

THE ROLE OF INTANGIBLE CULTURAL HERITAGE IN SUSTAINABLE HISTORIC CITIES: NEWAR TRADITIONAL CRAFTS AND THE DWELLING CULTURE OF CRAFTSMEN IN NEPAL

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INTANGIBLE CULTURAL HERITAGE: TRADITIONAL SKILLS, TECHNIQUES AND KNOWLEDGE

In December 2020, 'Traditional skills, techniques and knowledge for the conservation and transmission of wooden architecture in Japan' was inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity. It covers 17 different skills, techniques and knowledge related to wooden architecture (Figure 1). This designation focuses on the inseparable relationship between tangible cultural heritage, including world heritage sites, and the intangible traditional techniques that have maintained it.

In Japan, traditional techniques or skills indispensable for preserving cultural properties are called 'cultural property conservation techniques.' Among these conservation techniques, those that require conservation measures are designated as 'selected conservation techniques,' and a system for certifying the technology holders and preservation organizations was established in 1975 with the revision of the Cultural Properties Protection Act. As of December 2022, there were 84 selected conservation techniques, of which 17 techniques and preservation organizations involved in the conservation and repair of wooden cultural property buildings were registered as UNESCO intangible cultural heritage. It is unique in that it includes not only the techniques themselves but also the Japanese customs that are linked with nature, such as the preservation of forests to nurture the materials, traditional skills of collecting the materials, methods for regular maintenance and repair of wooden structures and the restoration method of traditional buildings.

Each selected conservation technique is overseen by a responsible association that undertakes initiatives such as training successors, documentation, research, and promotional efforts to develop and implement safeguarding measures. One

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Figure 1 The selected 17 techniques of traditional architectural crafts for inscription in UNESCO ICH (Source: Agency for Cultural Affairs, Japan)

such organization is the Association for the Preservation of National Temple and Shrine Roof Construction Techniques, Inc., which oversees four skills related to roofing. Established in 1959, the association currently has around 40 registered members, including skilled individuals and organizations. Since the 1980s, it has been organizing successor training programs and playing a pivotal role in documentation and fostering social cohesion. This is achieved through activities such as operating a small museum and hosting various awareness events for the local community.

The state plays a supporting and facilitating role, providing assistance with specific initiatives, such as annual fairs. One of the secrets behind the preservation of many wooden cultural assets in Japan lies in such conservation and repair techniques, which are highly recognized worldwide.

Many countries have their own unique traditional skills and techniques for the restoration of tangible cultural heritage. But unfortunately, the understanding or recognition of these skills and safeguarding these activities are not yet enhanced in many countries. And Nepal is no exception.

NEWAR ART AND CRAFTS IN HISTORIC BUILDINGS AND MONUMENTS

The seven monumental sites of the Kathmandu Valley have been inscribed as UNESCO World Heritage Sites since 1979. They include two Buddhist stupas, two Hindu temples, and three palaces from the Malla dynasty. Each of these World Heritage Sites comprises multiple historic buildings, numerous small-scale monuments, and open spaces. The structures were constructed using traditional techniques and showcases the rich 'art and crafts' created by skilled Newar

craftsmen. These sites date back to the Malla period (13th to 18th centuries), with some structures originating as far back as the Lichhavi period (5th to 9th centuries).

The Newars are the indigenous people of the Kathmandu Valley in Nepal, known for their rich cultural heritage, artistic craftsmanship, and unique architectural traditions. They are a diverse community that has historically been at the center of Nepal's urban and cultural development. The Newars are recognized for their profound contributions to art, sculpture, music, dance, and festivals, blending Hindu and Buddhist traditions harmoniously in their daily lives.

Stone-carved monuments are among the distinct types of structures in Kathmandu (Figure 2). Shikhar-style temples and traditional water fountains, known as *hiti*, were built during the ancient and medieval periods, many of which remain functional to this day. Chaityas, another prominent example of stone craftsmanship in the Kathmandu Valley, are small Buddhist shrines. Over 2,000 chaityas can be found within the old residential areas of Patan. Rich stone carvings are also evident in temples. For example, the Golden Temple (*Kwa Baha*) in Patan and the Nyatapola Temple in Bhaktapur display exquisite stone carvings. Intricately carved deities and lions are often placed near archways, staircases, and gates.

