Built to Meet Needs

Cultural Issues in Vernacular Architecture

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The importance of the study of vernacular architecture (1993)

Before we can begin to consider whether the study of vernacular architecture is important, or if so, in what ways its importance may be evident, we have to define what we mean by 'vernacular architecture'. The term 'vernacular' is a linguistic one, and when it is applied to architecture it becomes a part of the familiar linguistic analogy of 'architecture as a language of form', and vernacular architecture can be said to be 'the architectural language of the people' with its ethnic, regional and local 'dialects'. As a phrase it is still unknown and unused in many countries, but it is gaining greater currency across the world. Even so, vernacular architecture is often associated with 'popular' architecture. A distinction can be made between the vernacular – *of* and *by* the people, and 'popular' architecture designed *for* the people – whether in suburbs, main street services or the buildings of public institutions.

Defining the vernacular

In the British Isles there is no doubt that the timber-framed houses and other buildings of East Anglia or the Weald of Kent are vernacular; nor is there any question that the characteristic stone-built villages of the Cotswolds are likewise. But houses of such solidity and construction are not perceived as vernacular in some countries, where the phrase is frequently applied to smaller, simpler buildings. Of short life and made of local, and often very light materials, they may be the constructions of ethnic or other minorities. But, if the substantially built houses of the Mindanao in the Philippines,

Figure 2.1
A characteristic Cotswold village with houses built of local stone, including stone roofs. A manor house and church are nearby. Gloucestershire, England.

with their sculptured 'horn bill' decorations and massive tree trunk columns are 'vernacular', are the pile dwellings of the Baja fishermen also vernacular? If the compounds of the people of Burkina Faso or Cameroon are considered vernacular, should the temporary structures of the nomadic Fulani who pass through their territory also be so regarded?

The mistake may be to take a structural, materials or formal view of the built forms of various societies and to classify them according to their degree of permanence, technology and form. It is better I believe, to consider these aspects of the architecture of cultures in the context of their environments and essentially, in relation to their capacity to meet the values and needs of the societies that have built them.

While this definition raises questions in specific instances in many parts of the world, it may be accepted as what it is – a defining 'tool' which we may use when discussing the buildings of cultures that come within the orbit of our concerns and studies. However, the question arises as to whether they are important, and if so, to whom?

The number of people present at an international seminar compared with the tens of thousands of architects and architectural students in Mexico alone, is evidence enough that it is not a subject that is important to the majority of Mexican architects and students. It is clear that the subject is important to those who do participate, but likewise, it is evident that there are thousands of architects, practising or studying, to whom it has no significance. The best we can

Figure 2.2
Stone and adobe houses line the steep cobblestone street that winds through Taxco village at a high altitude (8000 feet). Mexico.

say is that it is valued by *some* architects and by *some* anthropologists and indeed, by *some*, but by no means all professionals in a variety of disciplines. To the others it may indeed, be unrecognized by them as a subject that merits study.

Approaches to the study of vernacular architecture

Ours is a subject without a discipline. It is not studied in the way that medicine, or law, or computer technology, or even formal architectural design are studied – with a curriculum, method and qualifications that may lead to specifically identified employment. This is both a weakness and a strength of vernacular architecture studies – permitting freedom from the constraints of discipline, but

also promoting a high level of uncertainty as to its practicality and usefulness, with serious questions as to purpose and method. We should not forget the important contributions made to our subject by those whose discipline did not bear upon it, or whose interest is not related to any academic pursuits: the amateur historians, the enthusiasts and devotees of vernacular building who are directed only by their love of the vernacular. Their passion is not to be dismissed – on the contrary, it is our common ground. Most of those among us who have embarked upon serious study of the vernacular have been motivated by our delight in the buildings, our appreciation of their beauty, our admiration of their simplicity, their honesty or their appropriateness.

Yet, beyond the level of aesthetic appreciation, which discards as inferior all that we consider to be lacking in quality or merit, there is much to be learned and understood. This is where the specialists of particular fields – architects, anthropologists, historians, archaeologists, geographers and many others – can apply their perceptions, skills, knowledge and expertise to traditional buildings, revealing much that we in other fields may not see or comprehend. As yet we hardly have a forum, or even a publication for the sharing of this knowledge and the fruits of our research, while the specific nature of our respective disciplines often isolates us from a more rounded understanding. We are all aware of the anthropologist who cannot describe a structure or communicate through drawings; of the architect whose study is of form but who has given no thought to symbolism or meaning; or of the geographer whose concept of spatial relationships is quite different from the architects' notion of space.

