ECOLOGY AND ANTHROPOLOGY OF TRADITIONAL DWELLINGS

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The dwellings of traditional societies generally respond to numerous determinants: ecological, economic and cultural. Recent research has emphasized this interdisciplinary approach and has given priority to interactions between these different factors. Through the use of examples drawn from various regions of the world, this article illustrates how this multiple perspective makes it possible to go beyond deterministic approaches, which are both outdated and oversimplified. This multiple-perspective approach helps to throw new light on a particularly complex area of study. In addition, the article attempts to show the ways in which the traditional dwelling is not just an isolated element within culture, but is a part of a system of symbolic representations which give it meaning. The dwelling thus appears as an object central to anthropological and ethnographic study.

For the last thirty years a handful of architects have been involved in questioning the primacy given to monumental structures in the history of architecture. This current of thought departs from the short chronology that emerged from the Italian Renaissance and reacts against a predominant international functionalism which has held little regard for local cultural contexts. It is under the influence of these "vernacular" theses that the small traditional structure has become a legitimate subject of investigation, of equal importance to erudite structures. This innovative and bold move breaks to a large extent with the utopian vision of modern architecture. It has led the architects in question to direct their attention to non-Western countries and put priority on the relationship between vernacular dwellings and culture. "Ethno-architecture," understood as the study of pre-industrial, "traditional" dwellings and settlements, was born from this decentering. These researchers, nurtured by the works of...
Panofsky, Eliade and Leé-Vi-Strauss, familiar with the work of the human sciences, adopted the conceptual tools of anthropology. They opened important sites of investigation in Asia, Oceania, the Middle East, and Africa and reaped a rich harvest of ethnographic observations. It quickly occurred to them that the so-called traditional dwelling proceeds from the culture of a given population in the same way as palaces and temples, and that it reveals a culture’s religious symbolism just as surely as the most sacred monuments.¹

Anthropologists, for their part, have long considered local architecture to be an important subject of study, a part of the entirety of a civilization. Among the pioneers, we can mention Lewis Morgan with his *Houses and House-life of the American Aborigines*, 1881, and André Leroi-Gourhan with his two-volume *Milieu et technique*, 1945. The exemplary works of Claude Lévi-Strauss on Bororo villages in 1958, and of Pierre Bourdieu on the Kabyle house in 1970, also exercised considerable influence.² The first showed how inhabited space relates to a social structure and a way of thinking: when this space is threatened, the very culture of the group is also in danger of vanishing. The second demonstrated that among the Kabyles the dwelling is integrated into an essentially bipolar system of indigenous conceptions about society and the world, in which are opposed summer and winter, male and female, dry and humid, culture and nature, etc. All these studies, which show the breadths of the field in question, turn out to be rich with meaning. In fact, the dwelling gives immediate insight into how different cultures distinguish themselves, organize their systems of hierarchy, and express their identity and innermost ways of thinking. It also bears witness to the extremely varied conceptions of space that must be understood along with other aspects of social life. Driven by the urgency to keep track of a vast cultural legacy undergoing a process of rapid change or disappearance, studies like these have multiplied greatly in recent years.

Although it partakes of other fields of human sciences and relates to other longstanding approaches such as geography, ethno-architecture is mainly located at the confluence of two disciplines. It places the pre-industrial, or vernacular, dwelling and settlement under the double scrutiny of the ethnologist and the architect. The built world is not only a matter of shapes, volumes, tools and know-how, but also of sociological and symbolic content. Ethno-architecture blends architectonic and semantic analysis with the study of technical actions and religious symbolism. It never separates the ideal from the material, the symbolic from the technical. As Leroi-Gourhan puts it accurately: “The organization of inhabited space is not only a matter of technical convenience, it is, in the same way as language, the symbolic expression of an overall human behavior.”³ Here are blended the social, the mental, and the material. This interweaving is particularly clear in non-Western “traditional” civilizations where all aspects of life are interconnected, and religion often controls all aspects of social life. Against all formalist temptations, ethno-architecture grants man top priority, and gives privilege to questions of meaning.

The spatial dimension of this field of study invites emphasis. One of the fundamental tasks for the researcher in this area is to identify spatial configurations and their rationales as expressed in architectural structures. What is the meaning of axiality, centrality, fronality, verticality or horizontality for a given group? All these notions need to be defined in the most precise way with reference to a social and cultural context. This is because space has no meaning except in relation to the group of people who occupy it. Space is always particularized, oriented, modeled — in a word, constructed — by a community. This is a valid assumption because there are many reasons to believe that, from the beginning, all human groups have endowed spatial structures with a complex of social and symbolic meanings that are tied to social and symbolic representations. Some anthropologists have elaborated this view and seen in ethno-architecture one of the preeminent areas of an “anthropology of space” which would aim to reveal the logic of built space and to establish rules for a grammar of representations out of which architectural elements are constituted.⁴

