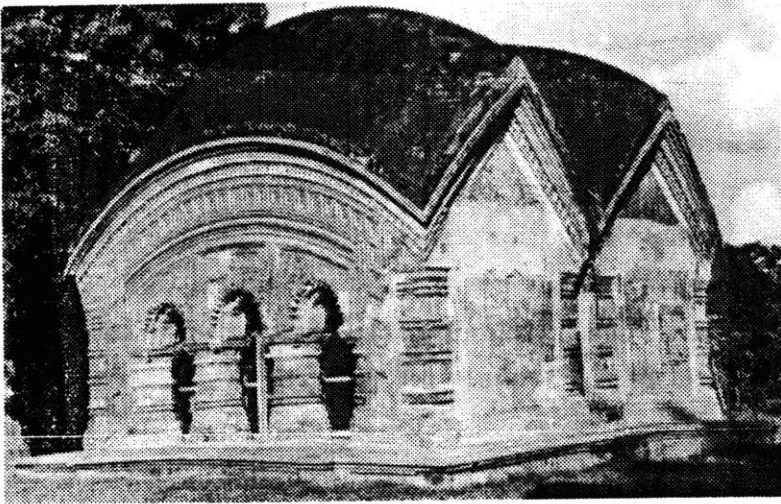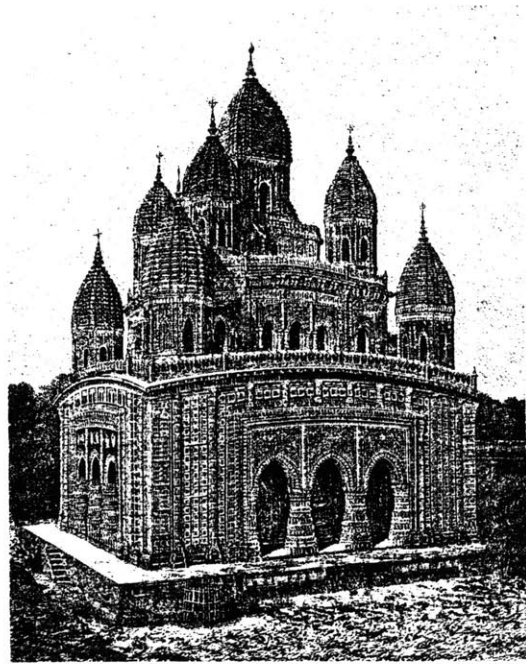
Fig. 4.2.2
Gopinath temple

Fig. 4.2.3 a
Kantaji Temple as existing.

Fig. 4.2.3 b
The original form of Kantaji
temple as depicted by James
Fergusson

This type of temple is quite common and there are one or more examples in every district south of the *Ganga* and west of *Pawdda*. One hut-form acts as the porch which invariably has three arches, the other as the cella or the shrine room. Generally, temples of this kind also have a side entrance to the rear chamber.[11]

### 4.2.2. Kantaji Temple

This temple, dated 1692-1723, is in Dinajpur, Northern Bangladesh. (Fig. 4.2.3.a) Originally it was a *navaratna* type, i.e. having nine towers, but the towers have been since destroyed. For an idea of its general form, a depiction by J. Fergusson is included here. (Fig 4.2.3.b) In a manner typical of Bengali huts and the predating mosques, this temple has curved cornice which is much less exaggerated than other temples. However, the most distinguishing feature is profuse terra-cotta work all over the exterior surface, including the plinth.

### 4.2.3. Notes

The regional architecture of the Muslims and the Hindus in Bengal is thus very similar. Although the Muslims were heirs to a very developed architecture, yet their structures were greatly adapted to suit the local taste. To scholars of Islamic architecture these mosques might seem unusual, lacking, as they do, enclosed compounds, minarets or ablution pools. However, the mosques were always set near the ponds of the village which took the place of specifically designated ablution pools.[12]

The dependence of these sacred buildings on traditional dwelling huts provides an indication of the significance of the latter in the lives of the Bengali people. A discussion of this should therefore be the next logical task.

11. See Brick *Temples of Bengal,* 1983, p.. 36

12. Perween Hasan, who surveyed 49 mosques in Bengal, mentions that almost all of them has a pond or a large tank nearby. op.citPerween Hasan, 1984, p. 270
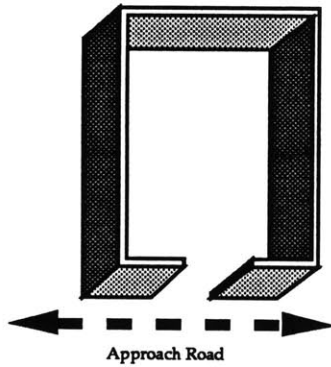
Approach Road

Fig. 5.0.1
Boundry walls are the first
operation of house building

# 5.
## URBAN HOUSES

So far, to carry out the desired objectives, this study have looked into the rural vernacular and at monumental architecture. Some similarities between them have been identified and from these, associations have been speculated into the deeper structures of the Bangladeshi psyche. At this stage it seems appropriate to delve into the urban scene. Does the understanding of architectural quality, speculated from the rural and monumental examples, also surface in the urbanism?

It has to be pointed out that, strange as it may be, there is very little archeological evidence of urbanism in Bangladesh. Whether that was the real situation, or whether action of natural elements is responsible, is an issue much beyond the scope of this thesis. Here only a look shall be taken at the urban vernacular with examples taken from the old part of Dhaka city because this possibly represents the oldest urban settlement. The examples for study has been selected from an existing study done in 1982.[1] Although a decade separates that study from this one, some lessons can be taken from the examples presented, specially when the present investigation is interested in looking at the initial situation of the houses as they were conceived. This is something quite extensively done in the source study.

The first action usually taken in the construction of urban houses is, just as in rural areas, demarcation of the site. In this case it is done by high boundary walls.[2] This primordial act perhaps speak more about the psychic than the functional; in the words of Christian Norberg-Schulz it was the first act of "being in the world" [3]

[1] Iftekhar Mazhar Khan, *Alternative Approach to the Redevelopment of Old Dhaka*, Ph.D. Thesis, 1982

[2] ibid. p. 6.3

[3] Derived from Heideggerian phenomenology and Jean Piaget's concepts, Norberg-Schulz's conception of architecture consists of emotional relationships and not on abstractions of science. Man relates to architecture by his emotions. Thus a 'place' may be understood as a structured figure on a less structured ground. In this case, walls of urban houses and *vita* of rural ones can be understood as the first act for the purpose.

Fig 5.1.1
Isometric Drawings showing the
chronological development

Fig 5.1.2
Plan of the house
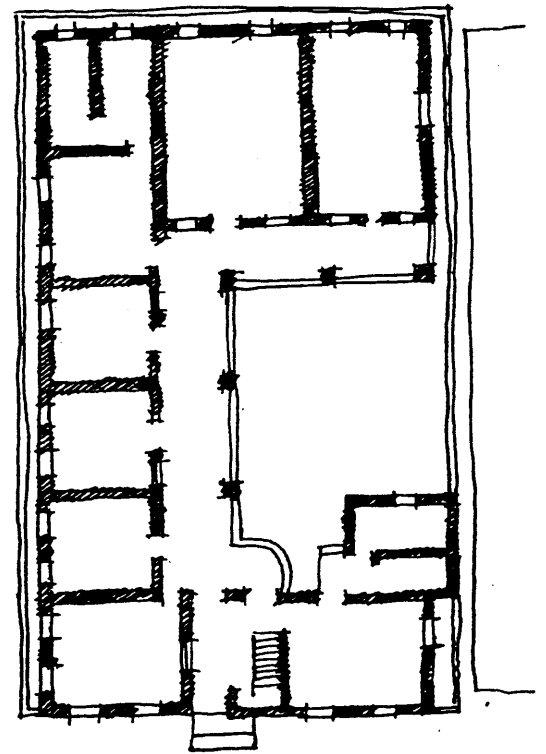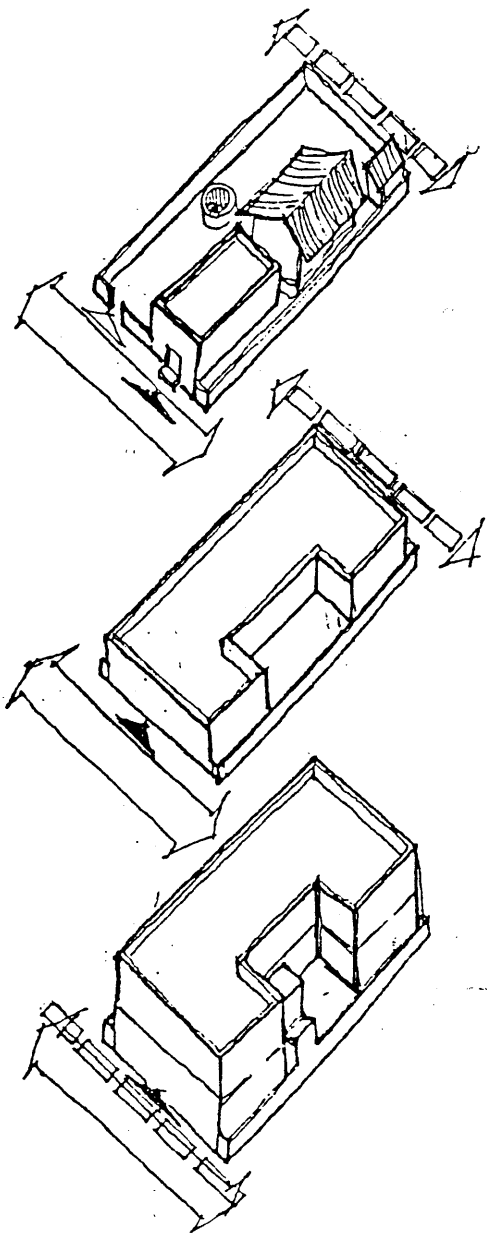
The initial layout as seen, is remarkably similar to their rural counterparts and this is perhaps not unexpected. A predominant pastoral society points to this. But later, urban pressures create transformations. A discerning eye looking within these changes may discover some enduring qualities. These are the indispensable elements and may be regarded as those constituting identity.

## 5.1 URBAN HOUSE 1

This house is unique because it represents the first attempt of a village based family to enter urban living. The land was bought by a joint family comprising of a father and two married sons. However, only the younger son and his family moved here. The house was much more then the home of a migrated nuclear family, and was actually developed as a base of an extended household in the city.

The first construction took place in 1952. This consisted of a brick exterior house, a *kutcha* [4]interior house and a toilet at the back. (Fig. 5.1.1)

The next stage in 1957 was a brick building. This was in the shape of a 'U' with three sides enclosing a courtyard in the south. The plan was a row of rooms connected by a verandah. The kitchen and the toilets were grouped together at the north-east corner. As in the previous example, installation of sewage lines made the construction of toilets and kitchen possible inside the house itself. However, here too, they remained secluded at a rear point. The plan shows one entry to the house, but it is controlled so that the privacy of the courtyard is maintained. The guests are entertained in a *katchari* which is a room in the front and leads off the vestibule. It

4      The term *Ka-cha* and *Pa-ka* refer to the structural condition of the house. *Ka-cha* denotes easily perishable materials or relatively much less durable material. *Pa-ka* denotes durability and relative permanence owing to the use of durable materials. In Bangladesh *Pa-ka* usually denotes brick houses .

Fig. 5.2.1
Isometric drawings showing
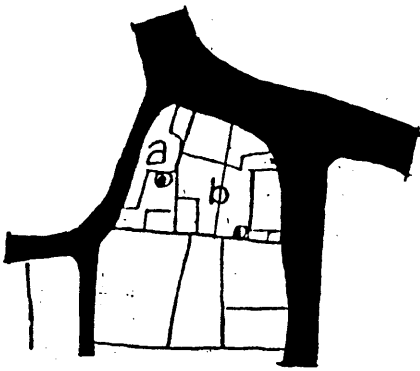chronological developments
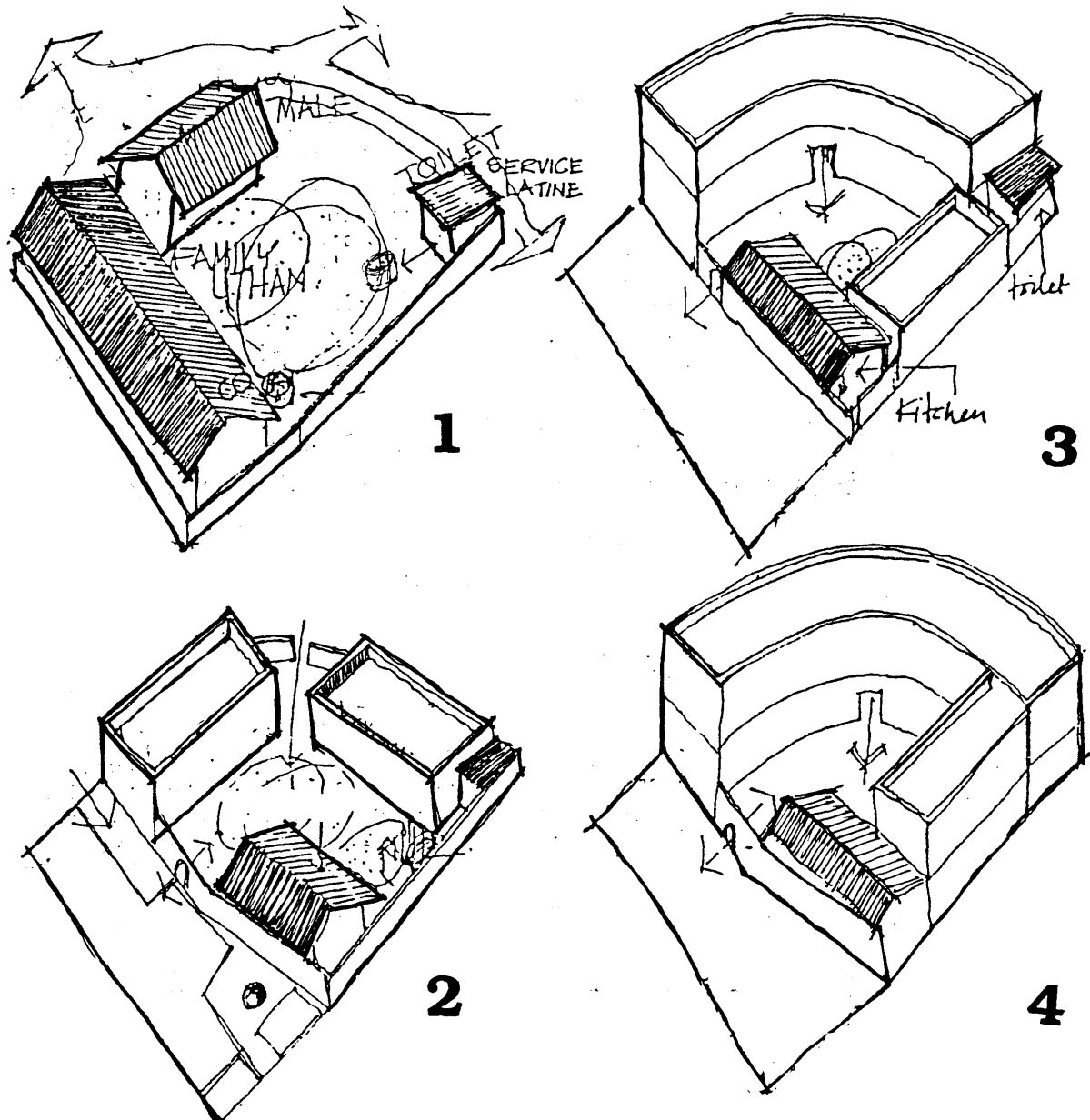
Fig. 5.2.2
The site of the house

seems that another toilet was added at the courtyard corner later on.

