



Figure 1: Entry side of Gönpa Gang as first documented by C. Luczanits in May 2012.

Architectural Restoration and Seismic Strengthening of Gönpa Gang

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The Monument

The Temple of Gönpa Gang, located opposite the village of Chuksang, is arguably the most important Buddhist monument preserved in lower Mustang. Completed in the 1680s as a nunnery, it is remarkable for its architectural features and state of preservation.

- Gönpa Gang not only preserves almost the full iconographic program as it was conceived by its founder, but also much of the original architectural features including their painting.
- The architecture of Gönpa Gang is unique within Mustang. In particular the construction of the Assembly Hall with its complex layering to allow for better lighting, is remarkable (Figure 3).
- The temple consists of a large Entry Hall, a large Assembly Hall and an apse built around a large image of the Buddha of the future Maitreya.
- Measuring roughly 26 meters by 23.5 meters, the temple is unusually large for the region.
- The painted program of the temple provides unique insights into the religious atmosphere of Lower Mustang in the second half of the 17th century. At that time proponents of the Nyingma School of Tibetan Buddhism played a major role in high Himalayan society, and it is clear from the iconography of the temple and the autobiography of its founder that the local teachers had wide connections, including major Nyingma centers in Central Tibet.
- The iconographic program of the temple contains a number of unique features not identified elsewhere so far. These include unique aspiration deities (*yi dam*) on the ground and first floors as well as an extremely high number of teacher representations on the upper levels. Presumably, these depictions reflect the most current Nyingma teachings at the time, some of which may well have fallen out of use.
- Unlike earlier monuments, this temple directly relates to the people of Lower Mustang, as the ancestry of the most prominent local families can, at least partially, be traced back to that time.
- Some of these connections are documented in the autobiography of the founder of this monument, Künzang Longyang (kun bzang klong yangs; 1644–1696), a locally sourced text which provides unique insights into the founding of the temple and the religious atmosphere of the time, as well as local documents that have already been studied in some detail.
- Overall, the temple is of unequalled architectural, artistic and historical importance for the region, if not Nepal as a whole.



Figure 2: The unique construction around the head of the future Buddha Maitreya, the main image of the temple. The small Buddha images preserved on some of the ledges on the right side are original to the foundation.



Figure 3: The construction of the Assembly Hall is unique for the region in that it allows for plenty of light to reach the sitting area in the Assembly Hall.



Figure 4: The original pillars, capitals and beams have been painted with dragons, auspicious symbols and mantras in lantsa characters. They are evidence of the undisturbed condition of the monument.



Figure 5: The murals of the temple have suffered considerably over time. This depiction of the wealth deity Vaiśravaṇa in the Assembly Hall demonstrates the original quality of the paintings, but also their damages.

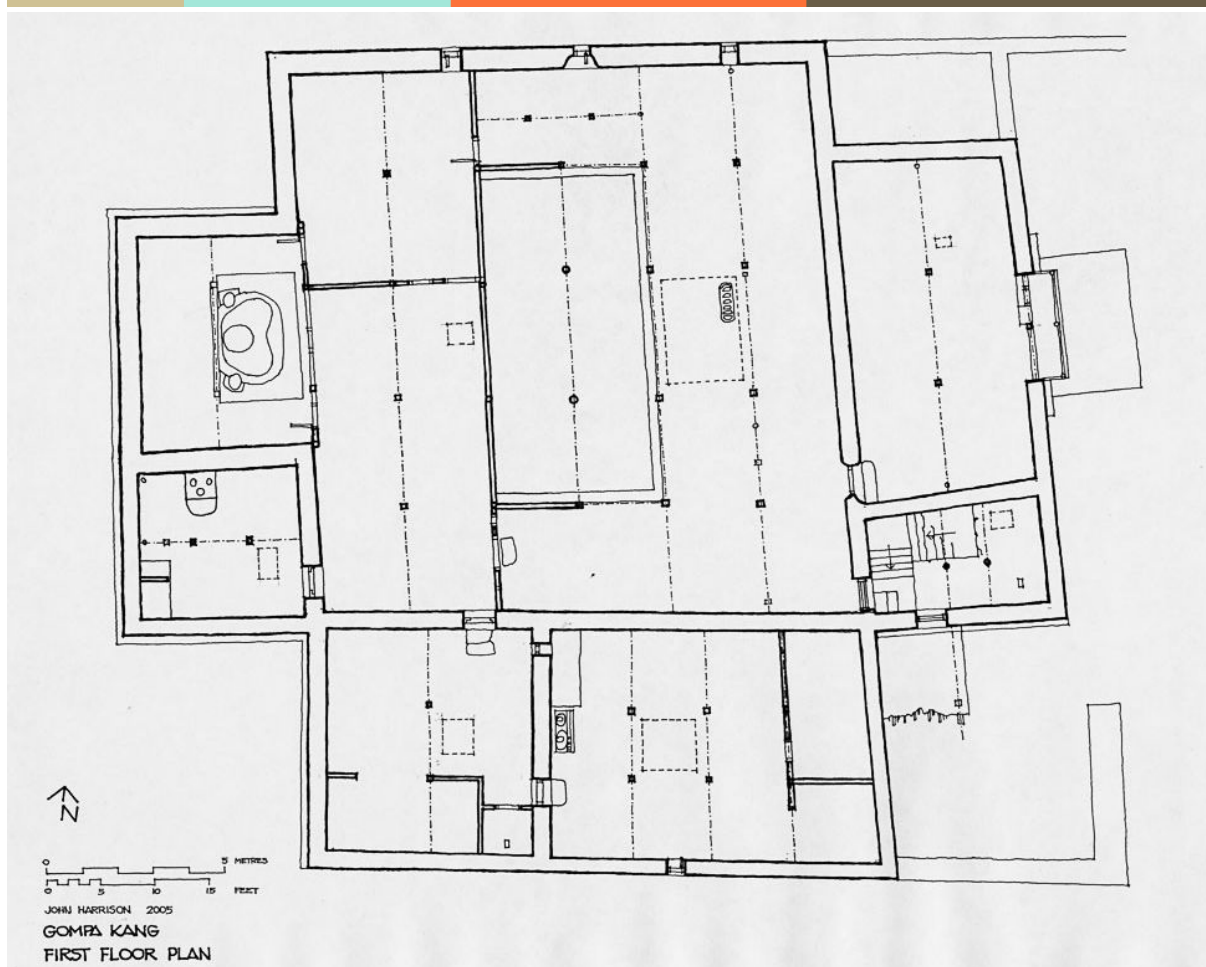


Figure 6: Ground plan by John Harrison, 2005.

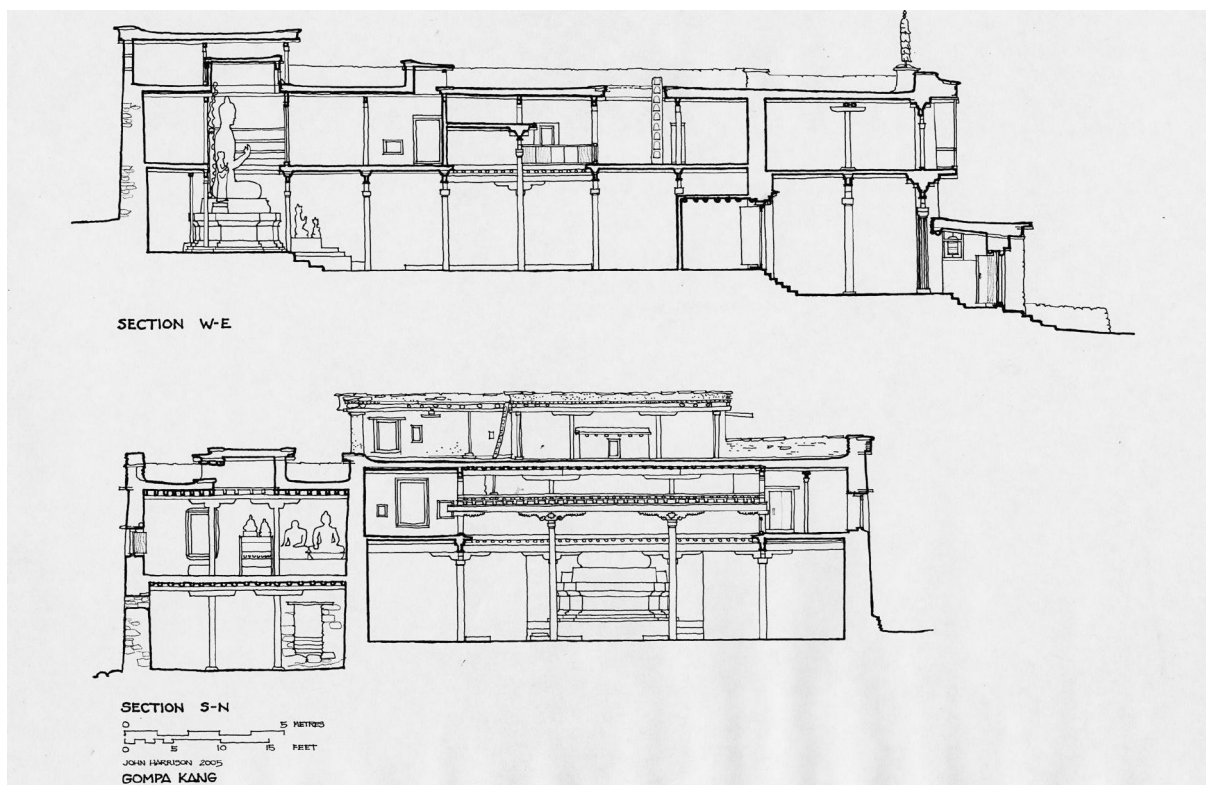


Figure 7: Sections of the temple by John Harrison, 2005.

Location

The temple of Gönpa Gang is owned by the community of Chuksang (Chusang, Tshuk) Village in Lower Mustang, Nepal. Its exact location is 28°54'37.13" N and 83°48'44.22" E., but it is on the west bank of the Kali Gandaki river while the village is on the east bank. Thus, when the river was high, from May to October, the temple was cut off from the village. This fact accounts for both the unique state of preservation of the monument as well as its poor architectural condition. The lack of direct access over the warm months made it extremely challenging to undertake larger maintenance work at the temple.



Figure 8: View of Chuksang village on the right side of the river. Gönpa Gang is on the projection on the left side of the image and the Kali Gandaki River.

In Summer 2019 a footbridge was built across the river to make the temple accessible year-round. In 2020, the local government financed the building of a road from the bridge to the temple, which can be used for transport if the river can be crossed. This satellite image 2019 documents the location and the new bridge:



Figure 9: Location of Gönpa Gang on the bank opposite Chuksang Village with the new bridge between them (Google Earth, 2019).

Community

The Chuksang community has continuously been religiously engaged with the monument, in particular at certain festival dates, but usage was restricted to the winter months. Following a tragic theft of key sacred objects in the 1990's, which were deposited inside the main sculpture of the monument to support such a restoration as proposed here, the community employed a permanent caretaker of the temple who lived there and made the daily offerings when it was cut off from the village.

Since the construction of the footbridge in 2019, the village has been adapting the monument and its surroundings to its religious needs. Besides attempting to improve the roof, the community has mainly been focusing on work that enhances the religious usage of the monument, such as introducing a wall with prayer wheels around the temple.

These works were done without an engagement of a specialist in architectural restoration and, thus, did not address the most severe architectural issues, such as the weaknesses in the wooden framework of the building, the causes of moisture in the walls that affects the temple's murals, and the poor drainage of the roof. A restoration addressing these issues goes beyond the technical knowledge of the community and exceeds their resources.

As will be seen below, these works also constituted an obstacle to the restoration, during which half of the prayer wheel walls needed to be removed.

The Project

The restoration project aimed to address all the architectural issues mentioned in the previous paragraph, to ensure the seismic stability of the building, and to prepare the monument for more extensive future use both by the community and visitors to the region. Further, restoring the architecture is a prerequisite for a follow up project dedicated to the cleaning and restoration of the precious murals contained in the monument.

Members of our project team have a generations-long connection to Mustang and the temple of Gönpa Gang. Kunjon Thakuri and Binod Gurung are descendants of families that originally supported the construction of the building in the 17th century. They and their relatives are engaged in the religious activities at the temple today.

The local team is supported by international experts with decades of experience in different subject areas pertaining to Mustang. Most relevant for this project, John Harrison is an award winning conservation architect with unique experience with Himalayan buildings of this type and author of a recent book on the architecture of Mustang.¹ Christian Luczanits is an expert in Tibetan Buddhist art. Together with Charles P. Ramble, one of the primary translators of original historic documents from the temple, John Harrison, Christian Luczanits and Nyima Drandul, have compiled and edited a book, *A Blessing for the Land*, dedicated to this monument, which establishes its importance for the region of Mustang and the Himalayas at large.²

Most importantly, however, this project was conceptualized after a meeting held by members of the Norbusum Foundation with community members in the nearby village of Chuksang to better understand the community engagement with the structure, and their hopes for the future. Without exception, the community expressed a united hope that the structure could be preserved and reinstated as an ‘active’ temple.

Lastly, with increasingly heavy rainfall noted in Mustang in recent years, we can expect that damage to the structure will only increase in coming years if it is not restored in its entirety. Anecdotal evidence from the local communities is supported by meteorological data that shows that the effects of climate change will lead to increasingly heavy rain

¹ Harrison, John. *Mustang Building. Tibetan Temples and Vernacular Architecture in Nepal Himalaya*. Kathmandu: Saraf Foundation for Himalayan Tradition and Culture, 2019.

² Harrison, John, Christian Luczanits, Charles Ramble, and Nyima Drandul, eds. *A Blessing for the Land. The Architecture, Art and History of a Buddhist Nunnery in Mustang*, Nepal Kathmandu: Vajra Publications, 2018.

events.³ The traditional rammed earth construction was not designed to tolerate rain events of the size that we are now seeing and can expect in the future. This not only added to the urgency of the project but also required to rethink the construction of the roof in its entirety. Accordingly a more durable and less maintenance dependent solution needed to be implemented.

Overview

The project was designed to:

- respond to community requests to restore the historically extremely valuable monument,
- address the severe architectural problems of the monument,
- strengthen its timber structure to continue to withhold seismic events,
- consolidate all original features in the interior of the monument,
- strengthen the buildings rain resistance in the light of an increase of heavy rainfall events and a decrease of maintenance,
- engage the community in planning the future usage and long-term maintenance of the monument,
- prepare the monument for more intensive future usage, and
- plan future painting conservation measures.

The works reported below are arranged by the time the restoration of a particular part of the building was first started. For each of these parts then the entire restoration process over the two years of the project is accounted for.

This Report

This report documents the work undertaken throughout the two project years roughly in the chronology the works were originally begun. To make the progress apparent, works at particular sections of the monument that spread over several quarters are presented from the beginning to the end. Works on the foundation and drainage continued throughout the two project years, and almost all parts of the monument needed final interventions in the last months of the project to reach their final appearance. Preparation of materials and works on the exterior were ongoing throughout the project and are reflected only partially in this final report. At the end of the report a group of before and after pictures are presented.

