

TRADITIONAL KHASI HOUSE FORMS: A STUDY OF THE KHASI SUB-TRIBES AND THEIR DWELLINGS

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Abstract

Tribal societies are an example of a strong social structure built upon the foundation of tradition. Their house forms is closely linked to various aspects of their belief system, value system and social system-thus creating a harmonious environment. The Khasis of Meghalaya are one such tribe.

This study is based on the premise that houses, being a human product of pronounced practical character, have a particular ability to show how the values and the cultural traditions give meaning to the daily life through the process of cultural symbolisation. The daily life has a meaning which transcends the immediate situation and thus form part of a cultural and historical continuity (Norberg-Schulz 1963).

Keywords: Vernacular, Dwelling, House form, Culture, Meghalaya.

INTRODUCTION

The Khasis of Meghalaya, are generally described as an Austro-Asiatic speaking race, representing, according to B. M. Reddy (See “Austro-Asiatic Tribes of Northeast India Provide Hitherto Missing Genetic Link between South and Southeast Asia” in journals.plos.org/ PLoS One, 2007, 2, e1141.), the remnants of an ancient migration from Southeast Asia. “How ancient their migration to these hills had been could be gauged from the fact that they had been producing iron at various locations in the Khasi Hills “over the last two millennia”, to quote the words of Pawel Prokop, a professor at the Department of Geo-environmental Research, Institute of Geography and Spatial Organization, Polish Academy of Sciences, Krakow. Prokop, who had carried out a radiocarbon dating of the iron smelting works in areas around Nongkrem and Sohra or Cherrapunjee, in fact, put the date of iron manufacturing here at “2040 ± 80 years BC” or a period between 353 BC and AD 128” (Nongkynrih 2021).

Khasi is a generic term and it signifies all the seven sub-tribes of the Khasi community living in the different districts of Meghalaya. The Khasis include the sub-tribes of the Khyntriams, the Pnars, the Bhois, the Wars, the Marams, the Lyngngams and the Nongtrais.

The Khasis have a distinct culture of their own. The society is divided into sub-tribes as mentioned above, and further subdivided into a system of exogamous (marrying outside one’s group) clans. All these sub-tribes and clans follow the matrilineal system in their social life. According to this system, children are given the surname of the mother, which is different from the surname of the father. Inheritance also goes to the girl-child known as Khatduh, defined not only as the last daughter to be born but also the last daughter to leave the house.

This study focuses on recording and documenting the traditional dwellings of the Khasis which is being subjected to change due to conversion of religion and modernization. It aims in understanding the cultural differences of the seven sub-tribes as observed in the traditional house-forms of all the seven sub- tribes of Meghalaya.

Objectives of Study

The study primarily aims to study the cultural importance of the traditional house-form of each of the seven sub-tribes of the Khasis with regards to climatic factors, topography, myths, rituals and beliefs.

- To identify the various aspects of the Khasis’ belief, value and social systems.
- To examine the meanings attached to various house-forms and its association with the socio-cultural system in, and physical landscape inhabited by, each Khasi sub-tribe.
- To understand the influence of climate, topography and material on the house form.

METHODOLOGY

The approach employed is descriptive with the support of anthropology and the history of the people. The study was first carried out through an initial literature review, to understand the concept of ‘Vernacular Architecture’, to explore the form of traditional buildings that are self-built by their owner-occupiers or built by members of a community, to understand the house form as the consequence of a whole range of socio-cultural factors seen in the broadest term and to understand architecture as a cultural object and a human product serving human activities.

After forming a theoretical base, the background, culture and house-form of the seven Khasi sub-tribes of Meghalaya were studied in detail. The house-forms of the Khasi sub-tribes were documented and analysed based on the connections between people and the built environment, the different factors influencing house forms- context, climate, availability of material, culture etc. and how the variation in culture influenced the house-form typology.

The study was also carried out through interviews with local author, Kynpham Sing Nongkynrih and the locals of the respective places. The questionnaires were in English but were interpreted in local languages for response. Research papers and relevant literature were also referred to. Field trips were made to identify, study and document the indigenous houses of the Khasis. The final analysis was done by comparative approach. The study is to a large extent a descriptive and a comparative one.

Vernacular Architecture

The study starts from the broad overview of theories and gradually narrowed to the focus of this research.

Broad understanding of the term ‘vernacular architecture’

According to Paul Oliver in his book ‘Dwellings: The House Across the World’, vernacular architecture includes many types of building which have not been professionally designed.

‘Encyclopedia of Vernacular Architecture of the World’ describes vernacular architecture as a term widely used to denote indigenous, tribal, folk and traditional architecture. “Within the context of vernacular architecture, it embraces what is known and what is inherited about the dwelling, building or settlement. It includes the collective wisdom and experience of the society and the norms that have become accepted by the group as being appropriate to its built environment” (Oliver 1999).

These books thus, give an understanding of what vernacular architecture is all about and helped comprehend that fully-dimensional plans, sections and elevations are not used when the houses were built.

Broad understanding of ‘culture and house form’

Amos Rapoport’s basic hypothesis, “*house form is not simply the result of physical forces or any single causal factor, but is the consequence of a whole range of socio-cultural factors seen in their broadest terms*” is well known and accepted by most. It is clear that not only do climate, material, technology and construction define the house form but also the culture of the people of a place.

Socio-cultural factors acquire primary importance in shaping and in the use of built environments. There appear to be a major need to understand how the culture of the place affects the house form. The analysis of this research will take this fact in the account with consideration for the physical forces as well.