In 1969, another floor following the same plan as the ground floor was added creating two houses. This addition was merely a technicality, involving only the construction of walls over walls. Therefore, in essence, the basic ground floor was duplicated.

This house, beside fulfilling living conditions, also functions as a consolidation of wealth. Perhaps that is why there are many more rooms than is required for the family. The first floor is rented out to a family of relatives and the owners live in the second floor. But this too is very big for their requirements and so some of the non-essential rooms of the upper floor are rented out to closely related family members

## 5.2 URBAN HOUSE 2

This house belongs to an affluent and locally powerful clan. The family is in the leather trade, a common indicator of wealth. The urban land on which the house stands underwent one subdivision and a few rebuilding acts. these are described below.

Before subdivision, the layout remarkably resembled a rural pattern; there were two structures on the plot which were placed at the boundary. A courtyard was therefore created in the center. The toilet was a separate structure at the back.

With the death of the owner in 1935 and subsequent division of the property into two, the house form changed. In this study, the larger portion of the division shall be considered. Firstly, change came in materials and *pa-ka*

Fig. 5.3.1
Layout of the house in 1912
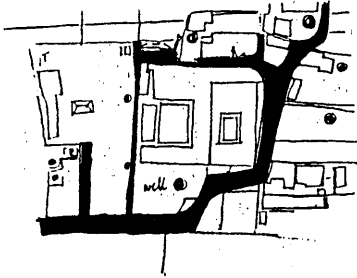
Fig 5.3.2
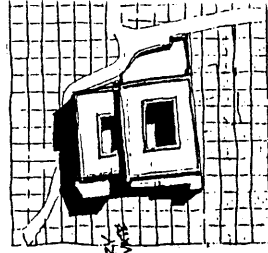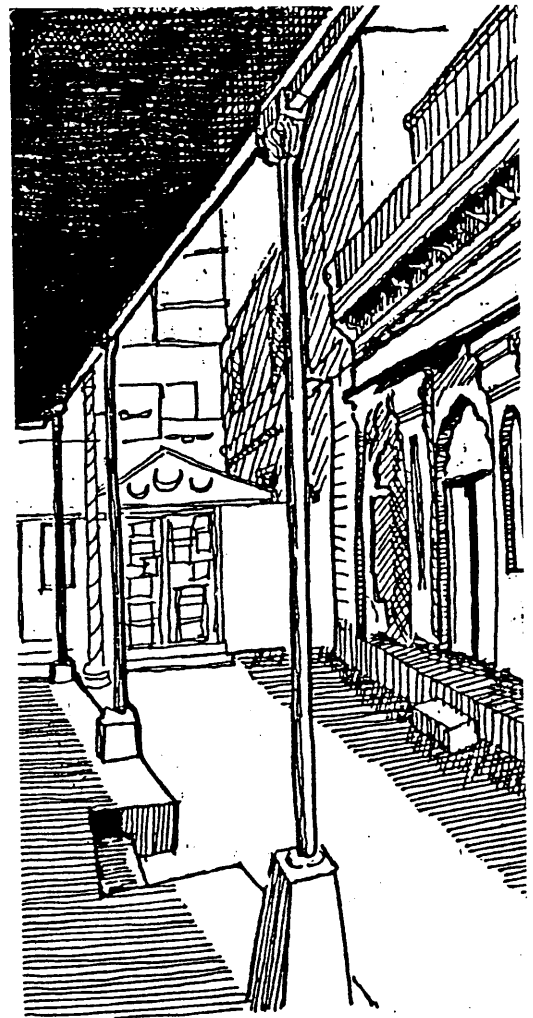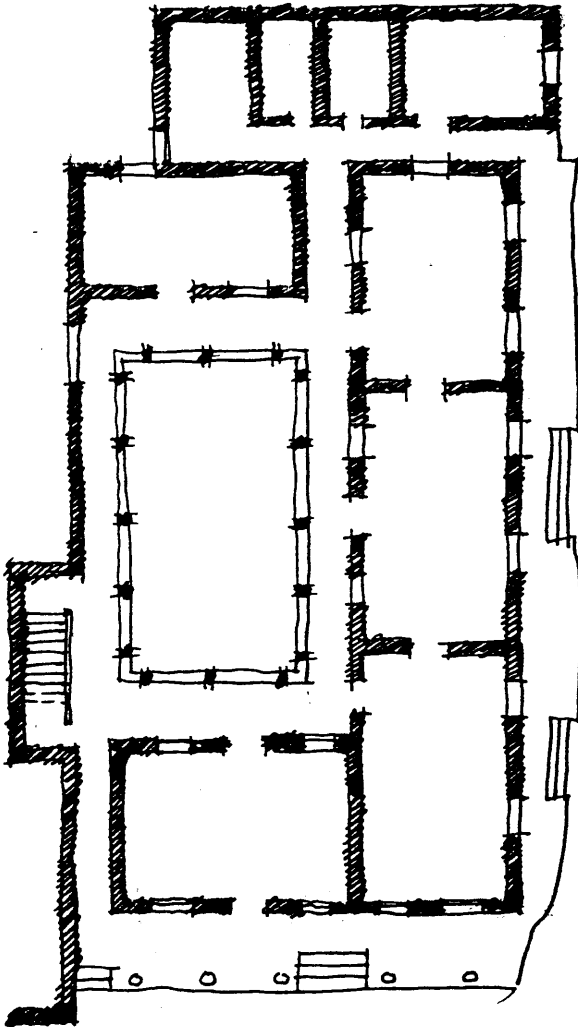The house in 1954, as can be distinguished from an aerial view

Fig 5.3.3
Rooms are arranged around a courtyard and they are connected by a verandah.

Fig 5.3.4
High plinth and verandah create an exterior space in a manner, similar to exterior yards of rural houses.

structures replaced the *ka-cha* ones. Interestingly enough, the layout was again in the typical introvert type built with separate structures around a courtyard. The kitchen and toilet however, remained *kutcha*.

Due to extensive commercial pressure, the property continuously gained value and ultimately it was more profitable to build shops on the road frontage. Therefore in 1950, a new structure developed along the road. Another small brick structure was added to the back, but the *kutcha* kitchen and toilet remained as they were. Later on, the family moved to the second floor, but they continued to use the toilets and the kitchen in the first floor. Even later , when sewer were laid, these services were then taken to the upper floor.

At present, the courtyard is totally neglected and is misused with no further signs of development, at least until the date of the last data.

## 5.3 URBAN HOUSE 3

This house, on 26 Purana Mughaltuli Lane was once an imposing and prestigious structure. It was a Hindu house built for the needs and preferences of the original owners. In 1947 when they had to leave due to political reasons, the house was divided into two. It exists today in a severed condition. However, it is possible to decipher its original form and intent.

The earliest available document of the house is a plan of 1912 (Fig 5.3.1) This is not a very clear document but does show the house to be arranged around two courts in two distinct groupings. There is a well in front of one group and possibly toilets to the rear. There are two entries, possibly formal and informal .



Fig. 5.3.5
Isometric drawings showing chronological development.

By the 1920's the house had already reached its consolidated form. (Fig 5.3.5) The major thing that happened was the introduction of a sewer line; so the toilets and kitchens did not anymore have to be separate. However, their relative positions in the rear remained unchanged. The abandoned house was divided into two by subsequent occupiers. This was easily done according to the two courtyards, but it necessitated the addition of a kitchen to what was formerly the first or the 'exterior' courtyard. Pictures drawn from a1958 aerial view (Fig 5.3.2) reveal that the entire land to be built up with the exception of the courtyards.

Gradually with passage of time and increased needs, the house expanded. Understandably, this happened in the vertical direction where the original plan was merely repeated. (Fig 5.3.3 and 5.3.5)

The entire building has an extended and quite high plinth. In the first courtyard, there is a verandah in the entrance and also a much extended plinth on the other side. Thus the public area is demarcated not by walls but by the plinth. In the process, a small space is also created (Fig. 5.3.4) towards the road, possibly a public gesture by the original owner.
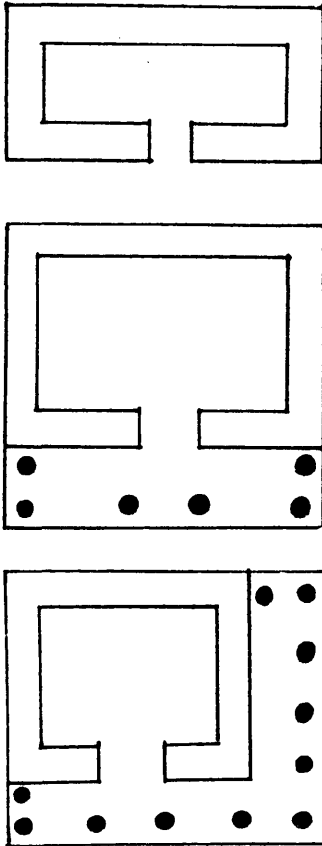
**Fig. 6.0.1**
**Plans of different houses**

[1]. Francis Buchanan, quoted in A.D. King, "The Bengali Peasant Hut: Some Nineteenth Century Accounts, in *AARP*, London, Dec., 1977,p. 71

[2]. Citing Francis Buchanan's study in Dinajpur, A.D. King states, " The door to the hut was usually the only aperture, 'crevices excepted', and was usually shut by the hurdle tied to the upper part of the door, which fell down, like a valve, to close. ... Very few houses had any window openings to admit air or light. " From A.D. King, 'The Bengali Peasant Hut: Some Nineteenth Century Accounts" in AARP, London, Dec., 1977, p. 71 House in today's Bangladesh does have windows, but they are quite small.

# 6.
## DISCUSSION

From a consideration of all the examples so far provided, the most significant common fact that one discovers is the use of **simple, rectangular and free-standing** structures. In rural areas this is quite vividly apparent. Verified by the monuments, separateness of the huts seems to be the most marked theme. As Francis Buchanan said in 1810, "... and there is no contrivance by which a person can go from one apartment to the other without being exposed to the sun and rain"[1] In urban cases too, as far as functional possibilities permit, such is the case.

The huts usually open out to the outside through their wider facade and hence they are organized in a **transverse** fashion. Thus a sense of an **exterior space** is created. These facades, though small, are rich in texture, and are made either of mud, or of bamboo. On top, each is qualified by projecting eaves, most commonly curved, and at the bottom by an extended plinth. Windows are small and do not contest the closed effect.[2] In some cases, although a sense of transparency is created by the bamboo matting, the overall closed effect is not hampered. Sometimes though, a verandah modulates between the vertical plane of the hut and the horizontal one of the courtyard in front of it.

A yard is produced in front of each hut. In the case of subsidiary huts they share the courtyards of the first building. The facades of the huts act as a backdrop to the space of the courtyard while also modulating and creating a character for it. It would be an appropriate time now to draw attention to the subdivision operations of a rural *bari.* Each hut has always had its own definite outdoor area. This is also a part of the *vita* and is seen in all the examples cited.

The courtyards are further characterized by being plain, without vegetation and being very well kept. Regular application of mud slurry gives to them a sense of a clean and pure appearance. This importance of the courtyard is evidenced by the fact that when a mound is prepared for a house, it is always made big enough to include the *uthan* space in front of it.

This arrangement between form and space also brings out **axiality** in their relationships. Consequently, when more than one hut is needed, a second axis at right angles comes into play and hence the courtyard is evolved on three or four sides. It should be noted that the huts retain their individual identity and do not touch at the corners. This is a marked contrast to the situation in west Asia where completely enclosed courtyards form a consistent architectural theme .



Fig. 6.0.2
Development of the homestead

It must also be pointed out that in all the different stages of house building, neither the sanctity of the courtyard, nor the independence of the individual structures is violated. When extension is required, a new structure-space is contrived and the process is started once again.

Each rectangular structure has associated with it an implied open space in front. The relationship between the two is cemented by the transverse entrance from the space through the center of the longer facade. In formal terms, when such is the function of the structure, the center of the facade is usually emphasized by a centralized arrangement in elevation which produces further accentuation of the axis. This can also be seen in the monumental architecture of Bangladesh. Coupling this fact with the layout patterns of the rural houses, it is reasonable to suppose that each temple and mosque originally existed with its own, defined exterior space.

The extreme symbolism of the bent shape can be taken as another pointer in this regard. This concept, albeit in a different manner, shall be again brought up in chapter 8. For the moment it would suffice to state the assumption that the hut and the yard space in front of it, in **tandem**, constitutes the special identity of Bengal architecture. This is universally seen in both domestic and monumental schemes.

Thus for the moment, particularly from the formal point of view, the following may be identified as being some of the qualifying elements of Bangladeshi architecture. These are, **individuality of the structure, persistence of the yard, a marked axiality and equal importance of space and form** as represented by the vertical and horizontal planes of the facade and courtyard.

Meanings in architecture are a function of the people who create and utilize them. Thus to understand them from a symbolic point of view, more background studies specifically from peripheral sources are necessary. In this way, some idea may be gleaned about the residual elements of previous conditions. This then is the next step of this inquiry.

# PART THREE
# MEANING IN THE
# ARCHITECTURE

Fig. 7.0.1. Totally enclosed
Courtyard

# 7.
# SOURCES FOR MEANING :
# PERIPHERAL ARCHITECTURE

It has been maintained throughout this thesis, that the culture of Bangladesh was not created by one specific religion or a set of beliefs, but was the synthesis of many varying attitudes, melted together to 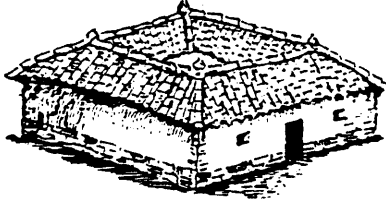create the predominant, albeit intangible uniqueness of this area. This has produced the special quality that is Bangladesh. It might therefore be beneficial to now stand back and take a wider look at the neighboring areas.

In a fairly wide ranging study, Ashok Mitra says, "The most important feature of the traditional Indian house, whether in village or in town, is not the house itself, but the courtyard, where most of the family life is lived. The house is merely where property is secured and shelter sought from the rigors of the weather. ... Even in the cold and wet Himalayan highland regions, the courtyard is indispensable, although it is frequently inducted into the house by the construction of the porch or the overhanging verandah, .... Only in the desert of Rajesthan does the courtyard contract into small rectangular sun-wells... ."[1] Although the author generally uses the term 'courtyards' he goes on to describe 'interior' and 'exterior' courtyards. The term 'yards' seems to reconcile both categories and shall be adopted here.