³ See, for example, Talchabhadel, Rocky. "Observations and climate models confirm precipitation pattern is changing over Nepal." *Jalawaayu* 1, (2021): 25-46.
<http://dx.doi.org/10.3126/jalawaayu.v1i1.36448>

The Planning Stage

Work on the project began immediately after we heard that it was approved in Summer 2022, that is before its actual commencement of the project with September 2022. August 13 and 14 Kunjon Thakuri and Sonam Dorjee visited the site to assess if recent rain fall has done any additional damage to the building and to talk with Binod Gurung and other villagers about the project. Later that month, on August 31, Kunjon met Thomas Schrom to plan his Gönpa Gang visit to finalise the planning of the architectural conservation, create a two-year work plan, and undertake emergency work as needed.

Thomas Schrom's visit was coordinated with the return of Kunjon Thakuri, Sienna Craig, and Christian Luczanits from Upper Mustang and thus planned for the last days of September. Unfortunately, Thomas caught Covid just before his planned departure and the visit had to be postponed. His visit subsequently took place in late October. Then he took measurements, assessed the condition of the site, and advised on the planning and implementation of the immediate interventions. Then, he has prepared a restoration plan for the site, which has been submitted separately at that time (pdf file "2022-12-24 Gonpa Gang Restoration").

Documentation

September 28 and 29 Kunjon Thakuri, Sienna Craig, Sonam Dorjee and Christian Luczanits returned from Upper Mustang and visited the site. While all the murals had been documented earlier (Figure 10), the sculptures had only been photographed as they were on display. This time the sculptures were documented in higher quality—smaller movable ones in a photo cube—from all sides and measured to have a detailed record of them (Figure 12).



Figure 10: Painting of Katok Rikdzin Tsewang Norbu (*kaḥ thog rig 'dzin tshe dbang nor bu*; 1698–1755) in the painted room of the southern wing.

Figure 11: Clay sculpture of Katok Rikdzin Tsewang Norbu (*kaḥ thog rig 'dzin tshe dbang nor bu*; 1698–1755) in front of the altar. This sculpture was too big to move into the photo cube.

Further, Sonam Dorjee learned to use a tool for assessing the quality of the wooden members of the architecture, which we could borrow for the winter months. He checked all pillars for potential faults that are not visible from the outside. A new problem noticed then was the presence of termites in some of the wooden benches inside the Assembly Hall. Obviously, their presence considered in the planning work, also in terms of the wood used.

Associated Site

Led by Binod Gurung and another villager, Kunjon Thakuri and Christian Luczanits further visited a ruined cave site in the side valley behind the monastery, to assess its condition and potential for tourism. The cave is open on one side and filled with debris that covers much of the stupa inside. Further, the murals on the ceiling are extremely fragmentary. Nevertheless, the cave still has great potential for research, especially if the debris is excavated archeologically and the base of the stupa revealed. Remarkably, the upper parts of the stupa were made in papier mâché the fragments of which are still extant due to its durability. Further, the mural fragments allow for dating the cave to the fourteenth century (Figure 12).



Figure 12: Fourteenth century mural fragments in the stūpa cave above Gönpa Gang.

Christian Luczanits suggested to attempt to motivate the Department of Archaeology, Government of Nepal, to undertake an excavation there to fully assess the cave, and to make the cave accessible once that is done. However, despite multiple invitations no representative of the DoA ever visited the Gönpa Gang during the two years of restoration, the suggestion thus could not be pursued further.

Planning Conversations

At the beginning of the project, Kunjon Thakuri often passed through Chuksang and consequently had many conversations about the project with Binod Gurung and other villagers. They also attempted to get commitments from villagers that may want to work for the project. There also were numerous conversations with current project members, Norbusum bord members and advisors on how to organise the actual project next year and the personnel needed. Major part of the discussions were questions of transporting the material, as the road built earlier is interrupted by the footbridge anchored at its access. The local government agreed to finance a road access from a side valley at the back of the monastery.

We also learned that the monastery has not been registered with the Buddhist Association, but that this was a prerequisite for gaining permission from the Department of Archaeology, Government of Nepal, for the restoration. Accordingly, a local committee

has been formed to undertake the registration process, and the monastery was registered in the first months of the project.

Heavy Rain

The acuteness of the project was demonstrated in early October 2022 when unusually heavy rains at the beginning of October did affect Gönpa Gang. A simple structure to the right-hand side of the building's entrance has partially collapsed (Figure 13) and it was said that the crack on this side of the wall got bigger. Further, inside the Assembly Hall, in the niche behind the big Maitreya Buddha image, water entered the interior of the building.



Figure 13: The structure to the right of the entrance partially collapsed in recent rains.



Figure 14: Water entered the building behind the main Buddha image as seen on October 15, 2022 (in the gallery this photo is replaced by one from October 20, as the original could not be found).

Immediate Interventions

To reduce dampness inside the walls of the temple, a drainage channel had been planned to be built around the structure. As an immediate intervention, four labourers started to move the mani-stones placed along the wall of the temple and cleared the site for digging (Figure 15).

On the ground floor of the southern structure underneath the painted room columns supporting the main beam had tilted precariously and barely supported the beams. Thus, secondary columns have been installed in the room underneath to strengthen the support of the beam temporarily (Figure 16).



Figure 15: Laborers during the removal of the mani-stones along the temple walls and the clearing of the pathway.



Figure 16: Inserting metal props as a temporary measure to secure the foundation of the southern part of the monument.

Preparatory Works

Kunjon Thakuri and Sonam Gurung visited the site in early February 2023 to prepare spaces for the storage of construction materials and assess the round poplar joists procured from the village of Gyakar which had been transported at the site before their arrival (Figure 17).



Figure 17: Poplar joists procured at Gyakar village stored at the site.



Figure 18: Members of the Chuksang inside the temple's Assembly Hall during the yearly ritual in February 2023.

They also got the opportunity to attend the annual ceremony of the Chuksang community organized at the Gonpa (Figure 18), and to discuss some restoration measures proposed. During this ceremony, which traditionally takes place on the first full moon of the year, which was February 5, one person from each household met at the monastery. During the ritual they light a thousand butter lamps. Further, one of the members makes food for all participants, each of which also brings yak meat for a communal lunch.

Approval by Department of Archaeology, Government of Nepal

As usual approval of the restoration had to be thought with the Department of Archaeology, Government of Nepal, before its actual start. Tashi Bista and Kunjon Thakuri first went on January 6 to get this approval, but more documentation was required, which was delivered a few days later. The approval letter was ultimately provided on February 27.

Personnel

Equally finding qualified personnel, including a site manager for the project was a major task during this phase. In January the civil engineer Bijaya Shrestha was interviewed for this position, but this appointment did not work out due to the demands of the candidate. Sonam also talked to another civil engineer for this position. Finally the architect Sabin Shrestha was hired to oversee the restoration of Gönpa Gang on-site. He had prior experience from his involvement in the restoration of Dzong Monastery (also supported by the Ambassador Funds).

A carpenter and electricians were identified and visited the site with Sonam and Kunjon in February. Before starting the actual restoration work on the temple area, temporary labor was hired to prepare the site. The communal building has been emptied and cleaned to accommodate the bunk beds and the kitchen. Mud paint was applied over the smoked walls and cracks were sealed.

Further, the site has been connected to the national grid and electrical wirings were completed with lighting and power sockets in every room including the caretaker's bedroom and the kitchen. The front of the temple and the gate area will be brightly lit with flood light for the safe mobility of workers during the night.

Sabin Shrestha was hired from March 8, 2023, the first week to familiarize himself with the site and the work planned. Sabin then arrived in Chuksang on March 24, and started assessing the damages and making plans of his own in reference to the restoration plan prepared by Thomas. From March 18 Santosh Gurung from Chuksang was employed to support him as onsite manager. They hired labor, stone masons and carpenters, and a cook for the on-site kitchen. The workers were accommodated on site, while the managers stayed at Chuksang.

The number of workers hired, and their specialization changed according to the needs. For the second year, we were fortunate to find highly experienced carpenters which contributed massively to the restoration of the Assembly Hall.

September 2024 was the last month of the employment of Sabin Shrestha who resigned after attempting to get a major raise (25 %) in his salary for the two months extension. Obviously, such a raise was not possible for both budgetary reasons and reasons of

fairness. It was agreed that he delivers his final quarter report and the drawings he has made last winter by October 10. However, we received the draft of this report only by October 28 and the drawings are still not delivered (see also Evaluation section towards the end of this report). Santosh Gurung took over the site management and Binod Gurung and Kunjon Thakuri were more often present locally to move the project towards its end.

Purchase of Materials

Throughout the planning stage visits to the site were also used to meet vendors locally and in Pokhara for the purchase of various construction materials and items for worker's accommodation directly at the monastery. After learning that the poplar trees of the nearby village of Gyakar and Samar were considered more durable, Binod Gurung and Sonam visited the poplar tree fields at Gyakar to assess their sizes and condition. Finding the trees suitable, it was decided to purchase the round poplar joists from Gyakar, work for which Binod Gurung took the responsibility. As per the plan and estimate prepared by Thomas Schrom, the sizes were handed to the community in Gyakar to fell the trees in January and they were delivered in February (Figure 17).

Mid-January 2023, Kunjon and Sonam Dorjee visited Sanjib Sawmill as well as other vendors in Pokhara to enquire about the available wood. Prices between them were similar, and Sanjib Sawmill offered to cut everything to size if someone of the foundation is present. Further Kunjon and Sonam did market research to assess the tools, scaffoldings and timber to be purchased and transported to the site by early March. Major construction materials such as waterproof plywood, pine wood ceiling boards, floorboards and building tools were purchased and transported to the site. Similarly, metal bunk beds and beddings were ordered for the worker's accommodation directly at the site.

Local Materials

For the roof, the production of clay bricks and the plastering of the walls material needed to be sourced locally. Grass for the adobe mud bricks was purchased directly from the villagers. The shrub used for the stick layer in the lower part of the parapet, called *perma*, needed to be brought from Gheling village, as it is not found locally.



Figure 19: Weighing a bundle of dry grass purchased from the villagers to mix with mud for the adobe bricks.



Figure 20: Unloading the shrub wood (perma) for the parapet walls near the footbridge leading to the temple.

Preparing Materials

Local materials often also need labor intensive preparation. Stones need to be sorted and cut to size (Figure 21). The brushwood for the parapet needs to be selected and bundled (Figure 22). A special maroon colored paint needed to be prepared to color them (Figure 23), and also the whitewash needs preparation (Figure 24).

To plaster the walls without decoration the mud plaster needed to be tested. In the first sample sand, mud and water were mixed in a 1:1:4 ratio. In the second sample binding materials like flour, sugar and rice-water were added to the materials of the first sample. This latter sample turned out to be more suitable and its composition was used to plaster the interior.



Figure 21: Preparation of the stone for the Mani wall.



Figure 22: Preparation of the brush wood for the parapet wall.



Figure 23: Preparing the maroon color for the parapet brushwood.



Figure 24: Preparing the white color for the whitewash.

For the clay bricks the materials needed to be assembled, including the grass used to avoid shrinking (Figure 25). Once made they also need considerable time to dry (Figure 26).



Figure 25: Preparing the mud mixture with hay and straw for the mud-bricks and rough plaster.



Figure 26: Drying the mudbricks.

Addressing Needs

Continually further materials needed to be purchased for the repair and maintenance of the machines bought from Shree baba machinery and tools as well as foot supplies. With autumn 2023 approaching new jackets and shoes were bought for the workers from funds left from the accommodation costs. To cover the edges of the bitumen aluminum sheets were purchased in 2024 at the advice of a local visiting from America where he works in the construction.

Purchase of wood was an issue throughout as parts of it were not delivered in time for a range of reasons, among them road issues and adverse weather. During the summer months material needed to be transported by tractor across the river, which got stuck twice, then a dozer had to be hired in support. This also concerned additional stone slates of different types for the drainage and the roofs. Further waterproof plywood was needed to finish the roofing. The plywood panels had to be carried to the site by the workers as

the river could not be crossed. Further purchases included clay, sand, brushwood and the colors for the exterior painting. We also needed to buy more tarpaulin to protect the site from rain as the old ones were torn by the strong winds.



Figure 27: Workers unloading the wood from the tractor.



Figure 28: Construction truck delivering the stone slates.



Figure 29: Workers unloading the stone slates.

Community Engagement

The actual restoration work started with a ceremony on March 17 (Dakini Day in the Lunar calendar). On that day, the abbot of Namgyal Monastery visited Gönpa Gang accompanied by two monks from his monastery and a local lama (Figure 30). They performed a ritual for the auspicious start of the restoration work, at which the Chuksang community participated (Figure 31).



Figure 30: The abbot of Namgyal Monastery visiting the temple of Gönpa Gang.



Figure 31: Monks of Namgyal performing a ritual for the success of the restoration.

On March 19, as recommended by the Namgyal Khenpo, two local boys clad in traditional attire initiated the restoration work by digging into the floor of the Assembly Hall (Dukhang; Figure 32).



Figure 32: The two local youth in traditional dress entering the Assembly Hall.

In March 2023, the Chuksang community decided to assign a villager for every day of the restoration work to observe the restoration process and participate in it. For this purpose, one member from each family came to the site on a rotational basis. Their participation made sure that the Chuksang community was aware of all activities at the site.

On April 2, 2023, the team organized a meeting with community regarding the on-going work and future plans in the village community hall. They also discussed the different problems of the site, their causes, and their potential solutions. The villagers also visited the site to observe the main issues with the foundation of the building, which were revealed once we dug along the foundation areas. In this discussion the villagers agreed to dismantle a poorly constructed living room to the south side of the apse (see ###) as well as a portion of the newly constructed mani-wheel wall around the old structure, as it obstructed the planned restoration work (see ###).



Figure 33 : Meeting organized at community hall and describe about site by our team members.



Figure 34: Villagers looking at existing foundation's condition after a dig around the outer wall.



Figure 35: Sabin Shreshta explaining the planned works in the Entry Hall to the villagers.



Figure 36: Villagers observing the Assembly Hall area's post plague caused by roots of the trees surrounding the building.

During the summer quarter 2023 the villagers stopped to come to the site daily to oversee the work. This was decided in a meeting among the villagers themselves. Instead, regular inspections of the site by larger groups of villagers were organized.

Other major community meetings are reported in relation to the main subjects discussed in them below.

Demolition

As agreed in the April 2 meeting, the poorly constructed structure on the south side of the apse was demolished in its entirety. This enabled to improve the foundations of the main temple in this area the walls of which carry murals on the inside.



Figure 37: The structure to the south side of the apse clearly is a later addition and poorly constructed.



Figure 38: Note the distortion of the small wooden members that once supported the upper floor.



Figure 39: The upper room was accessed through a door on the upper floor of the Assembly Hall.



Figure 40: The stones of this structure were retained for repair work.

Drainage

Once the first labor was employed the area around the monastery building were cleared. These included the collapsed stone wall in the front area, which was dismantled, with the stones stored for future use.