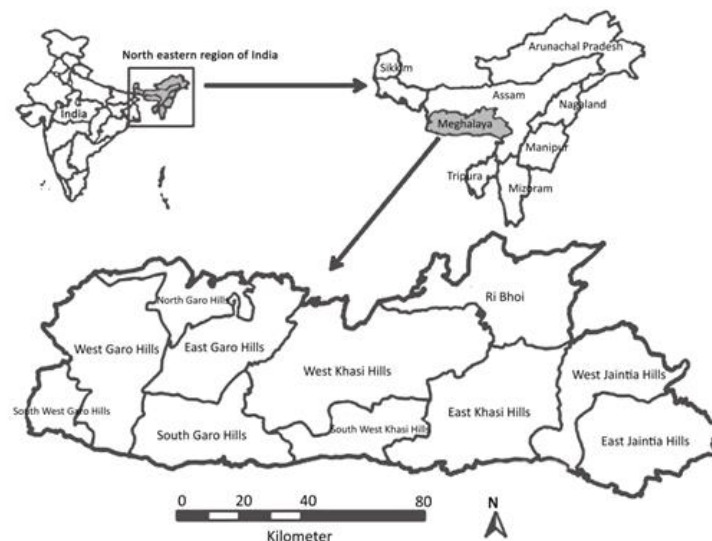
Architecture as a cultural object

In the book, *Intentions in Architecture*, Norberg – Schulz stated that, *Architecture itself is a cultural object. It is a human product serving common human activities* (Norberg-Schulz 1963: 122). He talks about built-form as a product of culture. The intention of the research is to demonstrate that architecture has a particular ability to show how Khasi cultural values, beliefs and traditions determine the daily life of the people.

Background of the Khasis:

Meghalaya is situated in the north-eastern part of India. The Khasis reside in the Khasi and the Jaintia Hills district of Meghalaya. The Khyntriams inhabit the East Khasi Hills, the Pnars in Jaintia Hills, Bhois in Ri Bhoi District bordering Assam, Wars in the low-lying areas bordering Bangladesh, Marams, Lyngngams and the Dikos in West Khasi Hills.

Figure 1 Location map of Meghalaya



Source: www.researchgate.net

The Khasis who still adhered to their *Niam Khasi Niam Tre* have their own elaborate rituals to follow during birth, marriage and death, which are too intricate to describe here. Among these Khasis, the dead are cremated. The indigenous Khasis still perform the egg divination- performed by the shaman (Khasi priest), which involves pleading and praying to God, *U Blei*, then the egg is broken on the *diengshat* which is a type of wooden block. The fate is interpreted from the broken pieces of egg. This is done to determine the cause of sufferings or illness or at times, to look for a sign guided by God before executing any plan of action in life. The egg hold a great significance because it is linked to the rooster which is the symbol of humility- which is equivalent to a golden heart, a virtuous heart, through which alone we can approach the presence of God.

Influence of socio-cultural factors on the House forms

The Khasi house form is a result of many socio-cultural factors. These socio-cultural factors could be broadly categorized as (1) Belief System (2) Value System (3) Social System.

The Belief System- Religion, superstition, taboo are the integral part of the belief system.

The Value System- An important stature is assigned to women. She is the keeper of the clan religion and the custodian of the ancestral wealth and property.

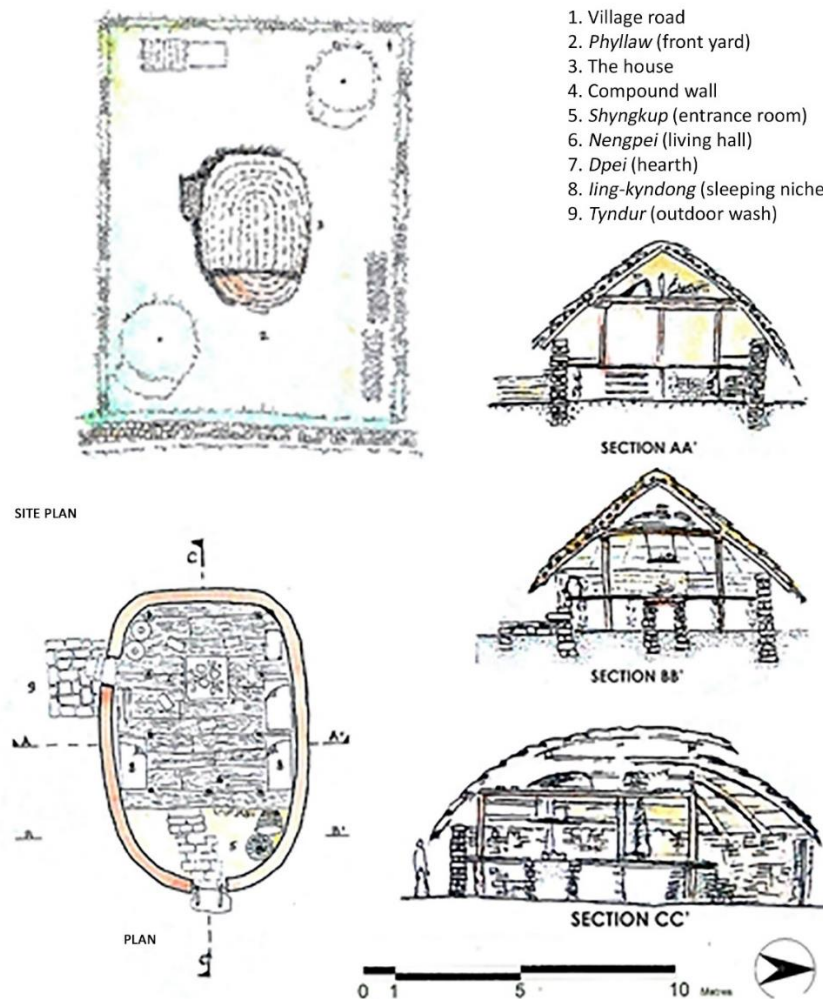
The Social System- the *Khatduh* who is the last daughter to leave the house inherits everything. If there are two daughters in the family, the elder one marries and move out and establish a separate household nearby.