Metal craftsmanship is another hallmark of the valley's artistic heritage, particularly in temples and monasteries (Figure 3). In the Golden Temple (*Kwa Baha*), a Buddhist monastery, the main shrine is gold-plated, and numerous metal sculptures of deities and animals adorn the interiors.

Woodcraft is equally significant, featuring prominently in temples, monasteries, and residential openings (Figure 4). Despite the use of different materials, the designs, deities, and motifs share a consistent aesthetic and deep religious significance in both Buddhism and Hinduism.

In addition to art and crafts, the traditional construction techniques of Newar architecture are remarkable for their uniqueness. The integration of brick masonry with mud mortar and timber, the skillful assembly of timber posts, lintels, and beams, and the expansive projecting roofs with traditional tiles are among the defining features. These construction techniques, dating back to the medieval period, have been passed down through generations and remain a vital part of Newar heritage.

Beyond tangible heritage, Newar art and crafts are integral to festivals and rituals, offering valuable insights into historical traditions. Festivals such as *Mataya* and *Samyak* are among the most historic and significant in Patan, closely



Figure 2 Stone carvings: Chaitya from Lichhavi Period (left), the stone waterspout 'Hiti' (middle) and Shikhar style temple (right)



Figure 3 The golden temple (Kwa Baha, Buddhist Monastery): Gold plated pagoda structure (left), stone carved entrance (middle) and metal crafted Sakyamuni Buddha statue (right)



Figure 4 Kumbheshwor Temple, a five-tiered pagoda-style structure, is an exemplary piece of traditional Newar architecture, showcasing intricate wooden craftsmanship

tied to Buddhism. The statues of Buddha, ritual accessories, and ceremonial utensils used during these festivals reflect the enduring craftsmanship of the Newar community. Many other festivals and rituals continue to incorporate these art forms, preserving their relevance and cultural importance to this day.

THE HISTORY OF NEWAR CITY AND DEVELOPMENT OF NEWAR ART AND CRAFTS

When we look at the history of Nepal, until the 18th century, the term ‘Nepal’ referred specifically to the Kathmandu Valley, and in the Newar language, it was called ‘Nepa.’ Consequently, the history of Nepal largely corresponds to the history of the Kathmandu Valley (Figure 5).

Bronze, metal, silver crafts, and stone carvings are believed to have been well-developed as early as the Lichhavi period (5th century) and continued into the Thakuri period. However, most architectonic works from these periods were lost due to conflicts. Stability began only with the rise of the Malla rulers. During their reign, construction technologies advanced, and the architecture of both cities and villages acquired a distinctive character now defined as the Newar style. During the Malla period, the caste system was introduced, organizing society based on occupation. Figure 6 illustrates the caste hierarchy and their

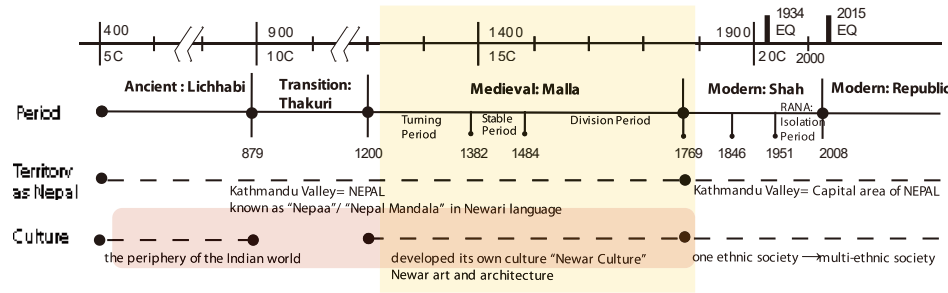


Figure 5 The history of Newars (Source: ©L. Shakya)