Despite the significance of its achievements, ethno-architecture seems to have gained greater autonomy in the field of architecture than in that of anthropological research. To confine our framework to France, the volume on *Ethnologie générale* in the *Encyclopédie de la Pléiade*, published in 1968 under the direction of Jean Poirier, includes, for example, chapters on ethnobotany, ethnomusicology, and even ethnomineralogy, but nothing on ethno-architecture. There is a similar gap in the recent *Dictionnaire de l’ethnologie et de l’anthropologie*, published by University Presses of France in 1991 under the direction of Pierre Bonte and Michel Izard. This dictionary actually contains an entry on the dwelling, yet it does not treat the subject as a discipline in the same manner as ethnoscience or ethnomusicology. If one turns to the university, the situation is even worse: instruction in ethno-architecture is conspicuously absent, and no chair exists for this field in any leading institution on human sciences. As to the laboratories associated with the National Center for Scientific Research which address the subject, they remain exclusively in the hands of architect-urbanists, associated here and there with sociologists or geographers.

One of the difficulties ethno-architecture has with defining itself as a specific field has probably to do with the fact that,
like ethnobotany or ethnozoology, it is a composite science. Experience has shown that the architect's idea of the house does not always correspond to the anthropologist's. Is this a question of terminology? Not completely. The ethnologist devotes himself to those aspects of the dwelling and its contents that illustrate social, family, and mental structures. The architect, however, tends to look at the dwelling first as a structure and a form; he analyzes it in terms of types, levels and scales. The former sees the subject merely as a basic research theme, nothing more; the latter adds to this a concern for promoting construction types and better carrying out rehabilitation.

Architects and ethnologists, however, have a lot to learn from each other. If the former cannot take proper account of the cultural elements of the society in which they are working, the latter would do well to consider the attention architects give to the technical aspects of dwellings. The arrangement of facades, the organization of interior and exterior volumes, the play of proportions between architectural masses, and the distribution of loads in buildings are some of the key issues that the ethnologist cannot address alone. Such collaborations, which ought to open themselves to other disciplines, particularly geography, history and linguistics, are vital for a sound understanding of the built environment. All the above concepts are in effect linked, and it would be dangerous to separate them from each other.

It is not our intention here to paint a complete picture of the fields related to ethno-architecture. Instead, the focus will be on some of its major lines of investigation, giving emphasis to recent research developments. It will also be necessary to return to certain sensitive issues and question some common ideas which still burden the study of dwellings and settlements. The discussion has been limited to a certain number of subjects on which the personal work of the author has led to conclusions he believes to be well supported. Other themes, on which thinking has not yet been fully developed — technical systems of construction, aesthetic aspects — have been for the moment put aside. Neither will urban anthropology be addressed. It, obviously, requires a separate study.

THE INFLUENCE OF THE NATURAL ENVIRONMENT

Among the most urgent and delicate questions to which ethno-architecture must respond is that of the considerable diversity of dwelling forms and types worldwide, even at the smallest regional scale. The first determinant that comes to mind, the first called forth by common sense, is that of the natural environment. Geographers once tried to make the case for relationships between the form of a dwelling — its materials, roof slope, and arrangement of openings — and climatic conditions. This question of ecological determinism caused much ink to flow. French geographers always asserted that settlement patterns could not be totally explained by these kinds of factors, and they took care to set themselves apart from their German colleagues, particularly Friedrich Ratzel (1844–1904), the founder of "anthrogeography," who was less cautious in this area. Yet their almost complete interest in this theme and their often naturalistic conception of social sciences aroused much suspicion. There is agreement today in thinking that no mechanistic link exists between ecological constraints and the forms and materials of dwellings.

The French countryside provides a number of illustrations to disprove this strictly deterministic argument. Thus, in alpine Provence, rich in forest resources, one notes with surprise that there is not a single rural house made of wood besides some remnants dating from a few centuries ago. Again in Provence, some farmhouses face north, fully exposed to the cold north winds; and unlike the case in other forested areas of France, lumbermen here built their huts in stone or rubble instead of wood. On the contrary, in the northwest of Oise, in Picardy, where little or no forest resources are available, rural structures nevertheless display wide wooden surfaces. About a hundred kilometers away, in the district of Compiègne, three quarters of which has been occupied for many centuries by one of the most beautiful forests in northern France, people build with everything except wood.

Does this confusion concerning the use of material apply to roof slopes? In fact, here too the argument of bioclimatic constraints hardly withstands criticism. Thus, the rural house of Lorraine, which was subject to important Latin influences, displays up to the elevation of Bar-le-Duc an extremely gentle roof slope. Its wooden frame barely supports the hollow roof tiles, while buildings in other regions of similar climate have adopted steeper slopes and flat tiles. Despite poor adaptation to climate and a technological shortcoming (the hollow tile does not resist frost), the Lorraine region still uses this principle.

