The Intersecting Fields of Ethno-Architecture. From the Indo-Himalayan World to Occidental Europe.

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For some thirty years, a handful of architects has been trying to call into question the primacy that the history of architecture has given to monumental buildings. The representatives of this trend want to get away from the short chronology, common since the Italian Renaissance, and react against the dominant international functionalism that has too little respect for the local cultural contexts. It is under the influence of this "vernacular" [1] approach that the small traditional structure became as legitimate an object of research as the well-known buildings. This approach, innovative and audacious as it was, broke with a utopian vision of a large part of modern architecture. It led the architects concerned to turn toward non-European countries and to focus their attention on the connections between indigenous housing patterns and cultures. From this decentralization ethno-architecture was born by which we understand the study of preindustrial, "traditional" habitats and housing. Inspired by Panofsky, Eliade, and Lévi-Strauss and familiar with the social sciences, these researchers appropriated the conceptual tools of anthropology. They opened up important fields of research in Asia, Oceania, the Middle East, and Africa and reaped a rich harvest of ethnographic materials. It quickly became clear to them that the so-called "traditional" house developed, in imitation of palaces and temples, from the culture of a given population and that it was informed by the religious images of the inhabitants as much as by its most sacred buildings. [2]

The ethnologists for their part had long regarded local architectures as objects of study and fully understood them as elements of civilization. From among the pioneers must be cited Lewis Morgan with his *Houses and House-Life of the American Aborigines*, published in 1881, and André Leroi-Gourhan with his *Milieu et Techniques*, published in 1945. The exemplary works of Claude Lévi-Strauss on the bororo villages (1958) and of Pierre Bourdieu on the Kabylean house (1970) also exerted a considerable influence. [3] The former demonstrated that an inhabited space is interdependent with social structure and thought systems. If that space is threatened, then the culture of the group itself is in danger of disappearing. Bourdieu has demonstrated that, among the Kabyles, housing is integrated into a bipolar system that forms an essential part of indigenous conceptions of society and of the world, in which summer and winter, male and female activity, the dry and the humid, culture and nature etc. confront each other. All this work, that illustrates the full range of the area under discussion, proved an extraordinary richness of meanings. In fact, the house made immediately visible the ways in which cultures differed from one another, what hierarchies they upheld and how they expressed their identity and the most hidden of their modes of thought. It also testifies to very varied conceptions of space which can be related to other spheres of social life. Propelled by an urgent wish to protect the traces of a vast cultural heritage that was changing or fast disappearing, such research has proliferated in recent years.

Just as ethno-architecture has influenced other human sciences and has expanded other approaches that had been preponderant, and geography in particular, it positions itself primarily at the confluence of those disciplines. It is from the dual perspective of the ethnologist and the architect that ethno-architecture analyses the habitat and housing of the preindustrial or "vernacular" type. Buildings are here examined not merely from the angle of forms, volume, tools, and know-how, but also from that of their sociological content and their symbolism. Ethno-architecture combines architectural and semantic analysis; it studies techniques and religious representations. It never separates the ideal from the mater-

ial, the symbolic from the technical. As A. Leroi-Gourhan has rightly said: "The organization of inhabited space is not just a technical commodity; it is just like language, the symbolic expression of global human behavior." [4] In ethno-architecture the social, the mental, and the material become intertwined. This imbrication is particularly clear-cut in "traditional" non-European societies in which all these factors are interconnected and religion frequently commands the whole of social life. Against all temptations of formalism, ethno-architecture clearly accords first place to man and gives preference to the asking of significant questions.

It is important to insist on the study of the spatial dimension in this field. One of the principal tasks of the researcher consists in identifying the configurations and the spatial logic to be found in architectural objects. What do the axial, central, frontal, vertical, and horizontal elements underlying these objects look like? All these aspects deserve being defined as precisely as possible with reference to their social and cultural contexts. Space, after all, only has meaning if linked to the group that inhabits it. Briefly put, it is always particularized, oriented toward, modelled after, and constructed by, the collective. We are dealing here with first causes for we have all reason to assume that, from the beginning, human groups have endowed their living space with a set of significations and attributes that were related to social and symbolic representations. Some anthropologists have elaborated this viewpoint and see in ethno-architecture one of the privileged areas of an "anthropology of space" that pursues the ambition to decipher the logic of built-up spaces and to lay the foundations of a grammar of representations that are constituted of architectural elements. [5]

