



ISSN 2278 – 0211 (Online)

Environmental and Religious Architecture Dynamics in Himachal Pradesh, North West India

Kiran Singh

Research Fellow, Department of Anthropology, University of Delhi, India

Abstract:

Anthropological view is different from architectural that is space and Culture. Architecture of houses and religious building is one of the most prominent arts that can be seen from since ancient times. Which represent the artistic mind of people. But in modern times in metropolitan city we hardly see this type of architecture. In Himachal Pradesh this type of the house can be seen in this period still some prefer to maintain, but some younger generation of Himachal Pradesh is turning towards to modernization. In this paper, it was the technique of making houses observe that instead of modernization, people still prefer to old architecture because it maintain the warmness and more reliability strong structure which hardly affect the nature. Tradition of sculpture expresses some of most profound ideals and experiences of men through simple and easily understandable symbols which have direct influence on everyday life.

Keywords: *Environmental, temple in Himachal Pradesh, religious, traditional architecture*

1. Introduction

Anthropological view is different from architecture that is space and culture. Both having different priorities between them. Space specifically architecture, space is thus cultural fact which cannot consider from only one viewpoint, as several different realities or interpretation take part in it architecture and anthropology which respectively represents the creative and analytical aspects of space. But there is another point of view needed to complete the approach, there is another point of view needed to complete the approach to architectural object what society says what society says what is represent practical aspects of space having three realities then spaces takes on different name and meanings. Anthropological methodology called fieldwork, which is based on direct knowledge of the object of study. Anthropologist tries to achieve Emikview, it view from within culture being studied: as observer they try to put themselves in place of the observer and thus start to participate in observation. Its important to observe the mutual adaptation dynamics between the habitation space and its inhabitants on one hand to observe that what point, if is the inhabitants who have to adapt their practice habits and concepts to adapt to architectural space. On the other hand, from the opposite point of view, it is also important to observe what are, what degree the transformation at a formal level introduced by inhabitants in this space, making it more adequate to their practices.

2. Results

The state of Himachal Pradesh has a treasure of traditional architecture. This traditional architecture has stood the test of time. This art and architecture have mostly grown out of age-old cultural heritage and numerous religious beliefs. It commands deep interest and respect as it represents and reveals the many faceted realities of the people living there. The ancient art and architecture of Himachal Pradesh have survived in the form of metal sculpture, wood carvings, stone carvings, paintings, traditional residential settlements and temple architecture. The most elementary form of hill architecture is represented by the old temples, which are scattered everywhere all along the mountain slopes and in the valleys. They are of indigenous styles and peculiar to the hills. Preparation of layout plans in hill area for the construction of

Different types of buildings, such as housing clusters, commercial complexes, institutional buildings is much more complicated as compared to the preparation of such plans in the plains. Layout planning is complicated due to constraints of hilly terrain for construction of buildings and roads beyond a certain degree of slope. It is further complicated due to the following: Difficulty of getting suitable orientation on the hill slopes, problems of soil erosion and landslides.

Restrictions by the forest department (ban on cutting of the trees). Existence of tall shady trees and dense forest area, which obstruct the winter sun required for the buildings. Limitations on the height of the building due to earthquake risk. High cost involved in the site development due to the cutting and the filling process. Non-availability and transportation problems of construction materials.

2.1. Traditional Settlements

The construction of the house or the habitable places usually starts near the resources like agricultural land, water etc. Prior to the commencement of construction, due consideration is given to the terrain and the climate. The traditional house is in the form of a hut, and a hamlet develops when there are more than one hut and a small temple, dedicated to the local deity is gradually added. Thus from a singular structure of a hut, a small settlement is developed. The vernacular architecture of hamlets in Himachal Pradesh also varies from region to region, depending upon the climatic factors and the availability of local materials. It has been noticed that in the regions, comprising the Kullu valley, Satluj valley and the Ravi valley, a great commonality of styles exists. In the Satluj valley region, the typical house consists of stone and timber walls, constructed in what is known as Kath-Kona style, an indigenous style of construction, in which the walls are made with alternate courses of dry stone masonry and timber without any cementing mortar. In the hamlets located in the Ravi valley, the walls of the traditional houses are built mostly with the dried masonry, without using any alternate layers of timber. These walls are plastered with mud both from inside and the outside. A common alternative is to make the lower storey of the house in dry stone masonry without any layer of timber beams and the upper floor exclusively in timber. The upper floor is projected on all the four sides supported by wooden posts and brackets.

