

Beyond Surface Resemblance: A Comparative Study of Multi-Eave Temples in Jilong Valley and Nepal

Shilin Huang^{1*}

¹ School of Sciences for the Human Habitat, University of Chinese Academy of Sciences, Beijing, China

Email Address

huangshilin22@mailsucas.ac.cn (Shilin Huang)

*Correspondence: huangshilin22@mailsucas.ac.cn

Received: 15 November 2025; **Accepted:** 7 December 2025; **Published:** 31 December 2025

Abstract:

Along the trans-Himalayan corridor between Southwest China and Nepal, the multi-eave temples of Jilong (Gyirong) Valley occupy a rare but understudied place in Himalayan traditional architecture. Qangzhong Zulakang and Paba Temple closely resemble the multi-tiered temples of the Kathmandu Valley, yet they differ markedly in spatial organisation, structure and functional use. Drawing on field survey, measured drawings and historical texts, this article compares plan layout, circulation, elevation and roof forms, structural systems and functional programming in Jilong and in representative Nepalese temples. It argues that Jilong's multi-eave temples are not simple copies of Nepalese prototypes but hybrid architectures in which imported forms are adapted to highland environments, local cultural customs and Inner-Chinese building traditions. The notion of "semblance without sameness" is used to conceptualise this process of architectural translation. The case enriches discussions of architectural hybridity and localisation in trans-Himalayan cultural networks and provides a basis for more context-sensitive conservation strategies.

Keywords:

Jilong Valley, Multi-eave Temples, Kathmandu Valley, Himalayan Architecture, Architectural Hybridity

1. Introduction

Jilong Valley, located on the southern flank of the central Himalayas, is at once a borderland of Southwest China and a pivotal corridor connecting the Chinese interior, the Highland Region and South Asia. As a key node on the historical Fan–Nepal route, the valley has long facilitated trans-regional exchanges of goods, people and ideas. From early cultural missions recorded in Tang texts to the marriage of regional rulers with Nepalese princesses, Jilong has repeatedly emerged in the historical record as a gateway between the Central Himalayas and the Kathmandu Valley.

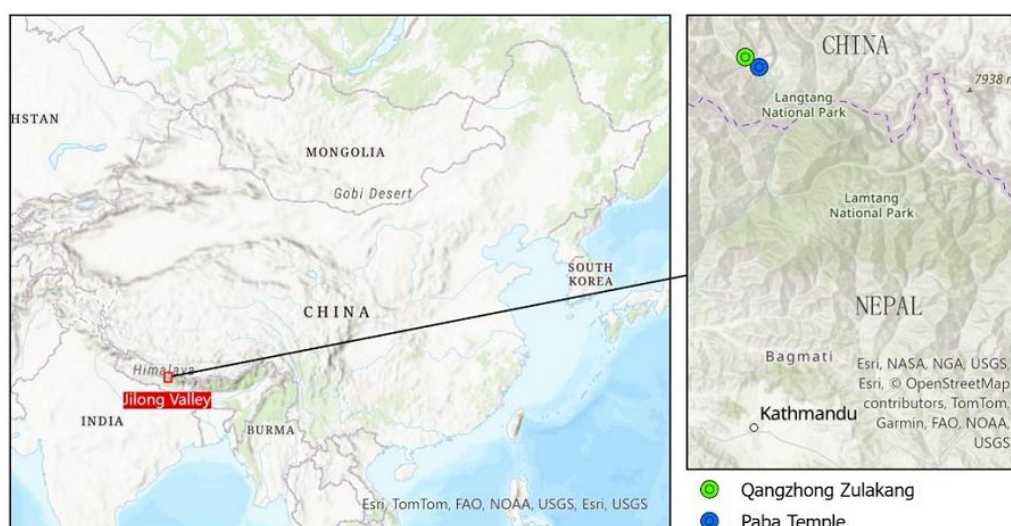


Figure 1. Location of Jilong Valley.

