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## The ancient corbelled buildings of Upper Tibet. Architectural attributes, environmental factors and religious meaning in a unique type of archaeological monument

Die frühen Kragsteingebäude des Oberen Tibet. Architektonische Merkmale, Umgebungseinflüsse und religiöse Bedeutung eines einzigartigen archäologischen Gebäudetypus

## **ABSTRACT**

This paper examines a unique form of prehistoric (pre-7th century CE) and early historic (650-1000 CE) architecture in Tibet consisting of all-stone corbelled buildings. Characterized by the use of corbels, bridging stones and stone sheathing to construct flat roofs, Tibetans in the highest part of their plateau began to build monumental edifices and residential complexes by the late first millennium BCE. Historical and architectural data indicate that these extremely robust structures continued to be produced even during the Tibetan imperium (ca. 650-850 CE). In addition to representing some of the largest corbelled buildings ever produced, these are situated at up to 5500 m in altitude, making them the highest permanent residences in the world.

The corbelled buildings of uppermost Tibet differ dramatically from Buddhist architecture in terms of their conception, design, construction and use. These massive windowless structures are set atop mountains or in other hard to reach locations, fully exposed to the elements and to the sky in one of the world's toughest climates. The semi-subterranean aspect of many structures suggests a chthonic dimension in the ideology related to their establishment. Dark, easy to heat, with low ceilings and small rooms, Tibetan corbelled architecture is womb-like in nature, asymmetrical in plan, and heavily improvisational in execution. It intensively exploits the topographical character of local sites, incorporating in situ boulders and cliffs into walls. On the other hand, Buddhist architecture is generally located at lower altitudes, has an axial plan, and interior spaces elevated above ground level. The Buddhist temple exhibits a formalism and symmetry borrowed from Indian tradition and imported to Tibet in the imperial period, beginning in the 7<sup>th</sup> century CE.

The differences in the architectural canons of native and Buddhist monuments in Tibet reflect great disparities in the religion, culture and society of their builders and users. These distinctions in the architecture of two major eras in Tibetan history are also discernable in the literary and oral traditions. Applying information from textual and ethnologic records affords a perspective on corbelled buildings that is complementary to empirical approaches to understanding these structures, furnishing a powerful tool for the interpretation of archaeological evidence.

## **KEYWORDS:**

Tibetan archaeology, Tibetan architecture, corbelled stone construction, pre-Buddhist culture, Bon religion.

## Conventions used in this essay

Essential Tibetan terms have been transliterated according to the system of Turrel W. Wylie (1959). Common Tibetan terms are presented in phonetic transcription. Their transliteration is given in brackets when first noted.