

John Harrison, *Mustang Building: Tibetan Temples and Vernacular Architecture in Nepal Himalaya*. Saraf Foundation for Himalayan Traditions and Cultures, 2019, 396 pages. ISBN 978-99377-0-6942-7. [Himalayan Traditions and Cultures, no. 47]

Mark Aldenderfer
(University of California, Merced)

Architectural studies of the religious and vernacular architecture across the Himalayas and the adjacent Tibetan plateau have a long and honored history. Early travelers were fascinated by the diversity of building styles across the region, and many of them drew representations of them in their notes, books, and reports. Illustrations were supplemented by photography throughout the 20th C. More detailed, analytical studies began later in the century, and some of the best-known recent studies include *The Lhasa Atlas* (2001), *The Temples of Lhasa* (2005) and its companion volume *The Lhasa House: Typology of an Endangered Species* (2019), *Himalayan Traditional Architecture* (2009), and *Tibetan Houses: Vernacular Architecture of the Himalayas and Environs* (2017). There are dozens, if not hundreds, of other, published studies of the architecture of the wider Himalayas by Indian, Chinese, Bhutanese, and western scholars. Much of this research has been devoted to documentation in service of both research goals as well as preservation and conservation efforts.

John Harrison is one of the most important and highly respected scholars of Himalayan architecture, especially that of Nepal. His career has spanned more than three decades, and while he first traveled to southern Mustang in 1985, his work with the Nepal-German Project on High Mountain Archaeology in the 1990s and further research its aftermath, helped to set the path of his career and forms the basis for the bulk of the contents of this volume. It is composed of seven chapters, a foreword and afterword written by Harrison, extensive endnotes, a glossary (very useful), references, and an index. Harrison describes the book as "...not a travelogue or a guidebook or a gazetteer or an architectural history. It is, I suppose, a record of a love affair with a Tibetan region which has fascinated me since I first saw it..." The book is filled with drawings, plans, and many black-and-white photographs of structures, landscapes, and building interiors. Some might complain that there are no color images, but I am in full agreement

with Harrison, who states “Although black-and-white may be criticized as pretentious, ‘art photography’, I think it better reveals the stark character of the landscapes and buildings of Mustang, allowing the eye to concentrate on form.” I found most of the images to be stunning and a testament to the variety and complexity of the built heritage of the region. It’s important to stress, however, that this is not just a picture book but one that has real and significant scholarly importance for geographers, anthropologists, architects, historians, and even archaeologists, like this reviewer.

In the Foreword, Harrison describes a bit of his background and succinctly outlines the contents of the book. Chapter 1 offers a brief description of research conducted in Mustang in the mid-20th C by scholars who had some interest in the built environment, including names familiar to Tibetologists such as Corneille Jest and Christian Kleinert. Because Upper Mustang was only opened to foreigners in 1992, this early research was conducted only in southern Mustang. In the 1980s and into the 1990s, two German sponsored projects began their research around Kag and the Muktinath valley, with an architectural team led by Niels Gutschow, who has worked in Nepal for decades. Harrison joined his team in 1993 and led documentation efforts at Lo Monthang and worked with the project until 1997.

Chapters 2 and 3 describe the ecology and peoples of Mustang and an outline of its history and prehistory, respectively. Architecture is only touched upon briefly. I offer two amendments to his comments on the timing and origin of the early peoples of Mustang based upon research published after his book was released. Although a date of 1200 BCE has been proffered by members of the Nepali-German team, it is not based upon a direct radiocarbon assay from any of the sites they researched. Dates from two mortuary sites, one near Ghilling and the other Lubrak, collected by my team, now confirm that the earliest known occupation of Mustang dates from 1500-1200 BCE. We also know, based on the analysis of the ancient DNA of human remains from these sites that they are most closely related to the modern population of the Tibetan plateau. The first peoples came down from the plateau, not up from South Asia.

Chapter 4 begins the detailed discussion of architecture through an examination of well-studied villages ranging from Cimang in the south to Chhoser (spelled Tshoser in the book). Two archaeological sites—Khyinga (called Khalung Mound in the text), which has the earliest known residential architecture in Mustang at c. 100 BCE, and Garab Dzong, dating to ca. 1600 CE, are also described. The villages, including Tukche, Marpha, Kag, Tsarang, and others, are illustrated with settlement plans as well as photographs of streets and their settings in the landscape. Lo Monthang is described most fully, and

Harrison offers several speculations about possible models for the layout of the town, including direct influence from China via Mongol patronage of Sakya or a design resembling that of Dzongkha, the capital of the Gungthang polity on the Tibetan plateau.

One of the enduring puzzles of Mustang is the origin and role of the so-called “sky caves” in its settlement history. There are thousands, and are found from the far north near the border with Tibet to the Muktinath valley. Many of these caves are single chambers; others are complex structures that resemble “apartment complexes” (my term), with multiple levels connected by interior passages. Most are today many meters above the modern ground surface and difficult to enter. Harrison suggests, based on data from two residential caves (median radiocarbon dates of ca. 800 BCE and 680 BCE) excavated by the Nepali-German team in the Muktinath valley, and following a hypothesis first offered by Gutschow, “...the development of domestic architecture in Mustang could be viewed as a progression ‘from darkness to light’ from cave dwellings to houses built like caves, and then to more open plan forms.” The early dates support this idea, but recent research complicates this scenario. Through 2007-2010, a Nepali-American team surveyed cave complexes in Upper Mustang; more than 60 were entered and documented, and radiocarbon samples from 15 caves were recovered. Although a few were occupied around ca. 500 CE, most reflect a Buddhist-era presence that appears to have arrived in two waves: 1100-1400 CE and 1500-1600 CE (Figure 1). This suggests that the majority of the “apartment complexes” in Upper Mustang pertain to this era. Just why these complexes appear after 1000 CE remains to be determined. This is a very small sample compared to the very large number of cave complexes, but it is nevertheless provocative.