Within this corridor, two heritage temples stand out for their highly unusual appearance in the regional context: Qangzhong Zulakang (often abbreviated as Qiangzhen Lhakhang) and Paba Temple (Figure 1). Both adopt a multi-eave, tower-like silhouette that strongly recalls the so-called “dega” temples of the Kathmandu Valley. Yet beneath these striking surface similarities lie divergent spatial organizations, structural logics and cultural practices. While Nepalese multi-eave temples grow out of Kathmandu Valley traditions centred on a ground-floor cella (core chamber), the Jilong temples fully embed local cultural systems, including multi-layered circumulation (walking paths) and complex arrangements of cultural images.

This paradox of “similar in appearance, different in essence” raises at least three questions. First, through what historical processes did Nepalese multi-eave forms enter the architectural repertoire of a Himalayan border region? Second, how were these forms transformed as they were adapted to a plateau environment and a different cultural system? Third, what does this case contribute to our understanding of architectural hybridity, cultural translation and the localized appropriation of global architectural forms?

This article addresses these questions by revisiting and expanding a previous study on the comparative architecture of Jilong and Nepalese multi-eave temples, re-framing it for an international readership and embedding it in broader theoretical debates on cross-cultural architecture and heritage.

2. Literature Review and Theoretical Framework

2.1. Studies on Nepalese multi-eave temples

The Kathmandu Valley has long been recognized as a major centre of South Asian monumental architecture. Classic works by Korn and Tiwari systematically describe the typology, construction and symbolism of Newar multi-eave temples, tracing their evolution from early wooden shrines to the monumental tiered temples of the Malla period [1,2]. These studies highlight the close relationship between building proportion systems, the mandala concept and traditional cosmology, especially the idea of the temple as a materialized cosmic mountain.

Key characteristics emerge from this research: square or near-square plans subdivided into 64 or 81 grids, a ground-floor core chamber housing the main figure, multi-tiered roof systems with prominent overhanging eaves supported by richly carved struts, and brick-and-timber structures carefully tuned to seismic conditions. The emphasis lies on the centrality of the core chamber and on the temple as a “chariot” circulating between heaven and earth.

2.2. Jilong Valley and Nepal–China architectural exchanges

On the Chinese side, scholarship on Jilong has mainly appeared in Chinese. Huo Wei’s pioneering study of cultural relics along the Fan–Nepal route situates Jilong as a key node in Sino–Nepalese exchanges during the ancient period [3]. Architectural comparisons between Jilong and the Kathmandu Valley have been advanced in recent theses and articles, which document the Nepalese stylistic features of Qangzhong Zulakang and Paba Temple and explore their historical links with Nepalese artisans [4–8].

The formative period of Jilong’s multi-eave temples coincides with the consolidation of cultural institutions in the ancient kingdom. When Trisong Detsen came to power in the 8th century, he sought to elevate new cultural practices and weaken the influence of indigenous factions [9]. A central actor in this process was We Selnang, the local governor of Jilong, who travelled to Nepal and played a crucial role in inviting masters to the region [8].

These works have convincingly established that Jilong’s multi-eave temples are rare within the region and historically related to cross-border contacts. However, most studies remain descriptive, focusing on stylistic similarity or generic notions of “influence” rather than systematically unpacking the mechanisms of adaptation and transformation that produced the present forms.

2.3. Architectural hybridity and cultural translation

From a theoretical perspective, Jilong’s multi-eave temples can be situated within discussions of architectural hybridity, transculturation and cultural translation. Post-colonial and global architectural histories have argued that when forms travel across regions, they are not simply copied but re-coded through local social, environmental and customary logics. Rather than thinking in terms of unilateral “influence”, it is more productive to speak of negotiation, selection and re-inscription.

Borrowing the notion of “semblance without sameness”, this study treats the formal similarity between Jilong and Nepalese temples as a starting point for investigating deeper differences in spatial syntax, use patterns and symbolic meanings. The Jilong temples are understood as hybrid artefacts in which Nepalese forms, regional cultural customs and Inner-Chinese architectural ideas intersect.

3. Research Area, Case Selection and Methods

3.1. Jilong Valley as a trans-Himalayan corridor

Jilong Valley lies in Southwest China, descending from altitudes above 4,000 m down to around 1,800 m at the border with Nepal. Its steep north–south valley provides a rare natural passage through the Himalayas, making it a “geographical bridge” between the Highland Plateau and the Kathmandu Basin.