Despite important works that have emerged, ethno-architecture seems to have acquired its autonomy more in the field of architecture in the strict sense than in anthropological research. To stay with the French example, the volume entitled *Ethnologie générale* of the *Encyclopédie de la Pléiade*, published in 1968 under the direction of Jean Poirier, contains a chapter on ethno-botany, ethno-musicology, and even on ethno-mineralogy, but none on ethno-architecture. The same gap can be found in the *Dictionnaire de l'éthnologie et de*

l'anthropologie, published in 1991 under the direction of Pierre Bonte and Michel Izard. This dictionary, it is true, contains an article about housing, but it does not turn this subject into a discipline like ethno-science or ethno-musicology. If one looks at universities, the situation is even worse. The teaching of ethno-architecture is conspicuous by its absence and there is no senior position devoted to this subject in the leading institutions of the humanities. As to the sections associated with the *Centre national de la recherche scientifique* that cover this field, they depend above all on urban architects who are linked here and there to sociologists or geographers.

One of the reasons for these difficulties to establish itself as a specific branch of knowledge is perhaps to be found in the fact that ethno-architecture, like ethno-botany or ethno-zoology, is a composite science. Experience has shown that the architect's house does not always correspond to that of the anthropologist. Is this a question of vocabulary? Not entirely. The ethnologist focuses on those elements in housing and those among his tools that help make social, familial, and mental structures comprehensible. The architect tends to see the house above all from the angle of the building and of shapes; he undertakes his analysis in terms of scale-models, levels, and scales. The former sees in his object nothing less than a theme for fundamental research; the latter adds to this the idea of putting forward constructive models and of carrying out rehabilitations.

Architects and ethnologists therefore have much to learn from each other. If the former cannot do without taking into consideration the cultural elements of the society in which they work, the latter should take account of the views architects have on housing. The composition of the facade, the arrangement of the inner and outer spaces, the interplay of proportions within the architectural structure, the distribution of the building's loads are very much essential areas on which the ethnologist cannot work on his own. A collaboration of this kind, which must also be aimed at other disciplines, notably geography, history, and linguistics, is vital for a good understanding of building systems. All concepts that have

been invoked here are in fact closely linked, and it would be dangerous to separate them.

It is not our intention to paint a complete panorama of the intersecting fields of ethno-architecture. One gains more for reflecting on some of the major axes of this discipline by concentrating on recent developments in research. It is also a matter of returning to the sensitive points and to revise certain received ideas that continue to impede the analysis of habitats and housing. We have limited ourselves to a certain number of subjects which, based on the personal work of the author, have resulted in conclusions that he believes to be well founded. Other themes, the reflection of which is not yet sufficiently advanced — such as the systems of construction techniques and aesthetic aspects — have for the moment been side-stepped. Urban anthropology is not taken up either and quite evidently requires particular study.

The Influence of the Natural Milieu

Among the most pressing and difficult questions to which ethno-architecture needs to respond is that of the great diversity of forms and structures of housing around the world, even on a very small regional scale. The first factor that comes to mind and that seems to be the most obvious one, is that of the natural milieu. Geographers have tended to bring out existing relations between the form of housing, its materials, the gradient of the roof, the distribution of openings, and the climatic circumstances. Much ink has been spilled over the question of ecology as a determinant. French geographers have always supported the view that the habitat cannot be explained completely in this way, and they have used this to set themselves apart from their German colleagues, notably Friedrich Ratzel (1844-1904), the founder of "anthropogeography," who are less cautious regarding this subject matter. However, their almost exclusive interest in this topic and their often naturalist conception of the social sciences have generated much skepticism. [6] Today it is agreed that there exists no mechanical link between ecological constraints and the forms or materials of dwellings.

