

Conservation of Jestha Varna Mahavihara: Past and Present Condition

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Abstract

Jestha Varna Mahavihara, also known as Jya Baha Bahi is situated 300 meters away from the Patan Durbar Square world heritage site. It is a part of a group of 15 historical Bahis in Patan. The Baha Bahi was originally two stories of which the top floor completely collapsed during the 2015 Gorkha earthquake making it structurally unstable. Therefore, the reconstruction of the historic mahavihara is being carried out to restore the authenticity of the mahavihara by following the traditional form, patterns and layout of a typical bahi backed with scientific investigations and primary research.

The objectives of this study are to assess the conservation work and restoration measures being employed at the site. It compares the visual as well as functional aspects of the vihar in the past and the present. Key informant surveys and first-hand observation of the current condition of conservation work are used as primary data sources for this assessment. The study also aims at documenting the architectural design, layout and function of various spaces of Jya Baha Bahi before the reconstruction work began, since no such sources seems to exist at present.

The study reveals that due to ignorance and negligence, Jestha Varna Mahavihar had been standing in a dilapidated and unusable condition. The reconstruction work undertaken by the Government of India shall be beneficial in rejuvenating the historic essence that the vihar once flaunted. Nevertheless, reconstruction being the most extreme level of intervention, it definitely poses the risk of loss of authenticity in design details, material and construction methods to some level.

Keywords

Traditional architecture, Buddhist monastery, Baha bahi, Vihara, Newari woodwork, Courtyard style

1. Background

Nepal is the one and only country in the world where people worship thirty-three million deities in the form of gods and goddesses. There are numerous Hindu temples and Buddhist monasteries mostly in Kathmandu Valley [1]. The three royal capitals in the Kathmandu Valley- Bhadgaon, Kathmandu and Patan- and also small villages and towns like Kirtipur are pleat with examples of historic architecture which gives them a distinctive medieval air. A catalog of the historic architecture in this area, "Kathmandu Valley", compiled in 1976 based on research carried out by UNESCO records that there are 221 pagodas and 266 Buddhist monasteries to be found here [2]. There are many Buddhist monasteries in Patan to attest to the claim that the development of the city was profoundly rooted in Buddhism. Even counting only those built in traditional style with a courtyard at their center, there are more than one hundred monasteries in the city.

The objectives of this study are to assess the conservation work and restoration measures being employed at the site. Key informant surveys and detailed first-hand observation of the current condition of conservation work are used as primary data sources for this assessment. The study also analyses previous publications and brochures available on the past condition and ongoing conservation project. This study is grounded in qualitative methods to evaluate the current state of Jestha Varna Mahavihar. This method emphasizes reality and existence, so the philosophical paradigm is classified as post-positivism. A case study is a research approach that is used to generate an in-depth, multi-faceted understanding of an issue in its real-life context. The epistemological approach used is interpretative, which involves understanding meanings/contexts and processes

as perceived from different perspectives, trying to understand individual and shared social meanings. The findings of this study could be a resource for researchers, academicians and students of architecture, history and culture. The field study was carried out on October, 2022 – January 2023 by the author.

The current study has a few limitations that should be mentioned. Since the conservation work is still ongoing, the level of intervention could not be fully comprehended. The as-built drawings of the building were unavailable to the author, hence the analysis of the restoration majorly depends upon first-hand observation of the site and interviews with the local people. Further studies could look into the form and function of the mahavihara after completion of the reconstruction work.

1.1 Research Area

One hundred fifty meters south of the Patan Durbar Square is Iba Bahi. With the same distance on the east from Iba Bahi is Jya Baha Bahi. 'Jya: Baha Bahi' (Newari), also known as Jestha Varna Mahavihar, is one of the prominent historic monasteries situated in Lalitpur. It is located in ward no. 12 of Lalitpur Sub-metropolitan city. On the topographical map obtained from Napi Office, the plot numbers mentioned for the Bahi are 8902, 530, 8903, 529 (fig. 1). Jya: Baha Bahi is located on the south side of the road and faces north. It is set slightly back from the road. There is a small square or plaza in front of the building. The foundation of the North façade built on a double plinth or dais some 1.5 meters higher than the road.