Historically, Jilong formed part of the Fan–Nepal route, along which goods, diplomats, and travelers moved between the ancient kingdom and Nepal [3]. Tang texts and inscriptions record missions and marriages that passed through this corridor, including the famous marriage of Songtsen Gampo and the Nepalese princess Bhrikuti. By the late 8th century, Jilong was already a major official trade route between Southwest China and Nepal, a status it has held, with interruptions, into the present [6,7].

3.2. Case selection

This study focuses on two multi-eave temples in Jilong (Figure 2):

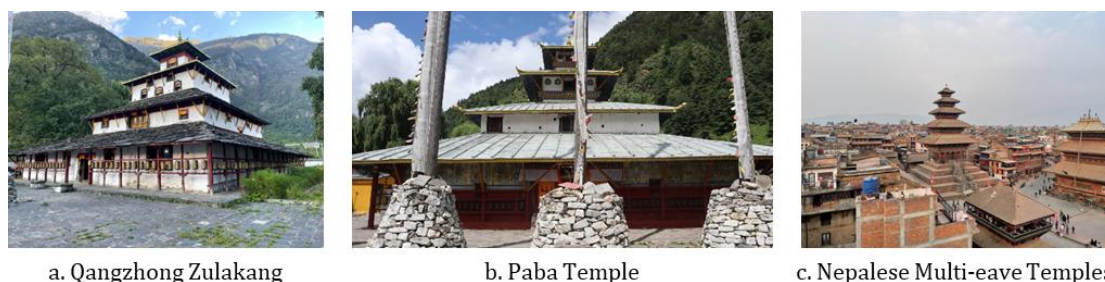


Figure 2. Case selection of the research.

(1) Qangzhong Zulakang

Located in Bangxing community in Jilong town, near the main road, the temple was listed as a regional protected monument in 2007. Historical texts trace its origins to a foundation under Songtsen Gampo and rebuilt in later periods. The current temple is a four-eave tower-like building of earth–brick–stone construction, internally organized as three main floors plus intermediate levels.

(2) Paba Temple

Situated on the northern side of Jilong town, about 2 km from Qangzhong Zulakang, Paba Temple was inscribed as a national key cultural relic in 2013. According to local tradition, it was built in the 7th century to house a sandalwood image, deliberately adopting a Nepalese architectural style.

On the Nepalese side, the article uses as comparative references representative multi-eave traditional temples in the Kathmandu Valley, drawing primarily on published documentation. These include two-, three- and five-tier temples in the royal squares of Kathmandu, Patan and Bhaktapur.

3.3. Methods

The research combines:

(1) Field survey and architectural recording

Fieldwork was conducted in both the Highland region and Nepal. In Jilong Valley, on-site surveys of Qangzhong Zulakang and Paba Temple documented their environmental setting, spatial configuration, patterns of use and current condition through systematic photography and video recording. In the Kathmandu Valley, representative multi-eave temples in the royal squares of Kathmandu, Patan and Bhaktapur were visited in order to obtain first-hand information on their layouts, elevations and cultural activities. For both regions, the survey recorded building materials, constructional details and critical structural connections, providing an empirical basis for subsequent comparison.

(2) Textual and historical analysis

The fieldwork was complemented by the reading of regional and Chinese historical sources related to the Fan–Nepal route, local officials in Jilong and the spread of cultural traditions, as well as by the consultation of local gazetteers, inscriptions and archival materials.

(3) Comparative architectural analysis

On the basis of the field and textual data, a systematic comparison was carried out between the Jilong temples and representative Nepalese multi-eave buildings. The analysis focused on plan typology, circulation patterns, elevation and roof systems, structural organisation and use of materials, and modes of functional use. Building on previous Chinese-language research, the study also employs summary tables and schematic diagrams to highlight how different environmental conditions and functional requirements constrain and shape architectural form in the Highlands and in the Kathmandu Valley.

(4) Interpretive synthesis.

