

PRELIMINARIES

1. INTERDISCIPLINARITY

Crucial matters such as tradition or vernacular are common basic frames within material cultural research, and as such are applied within this study. They accompany most discussions on this topic in a theoretical and practically applied manner, and are crucial not only in a Himalayan relation but for building research in general. Their basic definitions and relations to building research are at first treated in a theoretical form, which is thought to be a humanistic introduction to material cultural matters. Traditions are locally determined and in their general existence follow particular general patterns that are looked at from different angles. Materiality and architecture in particular are just components within the matter of tradition and vernacular, which may partially be explained by a material approach. Tradition and vernacular are deeply linked to humans as social beings within a social structure, and studying tradition and vernacular is closely related to the field of social anthropology. As a researcher trained in the field of architecture, this relation seems basic to understanding wider contexts. Nevertheless, this research focuses on the author's field of expertise. The following explanations show an interdisciplinary setting of tradition and vernacular, including material cultural and social anthropological aspects.

2. TREATMENT OF RESEARCH INFORMATION

Use of an appropriate building construction is an essential part of primary human needs. A wide range of construction typologies was invented, developed, adopted, transformed, and over the course of time, neglected or destroyed – i.e. subjected to continuous change², thereby continuously moving its architectural character. Construction is the backbone of any building structure as a carrier of material qualities.³ Its existence and design are interwoven into a wide range of human actions, resulting in constructional decisions. In any case, constructions communicate in a material form with the particular local environment, and are to be mentioned as an essential material-cultural⁴ fingerprint.

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- 2 Characteristics of traditional types of construction are directly related to its single components; the quicker the change of an object, the more short-dated the single components will be (Lehner 2008: 14).
 - 3 In this context, *material quality* refers to information on its physical existence given by and about the object itself, such as technical properties, e.g. which kind of construction or which materials were used. This may also be related to further information – sensual and associative – on non-technical properties, e.g. which social class did the builders belong to or what may have been the environmental conditions. The summary of all the information given by and about the particular construction defines its material quality: i.e. the information necessary to describe the single parameters, which are relevant for the material existence of an object including any information given by the related environment on the object and vice versa.
 - 4 *Material culture* in general is related to objects and, regarding the present topic, to architecture in particular. Speaking in an architectural relation may too much constrain the wide field of materialised parameters and might exclude objects that are not preliminarily architectural but are possibly used in an architectural context. Of the

Dealing with traditions requires scientific options to reconstruct incomplete historical data, since our understanding of historical facts depends on possibilities of reconstruction within a certain frame of understandable reference and period.⁵ History is used as a collection – and for the analysis of data – to get answers for comparable historical incidents. By using contemporary data to the greatest extent possible, the use of the present point of view to explain the past should not be attempted (Rapoport 1990: 80, 81).

This perception may lead to relativising and self-critical insight that results from the fact that research on traditions is dependent on society, its conceptual framework and the period of time, in which a researcher acts. An example of an allegorical depiction of a kind of *Ur*-structure and a related question of whether every structure may be defined as such is given in Schoper (2009: 63, 64) by providing a drawing as example concerning an allegorical change from nature into a simple building structure. The drawing depicts four trees grown in a rectangular position to each other. Their opposing branches form a gable roof in such a way that it seems as if the top of a simple hut has been constructed (as interpreted by Charles Eisen⁶). This example provides the opportunity to discuss the interrelation between how one interprets certain pre-information and the particularly given intellectual and cultural background.

Field research, documentation and the study of architecture and constructions on-site and at the living object reveal sensitivity for local varieties and related circumstances of possible genesis and change. This kind of on-site-research presupposes not only the examination of the construction but in a much wider sense the environmental, social and historical parameters, in which the object is embedded. This approach seems to be preliminary for conducting building research, no matter if the object is still in use, ready for use or already in ruins.

Typologies of building constructions are generally systematised parameters to make certain aspects comprehensible within a certain scientifically ascertainable pattern. It is the research on site that supports the understanding of constructive varieties within categories and different stages of transformation. This instance requires a closer examination and a constant questioning of existing rigid categorisations, and treatment stages of transformation on a same categorical level. One must be aware of mentioning particular methods in “making”, for example, an earth roof or wall, a plaster, a stove, etc. as regionally typical building methods, since constructions are often local variations and strongly dependent on local material resources.

Single aspects of construction techniques have to be studied in a respective cultural context with the respective particular relation and not as a separated momentum, as emphasised by Eriksen

main materials used for vernacular structures, i.e. stone, wood, clay, and fibres, none are primarily created for an architectural use as long as man defined them by a particular use as an architectural object. The particular use of these materials makes their integration within a particular culture physically evident. An essential aim in this debate is the closer examination of the essence of materials used as building materials within culturally distinct and differentiable human creativity.