Yards may be basically of two kinds, -- totally within the house, or outside. Security issues may be one factor in this regard. When the area is not secure from bandits and plunderers, then the yard is totally enclosed i.e. within the house. (Fig 7.0.1) Examples are in Madhaya-Pradesh, Gujrat, Rajesthan, Kerala and Maharastra. In very peaceful areas they are seen to be located on the back of the house, like those found in Karnataka and Tamilnadu. [2]

1. See Ashok Mitra, 'Rural House Types and Village Settlement Patterns', in Allen G Noble and Ashok K Dutt ed. *India : Cultural Patterns and Processes*, 1982, p.105.

2. Ibid.

Fig. 7.0.2
Artist's view of a house in West Bengal
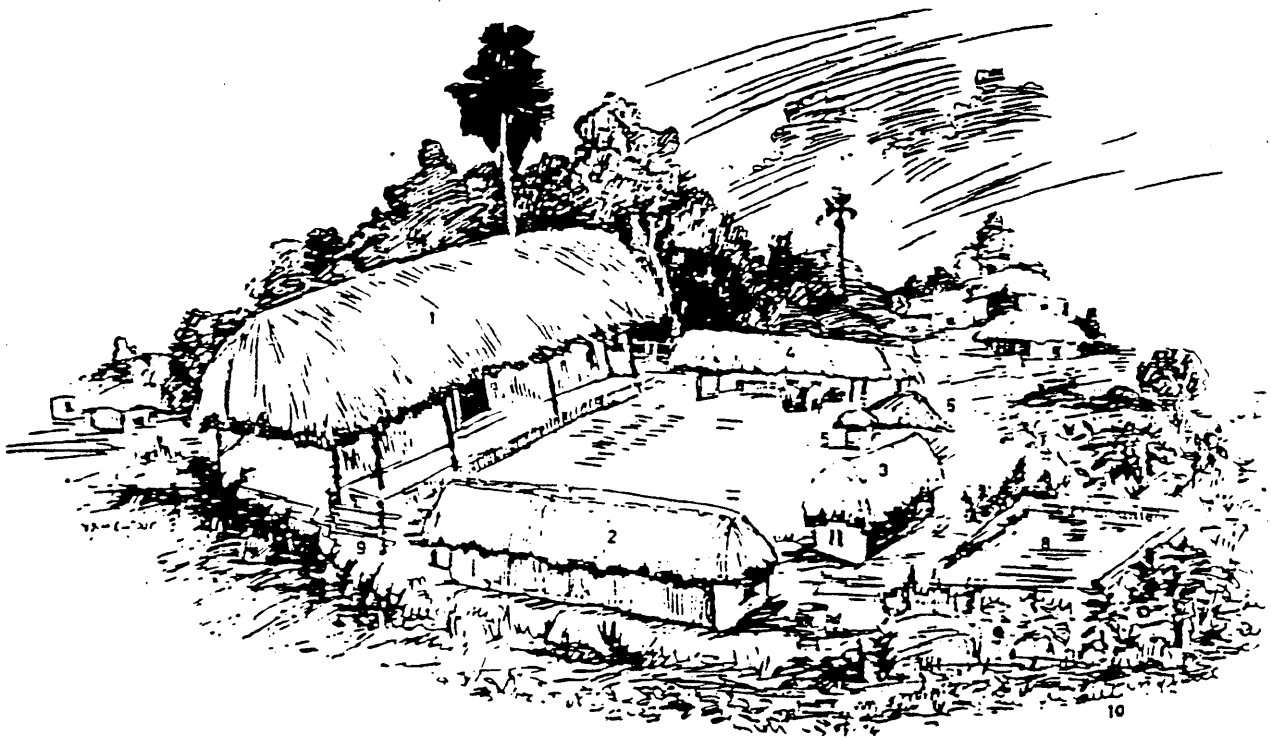
Fig. 7.0.3
Structures at right angles defines a
yard



Fig. 7.0.4
Parallel structures define a court

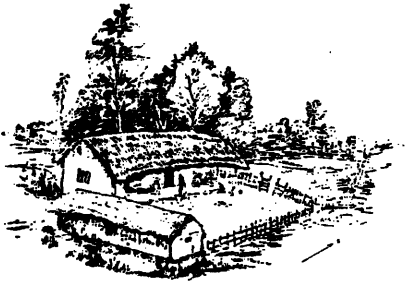People engaged in *Jhum*, or shifting cultivation, who do not keep draft cattle, usually have only one domestic hut. This free-standing structure defines a place, and this is further defined by fences. A verandah in front may be added as an initial extension but such additions are limited in scope. In areas which are relatively safe, the development then goes into multiple huts arranged around the space which then develops into an interior yard, as in Bengal. So, by this understanding also, the Bengali house is a cluster of single structures with a common exterior space. A typical house in West Bengal is shown in fig. 7.0.2.

The typical rural house in the Delhi region has three basic elements. Rooms for storage and sleeping during the cold, winter nights, a *sahan* or a courtyard almost exclusively used by the women, and a *batthak*, or an exterior room, used by the males. Another important feature is the provision for a cattle shed and storage. All these elements may have variations in their shape and arrangement in accordance with wealth of the owner.

Contrary to Bengal houses, the yard is usually enclosed, either by rooms on all sides or, if that is not possible, then with walls. This is a significant difference and must be pointed out. The yards here are strongly defined whereas it's Bengal counterpart exhibits a more subtle expression with the loose arrangement of the huts and the landscaping.

When the construction of *batthak* is not possible, then, "... a tree shading over a couple of string cots at a spot accessible through a foot track from the lane marks the entrance point for males to relax, ... ."[3] When possible, the *batthak* is a regular room or a roofed area enclosed on two or three sides by walls. Sometimes it is combined with a

[3]. See K.R. Unni, 'Rural House Types" in *Urban and Rural Planning Thought*, Vol. III, no. 1-2, Jan.-Jun., 1965, p. 06

cattle-shed or a storage. This sitting space for the males, whether any structure exists or not, is a symbol of male dominance and is never used by the women. Alternatively, the women's area, the courtyard, is relatively avoided by the males. [4]

This type of male-female separation is also an usual scene in Bangladeshi houses. The *katchari* is a place for males to relax. Although the cowshed is located nearby it is not made part of the same space of the sitting room as is sometimes seen in North India.

Cattle are the most prized possession of the village. To the Hindu, the cow is sacred. As can be seen from the figures, they are kept wherever security can be ensured and so mangers are seen inside the courtyards. People who can afford it construct a separate cattle yard called *Gher*[5]. *Nohras* are combinations of a sitting place with a cattle shed. It is more than a part of the residential setting; it is also a social place, used by close agnatic relatives. However, households which own *nohras* regard them as an essential part of their houses.

The kitchen, or the hearth *(Choola)* is another extremely symbolic place for the Hindu and is accorded ritualistic purity. Pollution of any kind, such as contact by low castes or by menstruating women, and those related to death, is clearly avoided. Therefore, even if the *Choola* is not surrounded by walls or covered by a roof, it is still uncommonly important.

The significant fact to be noticed here is that the structures are not independent, but grow as requirements dictate. Figure 7.0.5 shows the residential arrangement of a low caste kin group. Although they are arranged so that the rooms *(Ghar)* for sleeping and the courtyards for
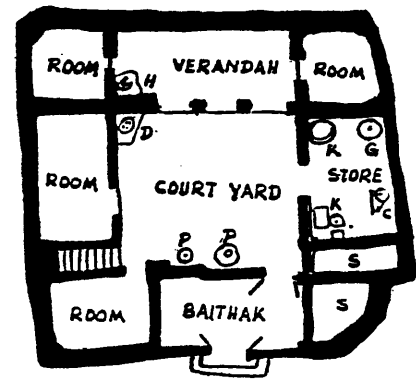


Fig 7.0.5
Plan showing layout around court
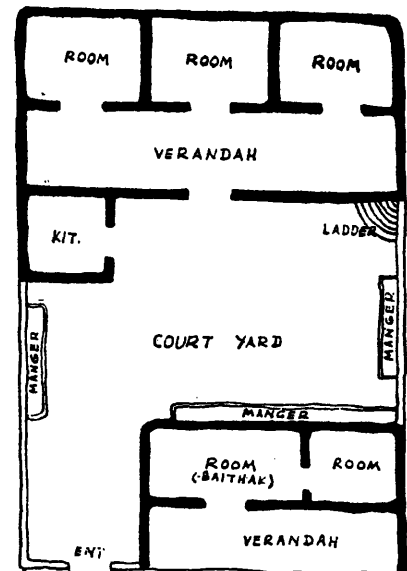


Fig. 7.0.6 Layout of a house in the Delhi region

4. ibid., Pg., 07

5. See R. K Bahl, and M. C. Mouli, 'Planning a Rural House in Delhi region,', *Urban and Rural Planning Thought*, Vol. XII, no. 1, Jan., 1969

women's work is created, yet physically, in contrast to a Bangladeshi house, they are packed together.

The courtyard has many uses in the Hindu house, though the fact that it is the place for cooking and keeping cows is most significant.[6] Similar courtyards and an exterior space may be seen in Hindu houses all over the sub-continent and can be seen in instances as far south as Karnataka and Tamilnadu. From this recurrence, it seems reasonable to assume that it has symbolic values. The tendency to create the men's section may also have more meaning then mere separation of the sexes. Hinduism is less strict in this matter than orthodox Islam. Yet this separation is seen in the houses of both the religious groups.

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[6]One must keep in mind that the cow is a sacred animal in Hindu belief.

Fig. 8.1.1 There may be some cause for distinction between the Dasyus and the Dravidians, as James Fergusson(1876) maintains. However, Eugene Viollet-Le-Duc speaks only of Aryas and Dasyus. The figure depicts a possible primordial forest dwelling by Viollet-Le-Duc.

# 8.
# SYMBOLIC MEANINGS

It would not be incorrect to assume that in a scene of continuous change, the introduction of something known or something familiar makes acceptance easier. Hence, if those features that somehow persist in many different circumstances are scrutinized, then some ideas of the familiar can be obtained. From this, in turn, a sense of meaning may be grasped.

## 8.1 ROOF CURVATURE

The special shape of the Bengal roof is a case in point. Studies into the form have only resulted in explanations based on the functionality of the bent bamboo and the adequate protection required against excessive rainfall. By now, it has been made clear that arguments cannot use functionality as the sole justification. Climatic considerations only would have made the Bengali house a row of linearly arranged huts, or even perhaps, a long house facing the cool breeze. That is not so. Hence further explorations are merited.

The Aryans pushed deep into eastern and southern India from the north-west, and in their expansion 'Aryanized' the people. They brought Brahmanism, from which sprung Hinduism. It has been seen that what happened as a revolt against this system took the form of the establishment of folk traditions that were nearly always successful in reaching the people. Where the Aryans advocated a top heavy social system, Buddhism and later Islam, specified egalitarian values. The *Caryapadas* are an excellent case to prove this point[1]. This collection of short songs, composed by the Buddhist priests of the Mahayana period, were designed to provide hints and guidelines for their followers. The general date of their

1. See Atindra Majumder, "The Everyday life of the Bengalees as Depicted in the "Caryapada"", in *Bulletin of the Cultural Research Institute,* Vol. VII, No, 1 &2, 1968, p.24

Fig 8.1.2 Curved element in a
jagged mountain face
Chaitya hall at Nassick
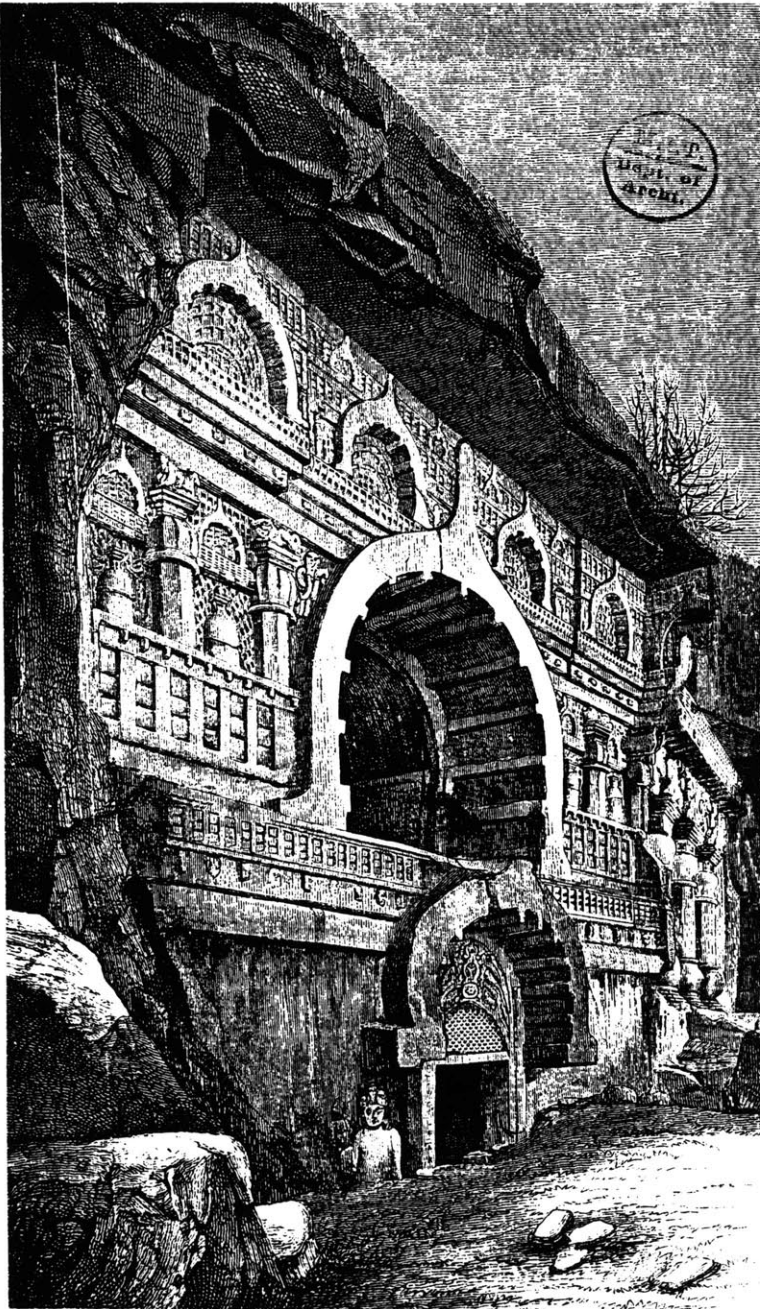
Fig. 8.1.3
Details on pillar show preference
for curved elements.
Budhgaya, 1st cent. A.D

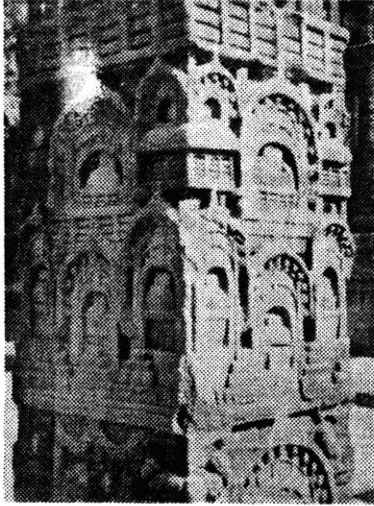composition is 850-1150 AD. The most remarkable thing is that these were composed in **Bengali**, and are therefore believed to make up the earliest composition in the language. As expected, these were passionately opposed to the Brahmanical orthodoxy and the caste system.