TRADITIONAL DWELLING OF THE KHYNRIAM TRIBE

Site: The region consisted of the *Khynriams* is on a range of hills ranging from 150 m to 2000 m above sea level. To the north of the region, the land slopes gently over a series of hills till it reaches the plains of the Brahmaputra valley. To the south, the land forms a table and then drops steeply to the plains of Bangladesh.

In the Khasi uplands, i.e. the Khynriam tribe, the shape of the house may be described as oval, resembling the shape of an egg. The houses are substantial thatch cottages with stone walls, raised on a plinth of 2 to 8 feet from the ground. The only opening to let in ray of dim light into the room being a small opening called pongshai. The mhouse is divided into a porch, and a center room. An earthen or stone hearth in the middle of the spacious central room was kept constantly alive and burning. The pigs and calves, are housed in separate shed away from the main house. It was considered sang or taboo to use metal nails then.

Figure 2 House form of the *Khyntiam* tribe



Source: Mawkhroh, A.S. Meaning in Khasi House Forms- A Study of Traditional and Bungalow-type House Forms of Cherrapunjee, CEPT College, Ahmedabad

TRADITIONAL DWELLING OF THE PNARS

Site: Jowai is the head-quarters of West Jaintia Hills District. It is a scenic place, surrounded on three sides by the Myntdu River bordering Bangladesh on the south.

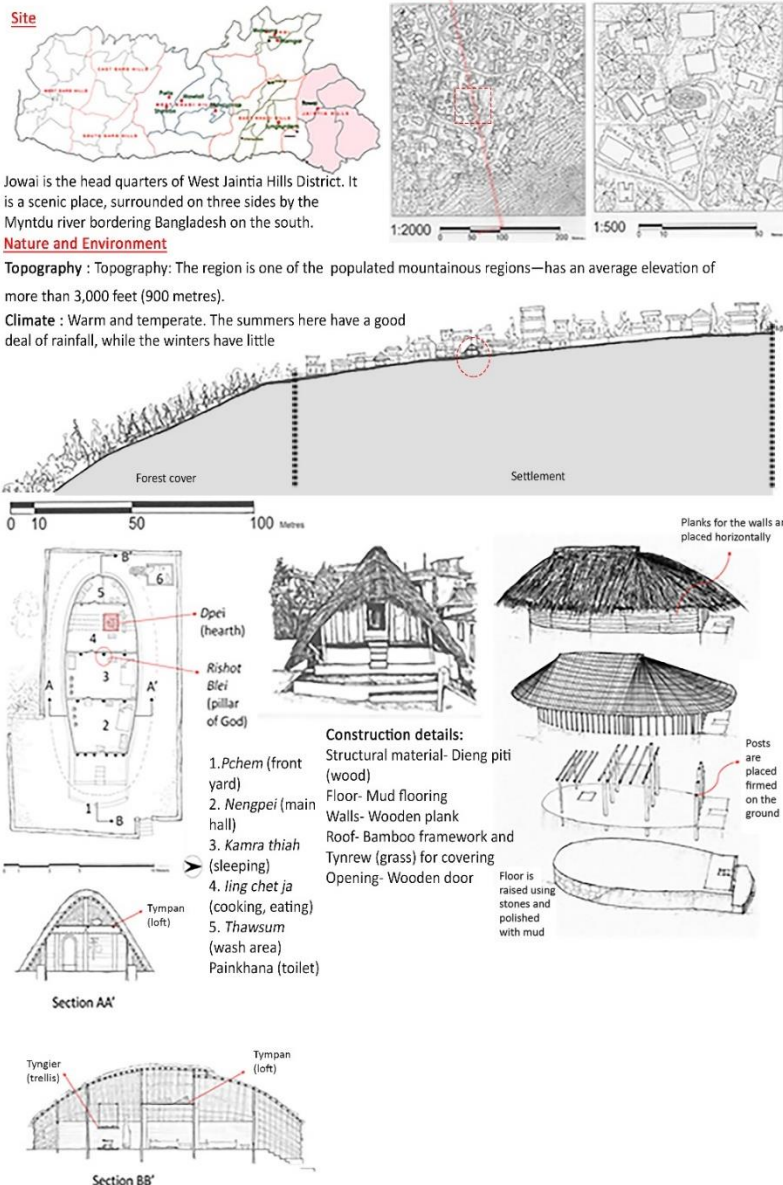
Nature and Environment:

Topography: The region is one of the populated mountainous regions—has an average elevation of more than 3,000 feet (900 metres).

limate: Warm and temperate. The summers here have a good deal of rainfall, while the winters have little

Figure 3 The Pnars in Jowai, West Jaintia Hills District

The Pnars in Jowai, West Jaintia Hills District



Construction Details:

- Structural material- *Dieng piti* (wood)
- Floor- Mud flooring
- Walls- Wooden plank
- Roof- Bamboo framework and *Tynrew* (grass) for covering
- Opening- Wooden door

Observations: Amongst the Pnars, mud plaster for the walls was said to have been contrived for protection against fire. The roofs which is thatched with the leaves of a palm called *tynrew*, is hog-backed and the eaves come almost down to the ground. They would not allow milk or any form of leather, be it a watch with leather strap, belts or bags out of leather inside the house. This is because they are associated with the cow, probably a remnant of Hindu influences. When the king of Jaintia hills back then converted his religion to Hinduism, the people didnt not really want to go against their king. Neither did they wish to follow another’s religion and stray away from the lineage. So what they did was, incorporate a little of the Hindu custom to the indigenous religion Niam Tre, like considering the cow sacred and not to eat beef etc.