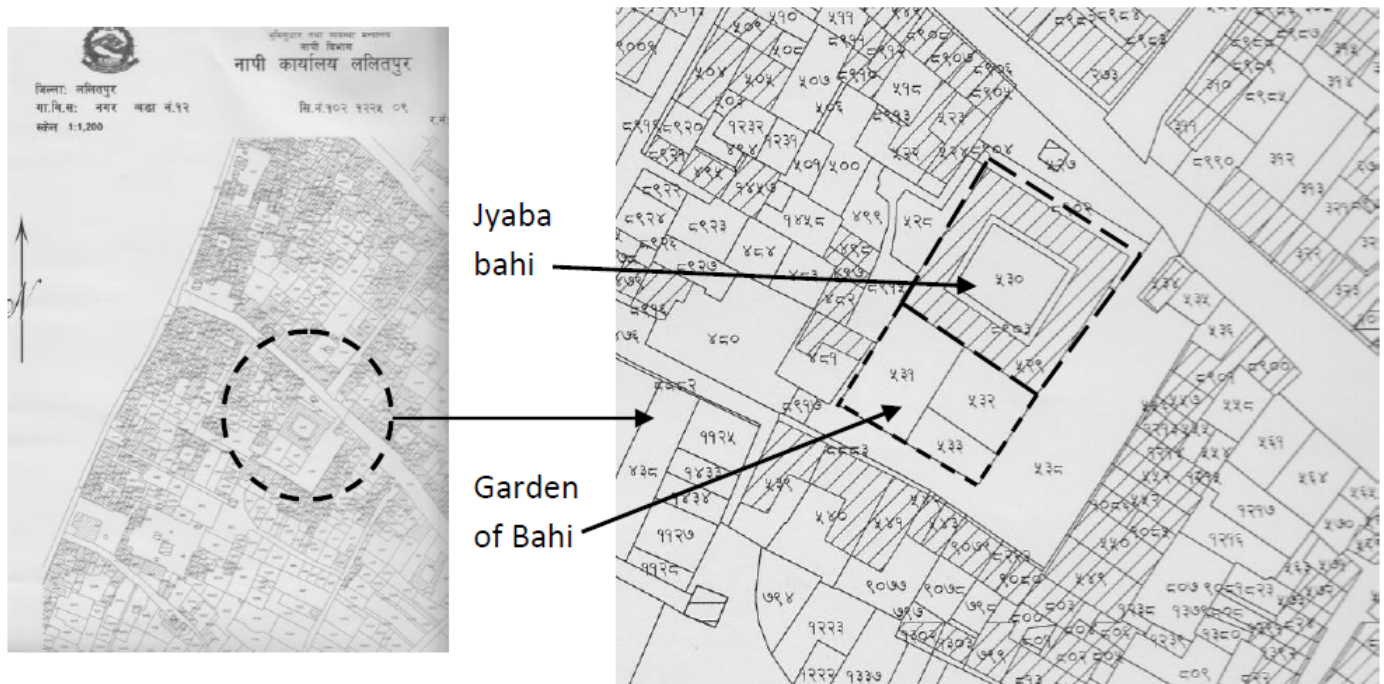


Figure 1: Topographical map of Jya: Baha Bahi

1.2 History of Jestha Varna Mahavihara

There is no recorded data on when that Bihar was established and little physical evidences remain of the original monastery. No confirmed dates for extant bahis earlier than A.D. 1200 (i.e. the beginning of the Malla period) is found. The oldest inscription at the site commemorating the renovation of the Bahi is dated N.S. 772 i.e., mid- 17th century. However, the foundation of the building is much older [3].

Several donations were made at this time including an image of the Buddha (sri sri sri gandhuri bhattaraka). The principal donor was one Brahmacharya Bhiksu Sri Mangaladevaju of Sri Jyestha has no stories or legends telling of foundation. In N.S. 800 a chaitya was set up at the bahi which is called in the inscription Jyaya Vahara Bahiri. [Lock, 1985,p-191] [4].

No records or pictures illustrating the original state and appearance of Jyababahi are documented. "Jyaba Bahi is also known as Jestha Varna Mahavihar which in Newari Language means the elder of all Vihar. Historic events and the voices of local citizens stress that this monastery was constructed at the same year as that of Iba-bahi, a well conserved Buddhist Monastery 200 m on the West of Jyaba-bahi. The social and cultural function carried out in Jyababahi resembles that of Iba-bahi too." Heera Kaji Bajracharya writes in his book "Yalaya BoudhVihar." So, I Baha Bahi can be taken as reference for the original appearance of Jyababahi [4].