Finally, the empirical findings are interpreted through the lenses of architectural hybridity, cultural translation and localisation. The notion of “semblance without sameness” is used to synthesise the results of the comparative analysis and to develop an explanatory model for how Nepalese multi-eave forms were appropriated, transformed and re-embedded in the specific borderland context of Jilong.

4. Comparative Architectural Analysis

4.1. Plan layout and spatial hierarchy

Both Jilong and Nepalese multi-eave temples share a broadly comparable formal schema (Figure 3).

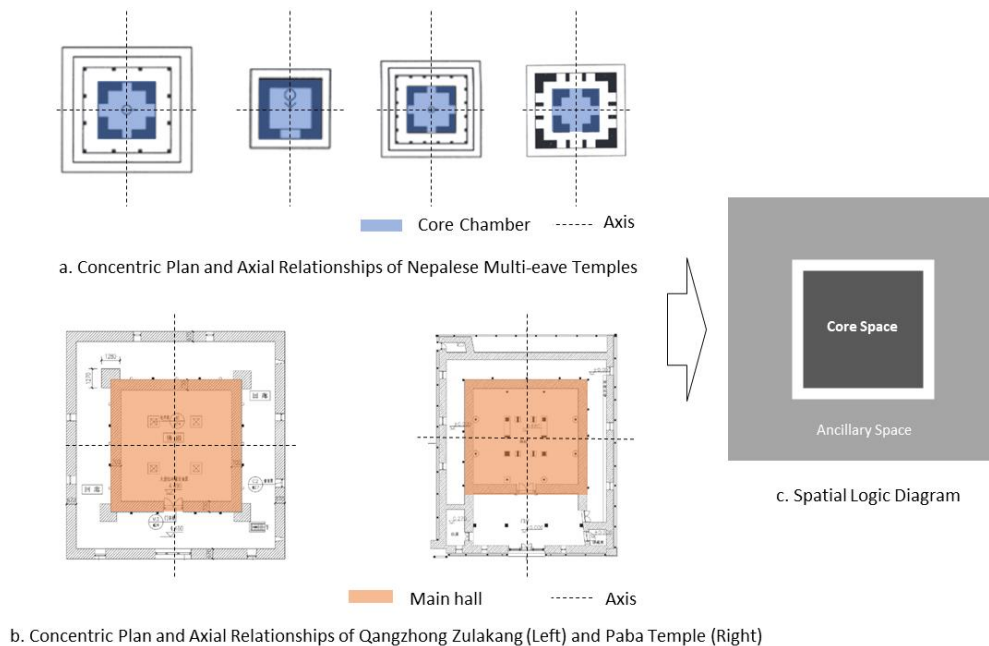


Figure 3. Similarities in the layout of multi-eave temples between Nepal and Jilong.

In both cases, the ground plan is square or nearly square, the central space is reserved for the principal cultural images, and circumambulatory paths around this

core emphasise a strong sense of centre and order. This geometric clarity materialises cosmological ideas of the temple as an organised microcosm of the universe. Yet behind this shared formal grammar, the spatial logic diverges in several key respects: the location of the central hall, the organisation of circulation, and the degree of openness and integration with everyday public space.

(1) Location of the central core / main hall

In Nepalese temples, the core chamber is typically located on the ground floor and directly connected to the earth. This chamber is small, enclosed and highly restricted: usually only specialized personnel enter, while lay visitors circumambulate outside or gather under the surrounding verandahs.

In Jilong temples, the principal Main Hall is not confined to the ground floor. At Qangzhong Zulakang, the first level contains a central block of small rooms and circumambulatory passages with 108 rotating cylinders, while the main hall is located on the second level, surrounded by an internal circulation corridor. Some upper levels are partly or wholly restricted for institutional use, serving as retreat or ceremonial spaces. The vertical hierarchy thus maps onto social hierarchies: higher levels are more restricted and associated with more esoteric practices.

(2) Modes of circumambulation

In Nepal, circumambulation is organised primarily in horizontal loops around the exterior of the core or around the plinth. These circuits are usually single-layered: visitors circle the temple but do not circulate through multiple internal gallery levels.