CLEAN CASTES		
RĀJOPĀDHYĀYA (Brahmā, Dyabohāy)		VAJRĀCĀRYA (Gubhāy), Buddhist priests, and SAKYA (Bani), goldsmiths, artisans and shopkeepers
ŚREṢṬHA (Śaīyā) including Jōī, astrologers, Kārmācārya (Kābhā), Śaivite Tantric priests, both of whom wear the sacred thread, and Rājahandārī, Amātya, and Śreṣṭhas, who do not		
Pīṭhārīya Śreṣṭhas		
MAHARJAN (Jyāpū), Dīgāl (Dīgū, Jyāpū), and Awālā (Kumhā): farmers and potters; latterly masons, carpenters, and many other trades		TĀMRĀKĀR (Tamāl, Tamot), copperworkers, Sīpakār (Lwāhāyām), formerly stone masons, now carpenters, Bārāhī, Kāthakār or Hastakār (Sikahm), carpenters, Rājarnakār (Halowāl, Marikahm), sweetmakers
TANDUKĀR (Khush), farmers, musicians	VYĀJĀNKĀR (Tepay), market gardeners	NĀPIT (Nau), barbers
WATER UNACCEPTABLE CASTES		
Untouchables		
KHADGĪ/ŚAHI (Nāy, Np. Kadhī), butchers, milk sellers, drummers		
KAPĀLI/Darsandhārī (Jogī, Np. Kadhī), musicians, tailors, death specialists		
DYAHLĀ (Pwāh, Pwārhyā; Np. Pōdē), sweepers with rights at pīṭhā and śmādhā, fishermen		

Figure 6 Newar caste system based on occupation (Source: Gellner (1994))

corresponding professions. For instance, carpenters and masons were part of the Maharjan caste, while stone masons and copper workers belonged to the Tamrakar and Kansakar castes.

The Shakya caste is categorized here as craftsmen and goldsmiths. However, before the caste system, 'Shakya' referred to celibate monks who lived in Buddhist monasteries to study Buddhism. Anyone could become a Shakya and learn Buddhism before the caste system was formalized. Even after its implementation, the Shakyas continued to adhere to their religious devotion and craftsmanship, particularly in creating Buddhist art and artifacts. This is why most artists and craftsmen in Buddhist traditions are from the Sakya caste. In the 13th century, the renowned artist Araniko, believed to be from Patan, was invited to China and Tibet. He led a team of 80 artists to create the White Dagoba Stupa in Beijing and the Golden Stupa in Tibet, among other pagoda-style structures. During this period, trade with Tibet also flourished.

Over time, various clans specialized in specific arts and crafts, honing their skills and traditions. Knowledge was passed down orally from father to son, ensuring the continuation and refinement of these crafts. In the mid-18th century, the Gorkha Shah dynasty began its rule. This period saw the development of Hindu-Islamic architectural styles, marked by the reconstruction of new palaces and temples. By the 19th century, during the Rana period, British-influenced neo-classical architecture began to emerge.

After the 2015 earthquake, a new reconstruction guideline for cultural heritage was established to enhance seismic performance. However, the guideline's deficiency in providing explanations or examples of various sizes and types of cultural heritage has resulted in a negative impact, as traditional construction methods are often overlooked or disregarded. For example, in reconstruction of Buddhist monasteries in Patan, wooden frames have been integrated into brick walls, and timber columns have been introduced to reinforce the balcony for seismic performance. In addition, '*lloham*,' a stone base of the column is totally differ-



Figure 7 Changing restoration method of historic buildings: The columns with stone base '*lloham*' (left), and columns newly installed without stone base and without utilizing original materials (right). Source: ©L. Shakya

ently used that ignores the traditional damp-proof technology (Figure 7).

Today, there is freedom in choosing occupations, and even non-Newar individuals are engaged in art and craft-related work. However, while the number of artists from the original craftsman families is gradually declining, some traditional craftsman groups continue to live collectively in the old town of Patan, preserving their crafts as family-run businesses.

LIVING ENVIRONMENT OF CRAFTSMEN

Newar houses in Patan are typically 4 to 5 stories tall and are built around enclosed courtyards, creating a harmonious living environment. Many of these courtyards serve as Buddhist monasteries, functioning as both religious and communal spaces. In some cases, the courtyards are surrounded by monastery buildings as well as individual residential houses. The majority of residents in these settlements are traditional craftsmen, who have continued their craftsmanship practices for generations. These vibrant communities reflect a blend of living heritage and cultural craftsmanship, deeply rooted in Newar traditions.