Former commitments to singular approaches are now being questioned. The meticulous recording of structural information and building details has a place: through careful observation and documentation much has been revealed about the distribution of types, the prevalence of motifs, the diffusion of technologies, the history of techniques. But the endless accumulation of data without relevance is of dubious value. Ideas of resource determinism – classification of the vernacular by the prevalence of the use of 'local' materials has little significance in many parts of the world. Even climatic determinism has been shown to be a less reliable key to architectural form than it might seem. Anthropological studies in kinship, inheritance and activity systems reveal much concerning values – but often without reference to the buildings and environmental contexts that accommodate them. Art historians who have studied decoration and detail but neglected construction, museologists who have

saved exceptional buildings but ignored the lesser structures, are now seen as having too narrow a focus in their research. Nevertheless, intensive research in specific cultures by anthropologists who are aware of the significance of buildings has demonstrated, for example, the complexity of binary classification within the Kabyle dwelling, or the concept of the community house as cosmos among the Tucanoans of Amazonia. Such research has brought new dimensions to the study of vernacular architecture.

In the past few decades there have been approaches that have not been tied to a single discipline: structuralist approaches that have related change in architecture to change in social development, phenomenological approaches which have stemmed from experimental analysis of the relationship of the individual to space; ethnoarchaeological approaches that have sought to understand the patterns of living of former cultures through the study of presently surviving ones; behavioural studies which have related patterns of culture and custom to the built environment.

While there is evidence of an expanding awareness of the advantages of multidisciplinary work in vernacular architecture, the methods and tools of study are for the most part, still thoroughly entrenched in the specific professional disciplines. So for example, architects bring their capacity to express structure and form through plans, sections, elevations and orthographic projections, even though these are by no means always comprehensible to those without training in them. At another level, anthropologists place considerable importance on fieldwork and participant observation, very different from the objective recording and analysis of the architects. Some of the methods used by specialists in certain fields are applicable only to particular vernacular contexts. Thus the accounts, probates, civic records and other documents that may be of great value to historians in literate societies are inaccessible or nonexistent with reference to preliterate and nonliterate peoples. As a result of these problems we may often resort to the methods of record which are materially productive – typologies of buildings, plans or details; tables of occupancy and statistics of density; climatic analyses of diurnal range; tests of building materials and their performance; histories of buildings to establish their precise dates of construction or the dendrochronology of their timbers – and so on. All these methods have their uses, all are uncovering aspects of vernacular architecture in many countries and cultures. But they can also be limiting – displacement activities for energies which might be directed elsewhere if other purposes were known.