5 The ability and the way to reconstruct depend on the given ability within a particular society and epoch (Assmann 1988: 67, 68). He mentions this fact as *Rekonstruktivität* (Ger.) as one of six features of cultural memory.

6 Front cover by Charles Eisen (1720–1778) in Marc-Antoine Laugier (1755).

(2001: 200).⁷ Techniques⁸ aimed at creating a certain product work within a certain local customary frame.

A detailed study of various material cultural case examples given in this contribution enabled the understanding of their local relevance. Comparative studies within a wider focus – also in a regional context – revealed fresh insight into possible regional relations. Studying the object itself is one matter, which is followed by the study of the object's interrelations. Individual constructive features and their comparison within a local and regional⁹ context are questioned and linked to a search for their material cultural impact.

It is awareness towards certain interrelations by comparing the particular significant parameters to each other and looking for a thread of transmission or diffusion. The possible range of synergies between the reasons for the existence of constructions is diverse. They either directly influence each other or have grown independently from each other. In any case, arguing within a certain predefined matrix of evaluation should guarantee a proximate objective approach.

Traditional building constructions are as such objects defined by humans and are to be seen as a product within a continuous process of change. This results in positioning objects of research into a living, not only object- but process-orientated continuity. Regarding this aspect, Allen Noble (2007: 1) relates “traditional” to processes and material objects as carriers of material cultural aspects, always to be understood within a processual context. Since traditions are related to historic structures, the process-generating facts are only evident in fragments. Mention of them may not be seen as exclusive but as a result of availability within the research work.

The process itself is hard to explain as something complete and finished but, au contraire, as an infinite summary of various parameters, depending on limited possibilities during field research. Conditions during field research are not always the same due to different circumstances, like accessibility, resources in time, unfavourable climate conditions, or high costs – practical reasons that may explain a kind of incompleteness of field sources.

In this regard, the possible objectivity of the relevance of single parameters within a whole process of the genesis of a particular type of construction has to be understood within a net of available and non-available information. Missing information may result in the vanishing of certain preceding structures or in not available written evidences. This has to be considered individually in the translation of the semiotics of an object. An example is the circumstance of non accessible parts of a wall construction, such as the constructive core of a stone wall. Even knowledge that a

7 With reference to Pfaffenberger (1988: 241).

8 Techniques are a social product learnt through tradition and are also part of a material culture (Lemonnier 2007: 544). As one characteristic of technique, Lemonnier differentiates between two dimensions of technical behaviour: physical and communication.

9 *Local* and *regional* are used as relative terms; *local* is defined by characteristics of a place, while *regional* defines a wider area defined by a certain geographical extension and particular characteristics. In this regard, their use depends on the context, not on a preliminary spatial limitation. Achleitner (1997: 111) points out that the changeability of a region is based on the abilities of the people settling there and also that a region exists in a continuous state of draft.

wall's external appearance is similar to that of a neighbouring wall – for which we possibly have detailed evidence of methods used for its construction – does not give full certainty to the conclusion that both walls' constructions are the same. The right choice of tools for the translation of semiotic parameters¹⁰ is needed for a successful approach.

Objectivity is the central aim within scientific work. Formulations and interpretations, choice of comparison samples, particularly within a comparative study, have to follow this ideal. However, contrary to *hard* sciences, a comparative study as a *soft* science is based on a relativity already defined by the choice of the examples of comparison. This situation potentially leaves unclear aspects and, based on subjective experience, a certain relativisation may be needed. The choice of comparative objects and of the used methods in analysis and interpretation are to a certain extent based on subjective experience. By giving all the related decisions in a most objective and comprehensible manner, the aim is again focussed on the *scientific*.¹¹

Regarding this concern, it has to be pointed out that most of the empiric material used is based on primary sources collected by the author. This bears advantages in originality compared to secondary sources. Several of the documented, primarily vernacular¹² objects were as such changed or have already vanished completely over the course of preparing this book. In this regard, parts of the presented material are unique and of high value as architectonic contemporary witnesses. The critical side of this circumstance is that with continuously ongoing change – or much worse with the disappearance of witnesses – material sources have vanished and may not be understood in the here documented way during further field research. In many cases the treated vernacular examples are not repaired or rebuilt in a traditional way after their partial or complete change or after destruction but are either replaced by 'modern' constructions that do not follow preceding building tradition or remain unreplaced.

3. ASPECTS OF TRADITION

Tradition can be explained as the living process of interpreting the past. One can also follow a definition given by Rieger-Jandl (2008: 26): Tradition defines "an anonymous product of a collective sub-consciousness" (transl. author). Another definition according to Shils (1981: 12) mentions tradition as "anything passed down within a group or society with symbolic meaning or special significance with origins in the past". A literal meaning directly translated from Latin is "to transmit" in the sense of "passing down". These definitions are not necessarily related to

10 The relationship between a sign and its object is understood by speakers of the same language (Beeman 2002: 421). The operating radius of local terms and related social communities are linked to this matter as seen in the following.