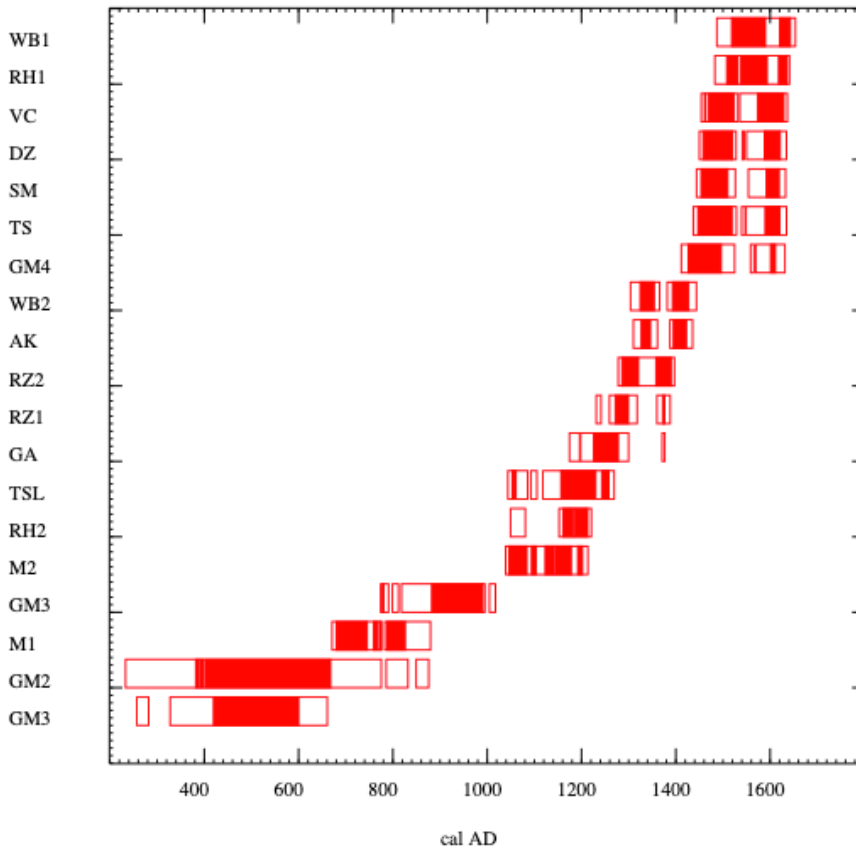


Figure 1. Calibrated radiocarbon dates from caves in Upper Mustang. The left column is the abbreviation for the site name. Bars indicate the full range of the possible age of the sample; the red bars indicate the highest probability of the age of the sample.

In Chapter 5, Harrison describes the traditional building elements of Mustang: wood, earth, and stone. He describes in detail how walls are erected, structures framed, windows and doors emplaced, decorative elements added, and rooves created. He offers an especially thorough description of how rammed earthen walls are made. Although not discussed in the book, I am always impressed by the labor requirements to build even small residential structures let alone the massive walls of Lo Monthang or the large number of dzongs, temples, and religious structures found throughout Mustang. Labor mobilization must have been a constant concern for elites or village communities.

Houses and other secular structures are described in Chapter 6. This is one of the richest sections of the book, and it includes many photographs, axonometric drawings, plan views, and images of interiors. Included are detailed analyses of the palaces at Tsarang and Lo

Monthang, dzongs at Kag and Dzar, and several residential structures both humble and ostentatious. Harrison notes that aside from the obvious wealth differentials of the residences of the elites, status in Mustang domestic architecture is reflected by the size of the dwelling, numbers and elaborations of entrances and windows, and the richness of interior decoration and room size. Nevertheless, he also notes that residential structures are remarkably similar; they share what he describes as the vertical separation of uses (storage and animal pens on the lower floor with domestic spaces above), standardized room function, and how structures are framed and built.

In the final chapter of the book, Harrison turns to descriptions of the religious and sacred architecture of Mustang. He begins with a brief discussion of Mustang's sacred landscape (all of it, essentially), and then to descriptions of mani walls, chortens large and small, cave temples (e.g. Mentsi Lhakhang, Luri), and Tibetan-style temples, the famous (e.g. Jampa and Thubchen in Lo Monthang) and the lesser-known but still important temples (e.g. Tiri, Te, Gompa Gang, and several others). This chapter is especially rich in section drawings, plan views, and complex perspective renderings of their interiors. Although decorations such as wall paintings are mentioned, Harrison wisely suggests that including more information about these was best left to the art historians and specialists in Himalayan art.

The traditional architectural practices of Mustang have created structures that have lasted 600 years, and they offer us a sense of enduring stability. But as Harrison notes in his Afterword, things *are* changing. Modern materials like concrete are replacing rammed earth and stone as foundations and walls and tin sheeting as roofing elements can now be found in some villages. Modernity in all its manifestations threatens tradition in Mustang, and with the completion of the road from Kathmandu to the Kora-la pass into Tibet, the pace of change will only intensify. But the greatest threat to the building traditions of Mustang is anthropogenically driven climate warming. Precipitation that once fell as snow is now coming as rain, increasingly intense, even behind the rain shadow provided by Dhaulagiri and the Annapurnas. Mustang's flat roofs are not designed for intense rainfall, and increasingly, house foundations are being eroded from below. Add to this more frequent landslides and flooding, and you can easily see why Harrison is pessimistic that traditional vernacular architecture will survive unscathed. Change and its outcomes underscores the importance of Harrison's book as a documentary record of the past but it is also a testimony to his love affair with the people and the traditions of Mustang.