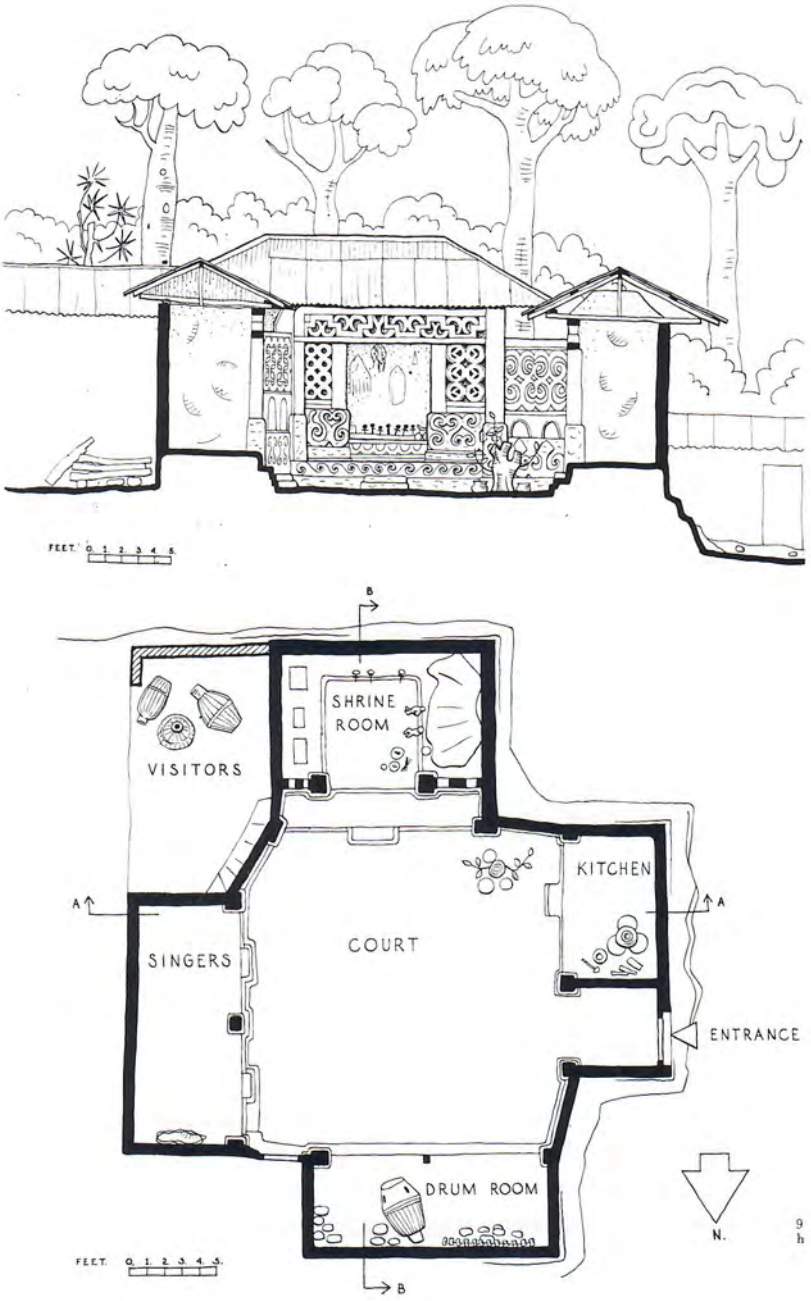

Figure 2.3
Plan and section of an Asante *abosomfie*, or village temple, drawn by the late Michael Swithenbank. Bawjwiasi, Ghana.

In the developing fields of vernacular research, methods employed in geography, archaeology or sociology, also demand methods in the acquisition and analysis of data involving specialized mathematical and computer skills. Other aspects, such as the analysis of spatial relationships within or between buildings, may inspire new kinds of

diagrams and graphics to convey complex patterns. Occasionally, the methods of research and their presentation from more than one discipline may be brought together, as for example, when anthropological diagrams of kinship over generations are related to growth and change in domestic plan. We can expect to see more of such developments in the future as the scope of research, and the methods by which it is conducted, continue to widen.

How much importance is attached to the researches undertaken in vernacular architecture is frequently conditioned by the preferences and prejudices of professionals in specific fields. Our criteria are largely shaped by our understanding of what is of significance to our own discipline. Historians ignore geographical data; anthropologists may see little merit or value in architectural typologies or may question the evidence of diffusion in the light of current disregard of diffusionist theory; sociologists may have little patience for phenomenological accounts. As awareness of alternative methods of study and of the growth in knowledge of vernacular architecture increases, we may see these prejudices diminish. The day may come when certain anthropological and sociological studies may be included in the education of architects and environmental designers, who have already encompassed some geographical and historical studies within their courses. But the day when architectural studies are an integral part of the education of anthropologists may still be a long way off.

Applications of vernacular research

If research in vernacular architecture is being developed and refined, it is reasonable to ask what the practical applications of such studies might be. Among the most visible is the selection of vernacular buildings for *in situ* conservation, or for dismantling and re-erection in open-air museums. There is a tendency to choose the most spectacular examples. When new buildings are constructed to old models, their decoration or forms are often exaggerated and even the open-air museums are often clinically clean. Then there is the response of architects who perceive the merits of vernacular architecture. Once it was the forms – and the white walls of Greek island houses – which inspired architects. But today, more are interested in regional qualities that are related to the use of local materials and they may seek inspiration in culturally specific building forms. Toraja roofs are erected in Sulawesi; the Sumatran Minangkabau house has obviously become a symbol, not of Indonesia, but due

to the centuries-old presence of some Minangkabau in Negri Sembalan province, of Malaysia. But if some uses of the vernacular by architects are imitative and cosmetic, several have studied climatic modification by traditional techniques or made intelligent use of indigenous building methods.

Architects and planners engaged in development projects – such as settlement upgrading, sites and services schemes, or low-cost housing – have drawn upon a wide experience of vernacular skills and know-how. So for instance, the Nubian vault system 'discovered' by Hasan Fathy, the Egyptian architect, has been applied by teams of the Development Workshop in Angola and Niger. Such technology transfer, has the potential for overcoming the disastrous effects of the depletion of local resources. But there are problems. As structural anthropologists would argue, technological transfer will also mean corresponding changes in society, and there are serious cultural implications when new technologies are introduced. Often the values of a culture are difficult to ascertain.