In Jilong, circulation is multi-layered, with both external and internal circuits at the ground level and further circumambulatory passages at upper levels (Figure 4). The spatial system is explicitly designed to sustain the local practice of repeated circulation, with cylindrical fixtures lining the corridors.

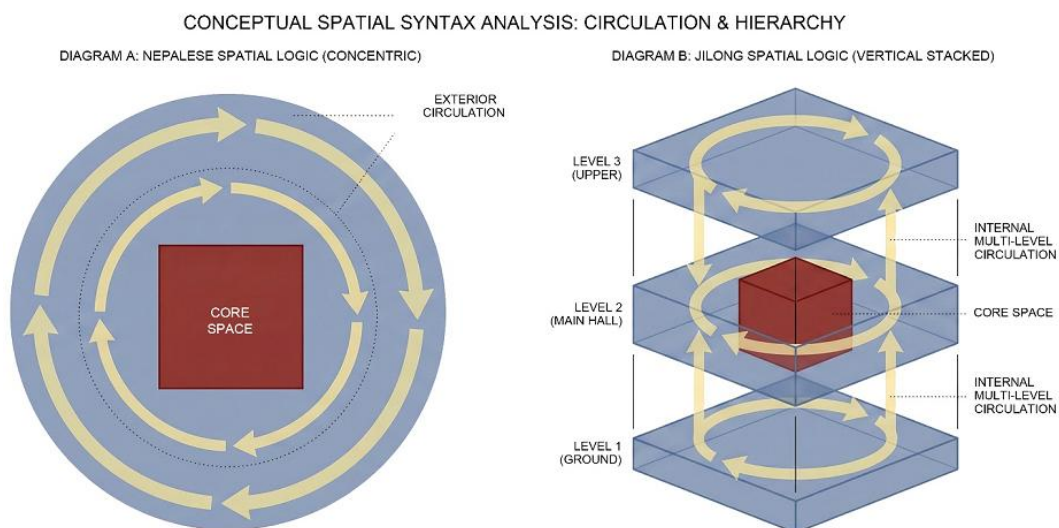


Figure 4. Conceptual architectural analysis diagram comparing two spatial logics.

(3) Openness and public access

Nepalese temples tend to be more porous. Built within dense urban squares, they are embedded in everyday circulation routes, and their plinths often double as public platforms where people sit, trade and converse (Figure 5). The temple participates in civic life beyond strictly ceremonial functions.

Jilong temples are relatively more enclosed and separated from the surrounding settlement. Historically they were sited slightly apart from the main residential clusters, and even today access to certain interiors remains restricted. While still important to local communal life, their spatial relationship to everyday public space is less intertwined than in Kathmandu's royal squares.



Figure 5. Nepalese temples' public space.

4.2. Elevation and roof forms

The most immediately visible similarity lies in the use of multi-tiered roofs that recede in plan to form a tower-like silhouette. In both Jilong and Nepal, this produces a striking vertical accent in the landscape, further enhanced by elaborately carved wooden struts and metal finials. Behind this shared visual language, however, the two traditions diverge in terms of proportions, symbolic numerology and the relationship between roof tiers and interior space (Figure 6).