It has to be admitted that the rural French dwelling can in no way be explained as a formal and material response to the ecological constraints of the site. Nature suggests, man decides. There are many other factors; the prestige of stone, regional prohibitions, and economic conditions all must be taken into consideration. It is only in light of a global approach to social and economic criteria and ways of thinking that one might be able to propose, in the best of cases, a satisfying system of explanation that would account for all the above peculiarities.
For comparison, it is not uninteresting to look at a region such as the Himalayas where ecological facts play an even more important role than elsewhere. The Himalayan region is known for its great differentiations in elevation and its extraordinary variety of bioclimatic environments. It is a laboratory of choice in which to study relationships between settlement patterns and the natural environment. The southern slopes of the mountains can be compared to a huge staircase rising from sea level to a height of more than 8,000 meters. From south to north ecologists have identified several levels—sub-tropical, alpine, steppe, etc.—which leave villagers only a limited range of materials for their dwellings. Let us consider the roof, an essential element of the house. To more or less every ecological level corresponds a type of roofing that relates to local vegetation and mineral resources. If one takes a cross section of central Nepal, one finds, successively, from the lowest elevation to the highest, seven main types of roofing (FIG. 1).

<table>
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<tr>
<th>Altitude Range</th>
<th>Roof Type</th>
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<tbody>
<tr>
<td>200-600 M.</td>
<td>Grass roofs among the Tharus of Terai.</td>
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<tr>
<td>350 M.</td>
<td>Roofs of small flat tiles among the Newars of the Kathmandu Valley.</td>
</tr>
<tr>
<td>800-1,750 M.</td>
<td>Thatched or grass roofs in the foothills in the middle of the country.</td>
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<tr>
<td>1,000-1,800 M.</td>
<td>Fine slate roofs in the middle of the country, depending on availability.</td>
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<tr>
<td>1,300-1,400 M.</td>
<td>Thin slate roofs or slate roofs in the middle of the country depending on availability.</td>
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<tr>
<td>1,750-1,800 M.</td>
<td>Shingled roofs (shingles) in the forested highlands.</td>
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<tr>
<td>2,500-4,000 M.</td>
<td>Terraced roofs in the Tibetan settlements of the Transhimalaya.</td>
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FIGURE 1. Roof types according to altitude in central Nepal.

It is nevertheless helpful to blend these bioclimatic constraints with socio-cultural factors. Thus, Kami blacksmiths, members of a lower Indo-Nepali caste, continue to cover their roofs with thatch following the Parbatiya tradition, even though they live in the highlands amidst "tribal" groups (the Gurungs, the Tamangs) who use wood shingles (FIG. 2). Similarly, the Parbatiyas of the Kathmandu Valley maintain the thatched roof tradition despite the fact that they live in a predominantly Newar environment where tile roofs are the rule. Their choice is more the product of cultural phenomena than purely ecological considerations. In fact, the different ethnic groups do not attribute the same value to types of materials. Newars look down on the thatched roof as the distinct sign of lower-caste people. One of the most impure castes in the Newar hierarchy, the Pode fisherman-sweepers, are not allowed to cover their dwellings with tiles; they can only use thatch.

FIGURE 2. A rich Kami (blacksmith) house in the Tamu Kosi zone of Nepal (1,840 meters). (Drawing by S. Verliat.)

Economic factors related to living standards play a role that is no less crucial. In the foothills, the slate roof, which requires much labor and skilled workmanship, remains the privilege of wealthy families. The poorest people have to make do with thatch, which is less durable yet less costly.

Finally, it is important to note that an analysis of roofing materials cannot be made without reference to the roof structure that supports it, and to the structure of the dwelling. For instance, roofing with wooden shingles implies an entirely different architectonic conception than roofing with thatch: shingles require a strong framework and massive walls, while thatch allows a lighter skeleton (FIGS. 3, 4). In return, it seems that a thatched roof can be more easily replaced with a roof of tiles.

In short, in the Himalayas as in France, climatic factors are at best restrictive. Ecological circumstances impose certain restraints, but man, in turn, dictates the choices. This explains how in similar environments, and even in the same village, very different house types may be produced. Examples of climatic misadaptation are many throughout the world—as in Japan, a country of cold winters, where houses are poorly insulated, and where walls consist of wooden-frame partitions covered inside with stretched paper. Thus, the belief that rural construction is a natural process, with spontaneous architectural decisions taken in harmony with the environment, is a total myth. It is a myth often taken up naively by newcomers to the countryside and city dwellers with second homes in the country. We will come back to this.