The strength of the *Bangla* language as a tool to reach the heart of the Bengali has proved successful over and over again. It is perhaps the most powerful instrument for moving the Bengali masses. Its resilience is hence above question. Similarly, the Bengali hut as a representation of the peasant, shows the same strength -- the same stubbornness not to be overshadowed. This is apparent in all forms of Buddhist architecture, where the bent form appears, perhaps as a symbol of the hut, in numerous places. The curvature of the stupa, the entrance to their temples, and small icons of decorative detailing are but some instances only. (Fig 8.1.3)

Percy Brown has reconstructed scenes and details of Vedic villages based on the Buddhist rock-cut architecture, with the idea that the Buddhist construction was a derivative of the Vedic method of construction.[2] (Fig 8.1.4) It is highly unlikely that the movement which started against Brahmanism, a movement that had its strength in the regional consciousness of the common man, would take its inspiration from its very adversaries. It is more probable that, just as the model of the *Caryapadas* was the common man's language, so was the model for their architecture the common man's dwelling.

If the above argument is acceptable, then one can go further in the quest for meaning. Instead of looking for similarities in construction details only, like Percy Brown, one might endeavor to inspect ancient Buddhist architecture for cues of symbolism. This direction of

2. See Percy Brown, *Indian Architecture (Buddhist and Hindu)*, Bombay, 1956

Fig. 8.1.4
Impression of Vedic village based
on Buddhist Rock cut architecture

Fig. 8.1.5
Facade defines the space -- curve
defines the facade.

research may be valid because of a certain similarity of that architecture with the Bengal huts.

As forms of expression in the Hinayana period (2nd century BC to 2nd Century AD) Buddhist rock-cut shrines were remarkable.[3] Although they are located in western India, they represent, in a way, their place of origin. These monastic establishments, as many as 1200 of them, were carved into solid rocky mountains and finished with a dexterous use of the chisel. (Fig. 8.1.2)

In these rock-cut examples the halls are elongated with a stupa in the far end. (Fig 8.1.6) Concepts borrowed from Classical and Persian temples might easily explain this elongated form, but the curvature at the entrance, points towards the indigenous. Although Perc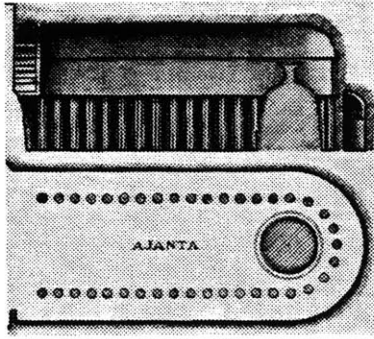y Brown suggests wooden detailing in the rock cut examples, the origins go one step beyond to the bamboo construction. Wood does not require the bent shape.[4]

It has been pointed out that the hut forms its own exterior space and is the 'backdrop' for the courtyards. It creates as well as modulates the space. Hence, in this symbolic 'set' the presence of the curvature is a mighty symbol. Just as the curvature presided over the domestic center and created a sense of belonging, so did temple entrances command importance and dominate space in front of them. (Fig. 8.1.2) Hence in this manner, the curved symbol was more than a bent bamboo. Transformed into stone and relocated elsewhere, specially in the superhuman task of temples hewn out of solid mountains, it still represented the indomitable spirit of the Bengali man by references to his humble abode.



Fig. 8.1.6
Plan and section of a rock cut temple in Ajanta

[3]. For a good description, see Percy Brown, *Indian Architecture (Buddhist & Hindu)*, Bombay, 1956

[4]. Except in boat construction. This has led to speculations about possible relationship between boats and architecture. See, Ronald Lewcock and Gerard Brans, "The Boat as an Architectural Symbol", in Paul Oliver ed., *Shelter, Sign & Symbol*, 1977

## 8.2. MAN, CENTER, EDGE

The Indian subcontinent has been exposed to various ideologies as they swept across it. This undoubtedly has left many residues in the cultural practices of the Bangladeshi man. The roots of form making go back a very long way and have been researched by many scholars. Two things stand out immediately when one ventures into its discourse. One is the metaphor of man, and the other is the conception of a very strict pattern.[5]

The Vedic view of the universe was that it was created in the form of man. It was believed that the primordial man of this early period created the universe from his body parts. He stands with his feet on the earth and arms outstretched to the cardinal directions. Therefore, he symbolizes unity both of the horizontal as well as the vertical. In this manner, the image of the man becomes the fundamental paradigm for explanation of phenomena, both micro and macro. It is with the metaphor of this primordial man that the Vedic seers communicated all temporal and spatial relationships.

The beginnings of Indian architecture may be seen in the concept of Vedic altars. According to Kapila Vatsyayan this has developed from ritual space and the layout of the altar. Here too, the image of the man is essential to the conception. All units of measurements were from different parts of the human anatomy. For example, the measure of man with his arms outstretched is 120 *anguls* or fingers. In this manner, every unit is measured by the standard of human dimensions. It is therefore not a very great surprise to note that the traditional measurement system still prevalent in the rural areas of Bangladesh is similar to the Vedic system. (Fig 8.2.1)
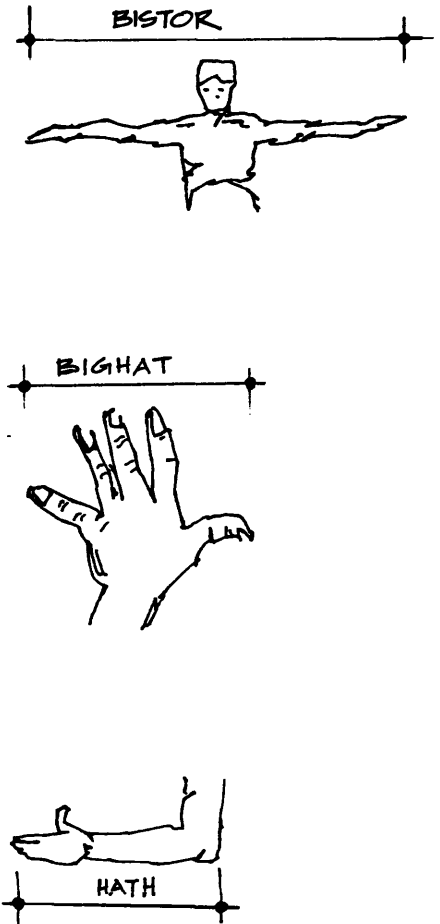


Fig. 8.2.1
Traditional systems of measurements in rural Bangladesh

6. See Kapila Vatsyayan, "Fundamental Principles Underlying Indian Architecture", in Carmen Kagal, ed., *Vistara,* Bombay, Oct. 1986
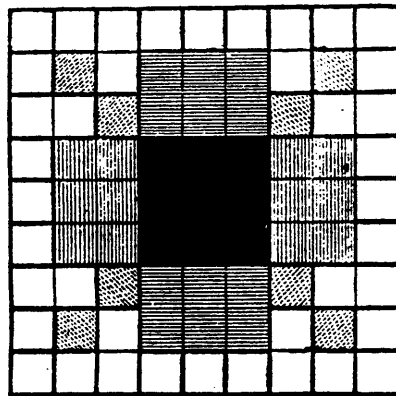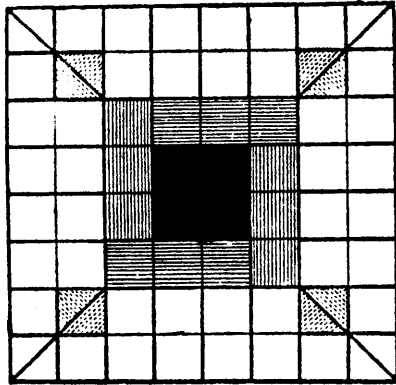
Fig 8.2.2
Different forms of Vastu-Purusa
mandala

9. It is interesting to note the similarity with Chinese belief. For them too, nature is represented in the circle.

7. In the Hindu concept, man and universe are referred to as analogous. But neither the concrete universe nor the physical man is meant. Both are regarded as reflections of the supreme principle or *Brahma*.

8. See Andreas Volwahsen, *Living Architecture : Indian* (1970) p. 44

Another important thing to be noticed is the shapes and symbolism of the altars of that period. A square one represented celestial space, a circular one symbolized terrestrial space and a semicircular one stood for the air world. [6] Even the construction materials were part of this symbolization, the number of bricks representing days, months, and hours.

The square form of the celestial alter has been extended into the form of the Hindu Mandala. To the Hindus, formlessness is a transcendental concept[7]. A circular form symbolizes movement while a square one is final, unequivocal and perfect, representing the absolute.[8] Hence, anything regarded as mere physical or external may be circular, but when it is regarded as a manifestation of a supreme principle, then it is rendered square, fixed by the cardinal points.

To the people who held this belief, the manifest and the non-manifest exist together. The form and elements of the perceived experience only helps in understanding the non - manifest layers that lie beneath the palpable realm. The nature of the cosmos is explained by the magic diagrams called Mandalas. Vastu-Purusha Mandala is the square which is the form assumed by existence itself -- by the phenomenal world, and so this is reproduced in construction diagrams. In this manner it forms the basis of architecture and generates all kinds of structures and urbanism (Fig 8.2.3). The diagrams as well as the plan of the architecture they produced were squares, subdivided into smaller squares. The most important thing about the mandala is the center. In the temples it forms the *Garbagriha* or the cella for the deity. In the diagram, the

Fig. 8.2.3 Plan and view of
Srirangam in Tamilnadu.
Derivation from mandala is
apparent.
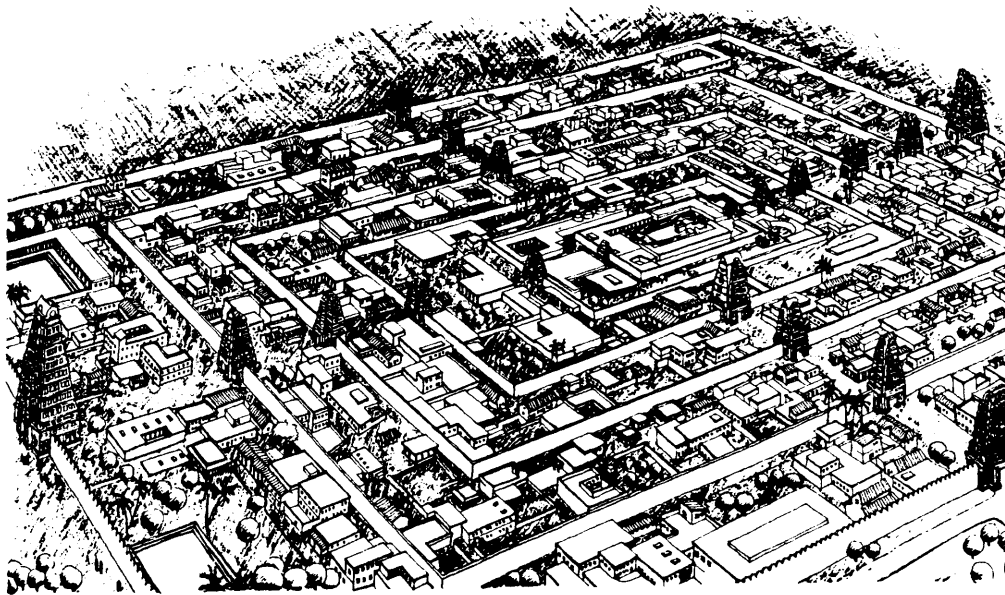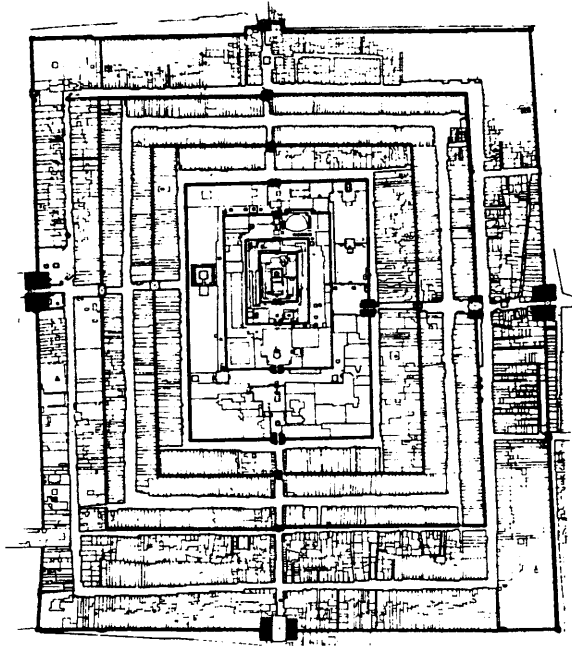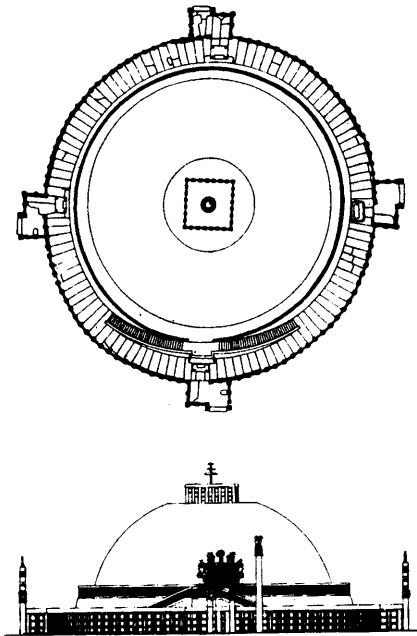
Fig. 8.2.4
Plan and Elevation of Shachi stupa

center contains **nothing** yet signifies everything. It is both *bindu* as well as *shunya*. Absolute power as well as absolute energy coexist together. Here lies *Brahma*, the supreme principle.

The Buddhists too, perhaps not unexpectedly, portray remarkably similar ideas. The stupas, by their very form symbolize a center and it is made more distinct by the central wooden post buried in the masonry which is symbolic of the axis mundi i.e. the column which passes through the universe uniting the 'above' and 'below'.[9] (Fig. 8.2.4) The Buddhist Viharas also display a strong symbolism of the center which is expressed. This is where the actual temple was constructed, and the monks lived in the periphery. The center therefore contained the *bindu*. (See Fig. 8.2.5)



Fig. 8.2.5
Paharpur Vihara in North Bangladesh.
Enclosure and center is made apparent.

[10]. The circular form is not unexpected, specially in the view that Buddhism stressed the importance of man more.

Islam bought with it new mystical values and traditions. The most important is the idea of a celestial garden based on the double axis symmetry, the *char-bagh*. Islam sees no distinction between the sacred and the daily life. Accordingly its buildings and spaces are such that it is always for the glorification of Allah. Hence, any built complex in its entirety is permeated with an extremely deep but subtle sense of a permanent presence of the divine. It is not a presence requiring acts of respect or certain modes of behavior, but is an unavoidable everyday fact. Therefore all Muslim architecture over the ages and in all places has tried to develop this *quality*. This is meditative in nature, contemplative in intent and tranquil in design--- the whole idea of which is to signal the nearness of the Almighty. In this sense, garden making may be taken as an act of piety and the atmosphere created, one of meditation.