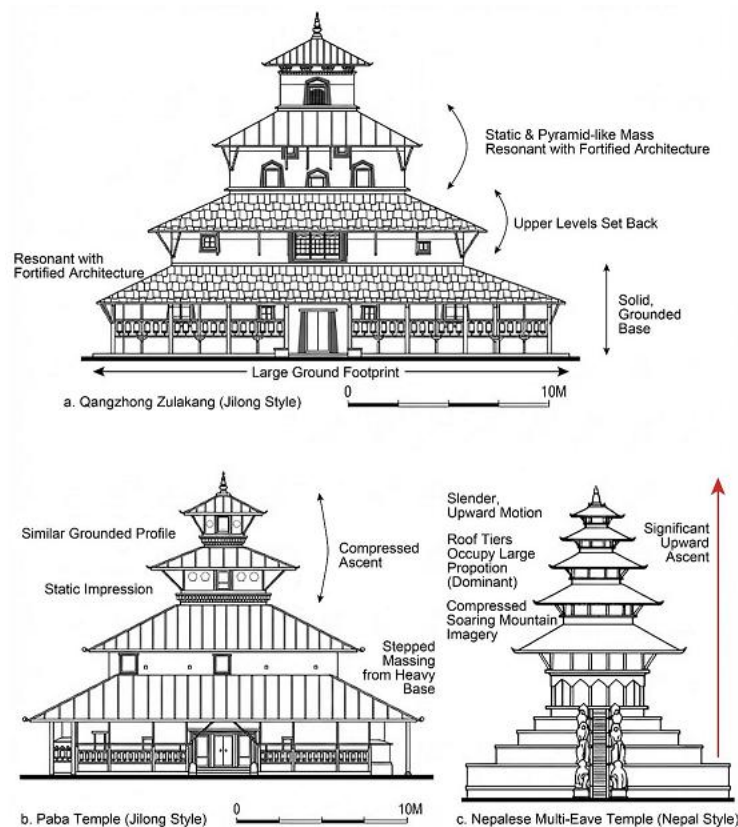


Figure 6. Comparative Elevation Analysis.

(1) Proportions and visual emphasis

Nepalese temples characteristically emphasise slenderness and upward motion. Roof tiers occupy a large proportion of the elevation, while the wall zones are relatively compressed. The resulting proportion system evokes the image of a soaring mountain, resonating with traditional cosmological imagery.

By contrast, Jilong temples appear more pyramid-like and solid. Because the ground-floor footprint is larger and the upper levels are significantly set back, the overall profile reads as a stepped mass rising from a heavy base. This produces a more static, grounded impression, which corresponds closely to regional fortified architectural traditions and to the defensive needs of Highland settlements.

(2) Number and meaning of tiers

In Nepal, two-, three- and five-tier temples are most common, with three-tier types particularly prevalent. This dominance reflects the symbolic importance of “three” in traditional cosmology—for example, the triad of traditional concepts or the three worlds. A greater number of tiers further accentuates the temple’s status and cultural significance.

In Jilong, however, both Qangzhong Zulakang and Paba Temple employ four visible eaves. Four-tier roofs are rare in Nepal; their presence here suggests a local reinterpretation of the imported form, possibly linked to regional symbolic systems (such as the four directions), even though explicit textual evidence remains limited. At the very least, this choice indicates that formal borrowing did not amount to simple replication.

(3) Relationship between tiers and usable floors

A further distinction lies in how roof tiers relate to interior space. In many Nepalese multi-eave temples, full floors do not correspond to each roof tier. Upper tiers often function primarily as enlarged cornices or light timber superstructures with minimal usable interior volume, so that the emphasis is largely visual and symbolic rather than functional.

In Jilong, by contrast, each roof tier shelters a substantial enclosed volume. Qangzhong Zulakang, for instance, organises multiple storeys with differentiated functions: ground-floor circulation routes and subsidiary rooms, a second-floor main hall, and upper levels reserved for retreat or other restricted activities. Here the building operates as a genuinely multi-storey tower, rather than as a single core wrapped in a tiered roof.

4.3. *Structure and materials*

Both traditions employ mixed brick-and-timber construction, with extensive use of carved wooden components for struts, window frames and brackets. However, the underlying structural logic differs significantly (Figure 7).

Nepalese temples are characterised by a highly integrated brick-and-wood system. Load-bearing brick walls, continuous timber ring beams and roof structures are interlocked to form a flexible network capable of dissipating seismic forces. Timber components are joined with considerable precision, and the sculptural struts not only support the projecting eaves but also visually articulate the transition between wall and roof.