**Dwellings and Production Systems**

It is important to acknowledge the leading role that the French school of geography has played in the study of settle-
ments and rural dwellings since the early twentieth century. All the monographs published by the foremost names of the school, by Paul Vidal de la Blache, Jean Brunhes, Albert Demangeon, Jules Sion, Raoul Blanchard, Jean Robert, etc., include chapters on rural housing. For certain, these geographers paid little attention to the role of society; instead, they focused on mapping density patterns and understanding the reasons for human distribution in the environment. Nevertheless, they were among the first to begin scientific study of rural French society. They endowed settlement surveys with both detailed questionnaires and precise maps which physically located elements in space.¹ The influence of these new tools of analysis was considerable.

Of these geographers, Albert Demangeon (1872-1940) was one of the most original. In several major articles he situates the
house in the rural landscape and systematically establishes the relations between the dwelling and methods of farming. According to him, the character of the house depends mainly on its internal organization, an organization born of the needs of farming: "The rural house provides a solution to the vital problem of relating men, animals and goods."¹⁰ In other words, the dwelling is conceived as an instrument of work—a tool which the farmer adapts to his farming needs. This instrumentalist theory, which passes completely over the social function of dwelling, has been seriously criticized. However, it did place emphasis on concrete interactions. A historian like Marc Bloch, who was largely inspired by it in his history of the French countryside, differs with it only in certain places.¹⁵

The connections between farming methods and dwellings are particularly relevant to mountainous areas. In relation to the Alps, for example, Philippe Arbos and later Jean Robert showed how the breaking of the settlement into a number of scattered structures over the mountainside was tied in with the agrarian cycle, particularly with the movement of herds on the slope throughout the year.¹¹ One discovers a similar multiplicity of settlements on the high slopes of the Himalayas. In these regions, farmer-breeder of the same rural community have several types of structures spread over the same hillside at different altitude levels. From bottom to top, the same family may own the following: a breeding shelter located on irrigated lands, below the level of the village, at about 1,500–1,800 meters; a house in the village proper at an elevation of 1,850–2,000 meters; a breeding shelter located above this site (1,850–2,000 meters); and a higher altitude shelter, between 2,700–4,000 meters, used during the summer (FIG. 5).

Besides the permanently occupied village house, these structures are only used in certain seasons of the year depending on the farming calendar and the movement of the herds.¹² These four types of shelter one can add a mobile "goth" shelter built out of poles and wicker that breeders move from field to field with their herds at an altitude of between 1,400 and 1,500 meters. For the Tamangs and the Gurungs such a mobile shelter provides a secondary house in which part of a family may spend the clearest part of the year at the side of the herd. Such a multiplicity of settlements, seen in all mountainous countries, takes full advantage of the horizontal stratification of natural vegetation into layers, and allows the best economic use of the various altitude zones. It also reduces distances and simplifies back-and-forth trips between dwellers on the hillsides. It is directly linked to a certain type of agro-pastoral organization and to the continuous seasonal movement of livestock and the availability of pastures on communal territory. Animals and their herders stay from June to September at high summer pastures, gradually descend by stages, spend the winter (January—March) at the lowest level of communal lands, and ascend progressively from April on.

The compact structure of "tribal" settlements of the highlands of central Nepal also has to be understood in conjunction with the agricultural economy. In the highlands of Ankhu Khola, for instance, the villages located at an altitude of 1,800 to 2,200 meters are clustered. Such a rural population pattern is determined largely by agricultural factors. In these regions, in effect, farmers follow a rigorous biennial system of crop rotation. They need to have fields in each area of rotation if they want to maintain a regular provision of grain from one year to the next. Thus, the rotation of the crop implies an entangled and scattered pattern of farming lots, and ultimately results in a compact settlement pattern. The farmer can hardly live in isolation, because he cannot concentrate all his land around his facilities.¹⁵

A few kilometers to the south, in an area where the Parbatiyas constitute an important portion of the population, rotational farming disappears. Here, the crops are distributed according to the model common to the foothills of Nepal, that is, in horizontal layers, with rice at the bottom level and wheat at the top. Each farming zone is associated with a main crop type and a specific rotation pattern. Significantly, this arrangement of fields coincides with a looser settlement pattern and a scattering of dwellings: it seems as if the house has moved closer to family-owned fields, and agricultural structures to cultivated fields. A changing farming pattern corresponds to a new form of rural settlement.

Factors tied to an economic system cannot explain all, however, particularly the diversity of dwellings found within the same region. In the Kathmandu Valley, for example, where wet rice cultivation and buffalo breeding predominate, both the scattered dwellings of the Parbatiyas and the clustered ones of the Newars coexist. Elsewhere in South Asia, for similar climatic conditions and for people practicing the same type of agriculture, one can find dwellings raised on stilts with perforated partitions, as well as houses built on the ground.