The importance of vernacular architecture studies

Vernacular architecture in countries throughout the world is threatened. Fortunately, the scale of deliberate destruction, such as the Ceaucescu regime perpetrated in numerous villages in Romania is not widespread, but the vernacular suffers from indifference and

Figure 2.4
Abandoned houses and entire villages in the Spanish Pirineos are numerous, their occupants having migrated to Barcelona, Zaragoza or other cities.

ignorance of its historic or social value, and from being assigned low status in housing. Mass migration from the rural areas to the cities of the developing world is driven by the push–pull factors of sophisticated urban living and fragile job opportunities. In the process, traditional homes and life-styles are abandoned, and in the villages, urban housing becomes a model. Confronting the widespread decline in respect for the vernacular, studies in the subject have become of major importance. They are necessary in the quest for knowledge of the diversity of mankind's solution to the problems of dwelling and accommodation of sacred and secular community functions. But they are also significant for the mutual benefit of cultures all over the world. With the reservations noted already, the transfer of skills may help solve resource depletion or improve climate modification. Practical applications of indigenous solutions to environmental problems may give a material incentive to the urgent recovery of vernacular know-how.

Yet, the need for vernacular studies is more complex than this. A culture without the presence of its history is a culture without roots and, very possibly, without meaning. The habitations of mankind are the scene of most of our activities from birth to death; the temples and shrines, meeting houses and communal social structures are the places where people meet their fellows, and commune with their deities. In scale and in detail, the vernacular offers antidotes to the architecture of power, to monumentalism and the profligate use of resources. It touches the well-springs of inheritance and points in many ways to technologically undamaging, culturally acceptable

Figure 2.5
A group of meeting houses, totem carving houses and other traditional structures, recently built by the Cowachin of Duncan, Vancouver Island, Canada.

and symbolically significant buildings in compatible landscape environments. This paper has a hidden agenda; to those who believe that the study of vernacular architecture is important, it is a plea for cross-cultural, interdisciplinary research. By sharing our perceptions and understanding, let alone our research methods, by endeavouring to resolve the dichotomy between those who study vernacular architecture and those who live in it, we may gain new, lasting and invaluable insights to the habitations of mankind. Such insights can lead to support and assistance for surviving vernacular traditions, and can inform policies and design in housing that will have to meet the exponential growth in populations in all continents.

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Cultural traits and environmental contexts: Problems of cultural specificity and cross-cultural comparability (1999)

At a recent meeting of conservationists in that part of England in which I live, I made a case for the conservation of the 'built environment'. The phrase was challenged by one member of the committee who argued that it was a contradiction in terms. His reaction drew my attention once again to the semantic confusion that can arise from terms loosely used. We assume that we all know what we mean by a phrase such as the 'home environment' and that the theme of 'culture, space and the home environment' need not be questioned or defined. The term 'to environ', or the environs, refers to surrounding, forming a ring about or around, or to enclose. So the environment is the state of being environed, or that which does environ. Since the 1960s, by extension, the term is used by geographers and natural scientists to mean the totality of the surrounding, external conditions, within which an organism, a community or an object exists (Monkhouse and Small, 1978). When, however, the term is applied to an abstraction, such as 'home', we may question whether it has any real meaning.

Environmental scientists identify a number of branches of their discipline, including the study of the natural environment, the nonsocial, noncultural landscape before the intervention of

mankind. This also embraces the geographical environment which is concerned with the spatial relationships of identifiable qualities, and the physical environment, or everything that is not within a social system. Monkhouse and Small warn that 'they are all slightly different, and unqualified use of the term can be misleading'. I would contend that one task that should be undertaken in a discussion on 'culture and space in the home environment' is to determine an agreed definition of what is meant by 'home environment'. But that of course, assumes that we agree on the meaning of 'home'. Home, it seems to me, is a very inexplicit word identifying a subjective involvement with a loosely defined sense of place. The astronaut declares that he is 'home again' when he sets foot on earth; the long-term prisoner in a foreign jail, greets 'home' as the soil of his country; 'my home country, my home town, my home' are degrees of scale and specificity that are familiar to English and American people. The landlady of an English guest-house advertises a 'home from home', the collector of bric-a-brac finds a 'home' for his latest acquisition; the point of a nail, even the point of a story is 'driven home'. Consideration of the use of 'home' as a prefix suggests its subjective nature – especially homely, homemaking, homesickness or homecoming. But other usages suggest a simpler, domestic but less romantic connotation – homemade, homespun, homebrew, home and away, home counties, homeless. Some of these usages may be unfamiliar, or unrecognizable to many people, which helps to underline that the word, like many others, is culture-bound.