Figure 41: Stones from collapsed wall in front of the temple.



Figure 42: The same space after clearance.

A major issue of the site is the dampness inside the temple, especially on the slope side. While several solutions have been planned to deal with this problem, their feasibility needed to be verified on site. Accordingly, workers were asked to dig a trench along the foundations of the temple walls to assess the condition of the foundation and identify the probable reason of the dampness before deciding on preventive measures (Figure 43). While digging, it was observed that the roots of the bushes and trees had spread towards the foundation of the temple and had penetrated the gaps between the stone walls (Figure 44). Therefore, such roots were removed, and the dug channels were left exposed so that those within the walls dry up before building the drainage channels.



Figure 43: Clearing along the foundation of the temple.



Figure 44: Roots penetrating the foundation of the temple.

Around the temples exterior a drainage channel needed to be dug to avoid the accumulation of moisture. The new drainage was made at a distance from the wall and its foundation support.



Figure 45: A worker digging the drainage channel at a distance to the temple's walls.



Figure 46: Continuation of the drainage on the north side of the temple.



Figure 47: Foundation support and drainage at the back of the temple in October 2023.



Figure 48: Preparation of the stone panels for the drainage.

In the second year of the project, 2024, the drainage needed to be walled and strengthened. The stone mason suggested to first prepare all the necessary stones to wall the drainage, which was done. This preparation continued throughout April 2024. By then thin stone slates for the drainage cover were delivered on 26th of April (Figure 226). Before placing stone slates, we prepared the sides of drainage with stone walls. Then, stone slates were laid around the temple and into the prepared drainage canal ensuring that rainwater runs off quickly.



Figure 49: Preparation of the stones and the drainage canal on the north side of the temple.

Figure 50: Preparation of the drainage canal at the back of the temple.



Figure 51: Making the stone wall for the drainage at the back of the temple.

Figure 52: Laying the thin stone slates on the temple side and along the drainage canal.



Figure 53: Works at the slope side of the temple including the installation of slates to ensure runoff towards the drainage.

Figure 54: The drainage, the partially rebuilt mani wall and the circumambulation path on the north side of the temple on June 29, 2024.



Figure 55: Digging the drainage on the northeast of the monument.



Figure 56: Paving the drainage with stone slates, first along the ground, then along the reinforced slopes.



Figure 57: Sourcing and preparing local stone for the drainage and mani wall.



Figure 58: Construction of the side walls of the drainage and the new mani wall.

Foundation

The clearing work revealed that the structure was erected with a very weak foundation, a new issue that needed to be addressed during the restoration. After analyzing the condition of the foundation around the building and identifying potential risks (damages

and distress) and weaknesses, we concluded that it is necessary to build a continuous stone wall adjacent to existing foundation to increase the stability of the walls.



Figure 59: All along the outer wall of the monument a ditch was dug for the wall strengthening the foundation.

Figure 60: The most precarious area in the northwestern corner of the building.



Figure 61: The a stonewall was constructed along the building to consolidate its foundation.

Figure 62: A corner at the back of the temple showing the finished stone wall.

Figure 63: The wall was constructed at a slope and covered with a mud layer to facilitate quick drainage.

Once the foundation walls were completed a mud layer was added to create a slope towards the drainage. Then the locally available stone slates were placed on top of the mud layer to prevent water entering the foundation. To facilitate a quick runoff, mud was also laid between the foundation wall and the drainage.



Figure 64: Covering the foundation support wall and the ground in front of it with mud.



Figure 65: Laying the stone slates upon a thick layer of mud covering the foundation support.



Figure 66: The foundation support wall after laying the stone slate upon the mud layer.

At the southwest corner of the apse a buttress stone wall needed to be constructed to consolidate the corner. The wall at this corner was rather weak with loose stones.



Figure 67: Mud was also laid between the newly constructed foundation support and the drainage.



Figure 68: At one corner a higher buttress was built to make it more stable.



Figure 69: Along the south side the foundation wall had to be stepped.



Figure 70: Work on the foundation and drainage was difficult as big boulders were occasionally in the way.

Painting Conservator

Since the painting conservator Sreekumar Menon was brought to Mustang for the Lo Gekar project, and the beginning of that work there was delayed in early April, the conservator was asked to assess the conservation needs of Gönpa Gang and secure fragile paint layers before restoration. In the following I add excerpts of his report.

“The paintings in the temple were assessed for their condition to propose a comprehensive conservation plan. The paintings decorating the walls of the ground and first floor of the shrine, and the entrance hall were found to be in the most precarious condition. In general, the paintings in the temple were affected by various deterioration problems such as detachment and losses of plaster and paint layers, flaking paint layers, salt efflorescence, non-original deposits, and darkened surface coatings.

Stabilization of wall paintings and removal of render layers around the purlins and beams of the entrance wall was done to assist architectural conservation interventions.

Inscription on paper pasted on wall were documented by visible and infrared imaging.

Some detached areas of inscribed paper were refixed to the wall as well.”



Figure 71: Images merged by photogrammetry, southern side of the entry wall of the Assembly Hall; Sreekumar Menon.



Figure 72: Sreekumar Menon taking an image for the photogrammetry of the painted walls.



Figure 73: Area around the joists in the Entry Hall secured by Sreekumar Menon.

Entry Hall

At the beginning of the restoration, it was decided to first restore the Entry Hall of the monument, as it is a relatively confined space, and major repairs needed to be done there. Above the Entry Hall is another room which in this report is referred to as the “balcony room”. Its balcony was restored multiple times historically, and it was impossible to tell how it looked originally. The reconstruction of this area originally followed a proposal by John Harrison that was later supplemented by planning work done by Thomas Schrom.



Figure 74: The temple on March 29, 2023, after clearing but before work started on the Entry Hall of the building.

To be able to add a foundation underneath the pillars and to level the construction for seismic strengthening the wooden structure of the Entry Halls' interior needed to be fully dismantled. First the superstructure of the Entry Hall was dismantled from the roof to the base of ground floor. Only the walls of the hall were retained. Then all wooden elements were renovated, cleaned, leveled, and prepared for reconstruction, with rotten wooden elements replaced with new ones. To hold the rebuilt structure new bed stones were laid in the appropriate size, that is much larger than the original ones, and joints prepared by stone masons. The wooden structure was then gradually restored with connections between all its members as documented in the images below. By the end of May 2023, the first-floor level was finished including the mud, while the roof was still outstanding.



Figure 75: Dismantling of the porch area started from roof.



Figure 76: Then the entire balcony was taken down.



Figure 77: Then the porch was dismantled as well.



Figure 78: Once the entire interior structure of the Entry Hall was dismantled the wall paintings were protected with tarpaulin.



Figure 79: The severely damaged right-side wall of the Entry Hall during dismantling of the upper floor.



Figure 80: Parts of the original pillars and capitals laid out for assessment after dismantling.



Figure 81: The original post holding the porch was lengthened by adding a new bottom section.



Figure 82: Inside the wall the support for the beam was strengthened by adding a level wall plate.



Figure 83: All original wooden members were cleaned and prepared for reconstruction, as demonstrated by Thomas Schrom here.



Figure 84: Villagers helped with cleaning the original wooden members.



Figure 85: The original pillar, expanded in height, was joined with a new bedrock.



Figure 86: New joints were also added to all parts of the capitals, one of which is being reassembled here.



Figure 87: Once the two pillars were erected the laying of the beams was prepared by first placing the boards.



Figure 88: Then the original beams were placed on top of the supports.



Figure 89: On the wall sides the reassembled beam was placed on a leveled stone plate inside the wall.



Figure 90: The joists were then refitted into the existing openings to avoid harm to the wall paintings underneath them.

Porch

For the porch the columns needed to be made anew (Figure 92), and also the beam needed to be replaced. First, they were fitted in a trial (Figure 91), and then they were installed in situ. For this the new wooden columns of the porch and their capitals were reassembled, using the old decorated wooden elements.



Figure 91: To fit the new and old parts together they were first assembled in the working area.

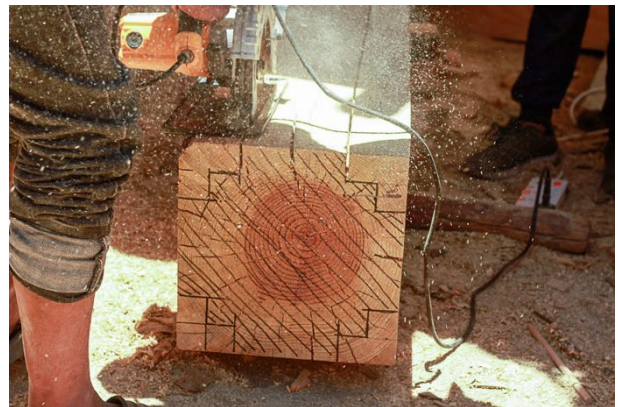


Figure 92: The massive pillars of the porch needed to be replaced, here they are cut to reconstruct their original multi-cornered shape.

The columns were placed on the solid stone foundation made earlier. They were then joined with the original capitals through connections prepared in advance.



Figure 93: Placing the front column on the bed stone with a projection connecting it to it.



Figure 94: Checking the placement of the new columns with small wooden connectors.



Figure 95: Connecting the old capital base to the new column.



Figure 96: The old capital members placed on the new column aligned with the wall.

Equally the beam placed topping the porch at this level were prepared to be joined. The following images document different stages of this process.



Figure 97: A worker taking a short rest during the reconstruction of the entry porch.



Figure 98: Arranging the positioning of the central beam as per measurements.



Figure 99: Connecting the members of the front gate beam.

Once the front gate beam was set up, the Entry Hall was completed by first carefully placing the joists onto the beams and into previous suspension holes in the walls. Then the old wood splits were screwed onto them. In this way, all the wooden members were gradually assembled to prepare for the mud flooring and wooden flooring planks on top of mud floor with wooden batten.



Figure 100: Arranging the original joist of the Entry Hall.



Figure 101: The old wood splits were screwed to the joists and retain the previous appearance of the Entry Hall ceiling.



Figure 102: Between the wood splits and the mud layer a breathing fabric was added to reduce dust.



Figure 103: By July 20 the mud layer of this floor was completed.



Figure 104: View of the ceiling of the Entry Hall after placing original wood splits on the joists.



Figure 105: Before the balcony room in the upper floor could be reconstructed the walls needed to be leveled to enable the placement of a wood tie across the corner. In this area the front wall was detached from the side wall.

Floor

Inside the Entry Hall, stone slates were used for flooring. These stones were collected from the nearby river. These were then chiseled to the needed shape and size to lay the floor.



Figure 106: Laying the stone floor in the back corner of the Entry Hall.



Figure 107: Work then proceeded on the right side of the Entry Hall.

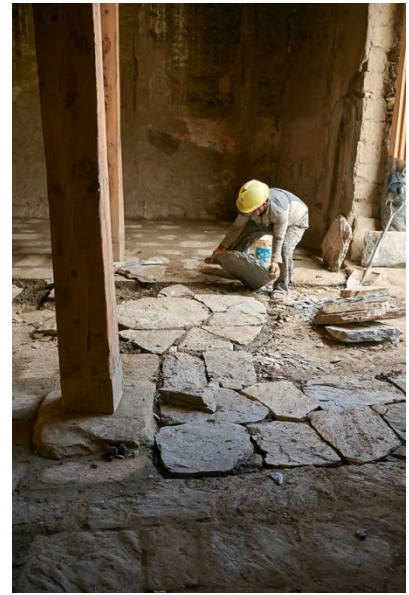


Figure 108: The central area was finished last.



Figure 109: View of the Entry Hall's floor after completion, the base stone supporting the pillars slightly projecting from it.

Balcony Room

Once the Entry Hall was completely reconstructed the balcony room above it could be reconstructed as well. Here the top of the walls was levelled, and a wooden tie layer was added. Then the first-floor superstructure was reconstructed with all its wooden members replaced, as the best-preserved original joists were used for the lower floors to retain their original appearance.



Figure 110: The area where the central beam is to be placed was strengthened by a leveled wooden plate.



Figure 111: In late July 2023, the central wooden structure of the balcony room was reassembled.



Figure 112: The wooden structure and the joists of this room are entirely replaced, as the best original wooden members were used for the lower floors to retain their original appearance.



Figure 113: View of the temple with the balcony room partially reconstructed.



Figure 114: Detail of the partial reconstruction with the back joists in place.



Figure 115: Assembling the wooden members of the balcony reusing the original central capital.



Figure 116: Placing the joist between the central beam and the balcony area.



Figure 117: Planking on roof above the balcony room.

Once the roof level was reached the wooden planking was installed (Figure 117). Finally, a temporary roof was installed for protection during winter.



Figure 118: Placing the wooden members with circle design along the top of the wall to support the parapet.

The flooring of the balcony room was finished in late 2023. Above the first mud layer a wooden batten filled with further mud was installed. Then the floor was finished by wooden planks.



Figure 119: Laying out the wooden batten to hold the flooring; with the hollow space filled with mud.



Figure 120: By late 2023 the new flooring and balcony room was completed.

Northeast Corner

An issue remaining from the first year's work was a major crack in the northeast corner of the Entry Hall. Since the crack appeared to have expanded during the restoration, more than just a repair was needed to tackle this issue. On the ground floor the inner walls are covered with murals, these walls therefore could not be touched. Instead, it was decided to take down a larger section of the corner of the balcony room above and rebuild it in a way that ties the two corner walls together, and in this way prevents the crack on the lower floor to widen.

First, the walls at the corner had to be taken down, which was started on March 19, 2024. Then the walls were reconstructed using wooden ties with rammed earth to connect them across the corner. This work was finished by March 22.



Figure 121: The severe crack at the northeast corner of the Entry Hall in October 2023.



Figure 122: Supporting the cross beams of the northeast corner on the ground floor level.



Figure 123: Opening the northeast corner on the upper floor level by dismantling the walls.



Figure 124: The upper part of the northeast corner after dismantling.



Figure 125: Placing the lowest wall tie on the upper floor of the northeast corner.



Figure 126: The northeast corner during reconstruction.



Figure 127: Finishing the reconstruction of the northeast corner.



Figure 128: The northeast corner after reconstruction, the crack still visible on the lower floor.

Balcony

The design of the balcony was discussed multiple times during the project with opinions divided. On the one hand, it was clear that the balcony as it was preserved was not original

but a later construction that likely was much narrower than the original, which should have been of the width of the lower parts above the door. The balcony as it was preserved certainly only took this shape after multiple rather crude restorations. On the other hand, the original appearance of the balcony could not be reconstructed with certainty anymore.

After finishing the temporary roof in late 2023, Sabin Shrestha, against the suggestion and plans of Thomas Schrom, installed a balcony replicating the most recent version in both appearance and technique (Figure 129). This reconstruction did replicate what was preserved at the site, but the areas to its sides remained to be decided on.



Figure 129: Photo of the reconstructed entrance taken on October 14, 2023.

In early 2024, it was then decided to keep the narrow balcony and to introduce screens to its side. Accordingly, some adjustment work on the balcony was undertaken March 20 and finished by March 21.