While taking the reference of I Baha Bahi, according to the copper plate inscription nailed on the front wall of the shrine, the donors who established the shrine were the five Pradhan Mahapatras. The completion date of the construction is noted as 1424 AD. As per the available written documents or inscriptions, I Baha Bahi is considered to be the second oldest bahi of Patan; Uba bahi, constructed in 1391 AD., being the first one (Manandhar). Thus, the confirmation of the oldest bahi of Patan requires further research.



Figure 2: An undated archival photograph of Jestha Varna Mahavihara Complex (INTACH Nepal, 2022)

2. Architectural Design and Planning of the Mahavihar

Jya: Baha Bahi is located on the south side of the road and faces north. It is set slightly back from the road. There is a small square or plaza in front of the building. The foundation of the North façade built on a double plinth, some 1.5 meters higher than the road (see fig 2).

Jya Baha Bahi used to be a two-story structure enclosing a courtyard. The buildings around the courtyard form an exact square and have an external dimension of 22.1m by 22.1m. The west wing collapsed in the 2015 Gorkha earthquake and no traces of it now remain. It was replaced by one story structure after the earthquake.

Although Jya Baha Bahi has a very closed-in feel to it from

outside, it also has a balcony on the first floor, just above the main entrance. Climbing the stone steps and passing through the entrance, one comes to an open space. On the right-hand side of that space or at west is a shrine of Mahankal. The courtyard is situated about 40cm lower than the floor of the building around it and extends 11.3m from north to south and 11.4m from east to west.

The chaitya in the courtyard is aligned along an individual axis crossing the yard in a north south direction. Two chaitya and a Dharmadhatu mandala are on the courtyard. There is also a pair of impressions of Manjushree feet near by the Sumeru Chaitya on the west north corner of this white chaitya. The shrine is located in the center of the south wing. And has a separate core to this section of the building. However, the walkway that originally encircled the shrine was blocked by a wall which has been built across it. In the eastern part of the south wing, the entire east wing, a double row of pillars edged the courtyard. The shrine of Kwapa dyo: is unornamented and has no Torana. The Kwapa dyo: is an image of Aksobhya facing north.

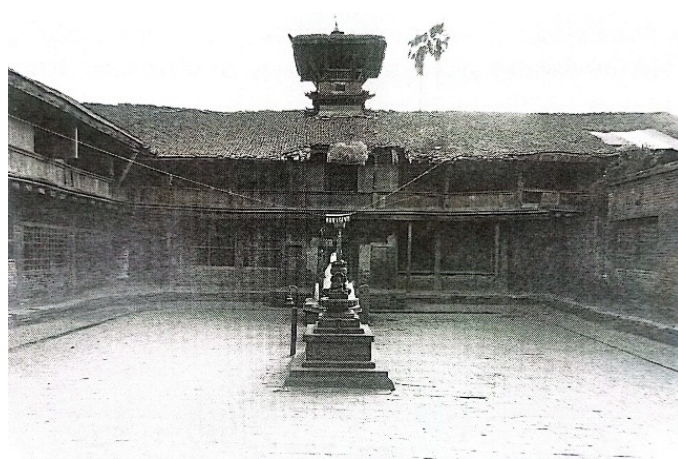


Figure 3: Courtyard and South Wing [2]

The first floor is reached by a single staircase that is located on the south east corner of the building. On the first floor, wooden joists extend beyond the floor itself to form a balcony overlooking the courtyard. The eaves are supported by pillars and wainscots that have been inserted into the spaces between them as handrails. Back from the pillars that form an edge to the balcony is another row of pillars found on the ground floor. With the exception of the shrine, the small partitioned rooms (monk living quarters)