I am no linguist, but I am interested to know whether the connotations of 'home', as distinct from 'house', translate, or whether they are differentiated in many languages. My impression is that the distinction is essentially Teutonic, its parallels to be found in German – *das haus*, the house, and *das heim*, the home; distinctions that are less evident in romance languages, and more distant still in nonEuropean cultures. This suggests to me that the concept of home is linked with sedentariness, and is often associated with the acquisition of property, furniture and domestic articles or ornaments. 'In Italian, *casa* is the nearest equivalent yet it is much closer in meaning to house than to home', wrote Csikszentmihalyi and Rochberg-Halton. 'The same is even truer of the French *maison*, and by the time one gets to the Hungarian *haz* the references are almost exclusively to their physical structure rather than to the emotional space'. They concluded that 'although we live in physical environments, we create cultural environments within them' – while neglecting to define what they meant by 'environment' (Csikszentmihalyi and Rochberg-Halton, 1981).

Many cultures have no evidence in their language or in their behaviour of a concept of 'home'. 'Patched and repaired from year to year, abandoned when not needed, or burned when death occurred in them, Paiute shelters were mainly protection from the elements. They were never "home"', Margaret M. Wheat observed (Wheat, 1967). A similar problem arises with the use of the term 'space'. It has been part of the architectural vocabulary for less time than may be imagined. Discussion that anticipates Bruno Zevi's *Architecture as Space* is comparatively rare (Zevi, 1957), although Siegfried Giedion's *Space, Time and Architecture* (Giedion, 1941) is among the small number of works that did. In anthropology, works such as Durkheim's *Primitive Classification* (Durkheim, 1903) considered space, but as a system of classification related to territory and to social structure. More recent studies, such as Christine Hugh-Jones' *From Beyond the Milk River* (Hugh-Jones, 1979), on spatial and temporal processes among the Piri-Pirana in north-west Amazonia, consolidate the link between concepts of space and of time, while cross-disciplinary approaches to archaeology and anthropology have enriched the study of archaeological evidence.

Here I wish to emphasize that the space is a concept, an abstraction, but not a universal one. Half a century ago, Benjamin Lee Whorf showed that 'space' as a concept did not exist in the language of the Hopi pueblo Indians (Whorf, 1956). It has been observed that their neighbours, the Navajo, with whom they share the northeast quadrant of Arizona, have six co-ordinates – north–south, east, west,

Figure 5.1
Hopi spatial organization is conditioned by topography, cultivation and the clan system, as in Moenkopi pueblo, by the Colorado River, Arizona.

zenith and nadir, and can therefore locate in space the position of say, a bird, with greater precision than could most 'Anglos'. Yet their lack of a concept of spatial relationships in other aspects led to a Dutch team endeavouring to devise a means of teaching geometry to Navajo Indian children through experimental means (Pinxten, 1987). In the Navajo world view, all is in motion and all is changing within an overriding concept of order and harmony. Space is related to movement, and as Witherspoon observed, 'the verb "to go" is for Navajo language and thought what the verb "to be" would represent for westerners' (Witherspoon, 1977).

Clearly, there is a problem: do the Navajo have an inbuilt perception of their world, of their 'environment', that does not require the concept of space, but does require certain terms that relate to movement through space? Is this simply the result of cultural conditioning? If a word does not exist in a language it may be argued that, broadly speaking, the concept does not exist either. But we are aware that a phrase may often serve as the equivalent to a specific term, to identify a concept. It must be evident that I am concerned that the terms we use and assume to be shared by others, are often interpreted differently by users from within a particular group, be it a profession or a tribe, or it may not be used at all. There are built-in assumptions in any discussion that arise from the interpretation given to the terms used, which are expressive of the language of a culture and are clues to the concepts of that culture.

For 10 years, I was totally involved in the compilation of the *Encyclopedia of Vernacular Architecture of the World*, to which a number

Figure 5.2
Navajo use of the landscape is not constrained, but its cosmic connotations are spatially and symbolically expressed in the form and plan of the *hogan* (dwelling). Canyon de Chelly, Arizona.

of conference participants contributed. In the course of this work, it was necessary to define the terms used, including 'environment', 'home', 'spatial organization' and 'culture', each of these having its own section or entry. It soon became clear that the diversity of approaches to the subject of vernacular architecture, whether disciplinary or interdisciplinary, required explanatory essays, while those aspects of culture which are broadly common to cultural groups also needed to be discussed. Which brings us to the fundamental question: What do *we* mean by 'culture'?