In some parts of Himachal Pradesh, there is a popular use of the Dhajji wall construction. In this construction system, the walls are made of timber frames with infills of light, thin panels made by close packaging of mud mortar, stone and ballast. The traditional Dhajji wall (framed wall) construction mode of the region was subsequently improvised by the British for making their colonial edifices. A typical mountain village comprises of a compact group of houses arranged along the contours, of preferably south facing slope.

The hill house usually consists of two rooms. One on top of another and is built with mud, stone and timber. Usually the ground floor is used for keeping cattle and storing grain and fodder. The upper floor is the main living area.

2.2. Building Materials and the Construction Techniques

Hostile weather conditions and limited supply of building materials has resulted in the usage of mud, stone and wood in varying degrees. Architecture of the Himalayan region wood is extensively used, the forests of the deodar wood and other mixed forests were easily available. The vast number of hill temples, are of deodar wood generally. Deodar wood has been used traditionally to impart stability to tall structures. The walls of some of these structures are raised on the horizontal wooden framework called Cheols. In the well built structure, the wood is very carefully arranged, the beams with thickness around 30 cms in depth extending over the whole length of the wall - a beam on the outside and another beam on the inside, the space in between is filled with stones.

In certain regions the construction system constitutes the erection of a timber framework of uprights, beams and braces with dressed stone blocks as an infill material without any cementing material. Over the walls, a frame of the timber rafters and purlins is laid out for the pitched roof. The roofing on top is with slates as the material. The walls of the interior are usually finished with the mud plaster. The locally available mud is used for the superstructure. Two types of construction techniques are used here, the rammed earth technique and adobe construction. In the former style, the mud is filled into the wooden forms and rammed into the place slowly building up the wall. In the later style, sun dried mud blocks are used in the construction of the wall. The roof is kept flat and comprises a closely packed layer of sun twigs supported on wooden beams and joists and resting on the wooden columns.

2.3. House Building Technique

Earlier house construction was a community, but activity now migrant laborers of the poorest people build houses. Traditional houses were built of mud bricks called "gaarekieent". Mud is brought from the river side, it is basically two colors soil. One is red color soil and another is white color soil. This two color soil is used to decorate the houses. They are simply mountainous soil mixed with water and molded in wooden frame. It is then sun dried. Traditional houses have been seen stand on the four legs of deodar wood. Above the leg the houses are made. outside sitting place is called Tong(veranda). There are several rooms are made of wood which consists the small doors in height because to keep the home warmer and whenever anyone enters to the room or home should vow to pay respect and also it is consider that home is like a temple. Rooms are long in length, having small windows made up of wooden frames and also consists net of aluminum wire. And the floor of the room having carpet all over the house green in color. From the one room there is also an entry of the other room. Room having large large boxes on the wall side to keep quilt and clothes, which on touch one can feel, but on seeing it looks like normal wall. Earlier people used to sleep on the floor only with some large pieces clothe called "baithuk" used to sleep and sit on the floor. But nowadays people having the bed in their room. Roofing of the house is done by the heavy slate like stone. Which is large in size and arrange in that manner so no water of rain can enter to it. It is kept two stone and between the two stone another one is kept. And supported by the wooden frame. Wooden frame can be deodar, shisham, and apricot tree wood. But mostly is used of deodar and shisham tree wood because of its long life durability. The houses are made in that manner so no earthquake can effect here.

Nowadays, people using aluminum shade for the roofing purpose called "chaddar" because it looks good and not take so hard work to make it. But the structure of the house is the same. Some long houses are seen which have many rooms in line and from one there is an entry for another room. Nowadays some people also making cement house like a modern house because it looks like new and people easily getting bricks and cement less in price, then the deodar wood.



Figure 1: Showing traditional house.



Figure 2: modern house with a Aluminum sheet

2.4. Description of Kitchen (Rasoighar)

Traditional rasoi is made up of wood dyarlakadi (deodar wood). Rasoi is also having chimney system to pass the smoke from the kitchen. chimney is very small in size made up of stone above the roof. Chulha is made up of soil name chiknimithi. Chiknimithi is brought from the river side. Chula is put on a large slab of soil is made of soil on the floor of the kitchen on which Chula is kept. Chula is burner facing the north direction in the kitchen. Chula is having two burners (hole two separate hole, but joining with each other) this is on the upside and there is one another hole large on down side through which fire is put to make flames. The wall of the kitchen is made up of soil and to decorate the kitchen. One color is red color soil and another is white color soil, brought from the upper side of the mountain. White color is painted on the upper half side of the wall and red is painted on the down half of the wall. Rasoi is the place in the warmest hole house.

