

Bhimakali Temple at Sarahan: An Architectural Marvel

KEYWORDS

Bhimakali Temple, earthquake resistant construction, kath-kuni

Ashwani Kumar

Assistant Professor, Department of Architecture and Planning, Malaviya National Institute of Technology Jaipur,

ABSTRACT The Traditional Architecture of Himachal Pradesh, which is developed and mostly present in the form of numerous temple constructed on different parts of the state, is the outcome of the prevailing topography, available natural resources, extremes of the climate and other natural forces. These temples are the best know example of working and successful experimentation with locally available buildings materials and indigenous construction techniques to produce architectural marvels and have the best response to the harsh cold climate of hilly regions and other natural forces.

The Bhimakali Temple at Sarahan is one such architectural marvel, which is developed by local craftsmen with locally available building materials and represents the finest example of architectural expression of hill which merges well with the mountainous backdrop. The construction materials and technology used in this temple makes it one of the finest example of traditional earthquake resistant buildings, which is also sustainable.

This paper intends to cover different architectural and planning aspects of Bhimakali Temple at Sarahan, to have a better and holistic understanding of this architectural marvel.

Introduction

Most of our rich heritage lies in the Hindu temples that had been developed over a span of two thousand years. The evolution of temple architecture was derived from the religious considerations and the designing evolution took place within the strict boundaries laid by the religion. The main designing module is based on the basic proportions and rigid forms. These building forms and proportions remain unchanged over the centuries though some alterations/ additions in terms of elements planning, components, materials, detailing are always seen in the temple style of different dynasties/ era. The architectural elements and decorative details that were initially originated in timber and thatch buildings remain intact in the whole stone era.

Western Himalayan region especially Himachal Pradesh is known as a land of gods having numerous temples which were built either on high mountain, lush green valley's bank of fast flowing rivers and in scenic hill towns. The four mountain ranges presented in Himachal (Dhauladhar, pir panjal, zanskar and shivalik range) are rises from 450m to 7, 000m enhouses varied temple styles, whose evolution depends upon availability of materials, local craftsmanship, traditional construction techniques, climatic conditions prevailing and period of construction.

The temple architecture started initially with a small chamber traditionally known as garbhagriha meant for the deity made of stone with plain facades and a single small entrance. With time as the religious rituals took elaborate forms, the requirement of the worshippers also increased and hence more halls and enclosures were added to meet the religious requirements. The present day temple styles present in the state of Himachal Pradesh can be grouped under the six categories depending upon the architecture character adopted by them [1]. The temple styles can be categorized as follows:

i) Pent roof or chalet roof style: The initial temples of Himachal were constructed in this style. Temple is either square or rectangular in plan having an entrance portico in the front. These temples were made up of stone and wood, having a pent roof made of stone tiles. These temples have intricately carved carvings in wood. Lakshna Devi temple at Brahmaur is the most important example of this type.

- **ii)** Nagara style: These temples are built during 8th to-11th century. The architecture style of Nagara temples is adopted from plains and it resembles with the "Shikhara" style temples of the South India. Structure of the temple is of trabeated style in which stone pillars and beams are the main structural members supporting the roof. Rich stone carvings are the main characteristic of these temples. The type of carving detail depends upon the time of construction of temple. Baijnath temple is the one of the most important example of this type.
- iii) Pagoda style: These temples are rectangular in plan, stone and wood are used in conjunction to form structures having successive roofs placed one over the other making them as multi-storeyed edifices. This style is much influenced from Chinese or Tibetan architecture. The interiors of these temples are richly decorated with wooden carvings. These woodcarvings were frequently replaced, when decayed, by replicating the old ones. Similarly the Pagoda roofs are also repaired, partly replacing the decayed portions. The temples at Nirmand, Nagar, Mandi etc come under this category.
- iv) Rock- cut Cave Temples: These temples are monolithic structures with profuse carvings both on external and internal face of walls. In Himachal Pradesh a very few examples of rock cut temples are present. Some of the rock- cut temples which are located in the remote areas of Himachal Pradesh has Shiv linga enshrined. The rock- cut temples at Masroor, is one of the finest example of its type.
- v) Buddhist monasteries: The layout of monasteries is simple and functional with their plans based on quadrangle pattern having built up area along the sides leaving

courtyard in the centre of the complex. The initial monasteries have no separate cells for monks but later individual cells were built for the monks. Open courts have been used for accommodating the devotees. The facades of interiors are decorated with paintings of bright and vibrant colours

vi) Tower style: this temple style is mostly adopted in the higher mountainous regions and also term as hill style temple. When the pent roof structure is raised to three or more storeys, so that projected beams from the walls form a cantilever structures over the veranda, it takes a look like a tower. These temples are built on a square high plinth. The different floors can be reached by a stepladder, which is connected by a notched tree trunk. These temples have sloping roof with gable windows. Best example of this style is the Temple of Bhimkali at Sarahan.