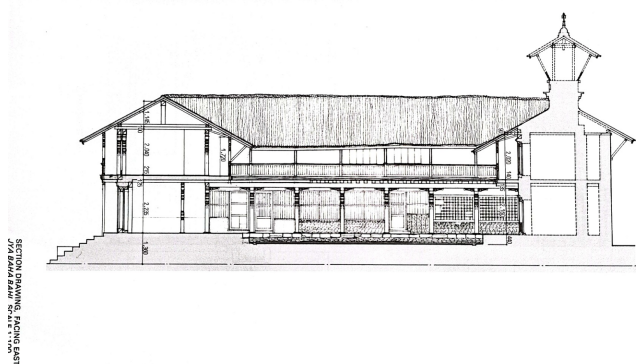
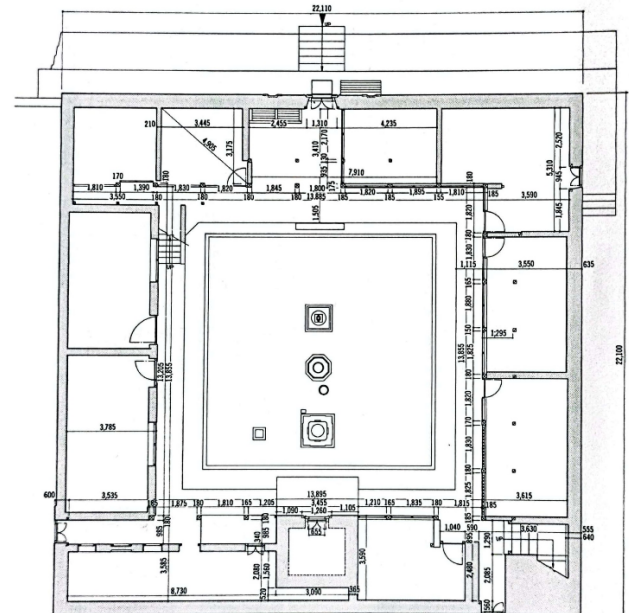
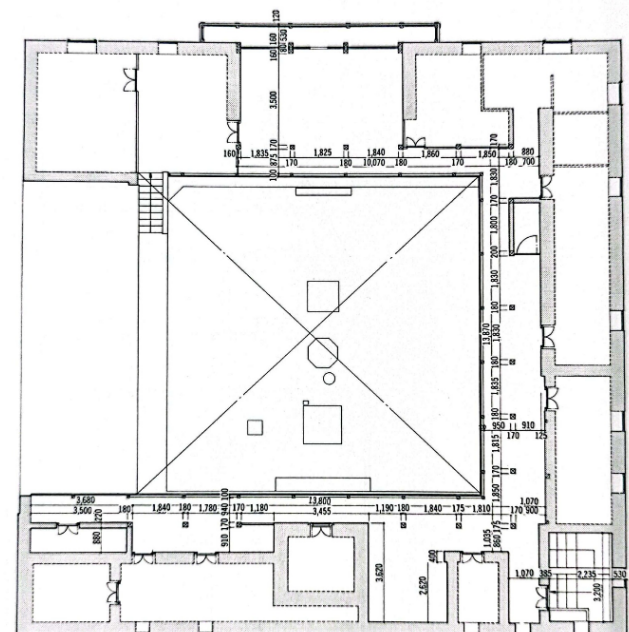


Figure 4: Sectional Drawing: Facing East [2]

in both the east and south wing are aligned with the corridor. A turret with an appearance like that of turret tops the roof of entrance to the walkway around the shrine. The walkway is closed with a wall in the same way as on the ground floor. In contrast, the central part of north wing is very open with wooden lattice between the pillars and above-mentioned balcony jutting outwards over them (fig. 4 5).



GROUND FLOOR



FIRST FLOOR

Figure 5: Floor Plans [2]

2.1 Use of Spaces in Jya: Baha Bahi before the Reconstruction

Before the reconstruction work began, Jya Baha Bahi was in deteriorating condition. However, the rituals which have to be performed by the priest has continued. On the days like full

moon day or 1st day of a month (Sankranti) some monks come for prayer along with the participation of the local community. An annual festival is celebrated in the Mahavihar by the local community members in the month of Falgun [usually February-March] [3]. The courtyard is used for gathering and preaching. For this purpose, on the ground floor, they have adopted two rooms. One on the south wing, on the left of main shrine room is used as kitchen. And on the east wing, the room near the entrance to access upstairs is used for chanting Buddhist prayers.

3. Analysis, Discussion and Findings

3.1 Condition of the Mahavihara before the Reconstruction

According to an account shared by Mrs. Shova Maharjan, there were several issues regarding the structural and aesthetic integrity of Jestha Varna Mahavihara before the reconstruction work began in 2022. Those issues were made worse by the 2015 Gorkha earthquake, due to which a large number of heritage structures were lost or badly damaged, especially in the Kathmandu valley. The loadbearing walls had cracks, columns were tilted, mortars could be seen crumbling and the bricks were deteriorating. The major problem however, was the roof of the Mahavihar. In most parts the roof, tiles (appa) had fallen off, causing rain water to seep inside the walls and deteriorate the structural timber of the building.