2.5. Obara (Cow-Shelter)

Obara is just below the kitchen of the house. Because kitchen is a warmer place. So by its effects the obara is also warmer. Obara is made of mud bricks and wood. Wall of obara is made up of heavy mud bricks and the roof is made up of only wooden. Because of mainly it is the floor of the kitchen. And the floor of obara is a plain ground having some mud on its on which hay straws are spread all over obara, so it's to keep warm.



Figure 3: Cow shelter (obara) a women showing her obara, which is made under the kitchen

2.6. Description of Khalyan

Khalyan is place in the village where 5,6 houses member of the village use to keep their grain when they fetch from the field and keep here to dry and thrashes. It's open place. Only surrounded by the boundry of the heavy stone in bulks are kept. khalyan is face to the north direction of the village. It's large in area. Floor of the khalyan is made of the stone and no cement is used here. But nowadays thiskhalyan is used to play and sit by the villager.



Figure 4: Traditional place called khalayan used for thrashing the grains.

2.7. Description of kothar (Bhandhargrah/ Storage Room)

Kothar is constructed of deodar wood and stone. It's in shape of hut smaller than house. It's traditional storage for the grain. Long life of one kothar is more than 80 years old. Small hut shaped stand on the four legs of the wood. It's look so heavy, mainly it's built of only wood but roof is constructed of slate like stone, which is black in color. Kothar having a small door to open on the door there is lock and adjusting it lock is made up of heavy two blocks of wood which inserts to the empty space of door to fit to lock. Lock is also having key is usually very long in size made of iron and slim in shape and like a sickle.

Inside the kothar on the floor there are four boxes, which is also having covering of lid made up of same wood. Floor of the kothar is made up of heavy built boxes. And the inside of corner of kothar inside is also having long boxes is made like a trunk to kept other grains and items. The roof kothar is made of wood and slate stone which is very heavy in weight. It's kept in that manner so no rain and snow fall can enter it.



Figure 5: Women showing her kothar



Figure 6: women locking her kothar

2.8. Wood Carving from Pabbar Valley

The wood carving. An indigenous craft tradition has retained its economic and cultural importance for hundreds of years. Wood was one of the most important materials used in arts to express thoughts. Wood was used to carve various items for household use as well as for ceremonial uses. In the good old days of kings and nawabs, any palace or haveli worth its name had to have incredibly carved doors, windows and jaalis.

The tradition of woodcarving existed in India from ancient times. The early wood-carved temples are surviving till date in many states. In India, each region has developed in its own style of structure and carvings. Local traditions and locally available wood varieties influenced them a lot. The whole north India has a traditional of carved wooden doors with intricate designs, brass inlay and trellis work of windows. The places of worship included large carvings of mythical figures.

The pabbar or Rohru valley consists of the area drained by the river pabbar in the upper Shimla hills of Himachal Pradesh that originates from Chansal peaks-south of Kinnaur and its tributaries. The valley extended from the south of Kinnaur to the Yamuna valley in Uttaranchal. The wood is not only used for their construction but also for their decoration. The carved panels, brackets,

pillars and houses are reminiscent of woodcarving. Now few specimens of woodcarvings could be noticed in the old temples and old houses as well. The wood employed for the carving are Deodar, Pine, Walnut, Shisham etc.

2.9. Temple of Hateshwari Devi

In Himachal Pradesh the best known for rich ornamentation, skillful execution and characteristic designs are Swarakoti temple tehsil jubbal. In Sawarakoti, the ceiling of Shiva temple is richly carved. The figures of gods and goddess are carved out of a block of wood measuring 2x2 feet, and then made to fit into and ornamented wooden frame. Woodcarving has also been noticed at Durga temple. The eave's planks of the temple are carved with the scenes depicting the life led by the deities during their various incarnations. The deities are also shown combat with the demons in the battlefields. The floral and geometrical patterns add the beauty and interesting. Vishnu with its various incarnation is carved so beautifully showing the mastery of the contemporary artesian in wood. The interlacing snakes (symbols of fertility) also serve the part of woodcarving on the panel. In the temple, the carved hanging bells of wood produce the pleasing sound with the blowing of air.