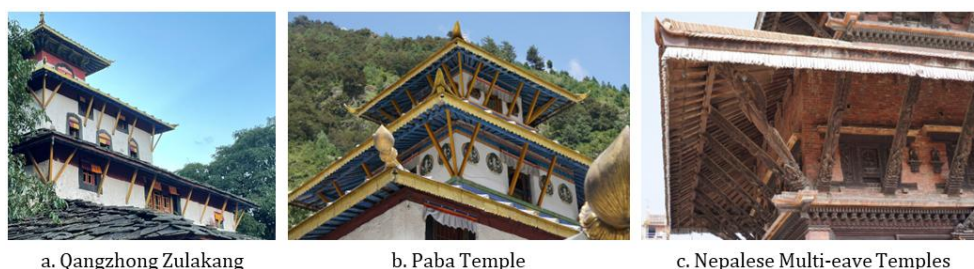


Figure 7. *Comparison of Regional Differences in Structure and Materials.*

Jilong temples, by contrast, tend to rely on a dual system composed of heavy masonry walls and a relatively independent internal timber framework. External stone or brick walls carry most of the vertical load and provide much of the lateral resistance, while internal columns and beams subdivide the interior and support floors and roofs. The connections between these two subsystems are often comparatively simple, using direct bearing or metal nails rather than elaborate joinery. This configuration reflects both the relative scarcity of large timber on the Highlands and a long-standing tradition of massive stone-and-earth construction in regional architecture.

Material choices in both contexts also respond closely to environmental conditions. In the humid monsoon climate of the Kathmandu Valley (c. 1,300 m elevation), the abundance of timber and high rainfall favour steeply pitched roofs with generous eaves and extensive timber construction. In Jilong, higher altitudes (1,800–4,300 m), larger diurnal temperature variations and frequent snowfall encourage thicker masonry walls, lower and more stable roof profiles, and greater concern for thermal performance. Flat or gently sloping stone roofs with limited overhangs are common across regional architecture; Jilong's multi-eave roofs can thus be understood as a negotiated compromise between this indigenous tradition and imported Nepalese forms.

5. Explaining “Similarity in Form, Difference in Essence”

The foregoing comparison suggests that Jilong's multi-eave temples cannot be understood simply as scaled-down Kathmandu temples transplanted to the Highlands. Rather, their hybrid character emerges from the interaction of at least three interrelated sets of factors: environmental constraints, functional and customary logics, and additional influences from Inner Chinese architectural traditions.

5.1. *Environmental adaptation: from valley basin to high plateau*

A first explanatory axis lies in the sharp contrast between the Kathmandu Valley and the Jilong region.

(1) Altitude and climate

Kathmandu (c. 1,300 m) enjoys a relatively mild, humid monsoon climate with abundant rainfall, whereas Jilong spans elevations from roughly 1,800 to 4,300 m, with pronounced vertical climatic zoning, lower annual temperatures, larger diurnal temperature ranges and frequent snowfall.

(2) Topography and settlement pattern

Kathmandu's broad basin supports dense urban development with expansive public squares. By contrast, Jilong's steep valley sides and narrow valley floor favour more

linear settlement forms and create dramatic height differences between the valley bottom and the surrounding ridges.

(3) Material availability

Historically, Kathmandu possessed rich timber resources and clay suitable for fired brick. Jilong, in turn, has limited access to large timber at higher elevations but abundant stone and earth. Even in its relatively temperate lower reaches, the transport of heavy timber remains costly and logistically demanding.

Taken together, these differences drive distinct structural and formal solutions. Jilong's temples must ensure stability against high winds and snow loads, mitigate heat loss through thick masonry walls, and respond to the scarcity of timber. Their pyramidal massing and heavy stone bases can thus be understood as rational environmental adaptations, even as the tiered roof silhouette maintains a visual dialogue with Nepalese precedents.

5.2. Functional and cultural logics

A second axis concerns social and functional aspects. The internal organisation of Jilong's temples responds to monastic life, whereas Nepalese traditional temples are oriented toward image worship and festival gatherings. Thus, the programmatic core of Jilong's temples is different even where the envelope seems similar.

Table 1. Functional differences between Traditional Temples in Nepal and Jilong Monastic Temples.