TRADITIONAL DWELLING OF THE BHOIS

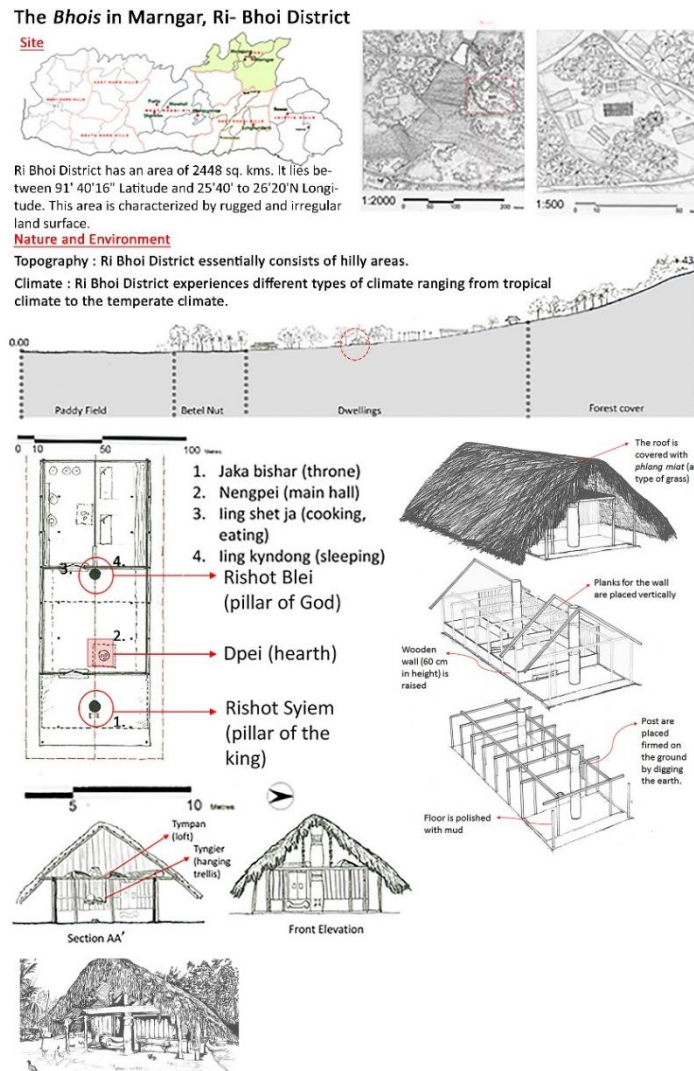
Site: Ri Bhoi District has an area of 2448 sq. kms. It lies between 91° 40'16" Latitude and 25°40' to 26°20'N Longitude. This area is characterized by rugged and irregular land surface.

Nature and Environment:

Topography: Ri Bhoi District essentially consists of hilly areas.

Climate: Ri Bhoi District experiences different types of climate ranging from tropical climate to the temperate climate.

Figure 4 The *Bhois* in Marngar, Ri-Bhoi District



Construction details:

Structural material-*Dieng lakhar* (wood)

Floor- Mud flooring

Walls- Wooden plank

Roof- *Phlang miat* (grass)

Opening- Wooden door

Observations: They consider *sang* or taboo to build their houses with stone, so they would use wood. The entire house is out of one type of wood. Metal nails are not allowed to be used either. The house have three significant elements- *lyngwiar dpei* (the hearth), *rishot Blei* (pillar of God), *rishot Syiem* (pillar of the king). The pillar of the king also acts as a throne for him where in he sits and carry out administration with his council of ministers.

TRADITIONAL DWELLING OF THE WARS

Site: In the war villages, the houses are even closer to one another from the nature of their situation on the hill slope. The villages actually nestle in the midst of their gardens

Nature and Environment:

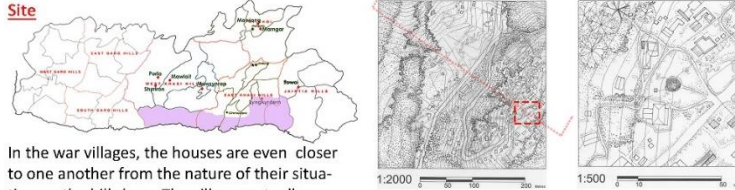
Topography: The region forms deep gorges and ravines in the southern portion.

Climate: Ranges from temperate to sub-tropical pockets.