In May 2024, another community meeting was organized to discuss the plans for the installation of glass windows and sliding doors on the balcony designed by Thomas Schrom. The villagers agreed to this plan documented the result of the meeting. However, summer was too busy to get back to this work, it thus needed to be finished in the projects final phase. Also mud plaster was only applied in early October.

Work on the balcony door took almost a month to be completed. The door itself was made by two carpenters from October 4 to 17, then the glass panels were installed. This took longer as the number of glass panels needed was miscalculated and more needed to be brought from Pokhara.



Figure 130: The balcony door has many compartments for glass panels and thus was a complex work.



Figure 131: View of the balcony door during the application of linseed oil to its ceiling.



Figure 132: View of the balcony with the doors installed but opened in the central area. Note also the screens added at the sides to give the balcony a uniform appearance.

Southwest Room

The southern building added to the temple at a later period was in its entirety in a rather precarious condition. In particular, the wooden structure on ground floor level was very weak and emergency supports were installed at the very beginning of the project.

The southwestern room is in the back part of the building and has no murals. It was, thus, decided to redo this room first. Again, the entire wooden structure had to be taken down and rebuilt with a stronger foundation, while the walls were retained.

After demolishing the foundation, large stones were prepared to support the two pillars of the room. The previous construction of the ground floor was of extremely poor quality. Thus, new post, capitals, and beams were prepared and installed at that level. Of the joists some could be retained while others needed to be replaced. Then, a new flooring with minimum thickness of mud was constructed.



Figure 133: The southwest room after dismantling its previous wooden structure.



Figure 134: Installation of the foundation stones; the new pillars and beam being ready for reconstruction.



Figure 135: The new beam was placed on a new wooden support inside the wall.



Figure 136: While some of the original joists could be reused, many had to be replaced.

For the room in the upper floor some of the original wooden members could be retained. Wall plates and wall ties were installed along the top of the wall for seismic strengthening.



Figure 137: Leveling the top of the wall to enable the installation of wall ties for seismic strengthening.



Figure 138: Installing the wall tie on the western wall of the southwest room.



Figure 139: On the upper floor the old capitals could be retained while the pillars and a part of the beam had to be replaced. Note the joints between capital and beam for seismic strengthening.



Figure 140: A few exceptions aside, the joists of the top floor needed to be replaced throughout.



Figure 141: The structural wooden members for the roofing of the southwestern room prepared for assemblage.



Figure 142: Leveling the wooden ties in the eastern section of the southwestern room.

Southeast Corner

A major bulge in the stonewall at the southeast corner of the southern structure required for the wall to be taken down and rebuilt. This also allowed for wall ties to be added within the stone wall. The tie at the level of the ground floor's ceiling could also serve as support for the joists. The new stonewall was constructed using mud mortar.



Figure 143: The structure in the southeast corner in 2019 revealed many structural issues.



Figure 144: First the wall placed in continuation of the southern wing needed to be removed.



Figure 145: The walls at the corner turned out not to be structurally connected.



Figure 146: The southeast corner after gradually dismantling the walls.

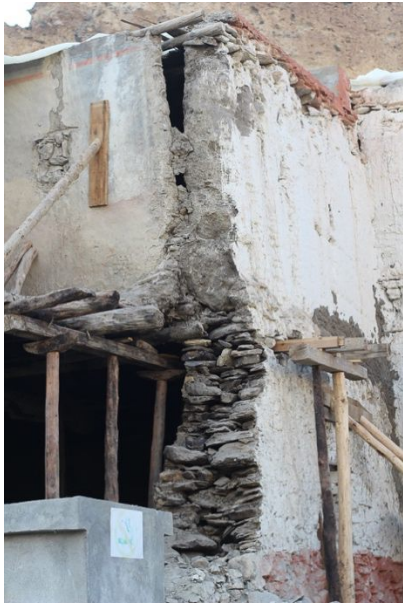


Figure 147: Supports needed to be installed in different areas of southeast corner.



Figure 148: The foundation of the southern wall was reconstructed first.



Figure 149: Partial reconstruction of the lower part of the southern wall.



Figure 150: The east side of the corner with temporary supports added while preparing the foundation of the new wall.



Figure 151: The base of the eastern wall of the corner is much lower than original to provide a proper foundation.



Figure 152: Then the corner was constructed with stones and mud mortar.



Figure 153: Wooden wall ties were added to the wall for seismic strengthening.



Figure 154: Installation of a wooden wall tie around the corner.



Figure 155: By mid June 2003, the wall was constructed up to the ceiling of the ground floor.



Figure 156: The newly constructed corner with the wall ties.



Figure 157: Continuing the construction of the southeast corner wall.



Figure 158: Repairing the adjacent wall with wooden ties.



Figure 159: Laying a new wooden tie across the corner to connect the old and new stone walls.



Figure 160: The southeast corner wall is now reaching roof level.



Figure 161: Once the corner wall was completed a stair was constructed to enable easy access the ground floor door.



Figure 162: View of the newly stone wall rebuilt in the southeastern corner.

Painted Room

The south wing has one room with eighteenth-century murals and some sculptures on the upper level, which in this report is referred to as the painted room.

In September 2023, a meeting was organized to discuss the movement of the smaller clay and papier mâché statues from the painted room to enable the restoration of this room. After consultation, the small statues were shifted from the painted room to the already restored southwest room. The two large clay sculptures seated on a large clay pedestal had to remain in place, as they were too fragile to be moved. In the meeting, we also discussed the preservation of the painted walls of this room.



Figure 163: View of the painted room in 2019. The murals in this room have suffered considerable damage, but historically important sections are preserved, such as the portrait in Figure 10.

Figure 164: The general as one of the Seven Jewels of a King in the painted room.



Figure 165: When the restoration in this room was about to begin, smaller sculptures, such as this image of Padmasambhava, could be moved to the neighboring room that was restored in the meantime. Behind the image is one of the Eight Auspicious Symbols, the umbrella.

Figure 166: These two large sculptures were too fragile to be moved. This complicated the restoration of this room considerably.

On the ground floor, the eastern part of the south-wing, including the area underneath the painted room, had many supports in problematic condition. Replacing them was challenging as the room above contained the eighteenth-century murals. The restoration, thus, needed to be planned around the painted room. Accordingly, the ground floor supports of this section needed to be dismantled and replaced section by section.

First the easternmost area of this section was demolished, and partially rebuilt. Then the restoration moved to the space underneath the painted room. First, the foundations were prepared; large bed stones with joints for the pillars were placed to support the new beams. The original beams needed to be replaced by new ones due to their poor condition. Replacing the beam was most challenging underneath the east wall of the painted room, which also preserved murals and contains an area considered particularly sacred.



Figure 167: View of the painted room after removing its floor to enable the replacement of the wooden structure underneath.



Figure 168: Dismantling the roof above the painted room to reduce weight on the wooden structure.



Figure 169: Installing temporary supports for the wooden members of the upper floor before dismantling.



Figure 170: Replacing the old joist with new one maintaining the level.



Figure 171: Placing new joist as needed underneath the partition wall.



Figure 172: Placing another joist under the partition wall.



Figure 173: Supports were installed to preserve the painted partition wall above during reconstruction.



Figure 174: Inserting the new beam to replace old one through a hole in the south wall.



Figure 175: The painted room with the new beam under the painted wall installed.



Figure 176: The ground floor level with half of the wooden structure already replaced.



Figure 177: Reassembling the old wooden structure in the painted room.

Once the supports on ground floor level were successfully replaced, a new flooring with a minimum thickness of mud was constructed. Some of the original wooden members could be retained to be reused in the upper floor. Wall plates and wall ties were installed on the upper level for seismic strengthening.

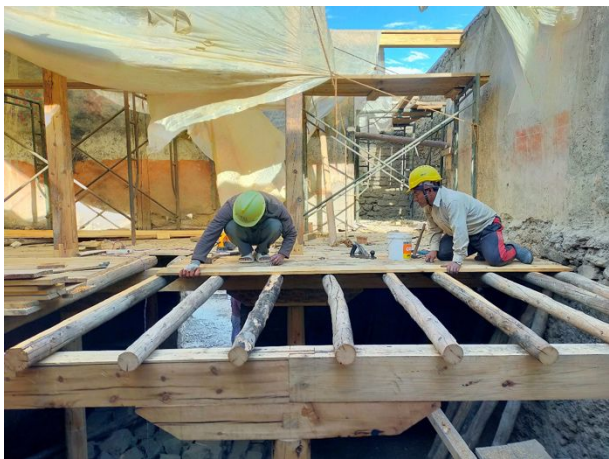


Figure 178: Installing the ceiling planks above the joists in the painted room.

The roof could not be completed in its entirety in 2023, instead a temporary roof needed to be installed.

Second Year

In 2024, first the temporary roof needed to be dismantled then we started to add the joists that were prepared when work began in March. After adding the joists, planking was installed above them. Then the batten work to finish the floor of the painted room was done. In this process we also integrated an electrical pipe before the mud and floor finish, then we prepared the planks for the floor. Also, the decorative wooden band to finish the roof of the southeast part was done.



Figure 179: Removing the temporary roof of the south wing.



Figure 180: Placing the joists above the south wing.



Figure 181: Adding the planking to the roof of the south wing.



Figure 182: Preparing the wooden floor for the painted room of the south wing.

Further the floor underneath the two broken statues in the painted room needed to be finished without moving the statues. This was achieved using wooden supports underneath the images and then replacing the joists underneath them. Then the planking was finished underneath, and a new wooden pedestal was created for the sculptures. This work started in on 14th of September and finished on the 23rd of September.



Figure 183: Cutting into the mud pedestal of the sculptures to be able to support them from below.



Figure 184: Installing posts from the lower floor underneath the sculptures.



Figure 185: Installing supports from the sides to keep the sculptures in place.



Figure 186: The sculptures suspended by posts while the old joists are being removed.



Figure 187: The supporting structure during the installation of the new joists.



Figure 188: Planking after joist replacement with visitors in the room.



Figure 189: The sculptures on their new base after completing the flooring.

Northwest Corner Wall

The stonewall in the northwest corner of the temple bulged as it was filled with loose stones. On the ground floor of this corner are some of the most important paintings of the temple including a depiction of the founder of the monument. It thus was deemed

important to repair this section comprehensively without damaging the murals on the inside.

First, the bulging wall was shored up with wooden members and an extra 16" wall up to halfway was constructed. Then the old wall was dismantled from the roof to the floor level of the first floor, and from there the outer section of the wall was carefully removed, leaving the inner layer of the original stone wall with the murals. Finally, the wall was reconstructed from bottom up and tied to the old wall sections. The following images document the different stages of this process.



Figure 190: View of the northwest corner with the wall cracked and bulging.



Figure 191: First the wall was shored up to prepare the dismantling from the top.



Figure 192: Then a scaffolding was erected and, after opening a section of the roof, the wall was dismantled from the top.



Figure 193: An extra wall was constructed in front of the problematic wall as support.



Figure 194: Investigating the condition of old wall by the site architect to decide on for further steps.



Figure 195: Supporting a large stone from the original wall that can act as connector between the old and new walls.



Figure 196: Construction of the new wall along the lower section of the wall and connecting it with the old one.

Figure 197: View of the area during the reconstruction of the wall.

We continued the repair work at the northwest corner wall up to roof level. When reconstructing the wall, we made sure that it was properly joined with the walls to its sides. For this we used wooden ties and wall ties at different levels.



Figure 198: The wall reconstructed to the level of the first floor, where a wall-tie was inserted.



Figure 199: Reconstructing the northwest corner wall with wall ties.

The wall had been constructed with wooden ties. For the winter of 2023, it was covered with plastic sheets to prevent snowfall damage. Also the roof supports that were installed before work were left as a security measure.



Figure 200: Installing the temporary roof above the new northwest corner wall.



Figure 201: The second floor of the newly constructed wall from the interior.



Figure 202: Northwest corner wall after completion.

Repairing the Walls

Both on the exterior and interior walls of the building needed to be repaired to cover cracks and areas of losses over time. For this purpose, stones were relayed as needed and the gaps between them filled with mud mixed in the traditional way.



Figure 203: This worker undertakes repairs along the south wall of the monument. The southwestern corner in the foreground had to be repaired extensively.



Figure 204: Here an area of loose stones was relayed.



Figure 205: In this section on the west side of the monument plaster needed to be applied between the stones.



Figure 206: In the interior of the Entry Hall plaster losses were repaired as well.

Sections of the monasteries' wall had cracks that needed to be fixed. These were filled with stone, mud and/or wooden ties as appropriate. Also the partition wall with paintings was strengthened by tying it to the adjacent wall. The following images show some examples of such works.



Figure 207: These three images show repair work in different areas of the temple using different techniques as required.



Figure 208: View from top during the repair of a stone wall showing wooden members to connect the repair to the original wall.

As with the South Wing all exterior walls of the temple were repaired and covered with two layers of plaster. Then the whitewash was applied to its surface. While some areas of the wall had to be repaired with mudbricks, others were repaired using plaster mortars only.



Figure 209: Wall repairs and plastering on the exterior of the temple.



Figure 210: Whitewashing the north wall of the temple after all repairs.

Also a big crack of about 2.5 inches in the northeast corner of Entry Hall was repaired. It was tied with 3 x 4 inch wooden members both vertically and horizontally. A base wall for the corner and wooden members was also built. Further, the south wall of staircase area was also repaired with wooden ties and stone, and then plastered and colored.



Figure 211: Repairing the large crack on the north wall of the Entry Hall with wooden ties.



Figure 212: Repairing the lower floor corner of the Entry Hall with wooden ties.



Figure 213: The repaired northeast corner of the Entry Hall after plastering.



Figure 214: Repairing the area of a former door on the south wall of the staircase.



Figure 215: The northeast corner of the Entry Hall after whitewashing.

Temporary Roof at South Wing

In the south wing area, which was a focus of the work in 2023, a temporary roof needed to be installed for the winter. It was made sure that the roof is properly supported from the inside to enable it to bear heavy snowfall.



Figure 216: Installing the temporary roof above the south wing.



Figure 217: Installing the supports for the temporary roof at south wing.



Figure 218: The temporary roof after completion late in 2023.

Mani Wall

As part of the work, we also started to prepare the foundation for mani-wall sections that needed to be destroyed to enable the restoration. Its removal was permitted by the villagers under the condition that we reconstruct it once the work is finished (see the images under Drainage and Foundation above).

Preparations for 2024

In an October meeting among the villagers, it was decided that in 2024 any donation or entry fee collected for a visit to the monastery will be used for the restoration work. To make sure that visits to the temple are a safe during the work, all visitors were guided by project team members and had to wear helmets. Further, it was decided to record donation visitors chose to give.

Preparatory works included the improvement of the available plans, calculations of the materials necessary for this year's restoration campaign and their purchases, as well as making sure that all necessarily personnel is available. Sabin Shrestha also prepared a detailed schedule for the works to be undertaken in 2024. It was then discussed with Thomas Schrom and Kunjon Thakuri, and it was shared with all team members.