The figure 8 shows Patan old residential area with historical monuments (Buddhist monasteries and temples) in left and the craftsmen's settlement in right. To figure out the living environment of craftsmen, author has conducted a survey with Professor Mitsuo Takada (Kyoto Arts and Crafts University, Japan) and his team in 2014. Based on the survey, the detailed living environment of 5 craftsman families is illustrated in this chapter.

Based on the concept of purity, the living space of Newar house is divided on each floor, such as the ground floor is used for a toilet/storage room/working room/shops, the first floor is used for a bedroom/guest room, the second floor is used for a family room, and the third floor is a kitchen, a prayer room (Figure 9). However, most of the houses are extended the extra floors to create space for



Figure 8 Patan old residential area with historical monuments (left, source: Slusser (1982)), and the surveyed house location of craftsmen (right, source: ©L. Shakya)

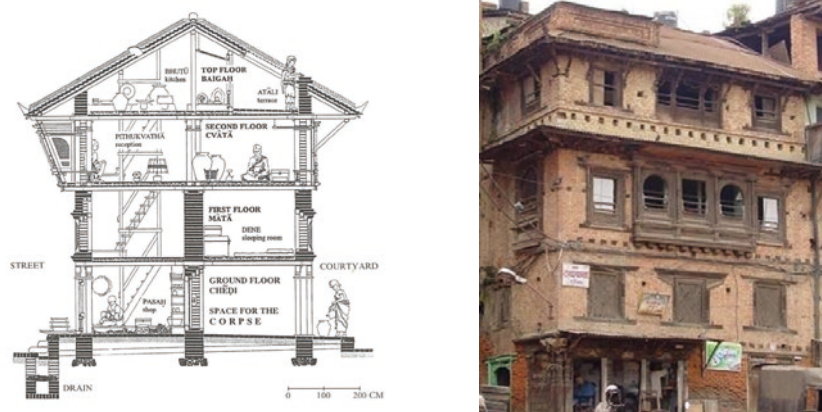


Figure 9 Traditional spatial structure of Newar house (left, source: Gutschow 2011) and a traditional house picture in Patan (right, source: ©L. Shakya)

extended family. In the case of craftsmen, the later extended floor is used for working spaces.

The survey targeted five families from different craft works, such as wood, metal, stone and silver. Except the metal statue craftsman all are working at their own residence with family. They have been working as craftsmen for generations. Case study 1 (Figure 10) shows the working place of a silver craftsman, Mr Chaitya Bahadur Shakya. The craftsman specializes in creating traditional silver and copper items '*halī jawah*' used in significant rituals such as weddings and first-feeding ceremonies, continuing a generational trade. His residence, a historic multi-story house in Patan, seamlessly integrates living and working spaces. The ground floor is dedicated to crafting, where he independently handles the entire production process—from cutting and shaping silver sheets to assembling and polishing the final products—using traditional tools like gas cylinders and adhesives. Upper floors serve as living quarters for the family, while some engraving work occasionally extends to these spaces. The house's courtyard and proximity to shared communal areas reflect the deep interconnection between his craft, residence, and the surrounding craftsman neighborhood, preserving both the traditional art and the lifestyle of Patan's craftsman community.

Case study 2 (Figure 11) shows the working place of another silver craftsman, Mr Kul Ratna Shakya. The silver craftsman in Patan creates *chusyaa*, a unique accessory for Buddhist prayer beads, using silver plates, grains, yarn, glue, and gas. The production process involves cutting, processing, assembling, polishing, and stringing, with tasks distributed among family members based on their skills. Their multi-story home integrates work and living spaces, with a ground-floor shop, summer and winter workshops on the 4th and 5th floors, and other areas for family use. This setup ensures seamless blending of professional and domestic life while preserving traditional craftsmanship. Situated in a traditional craftsman neighborhood, the home connects to both private and shared courtyards,

fostering social ties and sustaining the legacy of Patan's cultural heritage.