*Figure 5. A high-altitude shelter (4,000 meters) in central Nepal (Ganesh Himal zone).*
with massive walls. And what about France, where according to the location, the same function of preserving wine has generated so many different forms? Thus, from similar production techniques can result different modes of spatialization and house use. Indeed, the link with economic activities is present, but always mediated by other social or symbolic factors.

**THE ETHNIC IDENTITY OF THE DWELLING: MYTHS AND REALITIES**

The relationship between ethnic group and dwelling is a very ambiguous one. If it is true that the house, because of its symbolic and cultural value, acts like a particularly powerful sign of identity, it is also true that different populations can share the same settlement type, and that often, one finds within the same ethnic group several types of domestic architecture according to status or class. Hence, the dwelling is both “the most conspicuous and the most personal among ethnic traits,” and a stance within the flow of history which cannot be reduced to purely tribal or ethnic interpretations.

The debate is not a recent one. By the end of the last century the German geographer August Meitzen had already tried to find a way to relate the dwelling and settlement patterns of the different European countries with zones of ethnic distribution. This author distinguished several house types, such as Celtic, Franc, or Roman, according to their original occupants, and he theorized a connection between different settlement types (clustered, scattered, concentric) and major European population groups. Each group had a house and a village type. This thesis was disproved by Jacques Flach in the second volume of *L'Enquete sur les conditions de l'habitat en France* (Paris, 1894), a fundamental study of rural dwellings in the French provinces directed by Alfred de Foville. In his great synthesis of the geography of human settlements, Maximilien Sorre agreed categorically: “A purely ethnic argument for human settlements cannot be supported.”

Here, as in other areas, Nepal provides interesting points of comparison. This country, in fact, consists of a mosaic of ethnic groups, each of which have largely preserved its own customs, and which have lived until recently more or less isolated from one another. Yet what are we to make of this? In the Karnali Valley in the west of the country, the Parbatiyas of Indian origin and culture (75 percent of the population of Nepal) live in houses that are practically identical to those of the Tibetans, whose villages are on the next altitude level. In the center-west of Nepal, near Pokhara, Baglung, Magars and Parbatiyas live in houses that seem very similar, distinguishable only by the arrangement of details. Even the oval house of the Pokhara region, often related to an original Gurung form, is equally inhabited by the three predominant groups in the region. To the east, the Parbatiyas (Bahun, Chetri, Damai) and the tribal groups (Rais and Limbus) live almost in the same type of dwelling, hardly different from that found in the central part of the country. In contrast, if one considers ethnicity, one has to note that some groups, such as the Tamangs, live in different types of structures in neighboring districts subject to identical ecological conditions (Figs. 6, 7). By the same token, the houses of the Tharus of the Dang Valley have little to do with those of the Rana Tharus living at the far west of the Terai plains, or with those of the Katharya Tharus of Chitwan. Other factors of economic, geographic and historic order intervene as well.

Ethnic groups in Nepal have never lived in total autonomy. The cut-up and compartmentalized landscape of the foothills and mountains of the Himalayas hindered connections between valleys, but never prevented them completely. Some of these ethnic groups are even physically and linguistically alike. This is the case in the west with the Thakalis, Gurungs, Manangbas and Tamangs. In the east, the Rais, Sunuwars and Limbus are named after a single term: Kirant. It is not unlikely that these ethnic groups originally constituted a single entity, and that the present state of differentiation is recent. In the nineteenth century the unifying effort of the conquering Shah dynasty was no doubt influential in this process. The code of laws promulgated by Jang Bahadur Rana (in 1854), which classified the whole population of Nepal and attempted to organize it according to the Indian caste system, could not help but strengthen differences and arouse ethnic sentiments. Western linguists and ethnologists did nothing other than give primary emphasis to the idiosyncrasies of ethnic groups. Without going so far as to assert that the notion of the tribe was an invention on their part, it must be said that this concern for classifying people has largely obscured a complex and changing reality.

Throughout the world settlements develop as the product of a long evolution, and, like other elements of material culture, they are susceptible to external influences and borrowings. Even before European contact there were numerous examples of transformations in rural settlements in Nepal. For example, the appearance of the early-nineteenth-century Limbu house of eastern Nepal had nothing to do with its appearance today. According to British travelers of the last century, the Limbu house was raised on stilts, no doubt similar to the elevated Rai dwellings that survive in the Arun Valley today. The Limbus borrowed their present house type — as well as irrigated terraces and rice cultivation — from the Parbatiyas. This change in the framework of domestic life must have been
brought about as part of the unification pursued by the Parbatiyas in the eighteenth and nineteenth centuries. Breaking with past local leadership, this group of Hindus extended its domination over the tribal minorities of present-day Nepal and imposed itself as a driving force in the central foothills, carrying all other groups in its wake. In the same way the Tharu house of the Dang Valley was recently shown not to have always been the long, ground-level structure that is so characteristic today. At the beginning of the last century it was also raised on stilts and made of wood, bamboo and thatch. The transformation of this form of dwelling to its present-day state is basically the result of the gradual process of settlement among the ethnic group, and of a strong solidarity among its members, a solidarity based on the establishment of a particular tenure system and economic regulations enacted in the nineteenth century.