Wood

In the winter months the wood needed for the following next year was estimated and purchased in December as far as it was available. The wood was then stored on site to ensure that the wood is properly dried and ready to use when needed.



Figure 219: Loading the newly purchased wood in the village on a tractor.

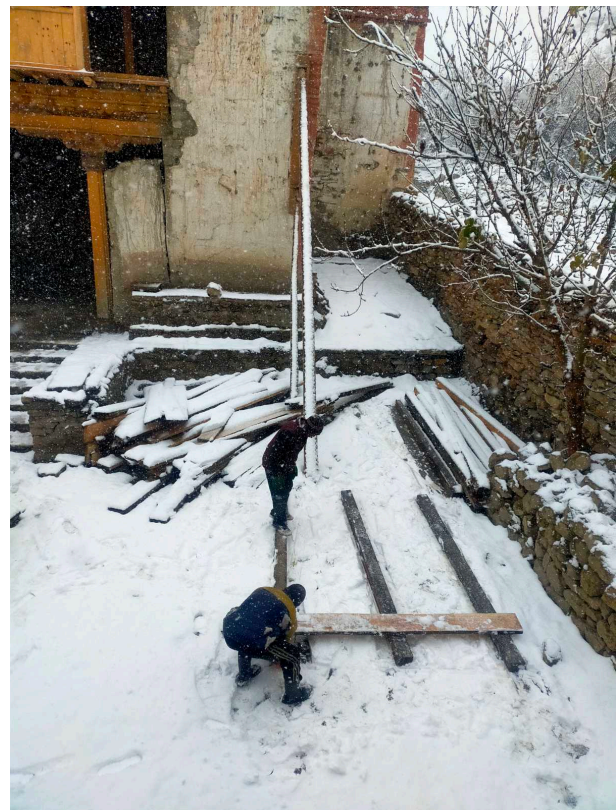


Figure 220: Storing the wood on site during a time of snowfall.

Nevertheless, some of the wood ordered in November 2023 arrived late due to diverse obstacles and resulted in a two-week delay of the beginning of the structural work in 2024. Only by May most of this wood was finally delivered, with a few more items still outstanding.



Figure 221: Stacking the wood properly.



Figure 222: Showing all areas of wood stored in front of the temple.

Fundraising New York

In February 2024, Binod Gurung went to New York to raise additional funds for the Gönpa Gang restoration project from the Chuksang community there. He succeeded in raising 26,335 USD, which were used as backup funds for unforeseen expenses and for work not budgeted for by the project. For example, project funds did not include expenses for the electrical installations, and these could then be covered by these additional funds. Further, these funds will be used to reconsecrate all images inside the temple once the restoration is finished. While the usage of these funds was reported, they do not appear in the project accounting.

Purchases

According to Sabin Shrestha's plans materials, tools as well as the number of workers and required food. Purchase orders were then sent to the vendors, namely Shree Baba Tools and Machinery and Sapkota and Sons, in February. He also bought all the necessary tools and food items for the labor accommodation at the beginning of March. Most of these were acquired in Pokhara and transported from there, while those not available there were acquired in Kathmandu.



Figure 223: Packing of the equipment in the stores.



Figure 224: Arrival of the equipment and food items at Gönpa Gang.

Throughout the year, materials needed for repair and maintenance of the machines and tools used were bought from Shree Baba Machinery and Tools. Also, the supplies for the workers need to be continuously replenished. Fuel for the generator was purchased to make sure that the work can continue uninterrupted during the frequent electricity outages.

Stone slates were purchased for the drainage area outside of temple and seven tractor loads of sand were taken from riverbank. Instead of the traditional Perma shrub twigs, which were not available in the required quantity, four tractor loads of apple tree branches were purchased to use for the parapet wall. In early June dried local grass needed to be purchased for the mud plaster. Further, natural colors for painting the walls needed to be collected from different part of the Mustang district. Further bricks were made to be used for the parapet.



Figure 225: Delivery of the apple tree twigs for the parapet on April 24, 2024.



Figure 226: Delivery of the stone slates on April 26.



Figure 227: Delivery of fuel and food on site on May 8, 2024.



Figure 228: Delivery of the wood on May 21.

Towards the end of the project additional material needed to be purchased, in particular wood for the flooring, stone slates for area in front of the temple and the parapet, and panels for the balcony windows.

Personnel

For this year, we contracted some of the workers from the previous year, while others needed to be newly hired. Some of these began working in early March, while others joined mid-March. Temporary workers were hired from the village as needed.

Initially work started on March 10 with one carpenter from last year. By the end of March we employed up to eighteen workers. Among these are six carpenters, two of their helpers, two stone masons and foreman, seven laborers and one cook. Some of the new carpenters already had experience in restoring ancient monuments, which helped a lot with the most crucial parts of the work.

Since some of the workers were ill equipped, in February 2024 jackets were ordered for the workers, and good shoes were bought for them as well. While the former could be given to them at the beginning of their work, the jackets could only be distributed on March 29, 2024.



Figure 229: The on-site team with Dawa and Binod Gurung on May 23, 2024, at the occasion of the visit of the Sakya throne holder.

Towards the end of the project additional workers needed to be hired, including a stone mason and helpers, as our previous stone mason did not return to the site as originally planned.

Sabin Shreshta left the project by the end of September 2024 after trying to raise his salary beyond the means of the project budget. Santosh Gurung was appointed as the site in-charge, tasked with assigning daily responsibilities to the workers. Under the guidance and planning of Binod Gurung and Kunjon Thakuri, Santosh excelled in managing the final stages of the project, which included completing the balcony, the wooden floors, roofing and other necessary finishes by mid-December.

Plans

In December Sabin Shreshta went back to the site with a helper and Santosh to measure the details of the existing wooden members anew and to compare his drawing with previous ones. Thereby, he focused on the Assembly Hall, which still needed to be restored in 2024. At that occasion, also existing drawings and sketches drawn by hand were updated. This work also supported the planning the restoration work as well as the calculation of needed resources.



Figure 230: Measuring details inside the monasteries' Assembly Hall with laser.

Figure 231: Measuring details of the wooden members in the Assembly Hall.



Figure 232: A scaffolding was set up to enable the measuring of the details of the large pillars.



Figure 233: Taking detailed measurement of the capital on one of the long pillars

Figure 234: Discussing the measuring work on site.

Work extended to mid-December and beyond the availability of project funds. The overtime salaries were thus funded by contributions previously raised from the villagers who live in New York.

In January, Sabin Shrestha updated his digital drawing from the measurements he took in December. These not only document the state prior to restoration, but they also document the restoration work by recording the changes made.

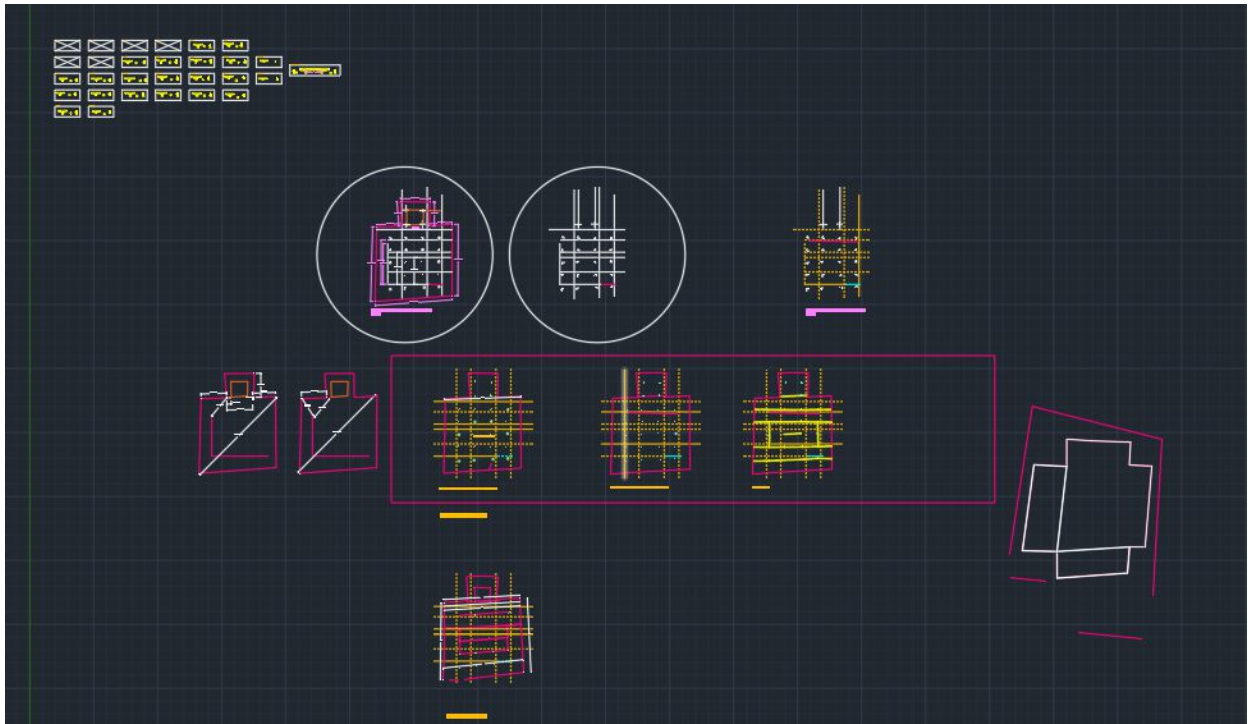
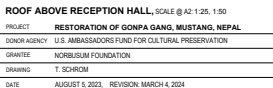


Figure 235: Screenshot of the digital drawings showing different elements of the temple in different colors.

In May 2024, the site was also visited by Thomas Schrom, who continued to be involved in all planning work for the project. Among others he proposed the alteration of the balcony mentioned above, the drainage of the roof, as well as the construction of the waterspouts. (see the plans for the roof drainage and the waterspouts on the following page).



Final Report, April 2025

Community Engagement

On March 24, 2024, a meeting was organized to discuss the demolition of a dry-stone wall at north side of the temple as well as the demolition of a partition wall on the upper floor of the temple that was a later addition to the structure and increased the weight on the wooden members to be restored underneath. We also discussed the contribution of the village to prepare the mud for the roof as well as the temporary removal of all portable sculpture which will be needed in the near future. We agreed on these points and documented the decision. On March 28 village committee members again visited the site to observe the progress of the work at the site.



Figure 237: Discussion at the community hall.

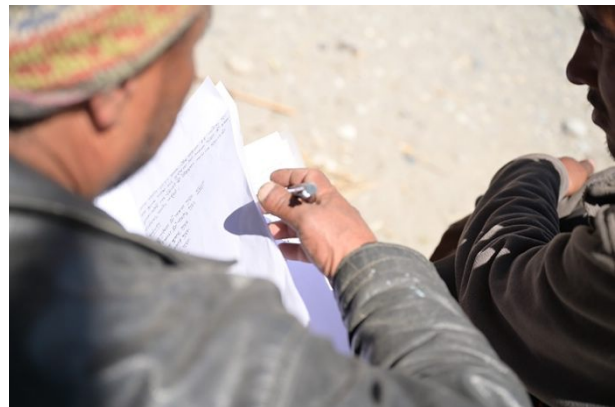


Figure 238: Preparation of a document recording the decisions made.



Figure 239: Inspection of the work on site.

Painting Conservator

The art conservator Noor Jahan from Shesrig Ladakh was hired from May 8th to 22nd for the stabilization on the wall painting within the temple to prevent further deterioration and potential damage to them. A full report of her work was submitted separately. In her conclusion she writes:

“The emergency stabilization work on the wall paintings at Gonpa Gang, Chuksang, Lower Mustang, Nepal, marks a crucial step in preserving these cultural treasures amid ongoing structural restoration efforts. By employing techniques such as menthol facing, stabilization solutions, and localized filling and filleting, significant progress has been made in protecting the integrity of the artworks. The cleaning and consolidation trials conducted have provided valuable insights for future conservation endeavors. It is essential to continue monitoring the condition of the wall paintings and implementing appropriate measures to ensure their long-term preservation. Additionally, all damages have been meticulously recorded and studied to develop the project plan.”



Figure 240: Noor Jahan securing the wall paintings behind the main image of the temple.



Figure 241: Noor Jahan securing the most fragile sculptures in the temple for transport and future conservation.

It was stunning to see the amount of work the painting conservator, Noor Jahan, managed to complete during her short visit.

Assembly Hall

As soon as sufficient labor was recruited, the murals within the Assembly Hall were covered with thin plastic sheets to protect them from dust. Then, the first bay of pillars adjacent to the Entry Hall was dismantled beginning on March 18, 2024. The pillars were strengthened through replacing the rotten bottom section and the entire support structure leveled. All existing wooden splits used for the ceilings were cleaned for reuse. Equally, all wooden members of the ground floor, including the painted beams were cleaned and prepared for reuse.



Figure 242: Attaching the plastic sheets to protect the murals of the Assembly Hall.



Figure 243: Further plastic sheets laid out for covering the murals of the Assembly Hall.



Figure 244: Removal of the roof above the Assembly Hall, including the plastic sheets added in an earlier village restoration.



Figure 245: Dismantling the support structure on the upper level.



Figure 246: The wooden splits covering the ceiling of the lower level after removal of all the mud.



Figure 247: View into the entry area of the Assembly Hall after the dismantling of the level above it.

By the end of March works on the wooden members was still ongoing, as was the preparation for the stone bases for the columns. These were rather complex tasks as the ceiling needed to be level once everything was reassembled.



Figure 248: Inspecting the original wooden beams to prepare them for reuse.



Figure 249: Preparation of a new stone base for one of the columns.

Throughout the spring quarter the structural restoration of the Assembly Hall was continued from the entrance side towards the main image. The structure was taken down pillar row by pillar row, new stone bases for the pillar foundation were placed, the pillars, capitals and beams were restored as needed and then placed back on the new stone bases. At the same time the height of each pillar is being levelled. Then the ceiling of the ground floor was completed with joists, wooden splits, geo fabric, batten and mud. Once the work on the ground floor was completed the upper floor was reconstructed. Then all the wooden members were assembled to the roof with planking on top. The removal of the beam from the walls above the murals and its replacement after restoration were the most delicate processes.



Figure 250: Once the structure was taken down the rotten bottom parts of the pillars were replaced.



Figure 251: A cross-shaped joint was used to connect the old and the new parts.



Figure 252: View of the cross shaped joint used to connect the old and new parts of the pillar.



Figure 253: The new parts were then cut to the size of the original pillar.



Figure 254: To ensure structural stability joints were created between each part of the capitals.



Figure 255: The bottom of the pillar was joined with the new stone base via a mortise joint.



Figure 256: Reassembling the first row of pillars inside the Assembly Hall.



Figure 257: View of one pillar reassembled with its capital and beam, all parts joined to each other for seismic strengthening.