Culture as a concept, has a comparatively short history. It was first used and defined by the nineteenth century British anthropologist Edward Burnett Tylor, who gave the following definition: 'Culture is that complex whole which includes knowledge, art, morals, law, custom, and any other capabilities acquired by man as a member of society' (Tylor, 1871). The term was appropriated and widely applied to what were considered to be advanced, 'civilized' societies as distinct from 'primitive' societies. In the 1950s culture was still associated with the acquisition of skills, the production of, or the study of 'the arts' – painting, music, drama and the like. This position was summarized in the work of F.R. Cowell, who loftily asserted that culture was transmitted orally by traditional societies and 'objectively' by those that were literate, to enhance the quality of life with value and meaning by making possible 'the achievement of truth, beauty and moral worth' (Cowell, 1959). Such an interpretation persists in the name of UNESCO, and in numerous public functions and exhibitions. In 1952 the anthropologists Alfred L. Kroeber and Clyde Kluckhohn published their critique of more than 160 definitions of culture offered by their fellow anthropologists. The consensus, in their view, consisted of patterns of behaviour, both explicit and implicit which had been acquired and passed on by the essential core of cultural concepts and traditional ideas and their related values. They argued that culture systems could be considered as the products of action and also as 'the conditioning elements of further action' (Kroeber and Kluckhohn, 1952). This dynamic view of culture was somewhat at odds with Kluckhohn's later painstaking record of material culture – in his case, also of the Navajo (Kluckhohn *et al.*, 1971).

Apart from any implied aesthetic status, culture embraces both activities and artefacts, and the recognition of their worth. 'It is not true', wrote Durkheim, 'that society is composed of individuals only; it also includes material objects which play an essential role in the common life', giving as an example, 'houses, buildings of all

kinds which, once constructed become autonomous realities, independent of individuals' (Durkheim, 1903). For the purposes of the encyclopedia, I defined 'culture' as 'the totality of values, activities and products, including buildings, of a society which give meaning and direction to the lives of its individual members. Culture is learned and is not transmitted genetically. A "culture" is a society whose members share such a totality'. 'Culture traits' I defined as 'aspects of social structure and group behaviour or values which may be defined and compared with those of other cultures. A "trait complex" refers to the interaction of a number of traits. Since the mid-eighteenth century, the term "trait" in English has meant "a distinguishing quality, or characteristic"'.

Cultural traits are seen by some anthropologists as the irreducible characteristics of cultural behaviour that can be recognized within a culture. In order to avoid unnecessary repetition in EVAW entries, it was important to discuss certain complexes of cultural traits in a separate section, which could then be compared or applied in the studies of specific cultures (I.II). These could not be discussed at length; only those culture traits, within broader trait complexes that related to the use or meaning of vernacular architecture, are considered. Certain of these are examined in greater depth in subsequent sections, where they had considerable bearing on the physical or functional aspects of vernacular architecture.

As the majority of cultures discussed in EVAW are sedentary and exist in specific physical–environmental contexts, some review of economy, whether subsistence or surplus, seemed necessary, while

Figure 5.3
When building her dwelling within an *enkang*, or Maasai settlement, a woman uses bark strips to tie the hut framework from within. Maasai Mara, Kenya.

nomadism, the major exception to sedentariness, also required discussion. An ecological approach to the study of vernacular architecture is included in the opening section of the encyclopedia. Encompassing the study of, response to and modification of the environment by human intervention or exploitation such an approach is largely focussed on the purposes of stock-raising, agriculture or horticulture for the obtaining of food as the basis of life support. Food is not a trait, but the traits involved in its acquisition and preparation are discussed. Whereas the cultivation and consumption of food are expressed in many culturally identifiable traits, those of cooking which require a separate structure, or may be related to heating systems, are discussed under Services (I.VI). The drive to obtain and consume food and water is essentially biological; the behaviours and means by which collectives of humans do so, are cultural. Moreover, these are culturally differentiated, developed by groups who communicate their discoveries, educating their children and sharing their activities in patterns which may eventually distinguish them as discrete cultures. The drive to bond, to engender children is innate, but the forms that the family may take are cultural and diverse. Family types may ultimately relate to the basic biological unit of parents and child, but the nuclear family is a particular cultural construct. So are the various forms of stem family or extended family whose unfolding over generations in the cycle of life from birth through childhood, maturity, old age and death establishes continuities through time and frequently generates lineages, descent groups and hierarchies. Family types and structural cycles take expression in kinship systems and these, in turn, in residential patterns. Raising the children is frequently, but by no means exclusively, the province of women. Women in some societies are the builders; in others they may prepare materials or finish surfaces, while the men do the structural work; this differentiation of gender roles in many aspects of human activity, may also have spatial expression in the dwelling or settlement and in the daily, weekly or periodic domestic routines of living.