Fig 8.2.6. Mausoleum in the center of the axes.
Humayun's tomb.
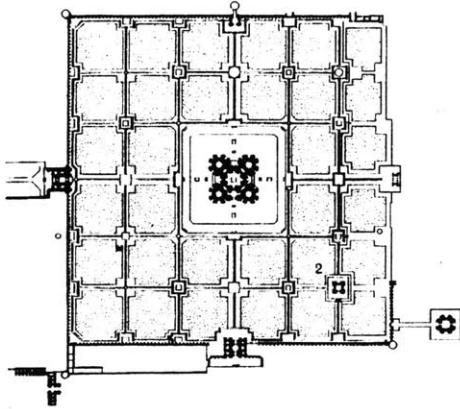
Fig 8.2.7. The center of the courtyard of Tajmahal is free to interact with the sky.

Fig 8.2.8 Plan showing the four quadrants and the buildings at one end.
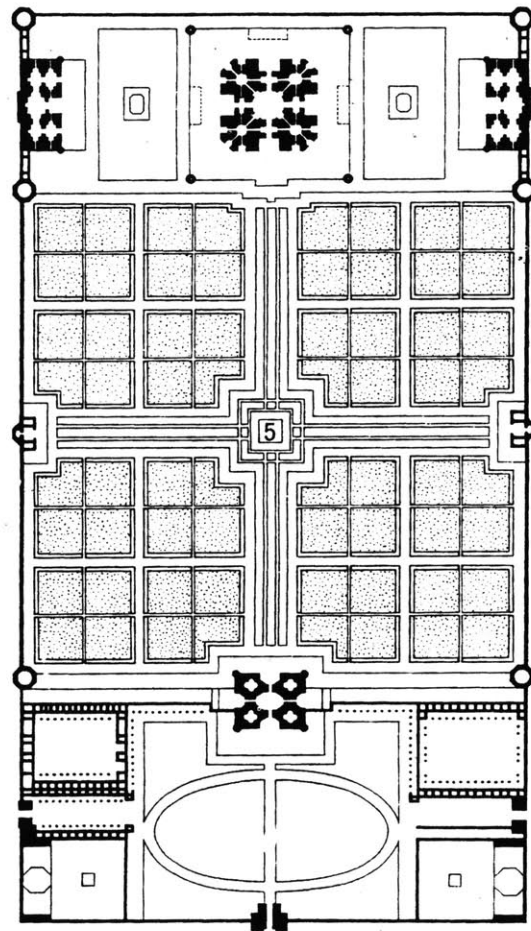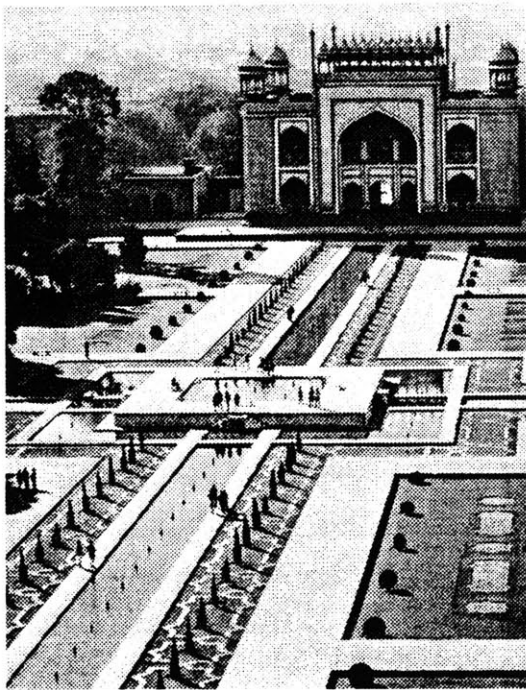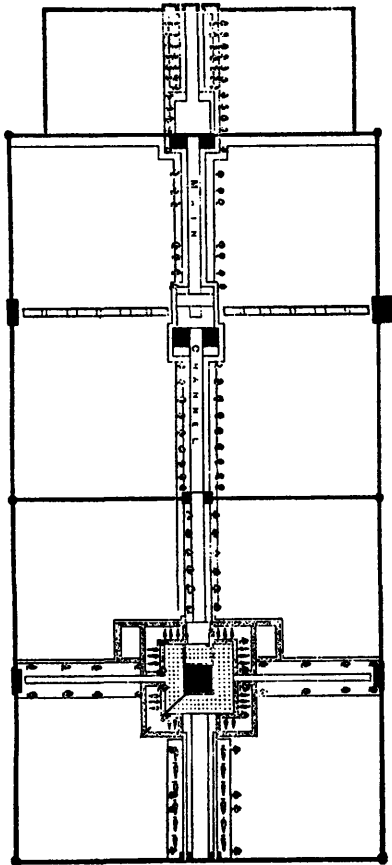
Fig. 8.2.9.
Plan of Shalimarbagh, Kashmir, showing formation of center by the crossing of axes

The form of this evocative design is two axes intersecting in the center. Attempts to deal with the origins of the form and its significance are far beyond the scope of this thesis. What should be emphasized though, is the notion of the focus which is created. In the first gardens in India, this was the meeting point of the axes, usually created by water courses. (Fig 8.2.9) Later on, the center became the huge tombs of the emperors. Transformations of this idea goes further in the final climax of the Tajmahal, where the tomb building goes to one side and nature again forms the middle. (Fig 8.2.8) In the latest symbolic gesture the earth and the heaven is reunited. It is quite clear the Mughals in the later stage had established rule in Bengal and were influenced somewhat by its architecture. Numerous appearances of the curve in their architecture bears testimony to this statement. It could thus be postulated that the concept of the facade presiding over a symbolic space, as was the case in the Bengal *Bari*, also prevailed in the layout of the Tajmahal in Agra. (Fig 8.2.7)

From this chronology of symbolism in the life of the people, it becomes relatively easy to comprehend the house building activity. These will hence act as reference to the discussions that follow.

# 9.
# FORMAL SIGNIFICATION
# IN THE BANGLADESHI HOUSE

The forgoing discussion, as a preparatory task, has hopefully created insights that may be useful in the reexamination of the Bangladeshi house. Going back to the examples cited, the first aspect one immediately notices is the creation of a mud platform on which **simple** structures are constructed with the attempt of creating various formal and compositional relationships.

The rural and the urban houses show a tendency for a strong relationship to be established to the surroundings of which they are a part. This is done by scale, proportions, forms, materials etc. They are simple unassuming and modest. In this manner, the houses become synonymous with the landscape. Similarly in a different way the urban houses also relate to their environment. By the positioning of the boundary walls and the structures right into the property line, a civic act of street definition is performed. Thus they too, become a function of a larger environment.

The people in Bangladesh, specially the rural communities, live in total harmony with nature. Everyday life is so much in chorus with the changing seasons that even subtle variations are not unnoticed. Hostility of nature is only one part. It can also be bountiful, generous and pleasant. It is a thing which has many different aspects. The manifold characteristics as brought forth in the changing months is given recognition in the culture by six different seasons and all six have their own distinctly separate qualities. When the terrible rage of the monsoon is gone and the flood waters have receded, Bangladesh goes into an idyllic state of relatively unchanged living. Nature becomes man's friend - his

eternal provider. Even the havoc producing floods leave enough alluvium in the soil so that crops grow easily in the next harvest. In this manner, the parting gift of the terrible monster makes the people wonder about its actual form.

The huts that man makes on the mound, typified by the huts of the examples cited are obviously conceived by instinctive artists. The peasants proclaim their joy in the natural materials and work with mud and thatch. Built amongst trees and vines, the houses seem almost a natural growth and an integral part of the landscape.

Another important factor that is easily overlooked, is the building materials themselves. The huts are built with what is all around them. They are done with utmost care and love and this is manifested in the texture of the bamboo mat or the mud walls. Even the setting of the house, in its lush vegetation makes it more of a part of nature than something separate from it. The lovingly woven bamboo mat expresses the interconnection between creativeness and the process of labor, and symbolizes the union of the hands and the hearts of the common folks. Sometimes expensive materials like corrugated iron sheet are used, but one must make a distinction that materials, whatever are being used, remains dominated by the form of the hut.

The meaning of the house incorporates all these elements and more. To understand them the next section takes a closer look at the actual parts of the vernacular house.
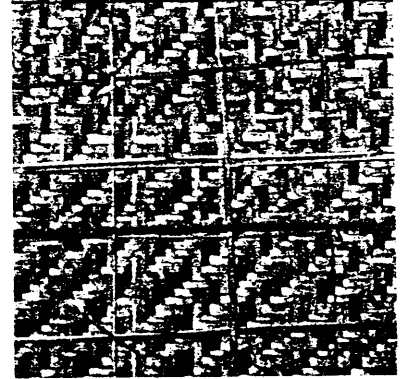


Fig. 9.0.1
Texture of the walls
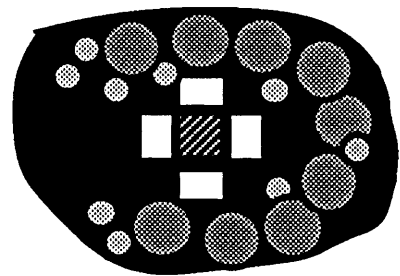


Fig. 9.0.2
Trees, Huts and Courtyards
The Bangladeshi House

Level of Agricultural Land

Houses on the Mound

Pond
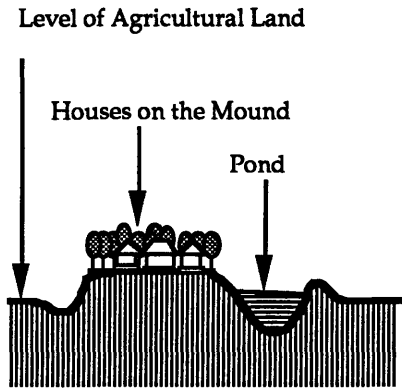


Fig. 9.0.3
Cross-section of a homestead

The act of creating homes in the flood-prone Gangetic valley starts with the creation of a platform or *vita*, for the house. This is done by raising up an earthen mound on the low lands above the average annual flood level. The next act is construction of the actual huts. Here too, small platforms are made for individual dwellings which become their plinth. (See fig. 9.0.3)

Raising such mounds is obviously a protection against floods. Climatically also, raising the buildings as high as possible ensures that they receive the maximum of cooling breezes, so that the air movement reduces the adverse effects of high humidity. Sometimes, according to location, the earthwork may need to be as extensive as building up 10 to 15 feet. Nevertheless, such a herculean task is always undertaken as the first task of the building process.

In comparison with the massive task of building the earth mounds, the flimsy construction of the huts which stand on them, seems almost an aberration. The question then arises as to how necessary it actually is to raise the huts on solid mounds, or how related the whole process is? An easy alternative could have been constructing on stilts. Given the knowledge that bamboo is something cheaply and extensively available, this would seem to be a wiser choice. It is also known that where mud platforms are difficult, for example in the outskirts of the city, where such elaborate endeavor is either not possible or not permissible, the people do, in fact, resort to building on bamboo stilts. (Fig. 9.0.4)

In spite of the immensity of the task, constructing mud platforms seems to be the accepted way of the people. "In some places, specially in the high lands of Modhupur and

Fig. 9.0.4 Sometimes forced construction takes place on bamboo stilts
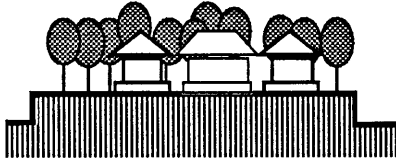
Fig. 9.0.5 Cross Section of a
Bangladeshi house

Barind Tract there is no need to have elaborate raising of the land for the homestead, even though in practice, the homestead is demarcated from the rest of the land by slightly raising it."[1] Ostensibly, it helps in the surface water runoff, but what might really be considered is that the raising of the land is an act of **expression** .

The operation of creating the platform immediately brings about a sense of place.[2] The location of the house identifies the owner's place in the society and the raised mound provides his position in the natural order of things. By creating a *vita* he imposes himself on the landscape and in this manner, creates his own 'existential space'. Although related by proximity and connected by causeways, the platforms are not continuous with the other houses of the village. They are separated by low lands and therefore proclaim their own sovereignty. This independence, not only from the attachment of nature, but also from the bonds of society, raises the house spiritually and gives to it a special identity. In a different plane of abstraction, this too, is an expression of man and his unassailable resolve.

This particular phenomenon is very much a socially accepted behavior. In fact, the *vita* becomes the social identity not only of the builder, but of his entire clan. This is one of the possible reasons why inheritors still prefer to cling to their forefather's *vita* even if they do acquire the means of making another. The structures on the earth mound may be taken down or new ones added, but socially it remains the index of the clan. So strong is the tie, that even second generation urbanites make distinction between *bari* or village homestead and *basa* or house where he resides. The *basa* is always temporary, even though he may own it. In response to the question, "Where is your *bari?*" the answer invariably would be the location

[1] See Muktadir, M.A., and Hasan, Dewan M., " Traditional House Form in Rural Bangladesh: a case study for regionalism in Architecture", in *Participants Paper, Architecture and the Role of Architects in Southern Asia,* Dhaka, 1985

[2] See Christian Norberg Schulz, *Genius Loci Towards a Phenomenology of Architecture,* 1980

of his *vita*[3] The author has himself experienced numerous instances where the concept of a *basa* as *bari* was not easily accepted.

The concept of defense in the creation or formation of a platform in the Ganges river valley does seem to offer another explanation for the raising of the *vita*. Probably, the whole idea of a raised mud platform has historically developed from this idea. Mention has been made earlier about huge mounds created for the identification and protection of borders. This may be a notion which has been carried over to the houses. Early travelers in Bengal also give vivid accounts about the hazards of man-eating crocodiles and the peasants everyday reckoning with this danger.[4] Hence, for defenses against enemy and animals, the creation of a raised area seems a logical attitude. Economically, however, this platform does not seem to be a very reasonable concept. Reference have been made to better alternatives and possibly a more efficient system.

The very first act of house-building, the raising of the *vita*, is a statement -- both against the terrible forces of nature, as well as for the superiority of man. This herculean feat establishes a vertical direction for man's habitation. Verticality, in art and architecture, has been argued as the signifier of demand on the environment[5]. In his first act of house building, the Bangladeshi person uses the vertical. However, the *vita* does not represent verticality in the sense of an axis but rather as a relationship. The peasant starts by using 'force' / 'strength' to make his place, his position in the landscape. This is something which he has learnt from generations of struggle with nature. Just as the European man had learned to take refuge in the caves, the Bangladeshi learned from the terrifying power of the vast riverine system in which he lives.[6] He learnt that against some forces he has to bend



Fig 9.0.6 Verticality as Relationship

3. See Iftekhar M. Khan, *Alternative Approach to the Redevelopment of Old Dacca.* 1982., p. 6.4

4. See Grant Colesworthy, *Rural Life in Bengal,* London, 1860

5. See Morse Peckham, *Man's Rage for Chaos,* 1965, p. 174

Public Court        Service Courts
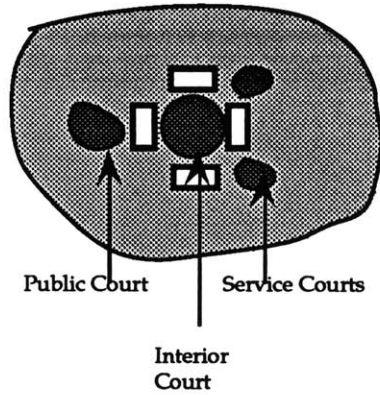
Interior
Court

Fig. 9.0.7
Different courts of the House

and against others he may fight. The platform therefore is his statement against the rising waters; perhaps also proclaiming his superiority. The vertical relationship with land makes that intention public. Thus the *viti* is both a symbol of dominance as well as an index to the terrifying nature of which he is a part.