All this, valid for many other regions of the world, throws back into question the term “traditional,” used commonly in conjunction with the word dwelling when referring to houses of the vernacular type. One cannot be attentive enough to the ambiguities of this term. “Traditional” with respect to what and to whom? Even though it is true that settlement type is that which is least likely to be altered in the rural world, and that the house is the main testimony of a vanishing or threatened peasantry, the forms of rural dwellings have always been subject to change. That which we think of today with a tinge of romantic nostalgia as the “traditional” house, surviving since unknown times, is in fact the result of a long process of technological change and rearrangement. Thus, one can also show that most of the structural elements of alpine dwellings which impress us with their picturesqueness date back only to the nineteenth century. Even more, in some regions, as in Queyras, for example, that which has survived through the centuries is not the outer appearance or the structure of the house, but its interior circulation pattern.

The refusal to take into account the historical past of these buildings results from the predominant, yet questionable dichotomy of “cold societies” and “warm societies,” societies held to be outside history and societies (such as ours) sometimes referred to as Promethean. It also results from the organic and hegemonic conception that much of American anthropology accords to culture. This school of thought gives an excessive importance to cultural differences; it attempts to “stuff” civilizations, to consider them as worlds apart, closed on themselves. Thus, historical phenomena are often overshadowed. Culture, however, cannot be comprehended merely in a synchronic way. To use the apt words of Henri Focillon: “It is not a simple reflex, but a ongoing appropriation and renewal. It proceeds as a painter, by lines, by strokes which enrich the image.” In every society there is an evolutionary process which contact with the modern world does nothing more than accelerate. It is the task of ethno-architecture to decipher earlier forms and to determine successive functional adaptations.
THE HIGH AND THE VERNACULAR: RETHINKING THE MODELS

Vernacular houses were usually believed to have been built by their users, without qualified labor or architects. This statement is totally exaggerated: so-called traditional societies have strict status regulations and generally prepare competent professionals. It has also been claimed that such houses were constructed without plans or any kind of graphic tools. This assertion is as suspicious as the previous one. It has thus been shown that the so-called French country house, or better yet the "rustic" house, was subject since the sixteenth century to the impact of high architecture. In his book *L'agriculture et la maison rustique*, published in French in 1564, Charles Estienne defined a specific architectural scheme for this type of structure. And his work is not unique; it was only the first in a line that in France, as in the rest of Europe, proposed an ideal model influenced by rational concepts. Craftsmen found here plans, elevations, and sections to apply directly in rural buildings. Though mostly used for large-scale farms, and not equally applied to all regions (how otherwise to explain the present diversity of rural French houses?), these models nevertheless had a clear impact. Therefore, in France it is totally irrelevant to establish a division between vernacular and high architecture.

The idea that regional architectural styles developed entirely from local sources also does not withstand challenge. In reality, many so-called regional architectural styles were subject to external influences. The "neo-Normand" style, for instance, born in the early twentieth century, which appeared in the seaside health resorts of Deauville, Trouville, etc., owes as much to the rustic style of Louis XIII and the neo-Gothic as it does to the vernacular architecture of the Augeron backcountry. Architects who pioneered this building type did not hesitate to combine various models to respond to the taste of clients in search of both the picturesque and modern comfort. That which became over the course of years the symbol of an entire region's identity was initially a falsely rustic eclectic fabrication. This is how traditions are created.

The question of the relation between the high and the vernacular poses itself equally sharply in countries of non-European civilization with written traditions. For instance, draw on common sources, usually on texts, and call for the same sacred authorities. They both assume a depositing of goods (grains, precious stones, metals) and bring into play similar ideas of a symbolic taking root and growing. Rituals tied to other stages of construction equally reveal a common language despite a few residual differences. These are continually reinforced by the correspondences that Indian religious thinking applies to the house, the palace, the temple and the city. In India, all these spaces are ideally based on the same sacred diagram, the *vastupurushamandala*, which should be understood as a sacrificial space.