Case study 3 (Figure 12) shows the working place of a stone craftsman, Mr Rajendra Bajracharya. The stone sculptor crafts intricate Buddhist statues from black, soft, and precious stones such as lapis and crystal, sourced locally and internationally. The work process begins with shaping the stone to the required size, followed by carving, sketching, and detailing, with special attention to the stone's grain to prevent breakage. Water is used during carving to minimize dust and soften the stone for precision. A single statue typically takes about 15 days to complete. The craftsman's multigenerational residence in Patan's Bhinchebahal courtyard integrates work and living spaces, with initial carving done on the ground floor due to dust concerns, while finer detailing occurs upstairs. The courtyard, shared with relatives and neighbors, serves as a communal access and workspace for materials like stones stored on-site, reflecting the intertwined nature of community, craft, and daily life in this traditional craftsman neighborhood.

Case study 4 (Figure 13) shows the working place of wood craftsman, Mr Uttam Shakya. The woodcraft craftsman specializes in crafting intricate wooden fixtures and furniture, using materials like soft Champak wood from Nepal's southern regions and harder varieties for durable components like window frames. The process involves sketching designs, estimating materials, ordering wood, carving detailed patterns, and finishing with linseed oil and sanding. Operating from a multigenerational lineage spanning over ten generations, the craftsman currently employs a small team, adapting to challenges such as the scarcity of quality wood. The residence, built 22 years ago in Nabaha, integrates living and workspaces, with the ground floor dedicated to design and production. Upper floors serve as living quarters and rent rooms, while small-scale finishing work occasionally occurs in these spaces. This arrangement exemplifies the seamless integration of livelihood and domestic life, characteristic of traditional craftsman communities.

Case study 5 (Figure 14) shows the working place of a metal craftsman, Mr Santa Kumar Shakya. The craftsman specializes in creating cast metal Buddha statues used for prayers and as decorations. This craft involves a detailed multi-stage process, including wax modeling, applying special clay layers, metal casting with copper, cleaning, fine carving, and polishing with gold and mercury paste. The workshop employs 25 workers, including family members, and occasionally outsources specific tasks. The craft has evolved into a large-scale business over the past 20–25 years, transitioning from handmade gold accessories to a factory setup for mass production. The family home, inhabited for generations, has undergone two renovations. A five-story extension in the backyard now serves as a dedicated workspace, with specific floors allocated for different production

stages. The original building houses a showroom and residential areas, reflecting the integration of work and living spaces. This setup mirrors the neighborhood's identity, renowned for its metalwork craftsmen, while adapting to modern demands through business expansion.

Cases 1, 2, and 3 illustrate the typical working style of traditional craftsmen, where only family members are involved, utilizing both indoor and outdoor spaces of their own homes as work areas. In contrast, Cases 4 and 5 showcase craftsmen who have expanded their operations to accommodate larger-scale