Figure 5 The Wars in Lyngkyrdem, East Khasi Hills District

The Wars in Lyngkyrdem, East Khasi Hills District

Site

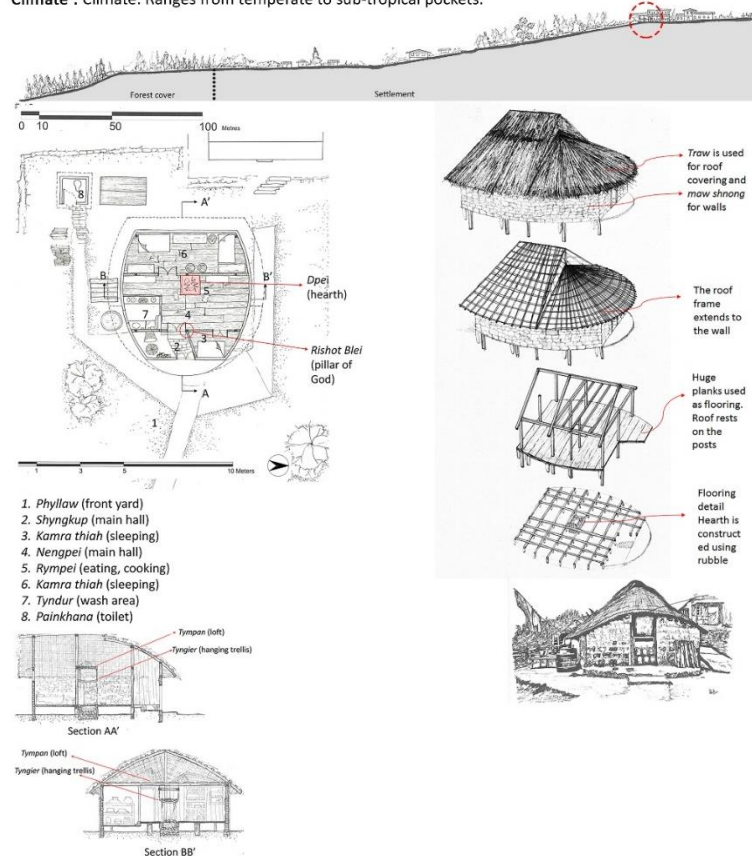


In the war villages, the houses are even closer to one another from the nature of their situation on the hill slope. The villages actually

Nature and Environment

Topography : The region forms deep gorges and ravines in the southern portion.

Climate : Climate: Ranges from temperate to sub-tropical pockets.



1. Phyllaw (front yard)
2. Shyngkup (main hall)
3. Kamra thiah (sleeping)
4. Nengpei (main hall)
5. Rympei (eating, cooking)
6. Kamra thiah (sleeping)
7. Tyndur (wash area)
8. Painkhana (toilet)

Construction details:

- Structural material- Local wood
- Floor- Mud flooring
- Walls- *Maw shnong* (local sandstone) with lime mortar
- Roof- Wooden framework and *Traw* (grass) for covering
- Opening- Wooden door

Observations: There is much similarity with house form of the *Khyrniam* tribe here. There are three rooms in the *War* house, the entrance porch, the main hall and the entity for wash area, although called by different names in the *War* dialect. However, partitions are put across in the main hall so as to demarcate privacy. The plinth is raised and the hearth is in the centre room. In some *War* villages, there are also separate bachelor’s quarters.

TRADITIONAL DWELLING OF THE MARAMS

Site: Mawsynrap is located in the South-West Khasi Hills district of Meghalaya. The no. of houses in the region ranges from 50-60.

Nature and Environment:

Topography: The region is low lying with slightly sloping areas.

Climate: Experience sub-tropical climate, influenced by south-west monsoon.

Figure 6 The *Marams* in Mawsynrap, South-West Khasi Hills District
The *Marams* in Mawsynrap, South-West

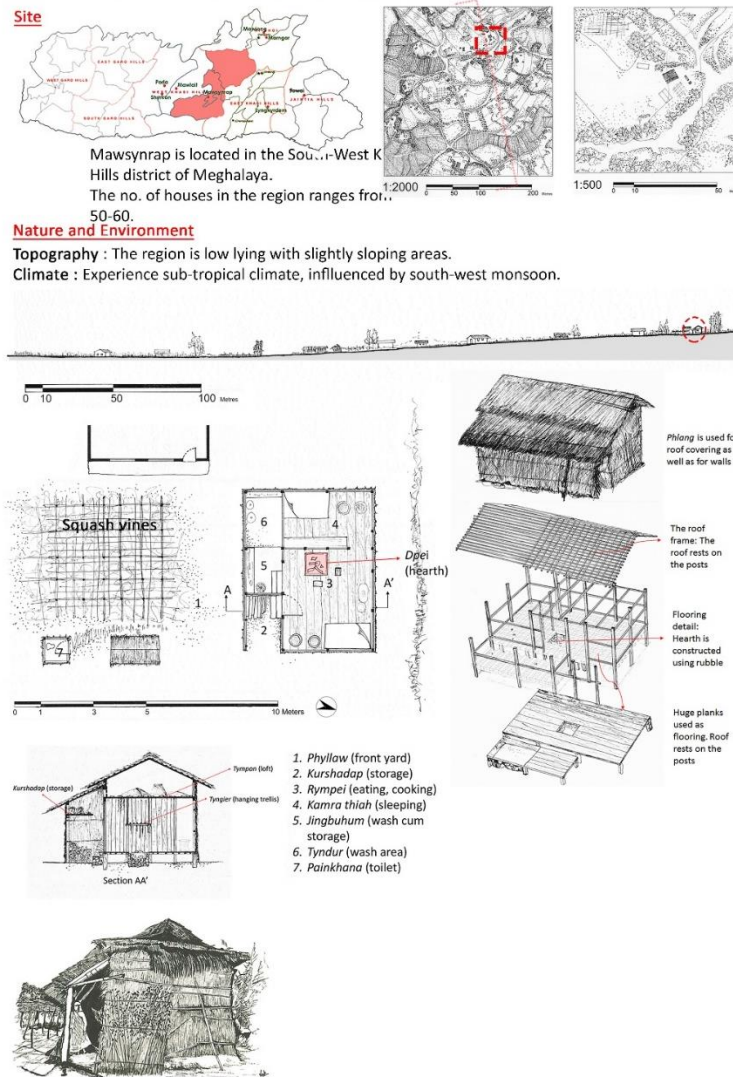
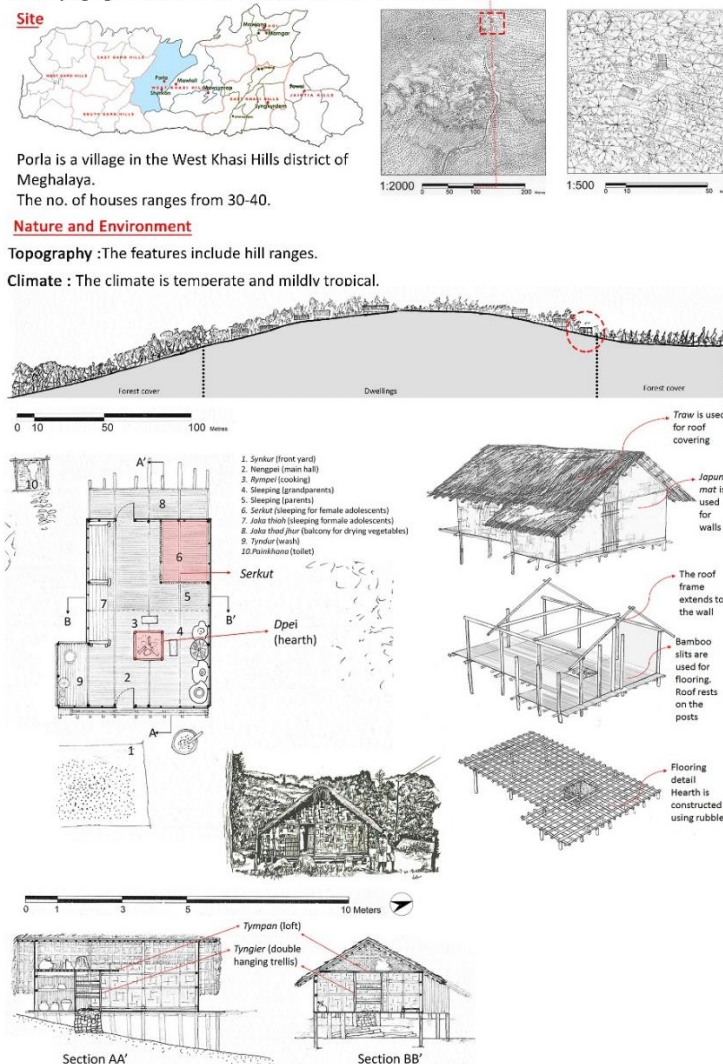