3.1.1 Outer Façades

On the front façade, on the left-hand side of main entrance, the bulging out and caving in if cracked walls could be seen throughout the elevation (fig. 6). Also on the west façade, the bulging out of walls along with cracks as wide as 3cms could be seen (fig. 7). On the edge of the roofs on all four facades, the tiles had fallen off and the rafters was well as eaves board had been slowly crumbling due to penetration of rain water.

3.1.2 Inner Facades Viewed from the Courtyard

At the interior facades of the baha bahi, the wooden columns of 11cm x 11cm were observed to be tilted. It could've been the



Figure 6: Dampness and Bulging out of Certain portions of the Outer Walls



Figure 7: West Façade, Showing Cracks and Caving in of Walls

result of movement of the structure during the earthquake. At the Northern façade, most of the columns had cracks in them (fig. 9). The roof had been an extremely dilapidated condition. The tiles had fallen off from large portions of the roof.

Due to penetration of rain, the wooden components of roof had started to decay, which had resulted in the roof being unstable and the spaces beneath had been rendered unusable. Plastic sheets had been placed over the roof in an effort to keep rainwater out (fig. 9). Recently this portion of roof had been repaired with financial support from the Department of Archeology (DoA).



Figure 8: Tilted column and cracks on column



Figure 9: Roof crumbling down on East Facade



Figure 10: South Wing Verandah in bad condition

The interior southern façade, the south west corner of verandah seemed as if it could fall down at any time (fig. 10). The wooden beam running from east to west had detached from the joints and had cracks in it. Over the roof, large amounts of vegetation had grown due to lack of maintenance (fig.11). At the North wing, over the verandah, the wooden planks which functioned as parapet had fallen out. Deterioration of dalins caused by termite attacks could be observed.

3.1.3 Inside the Building

While going up the staircase, mud plaster could be seen falling off the walls (fig.12). The fallen roof tiles had been stored on the lobby of east wing.



Figure 12: Mud plaster of staircase had crumbled down



Figure 11: Vegetation growing on South wing roof

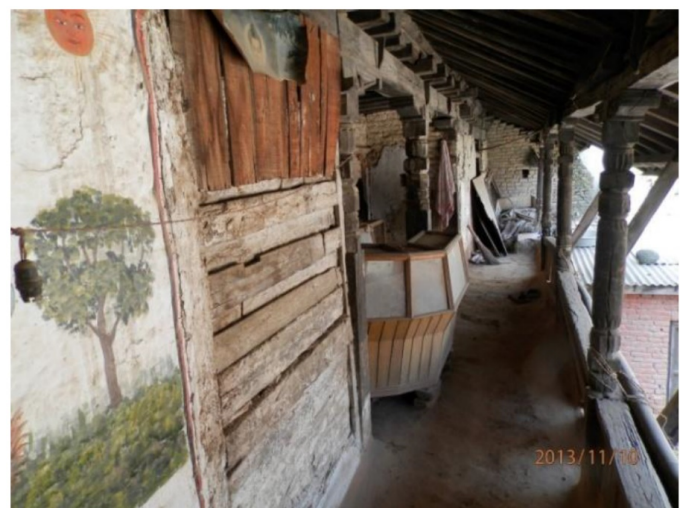


Figure 13: South wing lobby



Figure 14: North wing lobby – used as store room



Figure 15: Hole on roof on the east wing. Presently this portion had conserved with the help of Department of Archeology

3.2 Study of Reconstruction Work

Under Nepal's post-earthquake reconstruction efforts, 28 cultural heritage sites in Nepal have been identified by Government of Nepal to receive Government of India's reconstruction grant assistance for post-earthquake conservation/restoration and rehabilitation. The project is being coordinated by the Embassy of India in Kathmandu. INTACH has been engaged by the Embassy of India to provide complete end to end conservation expertise for 12 cultural heritage sites located in Kathmandu valley, including preparation of DPRS, documentation of the building, their post- earthquake condition assessment and develop appropriate conservation strategies for the same.