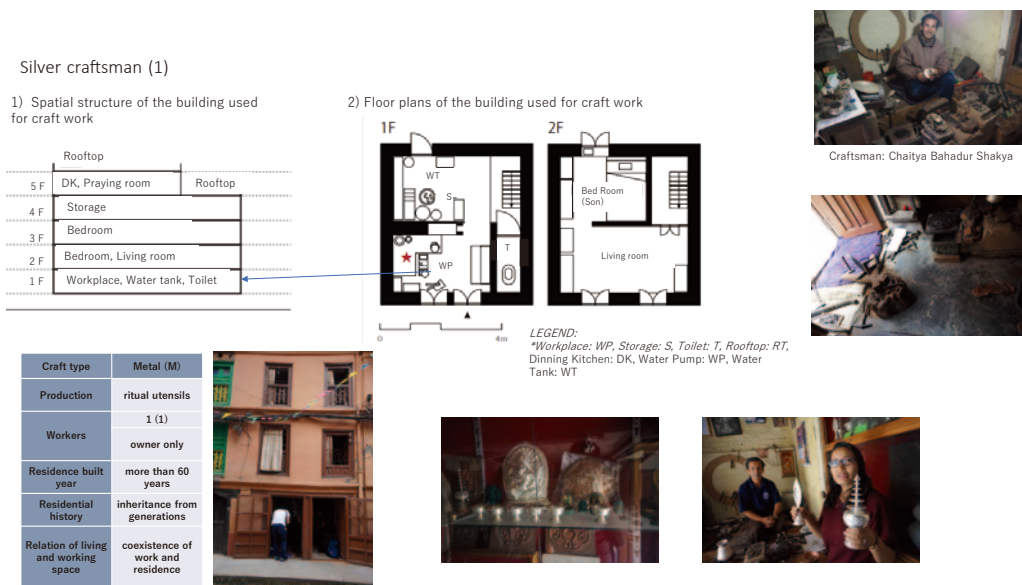


Figure 10 Case study 1: Living environment of silver craftsman (1)

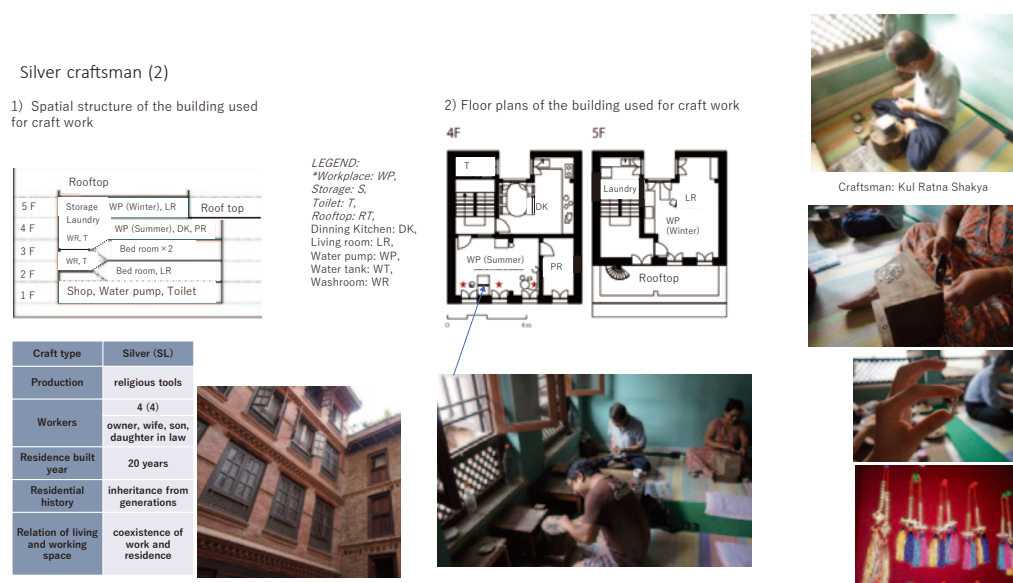


Figure 11 Case study 2: Living environment of silver craftsman (2)