Figure 7 The *Lyngngams* in Porla, West Khasi Hills District
The *Lyngngams* in Porla, West Khasi Hills District



Construction details:

- Structural material- pine wood and bamboo
- Floor- Bamboo matting
- Walls- Woven bamboo mat (*japung* mat)
- Roof- *Traw* (thatch) for covering and wood framework
- Opening- Wooden door

Observations: The houses of the *Lyngngams* are generally built on a platform, the main house resting on the platform and the hill-side and the portion on the platform projecting therefrom. They prefer to build houses on such sites, so that they could use the space below to keep cattle and for other storage purposes. The house is divided into spaces to suit the needs of the family.

TRADITIONAL DWELLING OF THE NONGTRAI

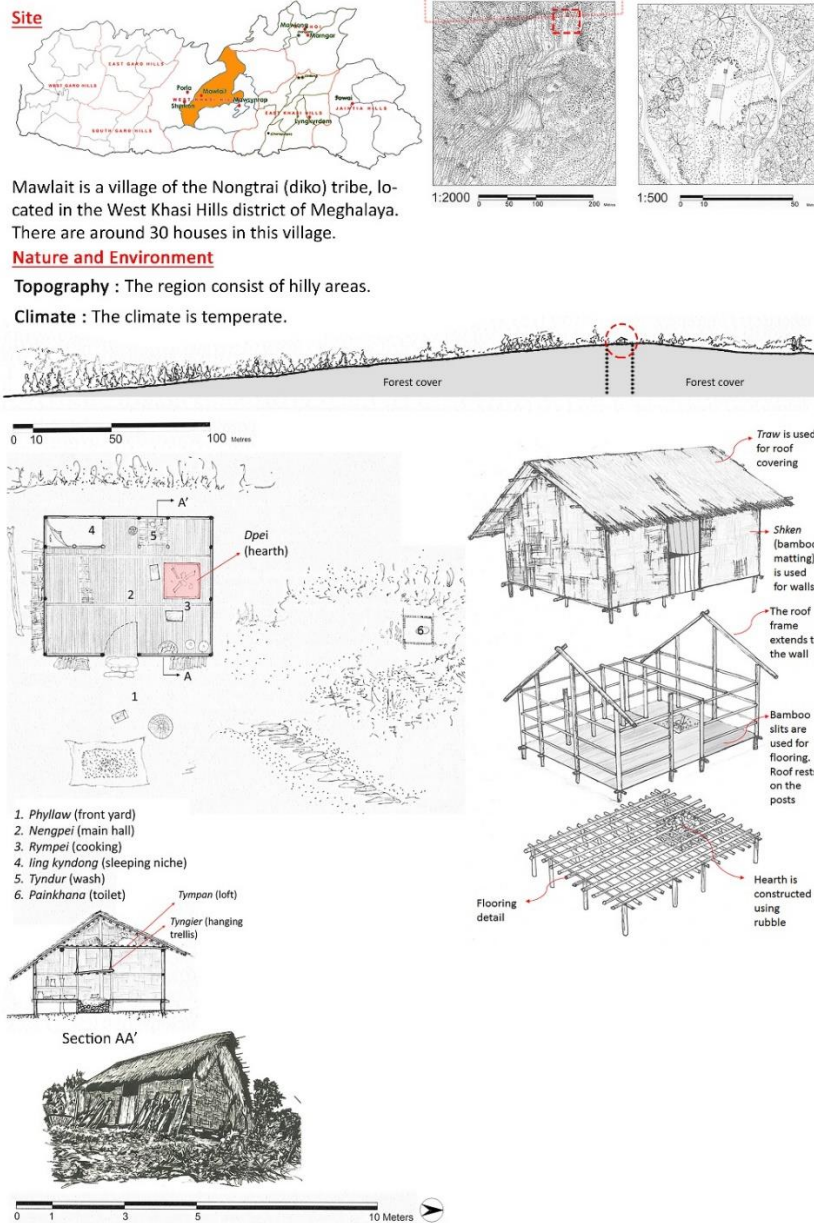
Site: Mawlait is a village of the Nongtrai (*diko*) tribe, located in the West Khasi Hills district of Meghalaya. There are around 30 houses in this village.