11 Beckwith (2009: xi) points out the need for acceptance of the importance of one's own experience made, which in its nature is subjective but still integral in an objective scientific process.

12 *Vernacular* (Ger. *vernakulär*) is used as a native language pattern versus the standardised and polite (*lingua franca*) architecture, and is based on local traditions and needs (Oliver 2006). The endemic existence of vernacular structures is limited to a certain region, possibly also to several regions. Indigenous patterns rely on continuous change. Aigner (2010: 27) mentions possible changes as adaptation to new living conditions by a process of modernisation, including structures, which were translated with new materials, different constructions or scale, or by immingling with different forms and cultures.

Himalayan culture and will primarily be treated here in a general discourse. The explanations given in the following context for “tradition” and “traditional” are again based on experiences from field research. When talking about traditions, their possible change and loss inevitably become a matter of discussion.

It is unclear when some traditions began. We may distinguish between the diffusion of traditions due to external influences and such, which are related to a common local aim of adopting and optimising. As an example, a particular method of using timber lacing in solid wall structures is evident along a route from the Himalayas via Pakistan, Iran, and Turkey towards East Europe. Its constructional coherence over such a wide distance is evident, and a local random development may be excluded. In the case of local knowledge on particular local methods in making timber-laced constructions, a diffusion of building traditions over a distance of hundreds of kilometres paired with local adaptations may be suspected (cf. Feiglstorfer 2009). A mixing of external respectively local reasons is supposed for the diffusion of a particular building method over hundreds of kilometres.

Within the material focus of the present research, knowledge of building techniques plays an essential role when “embedded in the habitus and in knowledge systems, and technologies may be studied as ideology” (Eriksen 2001: 201). The use of a technique has to be understood in local communities differently to consideration outside a vernacular context. In case of a loss of a local community, the choice of techniques becomes more variable, and from a builder’s individual decision in a vernacular context we see a strong relation to customs of the community. The vernacular system itself becomes a kind of reminder of accepted socio-cultural rules and conventions (Sanders 1990: 45), and its understanding is dependent on the “level of redundancy and way of transmission” (ibid. 47).

Hobsbawm (2007: 2) views the invariance and use of fixed practices as important facts for the existence of traditions, and points out the difference between tradition and custom. In his definition, tradition does not preclude innovation and changes that directly influence tradition (ibid. 3) as a continuous updating of order structures. Custom is mentioned as an expression of tradition being in a continuous confrontation with ingenuity (Lawrence 2006: 126).

Individual structures are interwoven within a local pattern language and the question of who founded a tradition may in general be answered by looking at a collective influence. Possibilities to change or add customs in a traditional system exist for a coordinating elite.¹³ Noyes and Abrahams (1999: 92) mention that customs and traditions may also be invented by using already existing models, and that the success of invented traditions “depends on the sensitivity of elite readings.” Traditional building techniques that developed over a long period of time and are based on environmental preconditions are to a certain extent related to functional necessities that

13 In this context, Herrle (2008: 12) differentiates in a generalising manner between adaption and usurpation related to exercise power based on the consciousness of those who are the users and those who are the builders. Herrle emphasises the importance of cohesiveness: “‘Cohesiveness’ in this context can then be defined as the degree to which the amalgamation of cultural elements of various origins has led to generally accepted norms and standards. [...] identity depends on a certain level of cohesiveness, on commonly shared values (at least in a particular reference group) and thereby allows a reassurance from the ‘other’ vis-à-vis the ‘self’” (ibid. 11).

define the design of a building. One meaning of tradition includes the existence of past practices and their continuity and relation to something authentic. Past practices in the present meaning are related to material knowledge, in particular techniques with a strong socio-cultural relation¹⁴ (Barfield 1997: 470). Until the start of a modernisation era, knowledge had been handed over within a particular community and from generation to generation. The process of collective learning is a non-genetically predefined process of ‘social learning’, by which a predefined behavioural pattern is acquired by an individual (Baumann 1996: 34). Further it is emphasised that people learn as individuals (ibid. 37).¹⁵

Traditional constructions were proven by the related society for their efficiency and may have been adapted to changes, if necessary. This process of adaption can last as long as this particular property of regeneration is not overwhelmed by external influences, such as the introduction of so-called “Western standards”. A continuity of a particular building culture depends on the construction itself in terms of its adaptability in a functional and technical context and on the acceptance of the society concerned (Lehner 2008: 16).¹⁶ Among four different stages¹⁷ within a design theory as described by Skibo and Schiffer (2009: 9–11), the behavioural chain and technical choices are of particular interest within this study. The behavioural chain contains the manufacturing process that is related to the availability of raw material and possibilities in its processing. The latter aspect, i.e. technical choices, is related to generation of an adequate construction and finding of a representative design. Throughout this contribution, these aspects are a basic guide.