It appears from these observations that the domestic dwelling is as "preconceived" as the masterpieces of architecture; it relies on just as elaborate a definition of categories of space as erudite buildings. The attributes of the cardinal points shape the structure. They condition the internal arrangement of rooms, their orientations, the external appearance of the dwelling, etc. In other words, just as often happens with the plans of architects, the premodern house type relies on religious concepts to provide the builder with construction guidelines. As Amos Rapoport has said: "People build houses and cities with an ideal scheme in their mind," or: "That which determines the form of the dwelling is a people's vision of the ideal." Nothing shows the impact of these symbolic schemes on the uses of the dwelling and spatial types better...
than the following excerpt from an ethno-architectural study on domestic architecture among the Newars:

A Tantric Karmacharya priest reveals to us how, for instance, such norms determine the arrangement of the kitchen. The stair which leads to it is to the right-hand side of the house so that one is able to climb facing north. The gods are placed on the eastern wall so the family members can pray facing this direction. The bhutu, the double-opening hearth for preparing daily meals opens to the west so that one can cook facing east. The bhutu khota, the cooking area exposed to stains, is in the front bay, but as far from the stairs as possible. Rarely enclosed, it is, however, always separated from the rest of the room either by a level difference or a low wall. As to the yaka bhutu, the single-opening hearth provided for the meals of day laborers, expectant mothers, animals, or as an extra fireplace for banquets, it is located apart from the first, in the back bay. Nevertheless, it is often allowed beside the main hearth. 

**DWELLING AS SYMBOL OF SOCIAL ORGANIZATION**

Clearly, social structures play an important role in the form and internal arrangements of dwellings. Thus, the relations of castes or classes are often expressed by different house styles and specific materials. In the Indian world, the impure castes, lowest in the social strata, are pushed to the periphery of the settlement, while castes of higher status are generally located in central areas. By the same token, in societies studied by ethnologists, differences of gender and age generally lead to specific dwelling types, such as the collective houses of South America or Oceania conceived exclusively for males or youths. The organization of a multi-unit dwelling in the end is always a function of customs in matters of inheritance and the internal arrangements of dwellings. Thus, the relations of levels are allocated according to generation or among married brothers, a large room for the common meals of the extended family, outbuildings designated for servants, etc.

All this is well enough known that it hardly needs further emphasis. The settlement always depicts and defines a social system. Doesn’t the breaking of kinship ties ultimately lead to the disintegration of “traditional” settlements? The relation developed between a group and the space it occupies is of primary importance. It reveals the very roots of communal identity. Each human group, whether it be familial, clan-based, or village-based, needs to mark its domain. Appropriation is often made by founding holy places and setting up a system of worship to perpetuate this creative social link. As soon as a group settles itself in a place, it delineates the limits of its territory; it draws a boundary between the gods and the bad spirits, the civilized and the savage, man and his counterpart. In other words, to settle is to establish a significant link with the environment. By building a new structure, man anchors himself in a given world.

Here the idea of space relates to time. Most pre-industrial societies inscribe on the land the order in which elements appeared and were established. Let us take, for instance, the Tamang villages of the highlands of Nepal. Starting from the highest point of the area, lineages and local clan descent lines are inscribed on the hillside in their order of appearance. The village territory can here be compared to a genealogical book projected onto space. It preserves the memory of ancestral descent and the expansion of clans. It becomes a crucial tool for studying the mechanisms of affiliation, alliance and residence, which each society combines in its own way. From a broader anthropological perspective, one can see that in choosing and in planning a place man simultaneously adopts a particular pattern of human association. Thus, inhabited space creates elementary social relations.

Another manifestation of the dwelling as a symbol of social organization is the linguistic assimilation between the house and its users. The local word that defines the dwelling may also be used to name the group which inhabits it. In “exotic” societies such overlaps abound. Among the Newars of Nepal, the word che designates both the house and the extended family. Among the Marmas of eastern Pakistan, the word ir, “dwelling house,” enters into a number of composite terms used to designate marriage, the couple, and widows. Among the Nayars of southern India the word saramud is understood to have the double meaning of the matrilineal clan (or a part of the matrilineal clan) and the large house where, until recently, all members of a kin group lived. And so on. This type of association is also common in many European countries. The French word maison, originally from the Latin mansio, covers a semantic field extending well beyond the field of architecture. During the Ancien Régime, it designated all the people in the service of a lord (sometimes numbering a few hundred individuals). Similarly, in southern France today the term oustau applies both to the built space of the house and to the household group.

The assimilation sometimes takes peculiar turns. In traditional rural France, especially in the southwest areas, each house has its own name, which also stands for the name of the family living there. As has been shown by the work of P. Bourdieu and P. Lamaison, among others, the house here becomes a moral persona having material and immaterial possessions, and perpetuating itself by transmission of the name. An individual inherits his father’s family name, receives a surname during his baptism, but is generally called
by the name of the house where he lives. In this case, social logic clearly prevails over spatial logic.