Nature and Environment:

- Topography:** The region consist of hilly areas.
- Climate:** The climate is temperate.

Figure 8 The *Nongtrais* in Mawlait, West Khasi Hills District

The *Nongtrais* in Mawlait, West Khasi Hills District



Construction details:

- Structural material- oak wood, pine wood and bamboo
- Floor- *Skong* (*siej bah*) Bamboo matting
- Walls- *Shken* (bamboo)
- Roof- *Traw* (thatch)) for covering and wood framework
- Opening- Wooden door

Observations: The unique feature of the houses of the *Nongtrais* is that they would always have the main entry of the house on the side of the wall with bigger surface area. Unlike all the houses of the *Lyngngams* where in the entry is on the wall with smaller surface area.

The thatch used for the roofs would have to be replaced would have to be replaced once or twice a year with new thatch. There is no window opening seen except for *pongshai*.

CONCLUSION:

Based on the research conducted, one can say that these house forms were the direct product of the people's way of life and their shared values and traditions, although other major factors had also contributed in a significant way. The findings of the study can be summed up and discussed as follows.

Culture

As stated by Rapoport, culture is the main factor that affects a community's house form. The socio-cultural factors that affect the house forms in most of the Khasi sub-tribes are many. Some of them include basic needs of shelter, family structure, role of women and privacy.

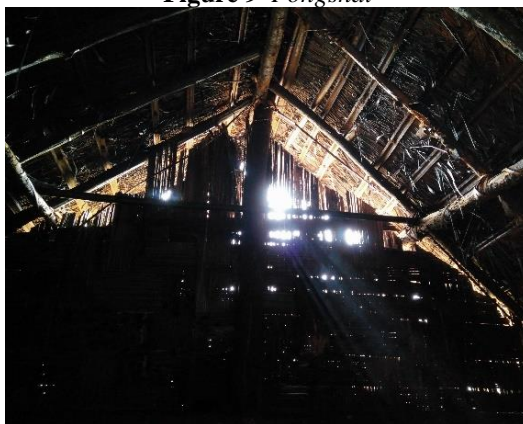
The way the matrilineal social system functions has a lot of influence as well. It is the rule, in Khasi society, for the elder daughters of the family to move out of their mother's house and establish a separate household near their ancestral house once they get married.

Hence, the families of the sub-tribes, as discovered in the study, do not have a joint family system. They have a separate house within the same built environment, or simply another house in another plot of land as close to the ancestral house as possible.

This is one of the reasons why the houses are small in scale. Being a nuclear and small family, they only need to house a few family members which results in small houses. There are, of course, exceptions: when the family size is large and comprises many sons and daughters, it is seen, that the house is also bigger.

The houses lack proper windows and usually have only small openings on one side of the house known as *pongshai*. Since in the past glasses were unknown, these openings were deliberately made small to prevent wind and rain from entering inside while at the same time serving as ventilation, allowing natural light and air to filter in. This style of architecture is continued even today. The houses do not have an exhaust system to let out the smoke from the hearth except for small gaps left between the thatch roofs and the wooden beams. Through this means, the smoke mostly goes up the roof and filters out through the gaps, though often it spreads around the ceiling before going out. But this also has its use, for it is the smoke that helps in preventing the thatch, beams and rafters from decomposing too quickly. The result is that, the wood lasts for a very long time while the thatch is also maintained for a longer period (normally five years) than would have been possible.

Figure 9 *Pongshai*



Source: Author

The indigenous religion, '*Niam Khasi*' is private and familial. The mothers and grandmothers, as mentioned above, spend most of their time around the hearth. All moral values about life and religion are imparted to their children and grandchildren, even as they prepare food for the family. In the evening when the menfolk come in, they also spend their time mostly around the hearth, telling stories about myths and legends and complementing on what the women have already imparted.

Hence it is said, that true worship takes place in one's own heart and around one's family hearth. This is why the hearth holds a great deal of significance in all the sub-tribes of the Khasis, as had also been witnessed during the course of the research.

The culture of the people—the way they live, their food habits, the way they spend their night-time around the hearth, the way they sleep and try to keep warm at night, the faith they follow, and their matrilineal lineage all go a long way in contributing to the forms of the shelters that the Khasis make. Culture, thus, play an important role in shaping the building.

The Role of Climate

The study started off by giving a primary importance to socio-cultural factors and a secondary importance to climate and technology. However, the subsequent analysis shows that the design of the houses of some of the Khasi sub-tribes is greatly influenced by the climate of the place.

The settlements of the Khyntriams, the Pnars and the Wars are exposed to strong winds and rains. The design of the house seemed to be inspired from the *knup* (the carapace-like rain shield made out of leaves and bamboo), which is the traditional Khasi umbrella. The oval shape of the houses, as inspired by the *knup*, helps in reducing the stress that is being buffeted by wind and rain on the corners and around the post and beam junctions. The sloping thatched roofs as observed in the house forms of these sub-tribes are also influenced by the shape of the *knup*, and like the oval design, they also help in resisting strong rains and winds that frequently occur in the regions.

In comparatively hotter places, like the regions of the Lyngngams and the Nongtrais, they normally use *japung* mat (bamboo mat) for the walls, which efficiently allow the heat to flow out of the house.

Figure 10 *Knup* (traditional rain shield)



Source: www.pinterest.com

The influence of physical factors, therefore, is as important as the influence of the socio-cultural factors in making the Khasi sub-tribes to build the kind of house forms they have been building for thousands of years. And these influences are interwoven.