BHIMAKALI TEMPLE COMPLEX AT SARAHAN

Bhimakali temple is the best example of tower style Temple situated/ constructed with wood and stone in Himalayas. The temple complex at Sarahan is set against the incredibly beautiful backdrop of high ranges and forested slopes. Bheemakali Temple complex was constructed by the Bushahr dynasty, who ruled from Sarahan before independence. The new palaces of the royal family are situated adjacent to the temple. The temple is approximately 800 years old, is dedicated to this great female power that was called Bhimakali and is one of the representatives of 51 Shakti Peeths [2]. The temple has influence of Hindu and Chinese architectural style. It has slanted slate roofs, golden towers, pagoda/(s) and carved silver doors.

Site Planning

The sacred temple complex measures approximately one acre. Site chosen for the temple is sloping and has a total slope gradient of about 9 meters. Whole of the temple complex is constructed as a series of courtyard encircled/ enclosed by buildings. This complex is design as a combination of 4 courtyard constructed at different levels (fig 1 &2). The highest/ topmost courtyard has two temples, temples of goddess Durga and Kali which are famous or known for their unique architectural style. Second courtyard has Raghunath temple and other buildings. King's palace is situated in the third courtyard. Fourth and lowermost courtyard which is constructed subsequently have Nar Singh temple (which is constructed with stone having Shikhara on top with wooden sloping roof) canteen and guest house for the pilgrims. Supporting buildings and residential accommodation for support staff was provided on the periphery of the temple. These different levelled courtyards are accessed by highly decorated and richly carved gates having series of steps in front.



Fig 1: schematic site plan of Bhimakali temple complex, Sarahan.

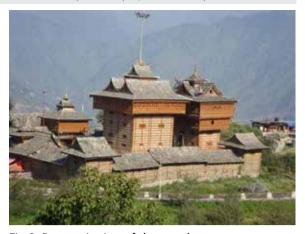


Fig 2: Panoramic view of the complex

Building Design

Main temples are designed as the amalgamation of Indian and Chinese architectural style, with Buddhist and Hindu influences and bronze statues of both religions in the shrines (fig 3,4). Buildings are rectangular in the plan having thick walls constructed in kath-kunni style. A narrow stone staircase is provided to access the upper floors. At the fourth floor level, floor is protruded out of the lower floor on wooden brackets/ cantilevers. At this level the outer walls are made up of cidar/ deodar wood which has nice and intricate carving. To reach the uppermost level (fifth floor) which houses the state of goddess Bhimakali a wooden staircase is provided. The uppermost/fifth floor is further project more over the floor below. Slanting roof constructed with timber and covered with locally available slates is provided [3].

The second temple has only one projected floor at upper level. This temple is devoted to goddess Durga. Lower floors of the temple have walls constructed with wood and stone whereas, upper floor has intricate woodwork on the exterior facade.

Raghunath temple built on a high platform in the second courtyard is a combination of linear building and vertical projected mass (fig 5). The chamber where idol is placed projected over a slanting slate roof of remaining building. This projection of cuboid over slanting roof presents a magnificent composition. This composition is further enhanced by pagoda roof on the top of cuboids.





Fig 3,4: view of main temple in the complex

The Nar Singh temple present in the complex is an example of Shikhara style temple. This style is modified by providing sloping roof around the temple for parikarma. King's palace in the complex is a linear building which has access from third courtyard (fig 6). Projected balconies on upper floors are provided to have panoramic view of the valley. These balconies are supported on wooden beams protruded out of the stone or kath-kunni walls. Highly carved arches are used in the balconies as an integrating element in order to exhibits an architectural masterpiece.