The reconstruction of the historic mahavihara is being carried

out to restore the authenticity of the mahavihara by following the traditional form, patterns and layout of a typical bahi backed with scientific investigations and primary research. All interventions are intended towards the seismic safety of the buildings. INTACH claims that the documentation and conservation of the decorative art surfaces and features such as historical timber works, stone sculptures and restoration of the wall painting at the shrine entrance in-order to restore the surviving material heritage at the site is being carried out along with upgradation of building services including illumination, sanitation, rain water harvesting in view of its location and usage. The estimated project cost is NPR 13.78 Crore; USD-1.18 Million.



Figure 16: Proposed Exterior Elevation



Figure 17: Proposed Northeast Facade

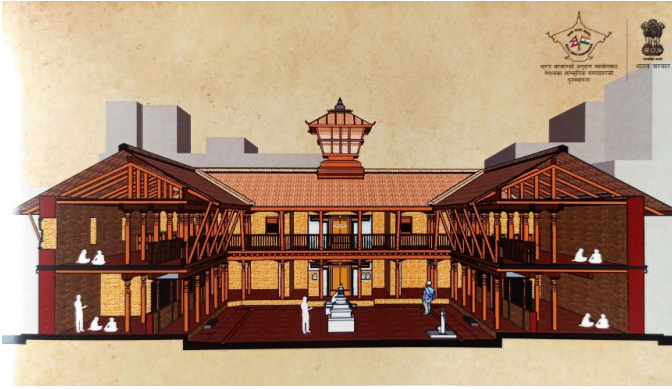


Figure 18: Proposed Sectional View

INTACH has claimed that the Jestha Varna Mahavihar, a significant living heritage site, will be conserved as per Nepal's Ancient Monument Preservation Act, 2013 (1956) and Department of Archaeology's Basic Guidelines and Manual for conservation and reconstruction of heritage affected by 2015 earthquake (2072) using material close to the original building material at the time of its construction as per the traditional ethos, local traditions and values that sustains and enriches such living heritage sites in Nepal (fig. 16-18). Due to the extensive damage caused to the historic shrine and sattal because of the 2015 earthquake, and the high cost of retrofitting or repairing the existing building, the conservation strategy of reconstruction has been selected.



Figure 19: 19 Reconstruction work taking place on December, 2022 (View of the Southern Façade)

3.3 Key Informant Survey

Two key informants were interviewed for the research, Mr. Shiva Bahadur Shrestha and Mr. Dilmohan Tamrakar. They are local persons whose families have resided in the area for generations. According to Mr. Shrestha, Jya Baha Bahi is older than I Baha Bahi, which was constructed in N.S. 547, B.S. 1484, during the reign of Shree Jaya Jyoti Malla [1]. Hence, the name 'Jestha Varna' was given to the Baha Bahi. In an event where a member of the priest family of I Baha Bahi is deceased, the corpse is brought to Jya Baha Bahi. Which is the symbolic 'elder brother' among the two.

From B.S. 2026 to B.S. 2038, the Baha Bahi had been used as a school. After that, it had been used as a space where the community occasionally organized pujas, rituals and ceremonies. The Maharjans of the community hold guthi for three days

annually on the occasion of Indraajatra. Mataya, the annual deepyatra will continue to be organized from Jya Baha Bahi every ten years, as per tradition, once the reconstruction is completed.



Figure 20: Interview with Mr. Shiva Bahadur Shrestha (Local Resident)



Figure 21: Interview with Mr. Dilmohan Tamrakar (Local Resident)

Mr. Shrestha mentions that the two lions usually observed guarding the entrance of Baha Bahis are not found in Jya Baha Bahi. However, the reconstruction being undertaken by INTACH plans on installing two lion statues as per the new design. The original stone inscriptions on either side of the main entrance, the pinnacle and the Mahankal statue have been kept intact. The design and appearance of the Baha Bahi has been kept as authentic and true to its originality as possible. The white chaitya, Sumeru Chaitya and Dharmadhatu mandala in the courtyard as well as the Mahankal shrine at the entrance have been shielded with CGI sheets to protect them from damage during the reconstruction work.