This symbol however, is not so apparent as one might expect. The statement that the Bangladeshi makes by his *viti* is tactfully tempered so that only horizontality is apparent to the casual eye. His act of individual assertion is tempered by the conceived need to conform to the social environment and to nature.

On the earthen mound, huts are made in a manner so that at least one yard is created. In fact, even when one hut is made , the land in front of it is immediately transformed -- both by the actual presence of the hut and by man's physical intervention on the space. Essentially, this acts as an extension of the hut itself.

In the examples cited, three kinds of courtyards may be identified. The interior or main courtyard, the exterior or public courtyard and the kitchen or service courtyard. Again, amongst these three, it is obvious that the main courtyard is the most important one and this is evidently demonstrated by its being the very first to be conceived. Whenever new construction takes place, the huts are invariably positioned so that a center, or to be more precise, a notion of a center is formed. This later becomes the main courtyard. It exists in all the examples mentioned, although the sense of enclosure is moderated by the varying number of huts.

---

6. See map in appendix.

| HOUSES | CENTRAL YARD | EXTERIOR YARD | KITCHEN YARD |
|---|---|---|---|
| RURAL HOUSE 1 (early) | 3 Sided | Yes | No |
| RURAL 1. A | 3 Sided | Yes | Yes |
| RURAL HOUSE 1.B (Original) | 2 Sided | No | No |
| RURAL HOUSE 1.B (After first addition) | 2 Sided | Yes | No |
| RURAL HOUSE 1.B (After father's death) | 3 Sided | No | No |
| RURAL HOUSE 1.B.1 | 2 Sided | No | No |
| RURAL HOUSE 2.A | 4 Sided | Yes | Yes |
| RURAL HOUSE 2.B | 4 Sided | Yes | No |
| RURAL HOUSE 2.B.1 | 2 Sided | No | No |
| RURAL HOUSE 3 | 4 Sided | ? | No |

TABLE 9.1 Formation of courtyards in Rural Examples

| HOUSES | CENTRAL YARD | EXTERIOR YARD | KITCHEN YARD |
|---|---|---|---|
| Example 1 | Yes | Verandah | No |
| Example 2 (Stage 1) | ? | ? | Yes |
| Example 2 (Stage 2) | Yes | No | No |
| Example 3 (Upper Floor) | No | No | No |
| Example 3 (Stage I) | Yes | No | No |
| Example 3 (Stage II) | Yes | No | No |
| Example 3 (Stage III) | ? | No | No |
| Example 3.(Stage IV) | No | No | No |

TABLE 9.2 Formation of Courtyards in Urban Examples
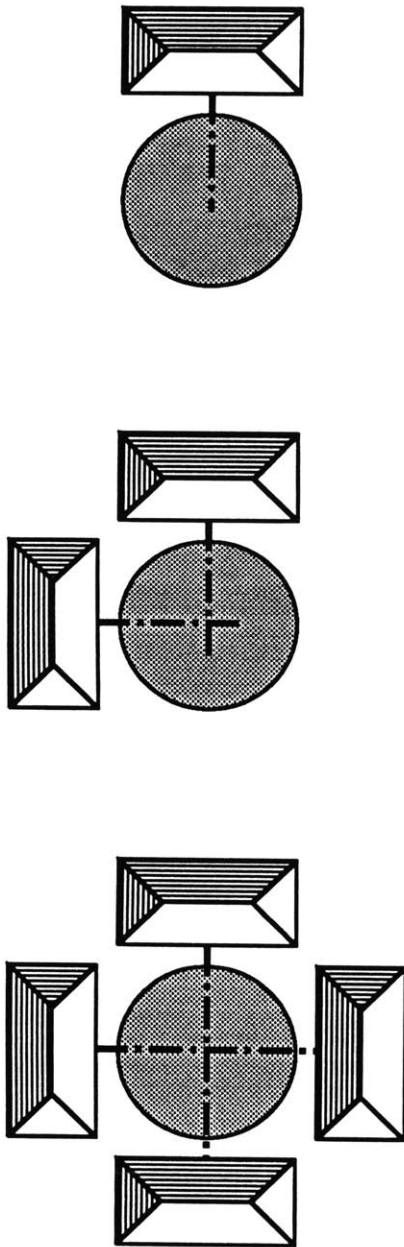
Fig. 9.0.8
Formation of yards

The formation of the courtyards also needs to be studied. What usually **begins** as an outdoor space connected to a hut rapidly becomes the center of the house. Additional huts that are built for the family are situated around this courtyard, gradually making it more and more defined. High walls and extensive vegetation are assiduously employed to give definition to this space. In terms of finishing too, this is very well done. The courtyard is well maintained and a clean layer of mud is regularly plastered on it so that a purified space is created on which all the different huts face. In rural areas set amongst extensive greenery, this space, by its clean, almost white finishing of mud, makes a marked contrast. As all the huts face this courtyard, it sets up a dialogue with all of them, thus being the only unifying factor. The feeling of a 'center' is what one automatically begets in this space. This concept of unification also extends in the vertical direction. In a symbolic manner, an experiential axis mundi is set up and the earth, or rather, the personalized earth of man is united with the sky. Man and the supreme are thus conciliated.

The other two courtyards, i.e. the external courtyard and the service courtyard, occur less frequently. Easily discerned from the examples, they are a function of space and perhaps of financial ability. They do of course confirm the exterior space as an immediate, and, as maintained in this thesis, a deliberate act.

Climatically, closed courtyards are not very desirable in the warm humid situation of Bangladesh. This is because they tend to trap the humid air in when efforts should be to attain a comfortable wind flow. Hence it is not surprising to see that the houses are placed such that there is always a sufficient possibility for air to flow through. Even the walls that are made in the courtyard are done

using bamboo and jute straw, so that they allow air to pass freely.

Curiously, however, in this rainy country, the people do not build connecting elements between their huts. One may perhaps attempt to explain it by saying that such inter-hut communication is not desirable, but this cannot be substantiated because there is also no effort to connect even the essential services. Besides that, having an open courtyard restricts its use to dry days, which, in terms of the whole year, does not make it very efficient. Poverty here cannot be held responsible, because there never has been any instance of a covered courtyard, or of connecting elements in the affluent house.

The courtyard is not usually paved, but is very well maintained. It is swept and kept clean and hence, gives a very neat appearance. There are always extensive trees all around the house, so that one can discern it from the larger landscape by its mass of trees. The courtyard sits right inside this pseudo-forest, expressing for man a clean and elutriated space. (Fig. 9.0.9)

Culturally, the courtyard is a place secluded from the outside. It is a place where the women can come out and perform all the family functions. "The broad 'living' functions are in two compartments/segregation, those pertaining to the family itself e.g. cooking, food preparation to child rearing and those pertaining to the family as it reacts with the larger community e.g. socializing, receiving guests etc."[7]

Iftekhar Khan makes a very broad distinction between family and social activities and stresses the point about the *uthan* or the courtyard being the female domain.[8] The
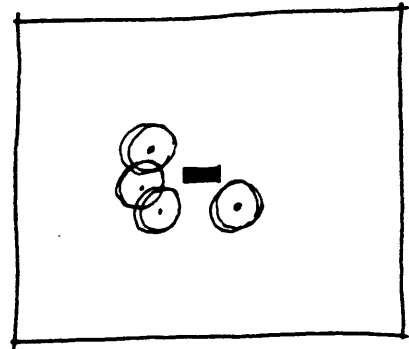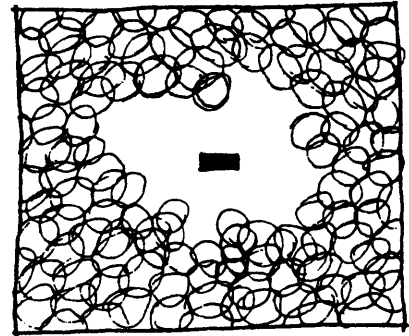


Fig. 9.0.9
Two ways of indicating human presence

Describing household tasks and the responsibility of women, T.K. Basu quotes a well known verse which goes like this,

"Where water is sprinkled, and
    sweeping is done
Before the rise of the sun,
And where the lamps are lit as the
    sun sets,
There I love to reside, says Mother Lakshmi"

See T.K Basu, *The Bengal Peasant from Time to Time*, 1962

7. ibid. Iftekhar M. Khan, p.. 6.6

8. ibid.

Muslim religious practice of male-female segregation confirms this observation. But Hindu homes also display similar courtyards. Urban house 1 is an example of this point. Subrata Ghosh looking at a Hindu Bengali home in West Bengal, India, remarks, "The courtyard forms the hub of the household around which daily activities take place."[9]

If one takes the position about women doing all the household activities, then perhaps the contradiction may be reconciled. We then turn to Hasan[10], who, in his study of traditional house forms in rural Bangladesh, observed that the inner courtyard is also used for grain drying, paddy thrashing, etc. Assuming that these tasks are done by seasonal labor, it might be inferred that the courtyard has a much wider value then merely being a female domain for household activities.

First efforts in building construction are usually in response to a need and this happens before ideas about architectural effects are conceived. Percy Brown compared ancient Vedic homesteads with those of the contemporary cultivators in Bengal.[11] Because of the dangers of living in the forests, the early people had developed an elaborate fencing system. The gate of that fence is one of primary importance here, and can be compared with the courtyard entrance to a present day rural hut. By comparing fig. 3.1.5 with fig. 8.1.4, it is seen that although the form is vastly different, the similarity of indirect entrance can be discerned. What is today interpreted by many scholars as the tool for protecting privacy, was in fact developed as a means for defense, most probably against animals. Similarly, the introverted arrangement of the huts around the courtyard was possibly another level of defense, or perhaps it was a rural version where homesteads had to be scattered because of reasons of

[9]. See Subrata Ghosh, "The Bengal Home", in *Architecture + Design*, May-Jun. Vol. 4, no. 4, 1988, p. 81

[10]. ibid. Dewan M. Hasan, 1985, p. 95

[11] See Percy Brown, *Indian Architecture, (Buddhist & Hindu)*, 1956, p. 04

proximity to agricultural lands. All the huts here opened into a secure zone from where the people could take stock of their surroundings before they ventured out.

Economically of course, the creation of a courtyard involves expense and time. As pointed out before, it is not only the matter of having a clear area in the front, but also the creation of the mud platform. The preference is not only to raise the huts but also the courtyards. In spite of the difficulty and ostensibly expensive task, the persistence of such a painstakingly created space speaks perhaps of deeper values than are immediately apparent.

The courtyard actually defines the village house. In the formation of the homestead, as it develops, it is seen to be constantly striving to achieve an ideal end result, which would be four sided. In all the examples cited, and also in the knowledge of the author, there has never been any other form. It almost seems that four has some kind of a 'magic', or perhaps, to use a better word, 'symbolic' meaning. Knowledge about the chronological development of beliefs, as mentioned in Chapter 2, makes this phenomenon easy to understand. The fact that trees offer a secondary layer of enclosure for this space, (See Fig. 9.0.10) indicates its removal from the ordinary everyday world. Just as its verticality is subtly expressed by relationships, so does its horizontal layering indicate its symbolism. The home thus becomes the microcosm of the entire universe in which the courtyard is the center. Hence man moves from the exterior to the interior, from form to contemplation, from multiplicity to unity, from space to spacelessness, from time to timelessness[12] and from the manifest to the non-manifest.
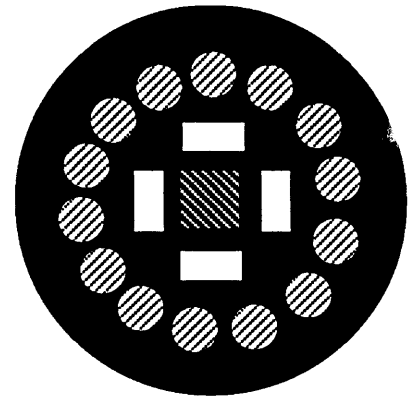


Fig. 9.0.10
Aspired Layout of a Bangladeshi House ?

12. See J.E Cirlot, *A Dictionary of Symbols*, 1971

Fig. 9.0.11
The rural hut

13. Gottfried Semper developed the idea of one moral element and three other protecting elements. The first kind is the hearth, while the others are roof, enclosure and mound.
See, Gottfried Semper, *The Four Elements of Architecture and Other Writings* , 1989, p. 102 and 103.
See also the discussions in Chapter 1.

14. An old saying in rural Bengal by an astrologer woman of traditional fame called Khana goes like this,

South facing is king of rooms
East is its vassal
West meets the wretched ones
North is belittle.
(Translated by the author)

See Rabiul Hussain, *Bangladesher Sthapatya Sanskriti.* , 1987

The courtyard can therefore be understood as a center-forming activity of the people. This can be compared to the 'hearth' as described by Semper.[13] As it is the center, both symbolic as well as actual, the courtyard is to the Bengal rural dweller what the hearth was in Semper's analysis.

The form of the huts grows from a clear and uncomplicated rectangular plan. In most cases, the plinth is made out of beaten earth, -- a sort of individual platform on the collective mound. On this, the walls are constructed in such a manner that the boundary of the platform remains exposed in the shape of an extension. (See Fig. 9.0.11) On top, the roof is created. This is usually a pitched type, with two and four pitched roofs being the most common. Hence, the huts themselves create an extremely strong visual statement. They have distinct vertical divisions -- plinth, walls and roof. All of these elements are exposed in harmony to one another so that one actually compliments the other and in turn they all exist in a compatible three dimensional state.