Social structures, including the exercise of authority, whether by rulers, councils of elders or other administrations, make their impressions on the spatial organization of territory, land units and in some societies, of property. The complexity of these political issues and their economic implications, is significant in large, multilayered societies requiring skills in communication on the one hand, and signals of cultural identity on the other. Whether it was the family, or the need for cooperation in the obtaining of food, that was the underlying reason for the emergence of language as a human attribute is

not our concern here, but language as a means of conveying and also at times, of circumscribing culture, undoubtedly is. The encyclopedia demonstrates that concepts of the dwelling, or of abstractions such as that of the 'home', are culturally and linguistically defined. Customary usages and technologies, or methods of construction or space use in the building, are frequently embodied in traditions which are transmitted over successive generations in the educative processes. But they are also observed, rehearsed and learned in children's play and socialization, still a seriously under-researched aspect of the sharing of values and behavioural norms related to the built environment. Such values are sometimes embodied in rule systems of use and behaviour about, and within, the building; in other cases they are implicit, perceivable to the visitor by avoidance cues, or sometimes supported by litigation and enforced by law.

Buildings may embody in expressive ways the qualities that we relate to our value systems. I say systems, because values and beliefs rarely lie outside a system – if they do, we may regard them as unformed or unrelated superstitions. But belief systems may be closely bound to religious convictions and practices, through which we endeavour to understand the cosmos or the spirit world. Temples, synagogues, churches, cathedrals, mosques, stupas, gadwaras, monasteries, madressehs – the range of religious edifices is great, and many of them being architect-designed, fall outside the vernacular. But others are vernacular shrines and furthermore, domestic dwellings may also be sited and planned on religious principles and contain within them places dedicated to deities, which may be spiritually sacrosanct. As extensions of the temporal and spatial patterns of movement, buildings can accommodate rituals and ceremonials which may correspond to the calendar of religious memorials and events, but which may also mark the rites of passage through the gateways of puberty, marriage and the life cycle. Ceremonials are never random but follow patterns sanctioned by traditional belief, often being symbolic enactments of the revered lives of priests and prophets. Symbols in speech, sound, movement, and gesture have their counterparts in the permanent symbols of religious edifices and their constituent elements, in orientation, form or embellishment. Whether they are codified as symbols, or expressed in formal and instructive language, the traditions by which a society maintains its links with the past and projects its future, constitute another field in which much research remains to be done. Even in the making of vernacular buildings, the means of tradition and their transmission are not well understood. But traditions are always under pressure

Figure 5.4
A local shrine with a figure of the many-armed goddess Durga, symbol of beauty and violence, good and evil. Bhaktapur, Nepal.

and influence, sometimes political, sometimes religious or ideological, seeking to denigrate or replace the vernacular with a 'superior' architecture, backed by power. Culture change may take place as a result of the diffusion of ideas or artefacts, or by the modification of tradition and intermittent bursts of innovation, acceptable within the norms of the group. Such processes have been accelerated with imperialist expansion, particularly of the European colonial powers in the nineteenth and twentieth centuries. Present trends to globalization arising from the electronic and communications revolution will inevitably impact upon traditional cultures. Yet, it is to be noted that tendencies to cultural independence and the retention of many aspects of their cultural inheritance, have been evident in a great many societies, including those of Central Europe and the Balkans in the last quarter of the twentieth century. These reactions may well

continue, or retrench, for many decades in the face of westernization and cultural interaction (I.II.20).

Complexes of cultural traits that bear upon architecture and the built environment may be summarized as relating to economies and life support, family and social structure, communication and education, beliefs, values and symbols, and sociocultural continuity and change. There are others of course, and many subsets within those I have noted, but their identification helps to guide and balance research, and is used in the encyclopedia as a contextual setting against which entries on specific cultures can be placed and compared (I.II). Augmenting this, is a section on the environment, as it shapes, or is shaped by, human occupation – including the diversity of location and site conditions, climates and their extreme conditions, population distribution and demographic trends, settlement patterns and land utilization, and issues of territory and tenure (I.III). While other sections in the first volume are progressively concerned with resources (I.IV), production (I.VI) and servicing (I.VI) of the vernacular, a further section considers the nature of symbolism and ornamentation on and within buildings, including the use of inscriptions and motifs. Rule systems of spatial ordering, the rituals of the building process, and the symbolism of building structures and defined space are disclosed in a number of case studies (I.VII). The potential of some materials and the constraints of others, the ergonomics of height and space use, the volumes encompassed and the requirements of access, illumination and circulation, are among the factors which facilitate the comparability of structures. Eleva-

Figure 5.5
Terracing and cultivation of mountain slopes, and the siting of Newar farms are in response to the location, climate and to subsistence needs. Central Nepal.