Functional Dimension	Kathmandu Traditional Temples	Jilong Monastic Temples
<i>Primary activities</i>	Ceremonial gatherings, processions, culturally significant events	Ceremonial assemblies, scripted communal activities, specialised cultural functions
<i>Central objects</i>	Symbolically important artefacts placed in the core chamber	Symbolic images, cultural icons and regionally important representations
<i>Architectural layout</i>	Focused on a compact core with limited ancillary spaces	Incorporates halls, circulation corridors and areas for extended cultural practices
<i>Modes of participation</i>	Public gatherings, outdoor celebrations	Combination of communal participation and individual movement practices
<i>Organisation of space</i>	Strong focus on the ground-floor core chamber	Differentiated interior levels with restricted-use zones
<i>Degree of openness</i>	Highly porous and integrated into civic space	More enclosed, operating as dedicated cultural complexes

5.3. Influence of construction traditions from the Chinese interior

A third axis is the mediating influence of architectural traditions from Inner China. Features such as axial organisation of interior columns, square multi-storey masses with reduced upper levels, and the combination of a tower-like exterior with interior hall-type spaces suggest that local patrons drew on both Nepalese prototypes and Chinese building repertoires when translating the multi-eave image into a regional monastic building.

Thus, the design process can be conceptualised as a three-way translation, resulting in buildings that are neither pure Nepalese temples nor straightforward regional monasteries, but hybrid constructs negotiating among these traditions in a specific borderland setting.

6. Conclusions

This article has re-examined the relationship between the multi-eave temples of Jilong Valley and the traditional temples of the Kathmandu Valley. It has argued that beneath striking surface resemblances lies a deep divergence in spatial organisation, structural logic and functional use — a condition aptly captured by the phrase “semblance without sameness”.

Historically, the adoption of multi-eave forms in Jilong is inseparable from the role of the valley as a crucial node on the Fan–Nepal route. Architecturally, the Jilong temples share with Nepalese prototypes a square plan, central core space and multi-tiered roofs supported by carved wooden struts, yet they differ in many key aspects.

These differences are not random variations on a borrowed theme but the outcome of layered adaptations: to a harsher plateau environment, to the functional and customary demands of local cultural life, and to existing Inner-Chinese architectural languages. Jilong’s multi-eave temples thus exemplify architectural hybridity in a strong sense.

From the perspective of architectural history and heritage studies, the case contributes in at least three ways: empirically documenting a rare architectural type in the region, theoretically illustrating how architectural “influence” operates through translation and re-coding, and practically underscoring the need for conservation strategies that recognise both trans-regional connections and local specificities.

Future research could deepen this analysis by employing spatial-syntax modelling, structural modelling under seismic and climatic loads, and ethnographic work with local communities, as well as comparative work with other Himalayan borderland temples.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Funding

This work was supported by the Second Tibetan Plateau Scientific Expedition and Research Program(2019QZKK1004).

References

- [1] Tiwari, S.R. *Temples of the Nepal Valley*. Himal Books, 2009.
- [2] Korn, W. *The Traditional Architecture of the Kathmandu Valley*. Ratna Pustak Bhandar, 2007.
- [3] Huo, W. Jilong cultural relics and several issues in ancient Sino–Nepalese cultural exchanges along the Fan–Nepal Route. *Tibetan Studies*, 2000, 1, 65–77.
- [4] Yan, A.N. *A comparative study of architecture along the Sino–Nepal ancient route (Gyirong–Kathmandu Valley section) from the 10th to the 13th century*. Southeast University, 2021.
- [5] Zhou, J.; Li, T. Tower-type shrines in the Gyirong Valley: A study of Nepalese-style Tibetan Buddhist architecture in Tibet. *Architecture & Culture*, 2016, 8, 239–241.

- [6] Suolang, W.D. (chief ed.). Cultural Relics Gazetteer of Gyirong County. Lhasa: Tibet People's Publishing House, 1993.
- [7] Huang, F.D. A study of the multiple factors of architectural remains along the Sino–Nepal cultural route. Chongqing University, 2023.
- [8] Mao, Z.H. From sekhang to multi-storey pavilion-style Buddha halls: the formation of a new style of Buddha hall architecture in Qangzhong Zulakang and the Early Propagation period of Buddhism in Tibet. *Journal of Tibetan Studies*, 2019, 1, 126-159, 378-379.
- [9] Laba, P.C.; Chen, Q.Y.; Zhang, Y. et al. A general history of Tibet: Tubo volume. China Tibetology Press, 2016.



© 2025 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)