Climatically, the best orientation is south, because it is from this direction that the soothing cool breeze of the summer comes. Since the cold winds flow from the north in winter, it should be avoided. Again western orientation is notorious because of prolonged exposure to the suns rays, which heats up the hut. Eastern orientation is a possible second to the south.[14]Therefore, the best orientation in these terms would be a long row of huts in a line facing the south. In reality we know that the houses are four-square and therefore face in all cardinal directions . That the orientation is not ignored, is revealed

Fig. 9.0.12
Construction of two kinds of huts

a. Bamboo walls, thatched roof

b. Bamboo walls, corrugated iron roof.
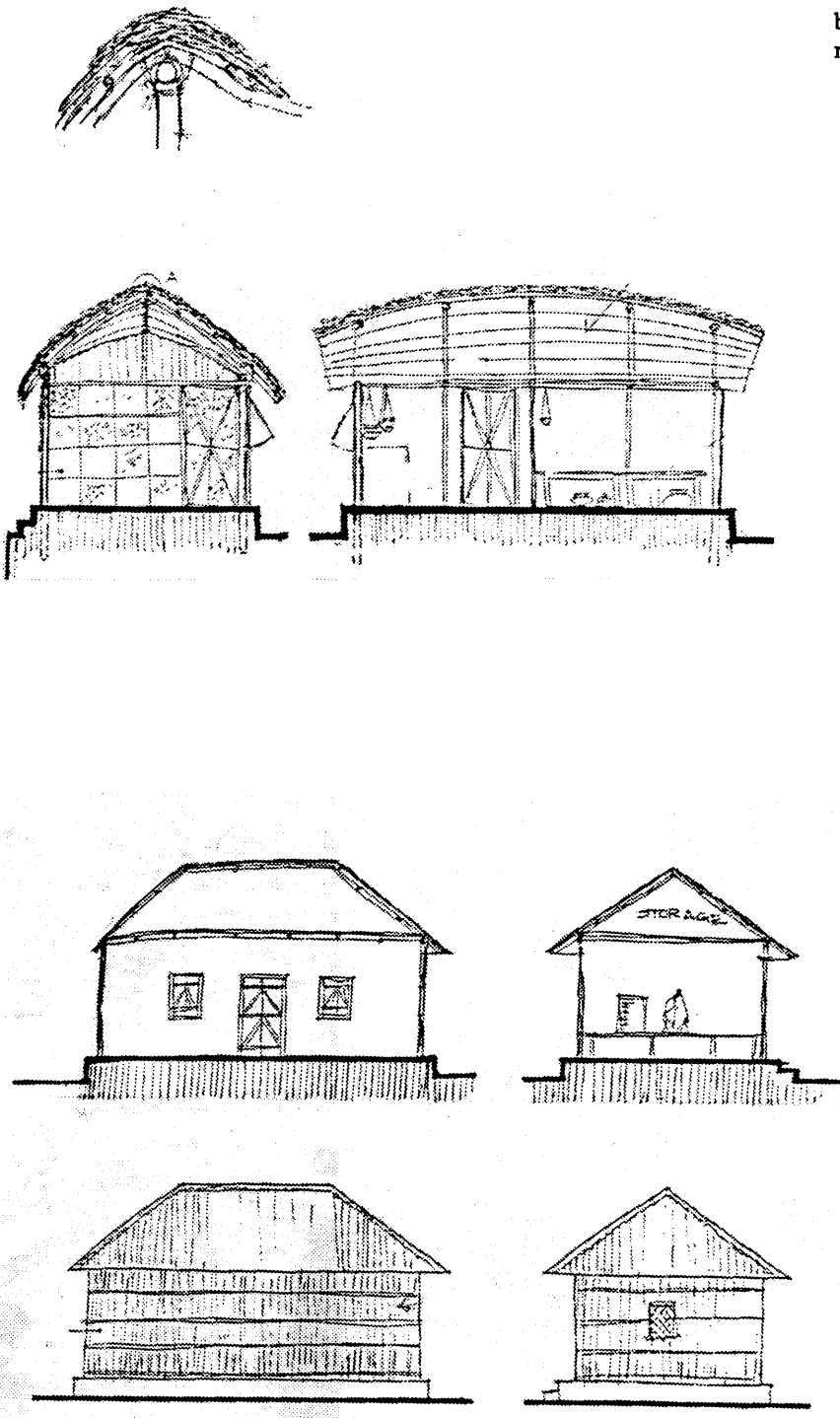
by closer scrutiny. The huts are divided by ranking, so that the most important person takes the most comfortable hut and so on.

This idea of orientation is deeply-rooted in the average Bangladeshi. On more than one occasion, the author has experienced the stubbornness of clients who refused to have their modern urban house oriented towards any other direction than the south, even when layout and approach demanded otherwise .

The materials of the huts are usually chosen from what is commonly available. The huts are placed in the solid earthen mound but they themselves give the impression of being frail, which they actually are. They are frequently damaged or even blown away by winds and storm and have to be regularly repaired and periodically replaced. Thatch, bamboo. jutesticks, mud etc. are the building elements. The advantage of such light materials is their resistance to thermal storage, and their penetrability to moving air.

The huts, as they are constructed by themselves, do not seem to be meant for defense against attack. This is contradictory because Bengali literature is filled with instances where the peasant house is torched. Against animals, the huts are a secondary defense and so their frailty can be understood.

Economically the form of the huts shows no deviation between the affluent and the needy. The only change to be observed is in the materials. Prosperous persons now choose corrugated iron sheets and wooden frame for their houses, while the poor stick to traditional materials. Consequently, in rural areas, although the form has

remained the same, the iron sheet house has developed a prestige value.

When the actual structures are being constructed, the people look towards the bountiful side of nature. The tripartite division of the huts - plinth, walls and roof are symbolic of the three kingdoms., 'below', 'here' and 'above'. Man, finding his rightful place in the cosmos, naturally inhabits the middle kingdom.[15] Although an attic is created because of the pitched roof, there is no attempt to live there. (See fig 9.0.12) Essentially its not mans place to live in. Man has raised himself from the ground by the earth platform, and continues to do so by building a mud plinth for his hut. He never attempts to dig basements. It would have been an obvious anti-thesis to his achievements. Crowded as he may be in his small hut, the Bangladeshi peasant makes no attempt to increase his space either downwards or upwards.

The form of the house admirably projects this philosophy. The house proclaims the three divisions and makes them explicit. The mud platform protrudes from the walls as does the overhead roof. Percy Brown associates the curving cornice to the bent bamboo which is the main structural material. Obviously this is not quite so direct, but holds deeper meanings. It may be meant to be symbolic of man's unity with nature and to be read as bringing forth humble gratitude. Had it been only the result of the bent bamboo, then architects of numerous mosques all over Bengal would have had no reason to transfer such forms into concrete. In a similar manner, the Parthenon echoes much more than the wooden details in its facade. It signified deeper meanings to the Greeks; this intensified its significance to the community.

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To Bachelard the House is almost a living thing. "In the dynamic rivalry between house and universe, we are far removed from any reference to simple geometrical forms. a house that has been experienced is not an inert box. Inhabited space transcends geometrical space." Gaston Bachelard, *The Poetics of Space*, 1969, p. 47

[15.] These concepts are developed by Mircea Eliade in the book, *The sacred and the Profane, The Nature of religion,*, 1959.
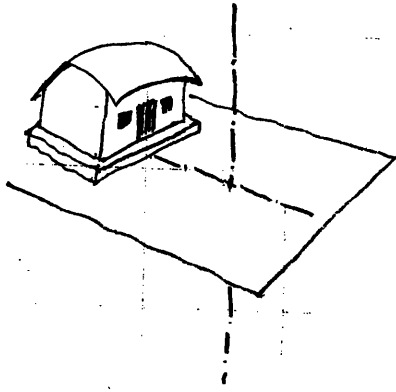
Fig. 10.0.1
Structure and space in relationship

# 10.
# REFLECTIONS

From the examples cited and the discussions made in the previous sections, one may conclude that the traditional architecture of Bangladesh is characterized by a synthesis between a building and a space. The rural examples display this relationship by each being composed of a transverse house with a yard in front of its central entrance. In dwellings of traditional type, centrality is further emphasized by introducing curvature in the roof. The yard that is created on the raised earth platform in front of this dwelling is equally important as is evident by its being very well maintained. In this way, covered and uncovered spaces are brought into a complex union. The relationship established in this manner is an axial one. However, there is not only a horizontal dimension to this relationship, but also a vertical one. The yard is raised above the surrounding countryside and has the front wall of the structure at the rear. The horizontality of the landscape draws attention to the sky and further emphasizes the link between the open raised yard and the sky above. Thus, both the dimensions are symbolized.

Though the house tradition is ageless, the individual dwellings are perishable. Evidence of the antiquity of the Bangladeshi image described above is found in monumental architecture in permanent materials. Both Muslim mosques and Hindu temples survive from the fourteenth to the nineteenth centuries in brick which bear witness to the importance of the structure-open space imagery in Bangladesh.

It may now be interesting to apply this analysis to some contemporary works of architecture in the country. Examples are taken from those where serious efforts are

Fig. 10.0.2
View of B.A.R.D

made to create an identifiable architecture which has contributed to their acceptance in the minds of the people at large .

Constantine Doxiades's work is an example in which both curved elements and courtyards are used in a conscious attempt to relate to Bangladeshi identity. A remarkable expression of formal composition in courtyards, the Bangladesh Academy of Rural Development[1] in Comilla and the Teachers-students complex of Dhaka University recall the introverted character so common in the vernacular. The setting created is one of tranquillity and serenity. Although the elements are there, the architect did not take their interdependency into consideration, something very important to a sense of architectural identity in Bangladesh. The structures and courtyards are unintegrated and remain as two entities without cohesion. Flowers in the courtyard and a grassy character take away the symbolism of 'white purity', which would have existed in the rural courtyard. The relative failure of this endeavor perhaps emphasizes the fact that relationships of form and space in Bangladesh have more profound meaning than merely visual effects. (Fig. 10.0.2)

The example with which most of the citizens identify very easily is the Martyr's memorial at Savar. Designed by Syed Mainul Hossain, this memorial structure is set in rolling plains recalling the agricultural land of the rural setting. The tower rises up from the ground in a majestic curve which reaches towards the sky. In its composition, elements having straight edges are cleverly juxtaposed to create a sense of curvature which literally expresses the inherent union of the earth and the sky, the worldly and the spiritual, the manifest and the non-manifest. (See fig. 10.0.3 & 10.0.4) The relationship it has with the ground is also one of major significance. Although there is a small

1. Locally known as B.A.R.D

Fig. 10.0.3
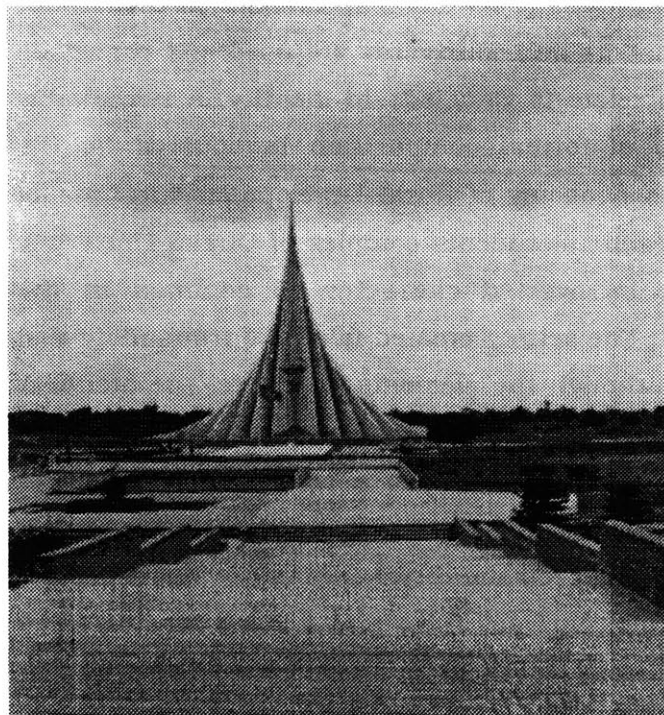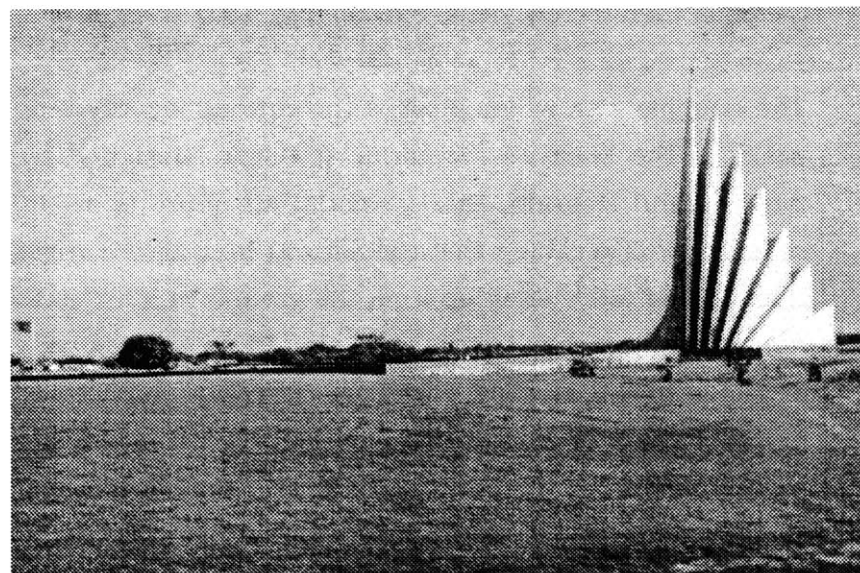Martyr's Monument, Front View

Fig. 10.0.4
Although the side view is more dramatic, yet it is hardly seen by the visitors
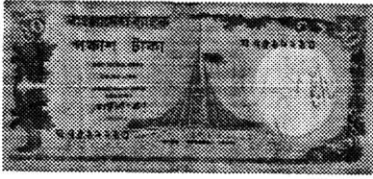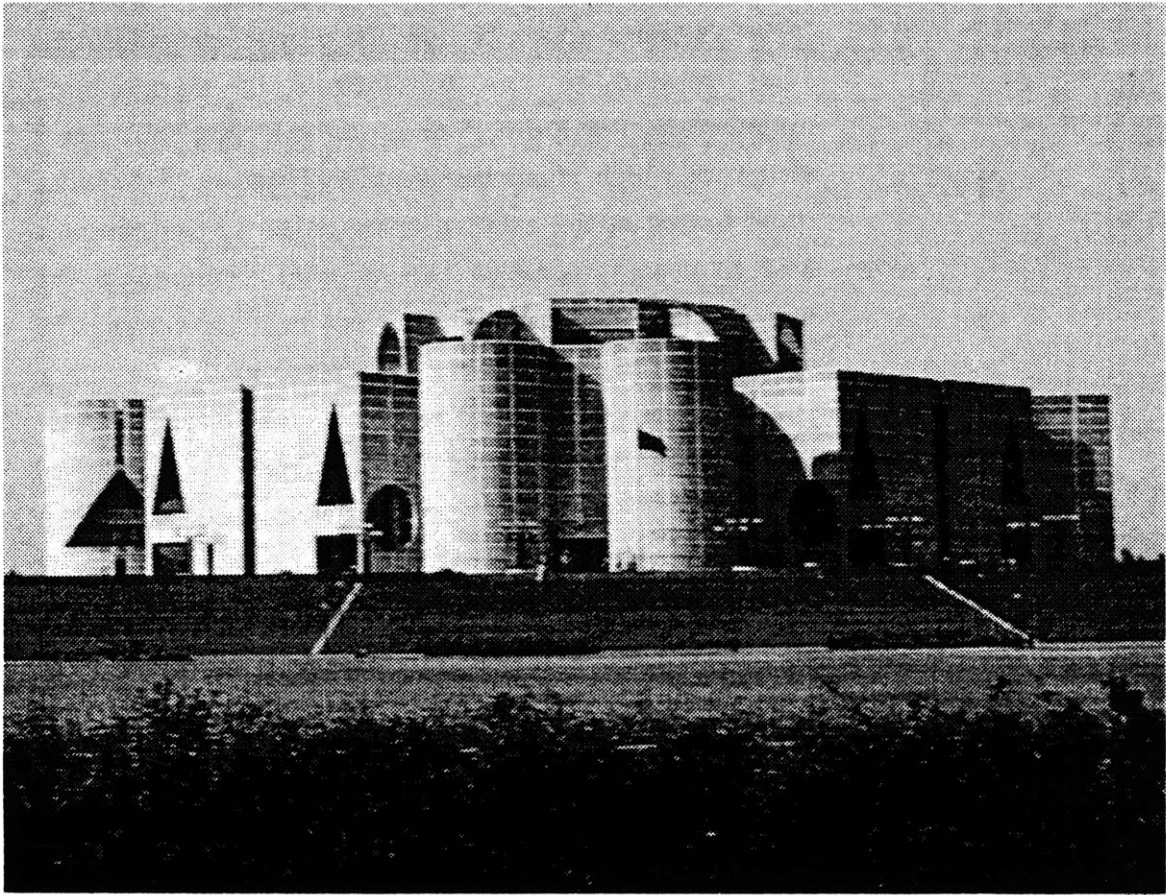
Fig. 10.0.5
Picture of the Martyr's Memorial in a bank note indicates its value to the people.

platform at the base of the tower, this suggests more its extended plinth. The larger yard or 'platform' is defined by a pool of water. The axis is strong, emphasized more by the flag, the altar, and most of all, this water body. All these find validity because of the tower, and the tower in turn creates them. This is a good example of form and space relating to one another. The backdrop of the tower becomes more telling of this relationship especially in the victory day, when the ceremony of flower laying is performed in the altar. In this manner, Bangladeshi architecture finds meaning.