Figure 12 Case study 3: Living environment of stone craftsman

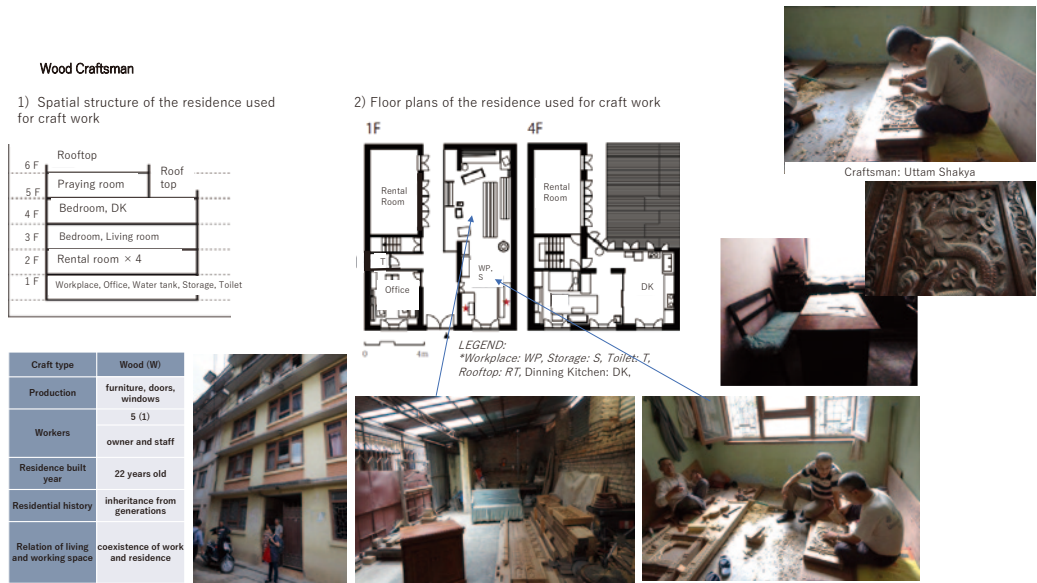


Figure 13 Case study 4: Living environment of wood craftsman

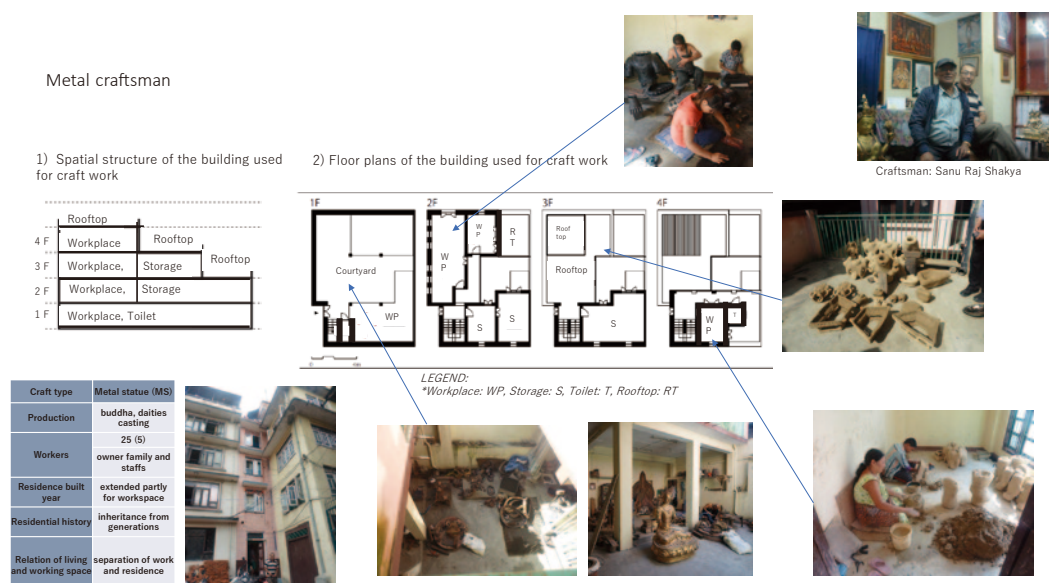


Figure 14 Case study 5: Living environment of metal craftsman

projects by managing bigger workshop spaces. However, even in these cases, their workshops remain closely connected to their residential areas.

CHALLENGES OF THE CRAFTSMANSHIP

Table 1 shows the relation with locals and challenges of craftsmanship. In Nepal, craftsmen face significant challenges in their trades, despite being members of the Federal of Handicraft Association Nepal (FHAN). For woodworkers, there is steady demand for doors, windows, and furniture, but they struggle with a lack of local business relationships and difficulty sourcing materials. Metal statue craftsmen primarily receive orders from Tibetan customers, with limited local demand, and face stiff competition from neighbors in the same trade. To address material procurement issues, they have formed a group within FHAN. Stone craftsmen mainly export their work, but face challenges in sourcing sufficient stones, leading to the creation of a small group to manage this issue. Metal (silver and bronze) craftsmen, though catering to local orders, are also in competition with their neighbors and lack networking opportunities to expand their business. Similarly, silver craftsmen, serving mainly Tibetan customers with little local interest, face the same challenges of limited networking and a lack of strong business relationships in their community. The lack of materials and local demand, combined with competition within the craftsman community, creates obstacles for these craftsmen to thrive and expand their businesses.