Building Form

Temple complex has a variety of building forms. The two main temples constructed in uppermost courtyard are the finest example of tower style temples and combination of Indo- Chinese architecture. The building form is rather simple but elegant. It is a combination of slanting pagoda roof over a cubical base. This cubical base has five storeys. Upper storey of the temple is projecting over the lower stories. The verticality of lower stories is broken by series of coursed of wood and stones. On the upper stories richly carved windows/ openings are provided in woodwork expresses the skill and accuracy of the craftsmen of the region wooden sculptures are used on brackets to support projected upper floors [4].



Fig 5: Raghunath Temple in the Bhimakali Complex



Fig 6: Palace of Bushahr dynasty king in the temple complex.

Method of Construction

The walls of the buildings presented in the complex are constructed in kath-kunni style (fig 7). It is an indigenous style of construction which is evolved in western Himalayas. In 'Kath-kuni' or 'Kath-kundi' style a mesh of interlocking horizontal cedar (locally deodar) sleepers/ logs is created. In this mesh dressed or raw stone are packed without any mortar. Absence of vertical members for wall construction is a characteristic of this style. With inherent elasticity, the design has an enormous seismic response. There have been instances, when tremors have dislodged the stones from the frame, and later, have been hammered back into the intact mesh of wood houses.



Fig 7: part of wall constructed in Kath-kunni Style

The upper floors of the temples which are projected over the lower floors have exterior walls made of carved wood. Sloping pagoda shaped roofs are covered with locally available slates. These slates are fixed on deodar wood trusses. Roofs in this complex have a distinct character and forms a very interesting skyline.

Access Gates

There are four main gate/gateways at different levels in the complex, which provides access to different courtyard or these are the circulation linkages in between different courtyards (fig 8,9). First gate is constructed to provide access to lowermost level which contains Nar Singh temple, administrative office and guest house. This gate has richly carved gold plating. The second gate is made of wood and is covered with intricately carved silver foils/covering. This gate provides access to third courtyard where king's palace is located. Third gate is constructed to provide access to Raghunath temple. The fourth gate which is a simple structure made of stone and covered with slates is the main door that leads to two main temples. This gate is known as Shri Dvar.





Fig 8,9: Entrance gates in the temple complex

Materials Used

Whole of the complex is constructed with the use of mainly indigenous/ locally available materials. Locally available sand stone and deodar/cidar wood are the two main building materials which are used in the complex for wall

construction. Natural slates are quarried from nearby slate mines and used as main roofing material over the wooden roof trusses.

Carvings/ Details

Whole of the temple complex have rich carvings in wood work and silver work (fig 10,11). Door frame is thick in size and have detailed carvings in wood or in silver. Shutters are thicker in size and majorly idols of different gods and goddesses are carved on them. Staircase balusters, balcony railing, brackets to support upper floors, wall panelling are made of wood and having very interesting floral and decorative patterns carving. Bronze kalsha is provided on the roof top of every temple. The most interesting decorative feature in the main temples is wooden wind chime which moves to and fro / oscillates while wind flows.



Fig 10: carved wooden arched doorway



Fig 11: carved wooden railing in balcony

Conclusion

Bhimakali temple at Sarahan is the magnificent example of hill architecture in India. It shows the expertise of craftsmen in terms of building design, material handling, construction techniques and aesthetics. This temple even today acts as an inspiration for architects/ designers to design new buildings (especially mid-rise) in hill towns. Many buildings designed and constructed in Shimla have borrowed their concepts, form & features from this magnificent temple.

1. Ar. Amanjeet Kaur, Ashwani Kumar, A Study of Shiv Temple at Baijnath, The Journal of The Indian Institute of Architects Vol 71 issue 08 August 2006 PP 58-60 | 2. Visitors Guide: Himachal Pradesh | 3. Chauhan R. 'Himachal Pradesh - a Perspective'. Menerva Book House, The Mall, Shimla, 1998. | 4. Mitra S. 'The Temples of Himachal'. A Good Earth Publication, 2007. | 5. Sharma S., Sharma P., Traditional and Vernacular buildings are Ecological Sensitive, Climate Responsive Designs- Study of Himachal Pradesh, International Journal of Chemical, Environmental & Biological Sciences (IJCEBS) Volume 1, Issue 4 (2013) ISSN 2320-4079; EISSN 2320-4087 |