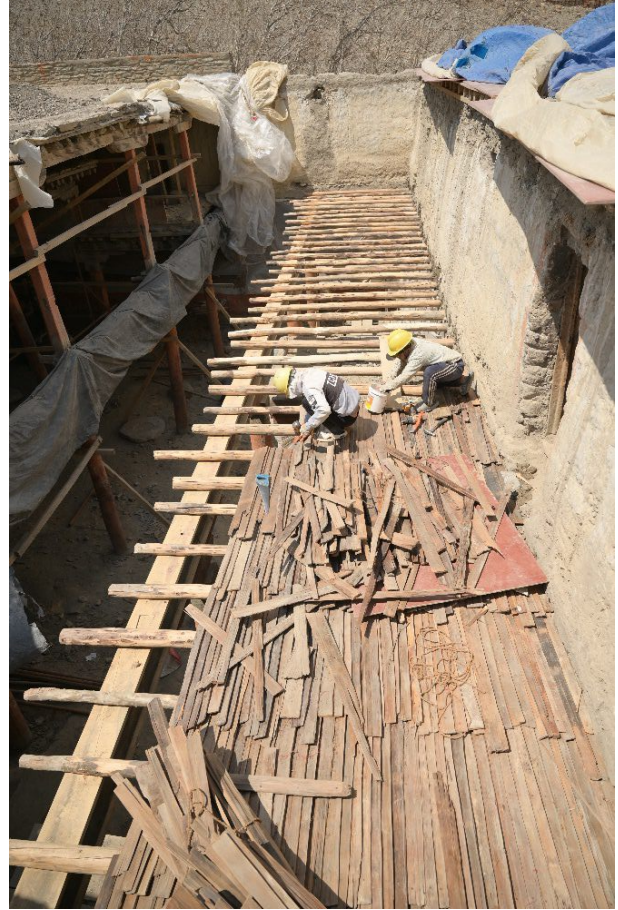


Figure 258: Reconstruction of the ground floor ceiling of the first bay.



Figure 259: Creation of floor frame for the first bay while the roof above the third bay is being dismantled on April 11.



Figure 260: Dismantling of the second row of pillars on both levels on April 11.



Figure 261: Preparing the foundation for the pillars of the second row.



Figure 262: Placing a pillar of the second row during reconstruction.



Figure 263: Rebuilding row two on ground level on April 18.



Figure 264: Placing the joists between the first and the second row of pillars.



Figure 265: Reconstructing the upper floor above the first row of pillars.



Figure 266: The first and second bay of the Assembly Hall after the reconstruction.



Figure 267: Reconstructing the upper level of the second row on May 2.

On May 25, and with the approval of the villagers, also the remaining sculptures were shifted from the altar to the already restored part of the Assembly Hall to protect them from damage.



Figure 268: The sculptures seated against the entry wall of the Assembly Hall on June 20.



Figure 269: View of the reconstructed upper floor of row two with the large skylight on June 24.

Painted Wall

To level the section of the area of the painted wall, above pillar rows three and four, and to avoid having to raise the painted wall it was chosen to take advantage of the plain section in the lower part of the painted wall. First, holes were made into the plain section of the wall to place the new joists at level. Then planks were inserted above the new joist level to rest the wall on the new joist level. Further supports held up the roof on the upper level, further reducing pressure on the painted walls.



Figure 270: The area of the painted wall above pillar rows three and four.



Figure 271: Inserting new joists into holes at a higher level of the painted wall.



Figure 272: Inserting the temporary joists into the holes drilled into the wall. Note the levelling line along the wall.

Figure 273: The structure underneath the temporary joists supporting the wall.

Once this support structure was established the wooden members underneath the wall could be dismantled for structural restoration. By the end of June, the structural work has reached mid-way to assemble all the wooden members that lies below the half wall paintings. Further, the long columns of the third row still needed to be restored.



Figure 274: Preparing to take out the pillar underneath the corner of the painted wall in the third row.

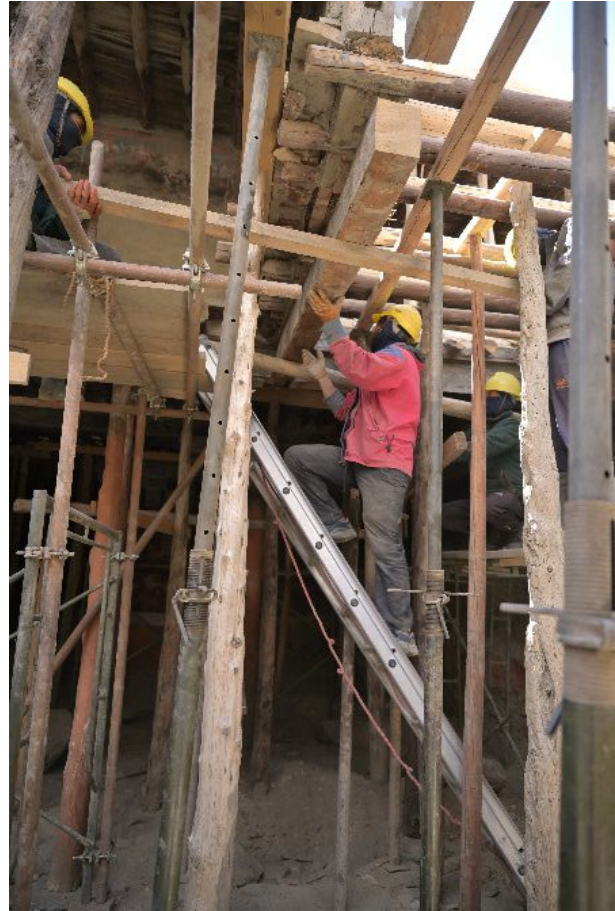


Figure 275: The same area after the extraction of the pillar.



Figure 276: At this stage also the beam that supported the painted wall could be removed.



Figure 277: Preparing the removal of the beam on the wall side of row three.



Figure 278: Removal of the beam on the wall side of the third row three on May 14.

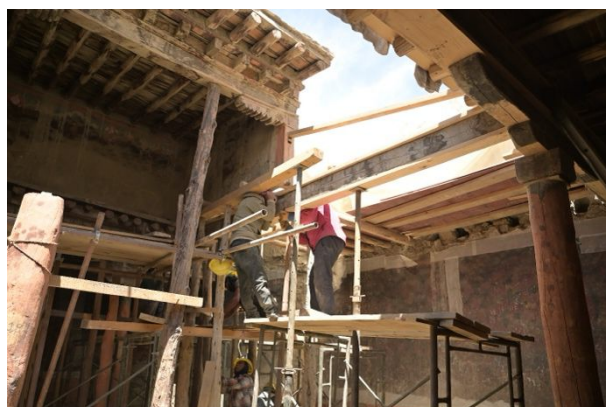


Figure 279: Reinserting the restored beam underneath the short side of the painted wall.



Figure 280: Another perspective of the process of reinserting the restored beam underneath the short side of the painted wall.



Figure 281: Reinserting the pillar underneath the corner of the painted wall in row three.



Figure 282: Reconstruction of the beam underneath the short wall on the other side of the same row three.



Figure 283: Inserting the pillar in the same section.

With the approach of summer episodes of rain became more likely, making it risky to remove the roof in its entirety. Thus, also the roof above rows four and five needed to be kept in place during the restoration of the structure underneath. This was achieved by supports from the ground floor level.



Figure 284: Preparation of the restoration of rows four and five by installing additional supports.



Figure 285: Removal of the intermediate floor between row four and the back wall of the Assembly Hall.

A particular challenge was the structural repair underneath the painted wall above the fourth row of pillars. It took until mid-July to restore the pillars under this wall in a Final Report, April 2025

logistically complicated operation. The following images document that process in some detail.



Figure 286: View from the restored section towards the fourth and fifth rows of pillars. On the right work commenced on replacing the support of the painted wall, while the broken beam in the last row and its support can be seen on the left.

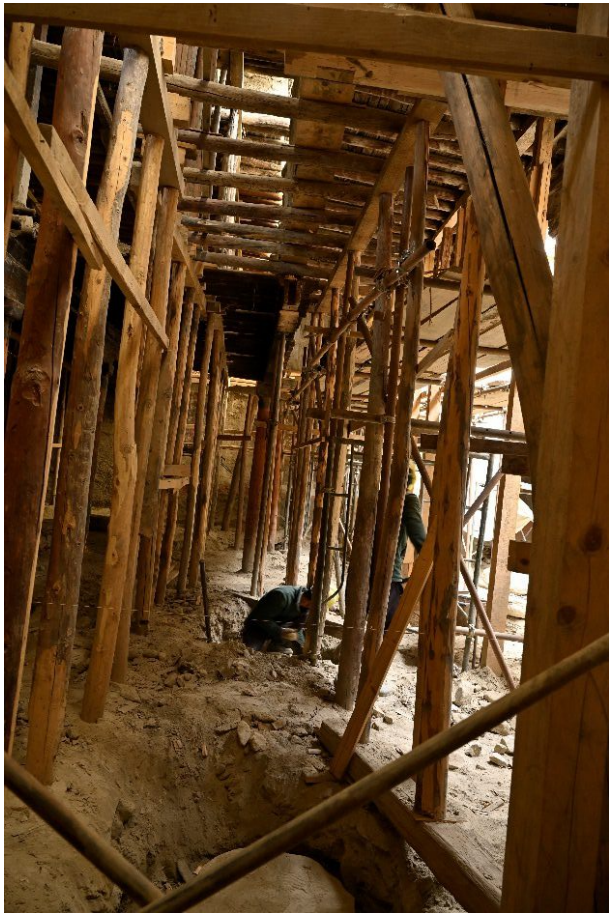


Figure 287: The temporary support structure underneath the painted wall with the original pillars removed.



Figure 288: Digging the new foundation for a pillar and placing its new stone base.



Figure 289: Preparing the placement of the restored beam underneath the painted wall.



Figure 290: Working on the joint between the beams underneath the corner where the painted walls meet.



Figure 291: Placing the new plank underneath the reinstalled original beam.



Figure 292: Preparing for the second beam to be placed underneath the painted wall.



Figure 293: Workers ready to lift the second beam into its place underneath the painted wall.



Figure 294: Joining the original beams underneath the painted wall.

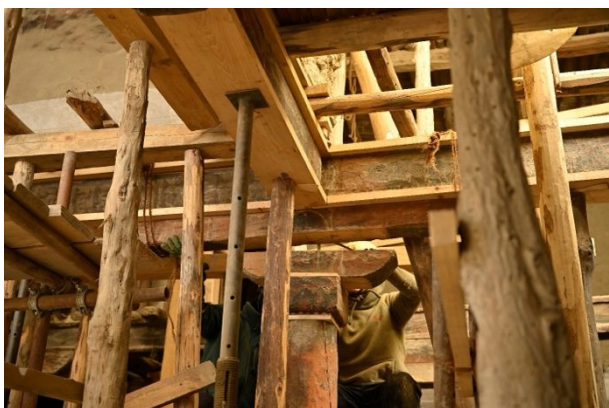


Figure 295: Placing the parts of the capital underneath the corner area.



Figure 296: Placing the pillar in its original place, now supported by a solid foundation and connected across all parts.

Then the joist above the painted wall had to be restored without exposing the painted wall to the elements. First, we removed the clay on top, changed the wooden splits and arranged the old joist. Then we covered them again with mud on the geofabric. Only when the work on the ground floor was finished by July 23, 2024, new pillars, beams, joist and planks were assemble on the upper floor to support the roof. During this process also the

long pillars of row three, which until now had to be kept in place, could be restored and put on a solid base.



Figure 297: Dismantling the beams and long pillars along the third row that hold the superstructure above the painted wall.



Figure 298: Continuing the dismantling process without moving the relatively light superstructure.



Figure 299: Preparing the repaired beams to be placed to their original position.



Figure 300: Reassembling the original capital and beam structure with their new joints.



Figure 301: Continuing to reassemble the original structure supported by the long pillars.



Figure 302: The reassembled beam with the new planks, compare with Figure 297.



Figure 303: Rebuilding the structure above the reassembled beam following the original construction.



Figure 304: Removing the clay on top of the intermediary roof above the long pillars.



Figure 305: Realigning the joists and placing the corner pillar to support the roof above the painted wall area.



Figure 306: View of the realigned joists while working on the structure to support the roof.



Figure 307: Reassembling the superstructure above the intermediate roof covering the painted wall area.



Figure 308: The wooden structure above the long pillars after it has been reassembled.

Fifth Row

At the same time, we started to dismantle the ground floor of the fifth and last row of pillars, supporting the ceiling with many temporary supports. Unlike previously, we also had to keep a part of the original roof in place to avoid damage during rain. The pillars

were restored as usual with new foundations in concrete supporting a massive stone and the connections between all its members.



Figure 309: Excavating the pillar foundations after dismantling while the fourth-row pillars are still in place.

Between the pillars of row five the beam on the south side was cracked in the middle and supported from below. As this break was complete, we had to join the two parts of the pillar with a 2 cm steel rod inserted to the middle of each of the pieces. The depth for the steel rod was 18 inches on each side. Then after putting the steel rod at center depth of beam, it was joined with glue. Then 5 mm metal plates were put at the top and bottom of the beam and connected by 12 mm bolts. The metal plates were placed within a carved out central section of the beam to preserve its original size. This also made it easy to level the joist and planks above it. The structural restoration of all pillars and beams on the ground floor of the Assembly Hall was completed by August 11, 2025.



Figure 310: Reassembling the broken beam with an iron rod.

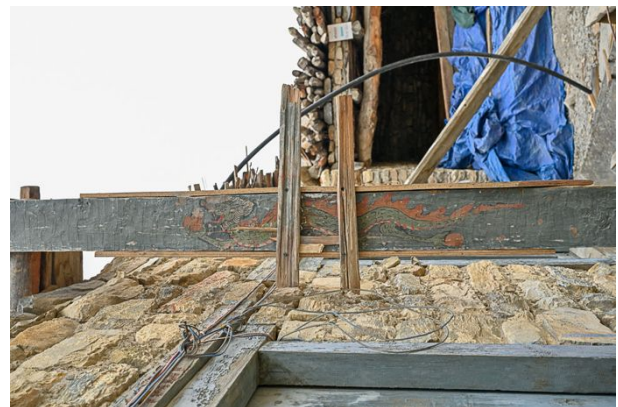


Figure 311: Gluing the painted wooden fragments to the reassembled beam.



Figure 312: Placing iron plates on both sides of the broken beam.



Figure 313: Reinstalling the repaired and strengthened beam in its original place.



Figure 314: Replacing the rotten joists between row five and the back wall of the Assembly Hall. Note the Assembly Hall murals and the protective roof on the upper level.



Figure 315: Laying the wooden shingles on top of the newly arranged joists.



Figure 316: The area between the painted wall (right) and the main sculpture after finishing the wooden structure.

Once the restored areas were roofed, mud plaster was also applied on the interior of the upper level.



Figure 317: Preparing the wall above the entrance to the Assembly Hall for replastering.



Figure 318: Plastering the wall above the entry to the Assembly Hall.

Visit of the Sakya School Throne Holder

At the invitation of the Norbusum Foundation and the Chuksang Community to visit the restoration site, the head of the Sakya School visited Gönpa Gang on May 23, 2024. His visit to the site made such an impression to him, that he initiated a conversation on heritage preservation with the Mustang abbots accompanying him. Kunjon Thakuri also had a conversation with him afterwards to encourage the reinstatement of a nunnery at the site in future. The entire community also participated in the reception of the Sakya School throne holder at the site.