FHAN plays a significant role in promoting and supporting Nepal's handicraft sector by offering resources, advocacy, and networking opportunities for craftsmen. While FHAN's activities are integrated and focus on enhancing the

Table 1 Challenges for craftsmen

Craft type	Wood (W)	Metal statue (MS)	Stone (S)	Metal (M)	Silver (SL)
Trade/ Sales	<ul style="list-style-type: none"> •<u>demand from locals</u> •doors/ windows/ furniture 	<ul style="list-style-type: none"> •orders from Tibetan customers •very few demand from locals 	<ul style="list-style-type: none"> •mainly exported to foreign country 	<ul style="list-style-type: none"> •<u>orders from locals only</u> •very few works 	<ul style="list-style-type: none"> •orders from Tibetan customers •very few demand from locals
Relation with the locals/ academia	<ul style="list-style-type: none"> •no relation •member of FHAN 	<ul style="list-style-type: none"> •most of neighbors are metal craftsman •member of FHAN 	<ul style="list-style-type: none"> •most of neighbors are stone craftsman •member of FHAN 	<ul style="list-style-type: none"> •most of neighbors are doing same work •member of FHAN 	<ul style="list-style-type: none"> •many neighbors are doing same work •member of FHAN
Challenges and activities	<ul style="list-style-type: none"> •challenge to get material 	<ul style="list-style-type: none"> •<u>established a metal craftsman's group</u> to deal with difficulties of getting materials 	<ul style="list-style-type: none"> •have challenges to get sufficient stones •<u>a small stone craftsman's group is established to deal with this problem</u> 	<ul style="list-style-type: none"> •do not have any networks regarding the work 	<ul style="list-style-type: none"> •do not have any networks regarding the work

quality and marketability of Nepali handicrafts through training programs and market access, there are gaps in addressing the specific needs of different types of craftsmen. Based on case studies, key challenges for craftsmen include material shortages and limited networking opportunities. Craftsmen in wood, metal, stone, and silver crafts face difficulties in sourcing materials, while many lack strong networks for collaboration and business growth. Although FHAN facilitates some networking through general activities, there is a need for more tailored support for these specific issues, particularly material procurement and expanding local and international connections for diverse craftsmen.

CONCLUSION

In conclusion, Newar art and crafts, which developed during the Malla period, continue to thrive today in the Kathmandu Valley. It is important to note that most craftsmen work individually within their families, using their residence spaces as workspaces and focusing on small-scale production, rather than engaging in mass production. Despite facing several challenges, such as material shortages and lack of networking, the craftsmen in these areas continue to live in the same neighborhoods, inheriting and practicing their traditional skills. These settlements, along with the passing down of traditional knowledge, play a significant role in preserving tangible cultural heritage, restoring historical sites, and ensuring the continuity of local festivals, making historic cities vibrant and alive.

The safeguarding of intangible cultural heritage (ICH) and the traditional skills associated with it are crucial for the sustainable preservation of historic cities. In Japan, the development and promotion of traditional techniques for cultural property conservation, particularly for wooden architecture, has been a major success. Japan's system, which includes the certification of skilled craftsmen, training programs, documentation, and community engagement, has proven essential for preserving its cultural heritage. The state also plays a supporting role in ensuring the sustainability of these practices.

In contrast, Nepal lacks a system that fosters collaboration among craftsmen, and there is a need for a comprehensive approach to address the challenges they face. The existing issues—such as the lack of a network to support craftsmen, challenges in acquiring materials, and a lack of structured systems to promote traditional skills—hinder the long-term sustainability of Nepal's craftsmanship. There is an urgent need for a system that creates a support network, facilitates material access, and ensures that the skills of craftsmen are passed on to future generations.

By involving craftsmen and craftsmen in post-disaster restoration projects, fostering better communication and networks between academic institutions and craftsmen, and acknowledging the contributions of craftsmen, Nepal can lay the foundation for a sustainable system that promotes and preserves its traditional skills. Such efforts will not only help safeguard Nepal's cultural heritage but also ensure the vitality and continuity of its craftsmanship in the future, much like the practices seen in Japan.

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Note: Portions of this manuscript have already been published in Shakya (2024).

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