The Chabutra in the temple complex stands as an ideal example of contemporary woodcarving. Its richly carved with intricate floral and geometrical patterns. The traditional concepts and basic techniques used in the woodcarving are the representation of human, divine and animal forms. These are not the copies of natural appearance, but the artistic expression of their tangible qualities and significance. Such a graceful curves, groupings of buds, unfolding of flowers, their folding and creasing the spiraling growth of plants, lustrous colour, delicacy and softness of various textures, etc.

It is also said that when the chalet type structure is raised to two to three stories height, so that the verandah all around extends beyond the walls to form a cantilevered structure, as if a chalet placed on the high pedestal, it looks like a tower. These temples are believed to have Chinese or Tibetan influence in their architecture during the Ashoka king. The arrangements in the interior of these temples, including the wood carvings resemble those preserved in the Pentroof temples. These wood carvings were frequently repaired, when decayed, by replacing the old ones. Below it large bell (ghanta) is hanging in large chain. Inside the temple there is mainly four room three room in a same row and one room opposite to it. first room on the left side style of roofs as a basis of distinction, such types of temples are built on square plinths. All the four lower eaves of the temple roof are of equal length and the roof goes on narrowing towards centre forming pyramid like roof in the centre. This room having one large shivlinga another is small linga. another room is like same structure only. Fourth room is used to do "yag" yagshala.



Figure 7: Temple of Hateshwaridevi

2.10. The Temple of DevtaBanar

The temple of devtaBanar at jubbal is profusely embellished with woodcarvings, depicting floral and geometrical patterns. However, the battle scenes are also carved, as usual noticed in the wooden temples of the valley. The scenes are depicted either on the door or carves of the frontal part of the temple. The planks are also carved with the rows of musicians beatings drums and warriors are marching forth towards for the battlefields. The floral and geometrical patterns enhance the beauty of the temple. Which have their significance in Hindu mythology. The floral motifs are employed to ornaments the various architectural features. Narrow strips in the architectural features of the building such as bands, columns and door-frames and adorned with the patterns of intertwined creeper and leaves. Lotus and rose flowers are the commonly used symbols in the ornamentation of architectural members of the buildings.



Figure 8: Banarddevta temple

3. Conclusion

In the villages, the elements of nature shape the spatial order and the man has to adapt himself to these forces, so he makes the shelters and the built environment in consonance with them and his cultural needs. The traditional architecture of Himachal Pradesh is the outcome of the prevailing topography, the extremes of the climate and other natural forces. Indigenous architectural solutions have responded well to these natural forces. Moreover the vernacular architecture merges well with the hills as the backdrop. The traditional architecture forms the backbone of social and cultural set up of the place. These architectural splendors serve as the living heritage and add to tourist attractions. Most of these structures are showing the sign of strain and abuse. The issues of restoration and preservation are of paramount importance and need to be addressed in relation to these buildings. It is essential for this architecture to retain its integrity. So the traditional architecture should not be disturbed, rather the contemporary architecture should be integrated well with the traditional architecture. The planning techniques, which have been scientifically proved successful, for the difficult terrain of the hills should be adopted keeping in mind the sustainability aspect. As a future strategy, the people should be made aware of the scientific use of the locally available materials to minimize the fragility of the region.

4. Acknowledgement

I would like to heartily thank to Prof. A. K. Kapoor, Department of Anthropology, University of Delhi. I would also like to show my gratitude to Prof. A. K. Sinha from Anthropology Department, Panjab University, Chandigarh for his valuable suggestions and Guidance from time to time. I would also like to thank all my respondent from Village of Himachal Pradesh for their support and cooperation for their precious time, blessings and support during my fieldwork, University Of Delhi for Conducting fieldwork and funding. And last but not the least I would love to express my love to my Father Mr. P.K. Singh and Mother Mrs. Meera Singh also to almighty god for showering his blessings.

5. References

1. G, Singh M. "Art and Architecture of Himachal Pradesh." B R publisher, 1985.
2. H, Chauhan. "Hatkoti a place of sanctity." marg magazine, 2002: 53(3):61.
3. H, Chauhan. "Woodcarving from pabbar Valley." Indian journal Of Traditional Knowledge, 2005: 4(4):380-385.
4. M., Singh G. wooden Temples of Himachal pradesh. New Delhi: Elegant Printer, 1999.