Figure 319: The mothers' group at the entrance of the temple at the occasion of the Rinpoche's visit.



Figure 320: Worship space prepared for the Rinpoche in front of the main image.



Figure 321: Preparation of the restored balcony room above the Entry Hall for the Rinpoche's visit.



Figure 322: The Rinpoche inspecting the restoration work in the Assembly Hall.



Figure 323: The Rinpoche lighting a butter lamp in front of the Maitreya image.

South Wing

The main work remaining for the South Wing was the completion of its roof and the finishing of their interior. First, the remaining parts of the ceiling were completed with joists and planking. Then, the decorative wooden band that marks the bottom of the parapet was fitted. We also needed to replace some of the damaged planks that were used the previous year to install a temporary roof.



Figure 324: Finishing the roof above the painted room of the South Wing.



Figure 325: Placing the decorated wooden frieze at the bottom of the parapet.

Once the planking was done a wooden frame was constructed on top of it to create a three-way slope toward the waterspouts (see also Figure 236 above). Then waterproof

marine ply was installed on top of the wooden frame, which was then covered with bitumen sheets for further waterproofing.



Figure 326: Constructing the wooden frame for the plywood with the sloping.



Figure 327: Attaching the waterproof plywood to the frame.



Figure 328: Constructing the wooden frame around the skylight.



Figure 329: Adding the bitumen layer on top of the plywood.

Once these works were completed, the parapet wall was constructed with the bottom wooden band and the apple tree twigs to form the so-called *perma* frieze.



Figure 330: Construction of the traditional parapet with the apple twig bundles on the outside.



Figure 331: Installation of the bitumen sheet.

After laying the bitumen sheets and the construction of parapet wall on roof, an aluminum sheet band was added to the parapet to cover the edge of bitumen sheet once it is installed. This makes sure that also in very adverse weather conditions no water can penetrate inside the wall. This procedure was then followed in all areas of the parapet wall. Further, Sabin Shreshta decided to install wooden barriers at the collection points of the waterspout to avoid mud running off the roof, a measure that is to be reversed.



Figure 332: Wooden barrier around the waterspout.



Figure 333: The aluminum sheet covering the edge of the bitumen sheet.

Then, layers of mud were laid on top of bitumen sheets; first pure yellowish clay was laid at a thickness of one inch, then a second layer of fine mud filtered in 1/8-inch net and at a thickness of 1.5 inches. Volunteers from Chuksang village carried the mud to the roof of the temple.



Figure 334: Laying the lower layer of mud on the roof of the South Wing.



Figure 335: Laying the fine mud on top of the first layer.



Figure 336: Part of the South Wing with two mud layers after two days of heavy rain. There was no leakage but the water did not run off completely either.

Interior

On the first-floor interior of the south wing, mud was filled in the areas after the batten work. Then the wooden planking of the floor was done within the month of April 2024. However, the area where two broken statues remained in the room could not be finished at this stage.



Figure 337: Preparing the frame for blanking in the South Wing rooms.



Figure 15: Completing the frame within the same room.



Figure 338: Filling the areas between the wooden frame with mud.



Figure 339: Installing the floor planks in the South Wing.

Finally, a first coat of mud plaster (mud mixed with grass, wooden husk and water - 4:1:1) was done in all the rooms.



Figure 340: Plastering the interior of the ground floor of the South Wing.



Figure 341: Plastering the walls on the top floor of the South Wing.



Figure 342: Applying fine plaster on the interior walls.

Exterior

On the outside, also the area of the newly constructed wall was plastered and damaged plaster areas were patched. Then fine paster was applied. The wall was then whitewashed while the projecting wooden members were painted red. A dark maroon color was used to paint the brushwood, the so-called *perma* frieze, of the parapet wall. These are traditional colors sourced and produced locally.



Figure 343: Plastering the exterior in the newly constructed corner of the South Wing.



Figure 344: Repairing and plastering the outside wall of the South Wing.



Figure 345: Repairing and plastering the southwest corner of the South Wing.



Figure 346: Painting the brushwood with dark color.



Figure 347: The southeast corner of the South Wing after painting.



Figure 348: The South Wing after completing the painting work.

Temple Exterior

A first coat of mud plaster was done all around the temple except on the outside walls of Entry Hall that still needed to be repaired.



Figure 349: The northwest corner of the temple before plastering.



Figure 350: The back of the temple after plastering on May 1.

As per the agreement with villagers, we also continued the construction of mani-wall before the newly ordered stones were delivered.

Roof

As the structural work moved from the entry area to the back of the temple the new roof could be constructed above the areas already restored. To construct the roof from the Entry Hall forward the same process and layering—waterproof plywood installed with inclination on light weight wooden frame, bitumen sheet and clay—was used as for the roof above the south wing rooms. Here too, the electrical wiring was inserted throughout the roof. Equally, a parapet wall along with its *perma* frieze was added along the edges of the roof throughout the structure.



Figure 351: Roof work above the Entry Hall.



Figure 352: Installing the plywood layer and bitumen above the Entry Hall.



Figure 353: Parapet with Perma and waterspouts installed on the entrance side of the temple.



Figure 354: The front of the temple after finishing the "Perma" work on the parapet wall in June 2024.

Once the structural work of the Assembly Hall was completed, the roof of the upper floor in front of the main image was dismantled and reconstructed with new wood. The roof was built in the same manner as in other areas including the electrical wiring.



Figure 355: Roof work around the skylight.



Figure 356: Dismantling the roof in the back area of the Assembly Hall.



Figure 357: View of the site during the restoration in June 16.



Figure 358: Installing wooden ties along the top of the Assembly Hall wall.



Figure 359: Preparing the roof for planking.



Figure 360: Once the planking was completed a frame to support the plywood at an angle was constructed.



Figure 361: Installation of the waterproof plywood on the wooden frame.



Figure 362: Installing bitumen sheets on top of the plywood.



Figure 363: Completing the plywood sheeting and sealing off the area above the sanctum.



Figure 364: Applying the bitumen sheets above the plywood.

Once the roof was completed all skylights were done in a design suggested by Thomas Schrom. While they have a wooden frame on the interior side, clay bricks protect the frame from the outside. Corrugated transparent sheets were attached to the wooden frame. This work started on October 28 and only finished by December 1, 2024.



Figure 365: One of the skylights above the southern wing with its interior wooden frame.



Figure 366: The same skylight with the corrugated transparent sheet as applied. The bricks along the outside protect the wooden frame from rain.

Along the edges of the roof a parapet was constructed with its outer layer of brushwood forming the traditional *perma* frieze. On the parapet wall wooden ties with metal sheets were introduced to cover the upper edges of the bitumen sheet along the vertical wall.

As the previous installation of the stone slates above the parapet turned out to be insufficient, a specialist was hired to improve on these by adding an overlap between the sheets and sealing the gaps. This parapet improvement was started on October 18 and finished by November 26.



Figure 367: Cutting an overlap into the edge of the stone slate.



Figure 368: The overlapping slates installed on the parapet.

The wooden stick layer of the parapet needed to be painted to make it more resistant to rain and give it its traditional coloring. For this the paint needed to be prepared first, which took a week (October 30 to November 6).

Finally, the work on roof was completed with a first layer of clay, which is sufficient to secure the site for the winter. More work needs to be done in spring to make sure that the roof is ready for the rainy season.

Apse

By August 13, 2024, work moved to the area around the main sculpture. There, the process of restoring the wooden structure around the sculpture was followed. With the completion of the structural work in this area by September 7, all structural work was completed.

Work in this section was complicated by the elaborate and throne structure around the easily damaged clay image and major structural problems that had developed there over the centuries. On the ground floor, the area to the left of the main image was particularly challenging, as here the pillar supporting the beam has sagged considerably. Thus, once the beam was removed a 2 foot x 16 inches foundation stone was placed underneath it to support it properly.



Figure 369: Mounting the supports in front of the main image.

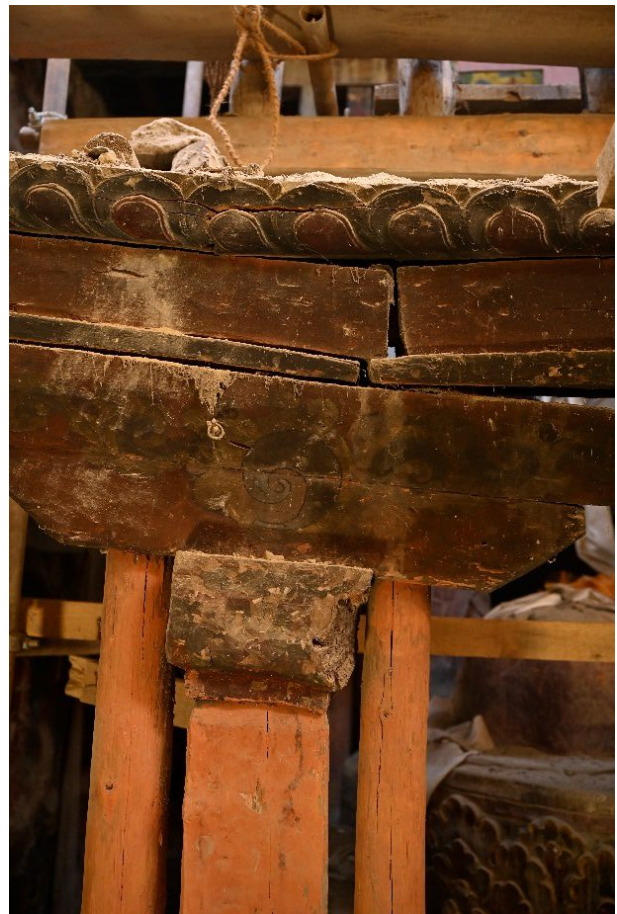


Figure 370: As the pillar to the left of the main image was sagging, the beams were at an angle to each other.



Figure 371: Reassembling the beam in front of the main sculpture after restoration; note the joints.

On the upper floor, the main image was protected by a wooden screen flanked by two walls with doors allowing for the circumambulation of the sculpture. Of these walls, that of the entrance could be dismantled as it was not painted. On the exit side there is painting above the gateway, this door thus had to stay in place while the structure underneath it was repaired. Further, at the level of upper floor's ceiling the beam to the back of the Buddha image was also broken and had to be restored using the same process as for the broken beam on the ground floor. The entire restoration process in the area of the main image had to be completed without removing the roof above this section to protect it from rain damage.



Figure 372: Preparing the restoration of the upper-level area in front of the main sculpture.



Figure 373: Preparing the removal of the beam in front of the main sculpture.



Figure 374: The upper-level area in front of the main sculpture after the main beam has been restored.



Figure 375: To enable work in the third floor lantern a platform has been raised in front of the main image.

To avoid damage to the main image and assist planning the restoration, the wooden frame around it was removed to be reassembled after the restoration. It fully revealed the damage to the beam in this area that required additional support.



Figure 376: Removal of the frame behind the main image's head to expose the broken beam in this area.



Figure 377: Installing supports to the back of the main sculpture.



Figure 378: Attaching the support to the back of the main sculpture.



Figure 379: Placing additional supports to the back of the main sculpture to enable the restoration of the broken beam.



Figure 380: The support structure to the back of the main image.



Figure 381: Detail showing the attachment of the support through pegs and ropes.



Figure 382: Removal of a painted beam of the upper level from the wall.



Figure 383: The back of the main sculpture with the broken main beam removed.



Figure 384: Restoration of the broken beam in the same manner as the one of the ground floor.



Figure 385: Preparing the placement of the beam after restoration.

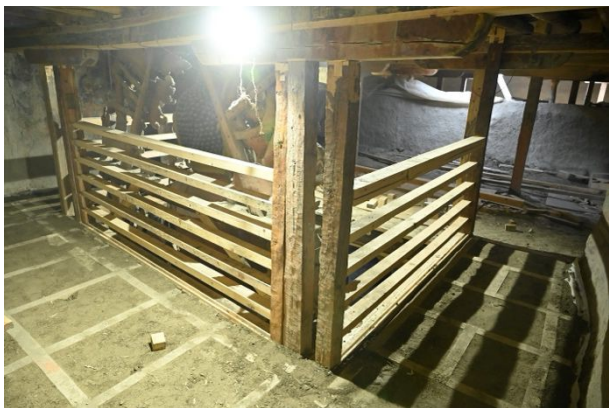


Figure 386: The circumambulatory passage on the upper level after finishing the floor for planking and the beams that originally held small Buddha sculptures.



Figure 387: The Buddha image after the restoration of the broken beam and the frame around it.

The wooden panels in front of the main statue of Maitreya were repaired as well, as were the doors leading to and from the circumambulatory. The wooden members were cleaned and reinstalled. Further, the long inner roof above the painted wall was plastered.



Figure 388: Work on the door leading from the Ambulatory on the upper floor.



Figure 389: Plastering the inner roof in front of the main statue to avoid dust.

Third Floor

Only the area of the main sculpture has a third floor consisting of a projection around the head of the image surrounded by an open roofed area. Both the floor around the projection and the roof of the third level were restored in the same manner as the other areas.



Figure 390: Removal of the mud on the third level around the lantern housing the uppermost part of the main image.



Figure 391: The third level with its floor removed to the joists.



Figure 392: The third level above the main sculpture with the roof removed.



Figure 393: Constructing the new support structure for the third level roof.



Figure 394: The wooden structure of the roof of the third level completed.

Once the roof was completed it turned out to be higher than previously in the area of the third-floor lantern. Thus, its side and front needed to be sealed to avoid water intrusions. For this work new bricks had to be made to complete the parapet, and clay had to be applied to the roof above the lantern as well.



Figure 395: Repairing the side of the third-floor extension above the sanctum.



Figure 396: Work on the third-floor extension above the sanctum.

Interior

Once the structural work in this section was complete Sabin Shreshta decided to construct large stone steps to enable access to the circumambulation path. Also, the altar steps in front of the main image were reconstructed.



Figure 397: Construction of the staircase in front of the circumambulation path around the main image.



Figure 398: the stone staircase leading to the circumambulation passage and the altar steps.



Figure 399: Reinstalling the old mani wheels in their original place.



Figure 400: Another view on the reinstalled mani wheels.

Figure 401: The head of the Buddha covered in cloth to protect it from damage.

After the restoration of wooden structure, a first coat of mud plaster was applied around the whole upper floor. Then second layer of mud plaster of the tested composition (see above) was applied. In the area of the painted wall, a wire mesh was applied within the plaster as additional support.



Figure 402: Application of the final mud plaster on the walls of the upper level.



Figure 403: Using a wire mesh as additional support for the plaster.

Then a railing was made around the light opening on the upper floor in the same design as the previous one but using new wood. It was started on August 19 and finished on by August 23.



Figure 404: Reconstructing the new railing along the light opening on the upper level.

Figure 405: The new railing on the upper level with stone slates framing the opening.