The mortar being used for the reconstruction work is the traditionally-used mixture of lime and surkhi sourced from India, which is believed to be better than the conventional cement mortar. In the original structure of the Baha Bahi, the used of Saal timber for all woodwork could be observed. Now however, Agrakh is being used for timber components. According to Mr. Tamrakar, the single piece wooden joists (dalin) spanning the entirety of the rooms were used in the initial construction. Since large pieces of natural wood are difficult to source nowadays, two or more shorter joists are joined together to form a larger joist in the reconstruction. A vertical column (Tham) is placed beneath the joints of the joists to secure them. Due to the area of the space below is obstructed by the columns,

whereas in the past, the larger joists allowed for larger uninterrupted interior spaces. All timber and pre-made woodwork used in the reconstruction has been sourced from Bhaktapur. The foundation is built of brick. Mr. Tamrakar believes that the contractor involved in the reconstruction work, INTACH is knowledgeable, resourceful and considerate about the history and cultural significance of the monument. Skilled woodworkers have been hired from Kirtipur, while all other labourers involved are from Terai region.

The room initially used as accommodation space for the Bajracharya priest has now been converged with the rest to create a large open floor plan. The exact function of each space/room in the Bahabahi has not been determined as of yet. The stairs were originally located in the southeast and west. A new staircase will be added in the in the Northwest corner. As per the new layout, the ground floor has been planned to serve as the local museum and tourist attraction which will be an income source to fund the cleaning, maintenance and management of the Mahavihar. Mr. Tamrakar also mentions that the Tikijhya western wall of the first floor has been removed. The various iconography on the exterior and interior façades have been either replicated with attention to each detail. In some cases, such as the wooden idols on either side of the tikijhya shown in fig. 24, the original idols have been salvaged and preserved to be install back in the same exact location. Similarly, original as well as newly replicated the wooden columns (tham), as seen in fig. 23 are used in the reconstruction.



Figure 23: Mahankal shrine at the entrance



Figure 22: White chaitya, sumeru chaitya and dharmadhatu mandala in the courtyard



Figure 24: Use of old and new woodwork; shorter joists joined together to create longer joists

It is said that the original area of Jestha Varna Mahavihar's compound was supposed to be larger. The Maharjans who were employed during the original construction were allowed to set up accommodation in the complex area for the duration of the construction. However, they ended up settling there permanently even after the job was over. This resulted in a significant decrease in the size of open area allocated for the Baha Bahi. The current reconstruction work plans on beautifying the remaining land area behind the Baha Bahi which will serve as a public open space for the community.



Figure 25: Use of authentic and replicated woodwork

4. Conclusion

The study of a large number of viharas such as Rudravarna Mahavihara, Hiranyavarna Mahavihara and others viharas in the principal cities of the Kathmandu Valley and references to innumerable viharas in the Lichchhavi and the Malla inscriptions bring to light the unique features of the Nepalese viharas. These viharas have their own peculiar characters which are intensely religious and supremely symbolic. Their quiet location provided the residing monks and scholars opportunity and inspiration to create bulks of Buddhist literature which not only educated the natives but also attracted foreign visitors. Translation of original Sanskrit and Newari into Tibetan took place in various viharas of Nepal. On the other hand, viharas also assumed the role of cultural and ritual centres where growth rites and many communal-clans and family rituals were performed under the leadership of the resident monks. It should be mentioned here that the vihara became embodiment of Buddhist religion and culture in Nepal. The “vihara culture” therefore, should be understood in the context of Buddhist culture sustained by the vihara, the centre of learning and ritual performances.

Jya Baha Bahi or Jestha Varna Mahavihar is a typical example of vihara architecture and culture of Patan. However, due to ignorance and negligence, it had been standing in dilapidated and unusable condition. The reconstruction work undertaken by the Government of India shall be beneficial in rejuvenating the historic essence that the vihara once flaunted. Nevertheless, reconstruction being the most extreme level of intervention, it definitely poses the risk of loss of authenticity in design details, material and construction methods to some level.

To prevent the vihara from once again being neglected and ignored, the strategy of adaptive reuse in the form of historic museum seems to be well fitted and adequate. This will provide the community an opportunity to showcase its unique culture while simultaneously creating a way to fund the maintenance of the building. In this way, the safeguarding of the building,

material and technology of our history shall be ensured.

In closing, only very few Bahas and Bahis still provide shelters for celibate nuns and monks in the valley. The majority of Bahas still existing today have been either extensively modified to serve residential purposes or have become unrecognizable. Either new or renovated Bahas and Bahi are built different from old ones with modern materials, technology as well as form in the valley. The Baha and Bahi architecture have indigenous style and technology with respect to geography, culture and climatology. It has great aesthetic value and is famous for exotic architecture in the world. Thus, it should be conserved in a proper way using traditional building form, materials and technology with respect to our geography, culture and tradition [5].

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