

V. SUMMARY AND FUTURE PERSPECTIVES

1. SUMMARY

Covering a thematically broad field, this book attempts to examine the material aspects of craft and building traditions approached from different angles: from a micro perspective such as looking at mineral properties, to a macro perspective including looking at the materialisation of spatial programmes. Methodologically, a variety of different tools from the fields of architecture, anthropology and geology, like building survey, interviews, participant observation, and clay mineralogical examinations in the laboratory allowed the author to go beyond mono-disciplinary perspectives.

In Tibetan Buddhist culture, the consideration of objects in a religio-political and ideological context is a trigger for particular material cultural developments, and these express themselves in the spatial-material definition of settlement structures as well as in the design of individual building structures, and in the choice of craft techniques and building materials. Various steps are taken to materialise an ideological programme, such as designing the layout of sacred buildings according to specific proportions and patterns of geometry and orientation. In this context, the selection of materials has a significant impact on the surface design of architecture and artefacts. The choice of raw materials and methods of processing are connected to the representation of a particular social status. This study sheds light on the interrelation between an ideological programme, its spatial manifestation and its interconnectivity with behavioural patterns of the local community such as circumambulation rituals. Not only the use of particular precious materials, such as *arga* for roofs and floors, but also the method of processing the materials connects the process of “making” with a material symbolism within the ideological programme.

Material and materiality in their totality play an essential role in shaping the identity of those who commission or construct a building, as well as of those who use it, such as monks, pilgrims, or farmers, for example. Various crafts are technically related to each other through an exchange of craftspeople and through similarities of material properties and production methods. Vernacular building and craft traditions are based on local knowledge and allow the study of a sustainable construction approach by using a variety of locally-available resources. This vernacular approach shapes various production processes, such as brick-making, the construction of roofs and floors, or the production of plasters. Vernacular knowledge of building and craft traditions have evidently been fused, using as a basis an integral understanding of materials and techniques, as has been demonstrated in this book exemplarily with crafts, such as pottery, clay sculpture production and stove-making. The processability of particular regionally-available materials – for example, polishing the clay surfaces of pottery, sculptures or roofs – led to specific manufacturing standards which, in turn, enabled the codification of certain symbolic and social hierarchical expressions.

Furthermore, by exploring the finest components of materials, we can discover a lot about local building methods. Clay mineralogical research methods allow us to examine building materials and to draw conclusions about the processing techniques used. An understanding of the complex

interplay of material components and their processing by different types of craftspeople suggests a lively transfer of knowledge within local communities. This study reveals such complex interrelations by examining mineral components processed in bricks, roofs, plasters, stoves and pottery from two villages in Ladakh.

This study demonstrates the impact of the natural environment on vernacular architecture, on the development of particular building techniques and on building design. Raw material deposits, climate and earthquake zones are interdependently reflected in vernacular decisions on the choice of building techniques and design. Local resources and the material properties of locally-available building materials, and their interaction with climatic conditions and altitude are striking aspects in triggering developments in crafts and building traditions.

An investigation into the Western Himalayas shows fluid transitions in the environmentally-triggered development of stone-clay-wood composite constructions. The respective proportion of material components is rather sensitive to changes in environmental conditions. Connected to this change, an interaction between the local development of building techniques and locally-rooted methods of processing materials go hand-in-hand. Beyond local characteristics, a striking result of this study is that it shows a regionally-superordinate context in the development of a collective understanding of building traditions. One example of this is building techniques in the context of a 'seismic culture', an aspect which suggests that local communities are flexible in how they adapt to environmental changes, over great distances, from the Himalayas to the Mediterranean.

2. FUTURE PERSPECTIVES

Material culture in a vernacular context is a multi-disciplinary challenge. Based on the research results, further focus on crafts and building traditions in an anthropological context might be promising to achieve a more holistic picture of the interrelation between building materials, building techniques and communities of craftspeople in various regions of the world. The examination of building materials and processing methods requires the interdisciplinary combination of technical and natural sciences, and humanities. The transformations of crafts and crafts(wo)manship, including historical, contemporary and future aspects, are a challenge for future research. Furthermore, research on the sustainability of local traditions in an economic, ecological and social context would allow us to question contemporary developments, to learn from tradition and to direct developments sustainably into the future. Building sites, workshops, transport and trade, or social-status-defining qualities as potential triggers of change are all factors which exert a strong influence on knowledge transfer among craftspeople.

Little is known about the processes and effects of the transformation of craft traditions, not only in terms of technical aspects, but in a wider sense, their impact on social and ecological developments. Each populated area of the globe deals with this topic in its own way. The Himalayas are suitable for investigations of this kind because of their diversity in many aspects. Finally, research on this topic will be needed in a wider and even in a global context.