Flooring

A huge task left for the last quarter of the project was the flooring throughout the temple. Work on the floors of the upper level was started in September but needed until November to be finished. Once the floors were finished the walls were given a final plaster layer. Such a plaster layer was applied to the balcony room, the room in the southern section as well as above the stairs. Due to the different floor levels in the south section wooden stairs were built.



Figure 406: Finishing the flooring in the painted room around the two statues located there in early October.



Figure 407: Small stairs were added at the entrances to the southern section to make up for the differences in floor levels.



Figure 408: Fine plaster was applied to all the undecorated walls of the upper floor.



Figure 409: Once the floors were finished gaps between the planks were filled with wood-dust mixed with glue.

In the southwest corner of the main temple area the door that led to a room that was dismantled at the beginning of the restoration needed to be closed. It was decided to convert it into a window, which was implemented by mid-October. The flooring of the entire Assembly Hall area on the upper floor was then completed.



Figure 410: The window in the southwest corner of the Assembly Hall, where previously was a door to an additional structure.



Figure 411: The area in front of Maitreya after flooring was completed.

Finally, the entire ceiling of the upper floor was painted with linseed oil to protect the wood from bugs.

Final Works

In the last quarter of the project the construction of the mani wall that was removed during restoration was continued. Further access steps were constructed in front of the temple.



Figure 412: Photo taken on September after partially whitewashing the exterior walls.

Assembly Hall

Inside the temple's Assembly Hall, a number of works needed to be completed. Without prior consultation Sabin Shrestha had massive stone stairs built to lead from the Assembly Hall to the Ambulatory around the Maitreya image. Since its design invited elder people to touch the murals in that area for their support when climbing the stairs, these needed to be dismantled again and replaced by straight wooden stairs with railing.

Flooring in the Assembly Hall started in mid- November and continued until December 15. To prepare the flooring, the ground needed to be levelled, which was done with the

support of villagers. In the northwest corner of the Assembly Hall, where a big stone boulder was covered by a clay platform, the floor could not be leveled due to the stone. To cover it a new platform was erected with clay bricks. Flooring then started in the Ambulatory around the main image with the installation of its support frame and moved from there towards the entrance to the Assembly Hall. Also the altar and the platform in the southwest corner were covered by wood.



Figure 413: Villagers working on leveling the floor of the Assembly Hall.



Figure 414: Workers applying rough plaster along the bottom of the wall in the southwest corner of the Assembly Hall. Note the stone bolder projecting in this area.



Figure 415: Installing the wooden frames for flooring the Ambulatory around the Maitreya sculpture. Note the massive flight of stairs installed at that stage.



Figure 416: The same area of the Assembly Hall with the stairs reduced and wooden frames for the floor in the Assembly Hall installed.

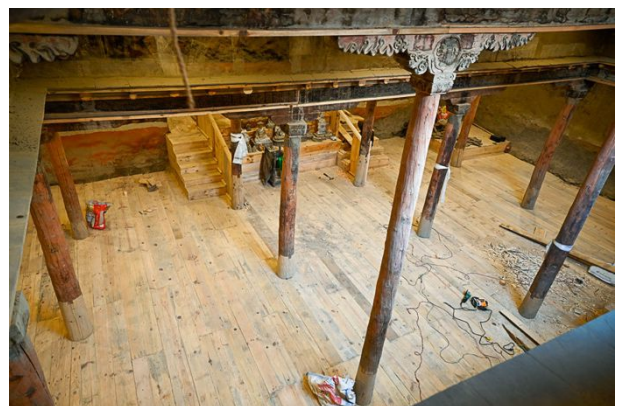


Figure 417: Area in front of the main sculpture with the altar and the stairs leading to the Ambulatory installed.

Figure 418: View from the upper floor into the Assembly Hall with the wooden floor installed.



Figure 419: Stairs to the Ambulatory around the main image of Buddha Maitreya after restoration.

Entry Hall

In the Entry Hall the door frame in front of the stairs that lead to the upper floor was improved. Further, the steps leading from the Entry Hall to the Assembly Hall were improved.



Figure 420: Improving the steps in front of the entrance to the Assembly Hall.



Figure 421: The entrance to the Assembly Hall after the steps were completed.

Entry Area

Oddly a massive crack on the left side of the entry wall of the temple was never restored. In October this crack was first patched up, then wall-ties were installed in the upper area. Completing this work also enabled the painting of this area.



Figure 422: The patched-up crack in the entry wall before the installation of wall ties. Note that the balcony door is still without glass.



Figure 423: The entry wall in late October after finishing the wall ties and painting the wall. Note that now some of the glass panels on the balcony are installed.

Then this side of the entry area need to be supported in the same way as the wall on the other side of the door. More broadly the area in front of the temple needed to be cleaned up. Work on the drainage also resulted in a steep decline between the entrance to the compound and the courtyard in front of the temple, thus stairs needed to be built there.



Figure 424: The stairs constructed between the entrance to the compound and the monastery courtyard.



Figure 425: Completing the support along the bottom of the entry wall.

Outside Work

In late October and early November, the outside of the temple was painted. Further, in the southeastern corner of the Entry Hall the supporting wall along the foundation was extended and heightened. This work started on November 17 and was finished on December 2. The eastern ends of the drainage could not be finished anymore.



Figure 426: Expanding the foundation support around the southeast corner of the Entry Hall.



Figure 427: Later it was expanded further to make it the same size as in front.

Lighting

Pipes for wiring were installed when doing the roofs, this quarter five electricians did the wiring and lighting for both floors as well as the exterior in the first two weeks of October. The lighting already proved useful for the flooring works inside and later in autumn for work outside as well.



Figure 428: Lighting installed on the different levels above the main sculpture of Maitreya.



Figure 429: Exterior lighting supporting the work later in the day.

Evaluation

Overall, the work at Gönpa Gang went well throughout the project period. In terms of management, Sabin Shrestha and Santosh Gurung were competent leaders for the work on site. Certain works planned were considerably delayed as originally experienced carpenters could not be found. Also the late delivery of materials, in particular wood, led to delays.

Throughout the project the windy conditions at the site posed a major challenge throughout, not only for the work itself, but even more so for keeping exposed areas secure for elongated periods. Tarpaulin used in this regard needed to be replaced frequently. Overall, the time gap between the dismantling of the structures and their reconstruction was long and represented a risk. This is particularly true for the Entry Hall, the walls of which are covered by wall paintings. The sever winds also increased the separation between the front wall of the Entry Hall and its northern wall, with the crack there increasing considerably over time, an issue that resulted in more extensive repair work there.

Poor weather, be it snowfall or excessive rain, occasionally brought the work to a complete standstill, but this was to be expected. Since the workers stayed on site they could monitor the situation.



Figure 430: In late April 2023 snowfall interrupted the work. At that time the Entry Hall with its murals were protected by the tarpaulin sheets to prevent damage.

Mid-August 2024 there was heavy rainfall which continued into September, which affected the work on site. The rainfall also resulted in the temporary loss of electricity. Together with the necessary cleaning work after the rainfall, a considerable amount of construction time was lost.



Figure 431: Rain damage to an exposed section of a wall which was later repaired again.



Figure 432: Plastic sheets and tarpaulin protecting the open areas of the Assembly Hall during rain.



Figure 433: Plastic sheets and plywood used to prevent water affecting the wall paintings on the floor underneath.

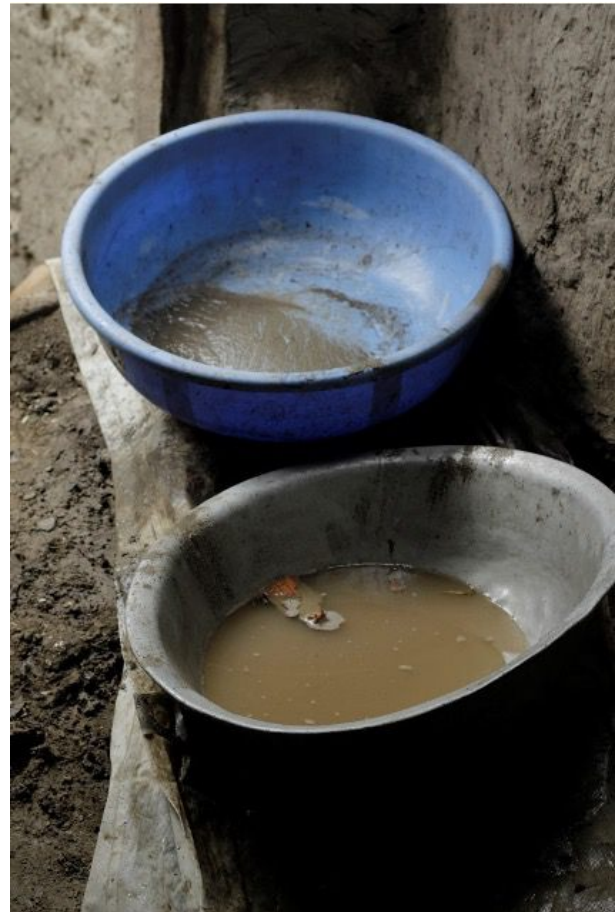


Figure 434: Collecting the rainwater in big bowls to avoid water on the floor.

During the rainy season there were also problems with the drinking water which was sources from a small side river. During this time, labor had to be used to carry drinking water from the village to the site.

Late September two days of heavy rain led to an unavoidable water intrusion. Part of the unfinished area was soaked in water, and the painted wall to the right side of the sculpture niche on the upper level was damaged.



Figure 435: Parts of the floor on the upper level drenched in water after the rain.



Figure 436: Tarpaulin sheet protecting the main sculpture, while the wall to the right shows water streaks.

Sabin Shrestha

A major disappointment was the resignation of Sabin Shrestha at the end of September 2024 as he was dissatisfied with his salary (see the section on Personnel above). Given the importance of competent conservation architects for such works it makes sense to shortly evaluate his performance.

Seen purely from his work on the architecture of the monument, Sabin has done exemplary work. He clearly grew into the project through first practicing on the less important parts of the monument (2023, South Wing and Entry Hall) before moving on to the most important section (2024, Assembly Hall). He contributed greatly through his attention to detail when preserving original structural members of the architecture. Together with the experienced carpenters he also found solutions for very complex restoration problems, and they appear to have been executed as well as it can be. From the outset Sabin has also shown excellent leadership regarding the organization of labor.

However, Sabin also has a complex personality that resulted in issues that make employing him a risk. Many of these issues appear ultimately to be related to a dissatisfaction with his salary. This not only came to the fore over the winter month 2023/24 and in September, but also in his attitude towards the work itself. Discussions about responsibilities and workload, and the delay in finishing any part of the work completely may all be the result of this dissatisfaction and created unnecessary tensions and even risks for the project. Ultimately Kunjon Thakuri had to step in many times to mitigate, and she also faced the brunt of these issues on a personal level. There would be many anecdotes that could be told to underscore these points.

Completion

Besides all the loose ends left by Sabin Shrestha throughout the complex the last quarter of the project also posed a lot of management issues. Further, project funding had to be complemented from the villager's donation, as otherwise it would have been impossible to finish the work.

During the Dashain and Tihar holidays it was difficult to retain workers during this quarter. Fortunately, the skilled carpenters making the balcony door stayed during Dashain and finished the work. Also, the mud plaster team stayed on and only left once their work was finished. To enable this, we needed to pay their travel home in addition to the salary, which was covered from the donation funds.

Recruiting new workers, particularly stone masons, proved challenging as most laborers were unavailable during this time of year. Our previous stone mason did not return, requiring us to find a replacement.

Additional wood and stone slates needed to be purchased from Jomsom using the funds raised in New York. Glass for the balcony windows was sourced from Lotus Glass in Pokhara. Generally, a lot of smaller material purchases had to be made to fill last minute gaps. The increasingly cold weather also posed a significant challenge, especially for outdoor tasks like stone slate work and mud plastering.

While most works could be finished during the last quarter, some tasks remain unfinished, including completing the clay layer on the roof, the stone slate work for the front courtyard, and the section of the mani wall that had to be removed to enable the restoration. Also the eastern ends of the drainage remained unfinished. These are planned to be done in 2025, but it is unclear if the remaining funds raised in New York will be sufficient to complete all works.

In the meantime, Noor Jahan and Sreekumar Menon also proposed a painting conservation plan for the site, which now forms the base for a follow up project application.

Before & After

In the following the report concludes with a series of images that compare the conditions before the restoration with that in April 2025, when Christian Luczanits could replicate the earlier pictures. Unless mentioned otherwise the before pictures are from 2019, when a complete documentation was made in anticipation of a restoration.



Figure 437: Frontal view of the temple in 2012.



Figure 438: Frontal view of the temple after restoration in April 2025.



Figure 439: The temple in late March 2023 just after we began the restoration.



Figure 440: The temple in January 2025.



Figure 441: The northwestern corner before restoration.



Figure 442: The northwestern corner after restoration.



Figure 443: View of the temple in 2012.



Figure 444: View of the temple in after the restoration in April 2025.



Figure 445: View of the entrance before restoration.



Figure 446: View of the entrance after restoration.



Figure 447: View of the west wall of the Entry Hall before restoration.



Figure 448: View of the west wall of the Entry Hall after restoration.



Figure 449: Entry to the main temple after restoration.



Figure 450: View of the entrance inside the Assembly Hall before restoration.



Figure 451: View of the entrance inside the Assembly Hall after restoration and with the light switches installed.



Figure 452: View of the Assembly Hall with the altar in the background prior to restoration.

Figure 453: View of the Assembly Hall with altar after restoration.



Figure 454: View of the Assembly Hall before restoration.



Figure 455: View of the Assembly Hall after restoration.



Figure 456: The broken beam with additional support before restoration.



Figure 457: The broken beam after restoration.



Figure 458: View of the distortion of the wooden structure due to the sagging of a pillar immediately in front of the main Buddha image.



Figure 459: The same area after restoration with the beam above the capital levelled.



Figure 460: View of the entry area of the Assembly Hall with the railing and skylight above before restoration.



Figure 461: View of the same area after restoration.



Figure 462: View from the Assembly Hall towards the upper floor after restoration.



Figure 463: The same balcony corner as seen on the upper floor.



Figure 464: View from the entrance to the upper floor with an intermediate entrance.



Figure 465: View from the entrance to the upper floor after restoration. The window in the back originally was a door leading to a later added and poorly constructed living room. This structure was removed at the very beginning of the restoration (see Demolition above).



Figure 466: View from the upper floor into the Assembly Hall and towards the main image before restoration.



Figure 467: View from the upper floor into the Assembly Hall and towards the main image after restoration.



Figure 468: View of the area in front of the main image of Buddha Maitreya before restoration.



Figure 469: View of the area in front of the main image of Buddha Maitreya after restoration with the lighting on the Buddha image.



Figure 470: View of the balcony room before restoration.



Figure 471: View of the balcony room after restoration.



Figure 472: View of the balcony area before restoration, note the wooden members inside the wall.



Figure 473: View of the balcony room after restoration, the centre capital is now outside the glass doors.



Figure 474: View of the painted room before restoration.



Figure 475: View of the painted room after restoration.