4. ASPECTS OF VERNACULAR

Vernacular includes a huge variety of different constructions and designs. Its complexity is given by its interdisciplinary entity in a quantitative and qualitative relation. Vellinga (2006) raises in the chapter “The end of the vernacular” the question for the need of a categorisation of vernacular. To get close to a definition, several interpretations will be given. An early use of the term vernacular in context with vernacular architecture can be traced back to 1839 (Green 2007; according to Vellinga 2011: 176), although the term *vernacular* originates from the Latin *vernaculus* (Ger. *einheimisch*, *inländisch*, Engl. *indigenous*, *native*).¹⁸ Vernacular may be understood as native or unique and linked to a certain place (AlSayyad 2006: xvii). In earlier days the term *vernacular* was used “to describe buildings that were built according to local custom to meet the personal requirements of the individuals for whom they are intended” (Noble 2007: 6). Rapoport (2006: 177) refers to early use of the term *vernacular* in the 19th century: Vernacular architecture may

14 According to a definition by Tim Ingold (1979) in (Eriksen 2001: 200), technology is “a corpus of culturally transmitted knowledge, expressed in manufacture and use”.

15 In this text referring to Goodenough 1981: 54.

16 Regarding *Regionales Bauen* (Ger.) and a related process of change, Achleitner (1997: 105) distinguishes between two influencing factors: “the more stable ‘local’ and the more dynamic ‘exterior’ with a systematised character [...]” (transl. author).

17 The four different stages within design theory by Skibo and Schiffer (2009: 9) are: life history / behavioural chain, activities and interactions, technical choices, and performance characteristics.

18 According to the Merriam Webster dictionary.

be explained because of actions taken due to local needs and given natural resources based on a collective decisional level.

Vernacular is related to a social structure and defines a system, of which materiality and in particular architecture and crafts are components. Polite architecture, in contrast, is defined by non-local styles and does not follow local traditions. The expression “vernacular architecture” may vaguely signify the merging of expressions such as “indigenous, anonymous, spontaneous, native or related to the countryside” (transl. author), which are used, according to Rudofsky (1993: 1), due to a lack of a related generic expression. Modern does not exclude vernacular, as long it remains part of a vernacular social context. Also a particular functional association or a particularly related social hierarchical status does not necessarily exclude an object from being vernacular, again, as long as it remains part of a vernacular social context. Based on this premise, all kinds of buildings, even palaces, monasteries, or residential and utilitarian structures may all be connected to the vernacular. In the following, a differentiation of architecture within vernacular systems is conducted by referring to “simple” vernacular structures and elite structures or structures of a higher social status. According to traditions and their continuous adaptation to changing local conditions, vernacular patterns of architecture can be transformed. AlSayyad (2006: xvii) defines a gradual change in vernacular architecture primarily as an adaption to geographic and economic conditions. An adaptation is also related to language that defines architectural components within a vernacular social context.

Vernacular design is based on local material resources and naturally given influences. Methods in joining and processing the single parts of a building or artefact are carriers of symbolic meaning and vernacular identity. Rapoport (1982: 43) mentions a symbolic approach mainly approved in traditional cultures, where a built environment is able to express strong and clear schemata. Tapering of walls can be given as a Himalayan example. In Tibetan culture a method for stabilising walls and preventing them from tipping over towards the outside involves sloping from the bottom towards the top. In Lhasa, we find this method applied with stone walls, in Spiti in Himachal Pradesh with rammed earth walls, and in Ladakh with adobe walls. Each material shows its own design pattern, which can be read via the surface of the wall. The static function of this technique and the general appearance remain similar within the Tibetan cultural zone. Particularly Central Tibetan walls show a design pattern that results from the laying of the stones. The recognition value of this technique is high. One symbolic effect of this traditional building method is its more powerful and fortress-like appearance, for example, the Potala in Lhasa. Size, location, colour and inter alia the tapering of walls denote a particular meaning and, in the words of Eco (1980: 214), act as a “sign-vehicle”.

Regarding the design of vernacular architecture, Broadbent (1980: 139, 143) distinguishes between “pragmatic design”, “typical design”, “analogical design” and “canonical (geometric) design”. The stage of “pragmatic design” as a state of trial and error is to be classified as pre-historical. The stage of “typical design”, where the community shares particular images, is a frequent design aspect in the Himalayas that expresses vernacular design. On the other hand, the “canonical (geometric) design” concerns us in the context of universal, political and religious concepts that are also expressed in design – in a spatial and constructive context. To go with Broadbent’s definition, this contribution is placed within the wide field between “typical design” and “canonical (geometric) design”.