Context

The houses of all the sub-tribes are made to sit on stone pillars raised two feet above the ground or raised on stilts. But if on a slope, the structures sit across the slope, not along the slope. Excavation of the sites is not done in the case of such dwellings. They are levelled by raising the houses on wooden stilts.

Availability of Materials

The materials used for the houses are locally available. They are available either in or around the site or acquired from the forests of the respective regions. As seen during the course of the research, the materials used are stones, timber, bamboo, *thri* (cane), thatch and grass like *phlang miat*, *tynew* and *traw*.

The Khyntriams and the Wars use stones for walls, whereas sub-tribes like the Bhois, Lyngngams and Nongtrais use woven bamboo matting for walls as the climate in their regions is comparatively hotter and drier than the regions of the other four sub-tribes.

The Maram used the same *phlang* (grass) material for the roofs as well as walls because it is available in abundance in the fields of their settlements.

The roof forms of all the sub-tribes look different from one another. However, they all use thatch (although the type of thatch differs from sub-tribe to sub-tribe). This inference is very much in harmony with Rapoport who states that, “..... same material can result in very different forms” (Rapoport 1969).

Myths and Beliefs

The myths and beliefs form an integral part of the culture of the Khasi people. As mentioned before, they “elucidate Khasi philosophical thought: their world view; their concept of God and religion, good and evil; their matrilineal social structure;

their clan system; their democratic form of governance and so forth". It goes without saying, therefore, that they have a tremendous influence on the lifestyle of the people. And when it comes to house construction, different sub-tribes have different taboos. The use of nails is a common traditional taboo among all the sub-tribes of the Khasis. Although Khasis actually manufactured iron in the past, yet they were forbidden the use of nails. No one knows why. People never dared question their ancestors as to the reason 'Why'. It was not ethical to do so. Whatever was allowed and not allowed by their ancestors was adhered to without absolute faith and people would not even question them. So this went on from generation to generation and the trend continues to be followed in many areas even now, although it is no longer observed in the case of modern houses.

Different sub-tribes have different taboos when it comes to house construction. As mentioned earlier, the use of nails is a common traditional taboo among all the sub-tribes of the Khasis. In the olden days, for any wooden construction, be it furniture or even a house, they would use wooden pegs. For bamboo construction, they would ideally use something from the bamboo itself for joinery. Practically, a metal nail and wood has different coefficients of expansion. When a metal nail deteriorates or rusts, it gets loose and as a result, the joint becomes loose, but, when one uses something from the same material itself, it expands and contracts at the same rate, so that issue does not occur.

Was that the reason then, that our ancestors did not allow the use of nails? If that is so, our ancestors were very smart. Everything they did seemed to have had a very logical explanation. They knew the cause; they knew the problems; and would generally come up with innovative solutions to every problem as well. They just never found it necessary to reason out or explain themselves and since people never dared to question them either, everything turned out to be a myth or a taboo.

It is possible that some of these taboos might have evolved as a result of past experience on building performance under various conditions, including earthquakes. It must however be stated again that most of the taboos, especially that of not using nails in constructions, have been done away with in present day constructions.

EPILOGUE

The study shows that the different house forms of the Khasi sub-tribes vary because of the physical and the socio-cultural factors of each sub-tribe, but certain spaces are consistently present in all the dwellings, although these spaces take various forms. For example, the spaces are still divided into '*shyngkup*' (entrance), '*nengpei*' (living hall) and '*rympei*' (the hearth and the area around it).

The '*shyngkup*' in the dwellings of some of the Khasi sub-tribes like the Khyrnriams and the Wars are enclosed, while it is not enclosed in the dwellings of the others. The Marams have a different name for the entrance space. They call it '*kurshadap*'.

The '*nengpei*', i.e. the main living hall, is multi-purpose and is used for all the activities in the house. This was done to encourage interaction between the family members and to develop uniformity in the manner of living. This is still intact in some of the sub-tribes' dwellings, while in other dwellings, the house is divided into different spaces with partitions for privacy.

The '*rympei*', which includes the hearth and the area around it, is still seen to be intact in all the sub-tribes' dwellings. As mentioned earlier, the dwellings do take various forms based on distinctions in cultural practices, availability of materials and the varied climate types of the different regions, but the underlying principles appear to have evolved over the years. This has been projected partially in the hypothesis at the start of the research. There are certain values, that still linger among the Khasis, like the significance of the hearth in most of the sub-tribes' dwellings, apart from those constructed on modern designs. But there are certain things which have changed, like the *nengpei*, which is replaced by other rooms evident in the house.

The Khasi traditional house is small and dark but despite all that, it has a beauty and quaintness of its own. As a proof of this, tourists will travel miles into the countryside just to have a glimpse of them.

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List of Figures

FIGURE 1	LOCATION MAP OF MEGHALAYA	13090
FIGURE 2	HOUSE FORM OF THE <i>KHYNRIAM</i> TRIBE.....	13091
FIGURE 3	THE <i>PNARS</i> IN JOWAI, WEST JAINTIA HILLS DISTRICT	13091
FIGURE 4	THE <i>BHOIS</i> IN MARNGAR, RI-BHOI DISTRICT.....	13093
FIGURE 5	THE <i>WARS</i> IN LYNGKYRDEM, EAST KHASI HILLS DISTRICT	13093
FIGURE 6	THE <i>MARAMS</i> IN MAWSYNRAP, SOUTH-WEST KHASI HILLS DISTRICT.....	13094
FIGURE 7	THE <i>LYNGGAMS</i> IN PORLA, WEST KHASI HILLS DISTRICT	13096
FIGURE 8	THE <i>NONGTRAI</i> S IN MAWLAIT, WEST KHASI HILLS DISTRICT	13097
FIGURE 9	<i>PONGSHAI</i>	13098
FIGURE 10	<i>KNUP</i> (TRADITIONAL RAIN SHIELD).....	13099