Figure 5.6
Barns and byre are among the functions of this typical Padonian L-plan farm complex. Water is drawn from the well with a *shadouf* system. Eastern Slovenia.

tions, forms and plans are among the features examined in Typologies (I.VIII). In popular parlance – or 'the vernacular' – the uses for which buildings are intended to accommodate are also frequently regarded as their 'types'. With the discussion of uses and functions, a bridge is established between the contextual themes and the specifics of cultures where, apart from dwellings, the buildings that accommodate many of the cultural traits are reviewed. Among them are the edifices which reflect social structures, placing their emphasis on authority and status, on hierarchies, administrations and councils. Buildings that are designed for economic purposes and the production of commodities from sericulture to chicken farming, are reviewed, as are outbuildings, such as barns and byres, granaries and hunters' stores, where animals are raised and produce protected. The transformation of cereals and other processes requiring or benefitting from technological developments are examined, including wind, water and animal powered machinery (I.IX).

Structures related to belief systems including the sanctuaries and temples of the major religions and the shrines and funerary constructions of cultures large and small throughout the world are given, as are social buildings which offer shelter for comfort, leisure or communal activities. Not all buildings are permanent nonetheless, and temporary and transportable structures used for periodic events, occasional functions or by nomadic and travelling cultures are also considered. Many of the examples are specific to a single culture, even to a small subregion, but they are included because a sense of comparative scale is necessary. But the question arises: to what

Figure 5.7
A decorated funerary structure to support a coffin is built for transportation through a village to the cremation site, where it is burned. Bali, Indonesia.

extent can they be compared on a cross-cultural basis? By identifying certain major complexes of cultural traits I hope that comparative data can be more effectively assembled and correspondences and differences more clearly delineated. But further problems are generated from the determination of these issues. What, for instance, are the defining characteristics of a culture, and what indicates its boundaries? In fact, cultural traits can be as useful in demonstrating correspondences between cultures, as indicating their differences. By a process of comparison cultures may be grouped into culture areas, where a number of groups demonstrate a measure of similarity of traits within traits complexes.

Unfortunately, very little has been done on the mapping of cultures since the 1950s, but for the purposes of the encyclopedia it was clearly necessary (Russell and Kniffen, 1951; Price, 1990; Gaisford, 1983). Culture traits such as language, or economy, as well as building methods, types and meanings were key features in this. National boundaries proved to be a poor basis for the definition of cultures, or of culture areas, though in some cases (such as the Pyrenees between the Gallic and Iberian clusters) a physical and political boundary may be drawn. In all, approximately 80 cultural areas were defined, of various scales which principally reflected population densities and cultural complexity. Between them, the borders are necessarily uncertain, and the attempt to accommodate, where possible, distinct cultures, culture traits, nationalities, physical boundaries and climatic zones necessitated compromises. These, however, can be considerably reduced and the classification

more finely tuned with further research. In all, the vernacular traditions of approximately 1300 cultures have been classified within some 66 culture areas, arranged in a triple alphabetical sequence (continental region, culture area, and specific cultures) moving from north to south and from east to west, approximating the generality of population and cultural movements. Until now, no worldwide resource giving discursive summaries of the housing of specific cultures has been available, and as comparative data have been difficult to obtain, the basis of cross-cultural debate has been severely constrained. Notwithstanding the disputes and disagreements on definition that are almost certain to arise, it is my hope that the identifying of cultural trait complexes relating to dwelling, and the mapping of cultures within the socio-environmental contexts of culture areas in the *Encyclopedia of Vernacular Architecture of the World*, will make a contribution to the debates that must follow, as we confront the issues of appropriate housing and cultural identity, let alone culture, space and home environment, in the future. Many of the characteristics that are shared in the buildings of differing cultures across the world may relate to the employment of materials, such as reed or bamboo, granite or adobe, or to the physical features of the landscape, whether montane or riverine, desert or steppe. They may reflect climatic conditions or the economies, subsistence or surplus, of the peoples concerned, although they may not be determined solely by any of these factors. Clearly, the mapping of these and many more such aspects of the vernacular on a worldwide basis, is necessary for the better understanding of common elements, of differing features and of future needs perceived on a comparative basis. This work is well advanced and *The Atlas of Vernacular Architecture of the World* should complement the documentation of the vernacular in the encyclopedia.

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