These customs are of great interest to anthropologists. They reveal in many cases intermediate forms of social organization between elementary kinship structures and complex forms of associations and affiliations. As Lévi-Strauss suggested, the social unity of “maison” corresponds to “a structural state where political and economical interests that tend to invade the social realm have not yet developed a distinct language, and are constrained to express themselves in the only available way which is that of kinship; this they must ultimately subvert.”16

But this type of institution, sometimes lacking biological basis, is not only present in European societies but also in Oceania and in Asia in stratified groups. To take a cultural area of which this author is familiar, a recent book by Pascale Dollfus reveals the importance of the concept of “sociétés à maisons” in Ladakh.17 In this region, where monolinear kin groups are practically nonexistent, the “house” becomes the basic social group. This is a cognitive entity, the existence of which is transmitted from generation to generation and which is endowed with a particular name.

We can extend this concept to other types of localized social entities. Take the urban districts of the Kathmandu Valley: these are versatile entities, at the same time residential and social, constituting exogamous social groups. These groups perpetuate themselves by means of strict hereditary rules, and express their solidarity in certain forms of common worship. They are neither lineages nor clans but compulsory associations resulting from the mix of groups of different ancestry. Here, blood and land ties are combined in a complex way. In recent decades the importance of residential ties in the study of pre-industrial societies has been so neglected that this point must be stressed.

As with all residential entities, dwellings (to use the expression of Isaac Chiva) are “useful to think.”18 Ethno-architecture is not only an important chapter in the history of architecture and rural landscapes, but, even more, it is an essential field for all kinds of ethnographic study, likely to shed light on modes of social organization that have until now been little or poorly studied.

**ESSENTIAL KNOWLEDGE FOR APPLIED RESEARCH**

One immediate conclusion asserts itself: the “traditional” dwelling is a realm of multiple determinants. It is the result of various types of interaction between man and his environment, and between the different familial, political, and religious elements which constitute society. The interest of ethno-architecture lies precisely in its pluralistic approach, an approach in conformance with the multiple facets of the subject of study. As we saw, this field considers architectural structures in their interaction with all the constituents of collective life, whether material or human. It includes all the ties that unify an architecture and space with a given culture and society. It is only by means of such a total approach that one can hope to overcome reductionist attitudes, overly deterministic claims, and unsound disciplinary reflexes.

Still new, this scientific field, however, is too often confused with the recovery of lost archetypes. Its pioneers, it must not be forgotten, opposed from the beginning modern architecture, which they considered inhuman, rootless, and purely theoretical. What were they looking for in pre-industrial human settlements other than a way to invent new human spaces that would no longer dissociate the technical, the social, and the symbolic? From this came a certain propensity to accentuate the differences between this house type and the ones of the modern world by underestimating even the least tyrannical constraints of tradition in “exotic” societies. These abrupt oppositions are irrelevant. It is not possible today to draw up, one against the other like two distinct entities, traditional civilizations and modern civilizations. It is no longer possible to establish an absolute schism between the high and the vernacular, the rural and the urban. The intent is not to erase the differences that separate, sociologically, the pre-modern house from that of our industrial societies. Yet the former is far from being static; it is a place of constant rearrangements, responsive to the urban realm. An enormous task of reinterpretation must take place to better account for context and to give history to objects which until now have been excessively mythicized.

If it is possible to overcome this fascination with the archaic in the near future, ethno-architecture could well play a key role in social-science research. In fact, the prospect seems favorable. This discipline is not just a valuable tool of knowledge for the majority of human civilizations, it is also an essential tool for the preservation of world’s architectural legacy. One can no longer be preoccupied exclusively with historical monuments; in the last several years UNESCO has initiated large-scale rehabilitation projects for entire districts of modest dwellings, considering them as coherent and pertinent to urban forms as monumental historical architecture.19 Likewise, many Third World countries are today reevaluating the value of traditional materials of construction in order to struggle against the destructive effect of imported modern technologies on local cultures. This difficult effort requires, as one might imagine, in-depth knowledge in the area of vernacular architecture. This gives even more weight, and relevance, to basic ethno-architectural research.
REFERENCE NOTES

1. Remember, the word "slave" means "a slave born in the house," and by extension "the intimate world of domestic life."

2. This paper pursues the general lines of the plenary talk that the International Association for the Study of Traditional Environments (Berkeley) invited me to present at its third international conference (“Development vs. Tradition: The Cultural Ecology of Dwellings and Settlements”) held in Paris, October 8-11, 1992.


7. These examples are drawn from the excellent article by F. Calame, “Technologie et architecture rurale,” in Habitat et espace dans le monde rural, pp.67-73.

8. Ibid., p.72.

9. Ibid., pp.70-71.

10. For a complete picture of these constraints, see G. Toffin, “Couvertures des habitations et milieux au Népal,” in D. Blamont and G. Toffin, eds., Architecture, milieux et société en Himalaya, pp.11-30.


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