In modern times the most celebrated architecture in Bangladesh is the parliamentary complex in Dhaka. Louis I. Kahn's famed approach through 'beginnings' is in many ways related to the beginnings of Bangladeshi architecture. For Kahn, "Life is not arbitrary, but has a structure which comprises man and nature."[2] Because Kahn looked at the existing order of things to determine how to design, some of the seminal elements of the indigenous architecture are evident in his creation. The south plaza of the complex is a place which has been 'reclaimed' by the people. This has become more than just the plaza for the parliamentary members, more than an 'architectural' setting of the grand building and more than a gallery for the parades. It has today become a favorite place of congregation for the people of Dhaka. Hundreds of daily visitors attest to this. One can but wonder at Kahn's deep wisdom in this act. Was it a fortuitous gesture that while the red arms of adjacent structures produce a huge curvature to hold a space in the northern side, the plaza is created on the open southern one? In a monumental manner embodying the argument of this thesis, it is a place open to the sky and is modulated by the majestic facade of the building. It leads one to wonder if the

2. 'The Message of Louis Kahn' in Christian Norberg-Schulz, *Architecture : Meaning and Place*, 1988, p. 201

Fig. 10.0.6
South Plaza of the Capitol
Complex

curvatures of the mosque at this side constitute more than a mere signal of its religious function. (Fig. 10.0.6)

It may be argued that none of these modern examples possess all the significant elements identified as being representative of the architecture of Bangladesh. For example, in B.A.R.D. the architect perhaps thought that it was enough to use courtyards and curved roofs -- but he failed to achieve the intrinsic relationship between them. The front platform of the Martyr's monument is not raised and is defined by water. Although the actual progression towards the memorial tower is in a descending manner, rather than the opposite, it is in tune with its solemn nature. The plaza in the Capital Complex is raised, and in a manner, does suggest protection from the water. Signification runs deeper in this case. Both the vertical and the horizontal planes in tandem, create and define one another, which brings out the powerful local symbolism.

It is debatable whether the architects of the monument and the capitol complex were aware of the identified relationship, or whether it was a subconscious decision by them, yet the fact remains that the people react positively to them. Such relationships, as one goes on looking can be seen in many more manifestations in the indigenous. The stages set up under huge trees in Ramna park and Bangla Academy to celebrate the Bangladeshi festivals and other occasions is another example. Here, the tree becomes the stage and the focus of the space.

In this brief document, and at considerable distance from the primary sources, the author has endeavored to demonstrate that a single concept, that of a transverse structure with a smoothed yard in front of it, had universally contributed to a special sense of spatial

identity in Bangladesh. It has been suggested that the roots of a symbolism derived from this concept, which may be said to constitute the 'meaning' of Bangladeshi architecture, go back at least to pre-Mughal times.

Further study should provide a better understanding and definition of this sense of place and of identity in Bangladesh.

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# APPENDIX

Fig. 11.0.1 Bangladesh:
Topographical Setting.
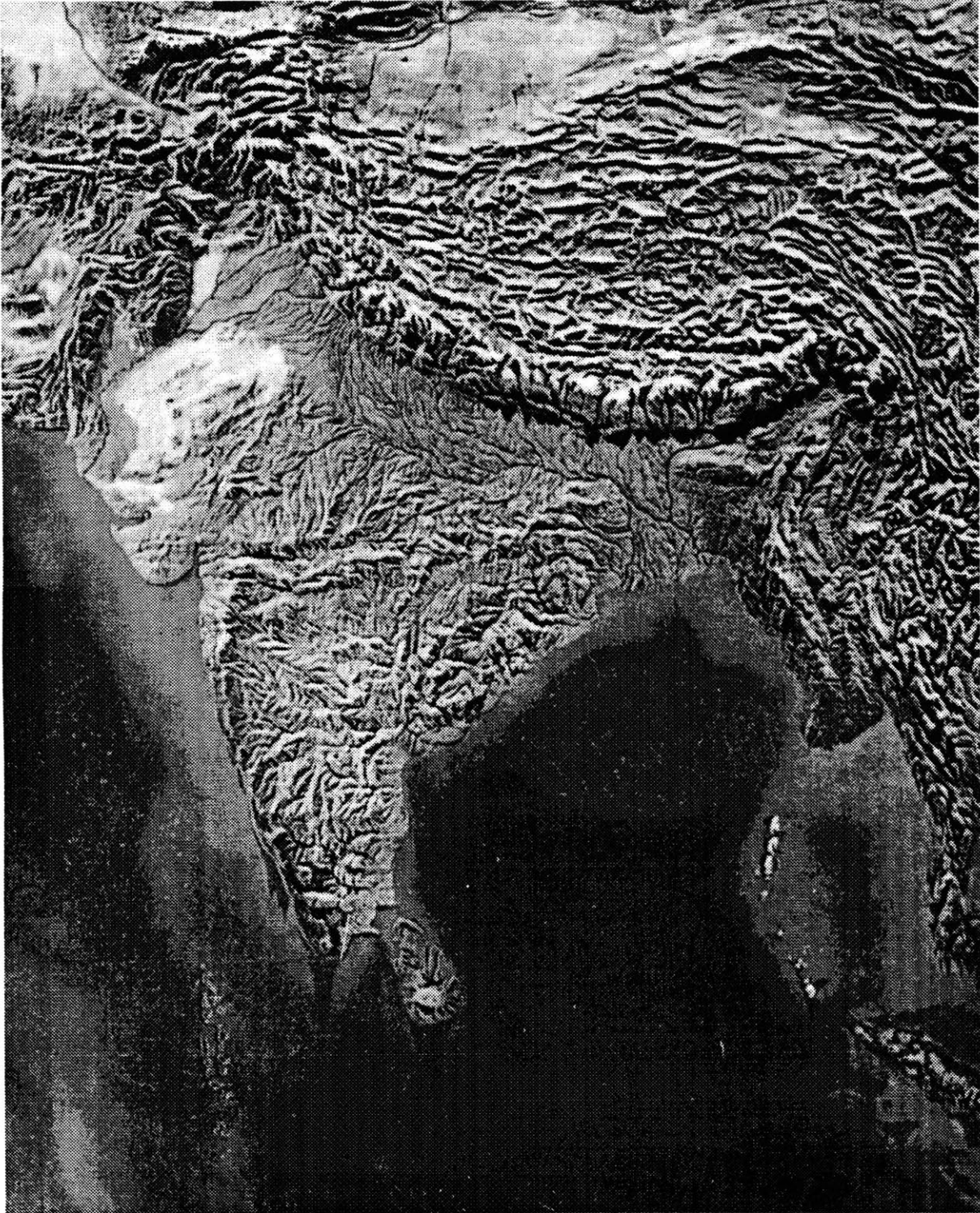
# BANGLADESH

Bangladesh lies betwen the north Latitudes $20°$-30' and $26°$-45' and between the east latitude of $88°$-0' and $92°$-56'. Tropic of Cancer runs approximately through the midpoint of the country. It has an area of 144000 square kilometer and is in the north-eastern side of the Indian subcontinent. On all three sides it shares a border with India, except for a little bit in the east where it borders Burma. On the south, where it meets the sea, the coast-line is continuous with Burma and India.

Almost the entire country is flat, made up of alluvial soil which is criss crossed by numerous rivers of various sizes and is also dotted with marshes and lakes. An idea of its flatness may be gained by considering the fact that areas as far as 150 kilometer inland is only 9 meter above the sea. The slope of the land is less than 8 centimeter per kilometer.

The river Ganges becomes the *Pawdda* (Padma) in Bangladesh. It comes in from the west. The Brahmaputra, also known as Jamuna comes from the north while the Meghna comes from the north-east. These are the main rivers which, with their numerous tributaries and distributaries water and drain this immense delta.

Average annual rainfall is quite high and is about 254 cm/yr. This causes much of the area to go under complete inundation during the monsoon months. When the current in the river is not swift enough, the silt laden rivers deposit their loads on the banks which gradually raises itself above the flood level. The silt is then deposited on the river beds which consequently rises above the surrounding area. As a result the banks give away, and when they do, the river falls into the lower level beyond and hence shifts its course.

Fig. 11.0.2
Houses in and around
Bengladesh.
No. 26 shows a house in Dhaka
district and no. 18 depicts one in
West Bengal
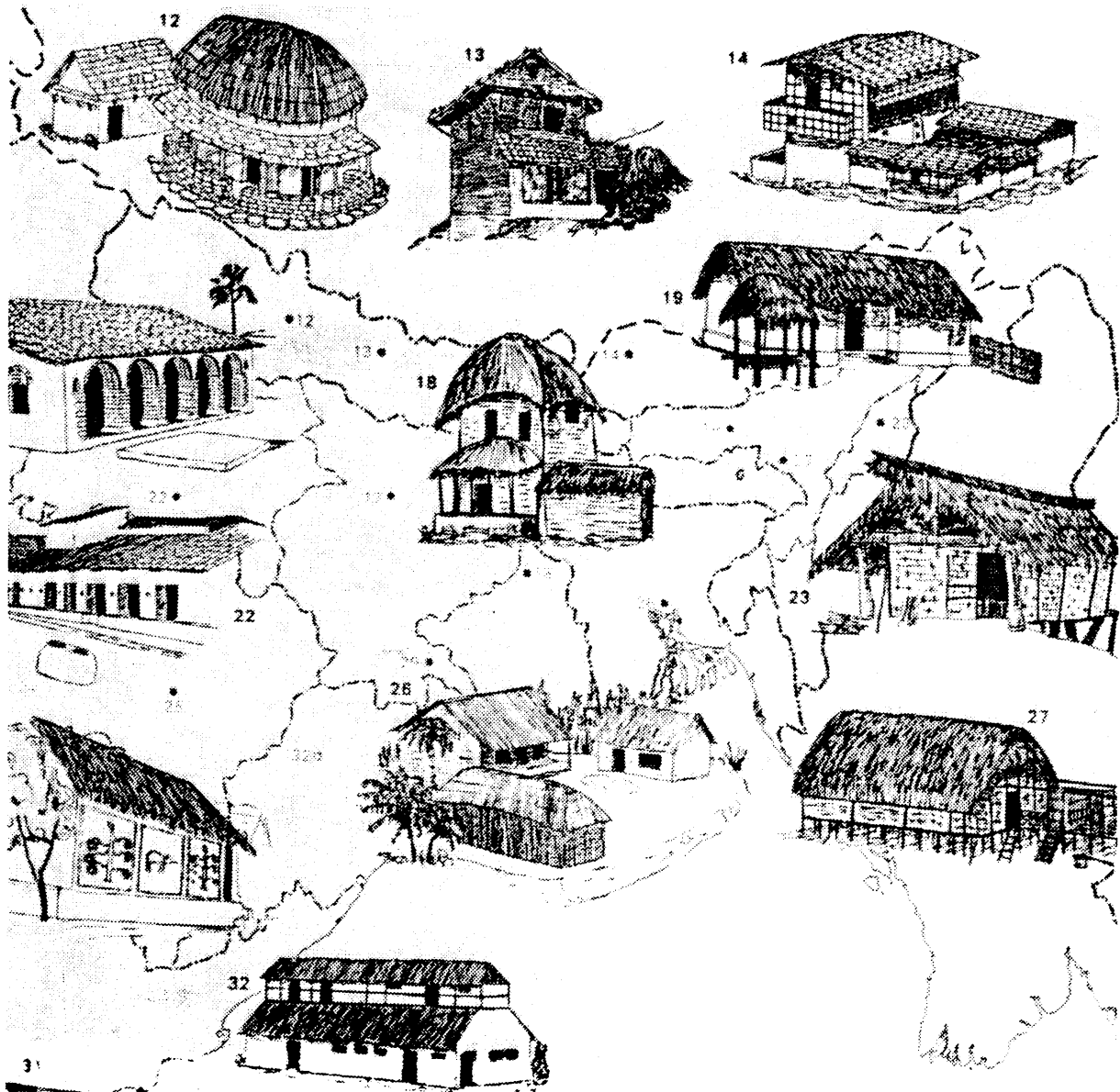
# FAMILY TYPES IN BANGLADESH

## JOINT FAMILY

A joint family in Bangladesh usually consists of two related married families. Usually they are related lineally, in a father-son relationship or collarterally, in a brother-brother relationship. Sometimes, unmarried widowed or divorced relatives also supplement such families. A joint family is distinguished from an extended family by commensality.[1] The family is the hearth group, relatives eating from the same kitchen. Joint families survive usually as long as the father is alive. Sometimes they also function under a widowed mother or a stern elder brother. Earning members of a joint family usually contribute a fixed amount to a common household fund for food and other regular expenses. Most commonly, the house or homestead built by the household head or an immediate ancestor is the single, most important, property held jointly by the family.

## THE EXTENDED FAMILY

An extended family is usually brought together by propinquity or mutual kinship. It is formed by one or more households united by agnatic kinship bonds, living in adjacent dwellings.[2] Most commonly, in rural Bangladesh, after the death of the family head, a joint family converts to an extended family. In such cases the family units tend to remain in the same *vitt.*

1. See Mary Jane Beech, "Family Cycle in Three Urban Bengali Neighborhoods" in Robert Paul Beech and Mary Jane Beech ed., Bengal Change and Continuity, Michigan, 1971

2. ibid.

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