Rural France offers numerous examples that refute strictly deterministic explanations. Thus we discover to our surprise that houses in the countryside of the Alpine parts of Provence, a region rich in lumber, are not at all built from wood with the exception of certain minor elements that go back several centuries. Also in Provence, a number of peasant houses are facing north and are thus fully exposed to the mistral. The woodcutters' cottages are made of quarry-stones, of rock, whereas one would expect wood structures as in the case of other foresters' cottages in France. [7] To the northwest of the river Oise, in the Picardie region, no large forests offer their resources, and yet rural buildings largely have wooden sidings. A few dozen kilometers from there, in the county of Compiègne, three quarters of which has for several centuries consisted of one of the most beautiful mature forests in northern France, buildings are constructed of all sorts of materials except wood. [8]

Does what proved to be problematic for the building materials apply as well to the slope of the roof? In fact, here too the reference to links with bio-climatic constraints is open to criticism. Thus, the rural houses of Lorraine, that in important ways have been exposed to Latin influences, have, up to the latitude of Bar-le-Duc, an extremely low gradient. The frames poorly support the grooved tiles, but, though lying in the same climatic region, other parts adopted very steep gradients and flat tiles. In spite of a less good adaptation to the climate and a weaker technology (the grooved tile bears up poorly to cold weather), Lorraine continued to use this system. [9]

We must therefore conclude that housing in rural France cannot in every case be seen as a formal and material response to the ecological constraints of the site of the settlement. Nature proposes, but man disposes. Other factors also come into play: the value attached to the stone, public regulation, economic conditions; all these must be taken into consideration. It is only in light of a global approach to social and economic preconditions and to mentalities that it is possible to put forward, in the best case, a satisfactory explanatory scheme that allows us to take account of manifest particularities.

It is not uninteresting to turn toward a region of the world, the Himalayas, where the ecological preconditions play a more important role than in the cases discussed so far. The Himalayan arc, as is well known, is characterized by the range of its altitudes and its extraordinary variety of its bioclimatic milieus. It is a laboratory *par excellence* if one wants to study the connections between housing and the natural environment. The southern slopes may be compared to a huge stairway starting at sea level and going up to over 8,000 meters. From south to north ecologists have found several different levels: subtropical, alpine, steppe-like etc. that, according to the evidence, leave villagers with only a rather narrow range of options in the choice of building materials. Let us take roofing, an essential part of a house. In most cases, each ecological level corresponds to a particular type of roofing, in line with local vegetation and mineral resources. If one investigates a cross-section in central Nepal, one can find successively, from the lowlands to the uplands, seven different major roof types.

However, it is advisable to qualify these bio-climatic constraints [10] on the basis of socio-cultural factors. Thus the Kami blacksmiths, as members of a low Indo-Nepalese caste, continued to thatch their roof in the Parbatiya tradition, although they lived in the uplands. They were surrounded by the houses of "tribal" groups (Gurung, Tamang) who used wooden shingles. Equally, the Parbatiya of the Katmandu valley upheld the thatched-roof tradition although they lived in the predominantly Newar region where roof-tiles are the rule. Such choices reveal the greater weight of cultural factors over purely ecological ones. The different ethnic groups in fact do not attach the same value to different types of building materials. Among the Newar, thatching is clearly downgraded: it is associated with members of lower castes. The Pode road sweepers and fishermen, one of the most impure castes in the Newar social hierarchy, do not have the right to cover their roofs with tiles. They may only thatch them.

200-600 meters	Gramineous plant among the Tharu of Terai
1350 meters	Small flat tiles among the Newar of the Katmandu valley
800-1750 meters	Plant roofing (gramineous or thatch) in the hills of the middle region
1000-1800 meters	In middle region, fine slates, depending on availability
1200-1400 meters	Light slates and schists in middle region, depending on availability
1750 meters and above	Wood shingles among inhabitants of upland forests
2500-4000 meters	Terraced roofs for Tibetan housing in the Trans-Himalayas

Roofing Practices According to Altitude in Central Nepal

Economic factors relating to the standard of living play a role that is no less crucial. In the hills, slated roofs, which are by definition labor-intensive and require skilled workers, are more characteristic of well-to-do families. The poorest have to make do with thatching which is less durable, but also less expensive.

Finally, we have to consider roofing materials that cannot be analysed without reference to the roof structures that support them and to house structures in general. Thus wooden tiles imply an architectural design that is radically different from that supporting a thatched roof. The shingles require robust carpentry and thick walls, whereas thatched roofs allow for a lighter frame. Conversely, a thatched roof, it seems, can be more easily replaced by tiles.

In short; in the Himalayas as well as in France climatic factors are at best limiting. The ecological preconditions do impose certain constraints, but man in turn makes his own choices. For this reason the same milieu can produce very different houses, even in the same village. Besides, examples of non-adaptation are legion in the world, like in Japan, a country with cold winters, where

houses are poorly insulated and where the walls are made of wooden frames on which paper has been put from the inside. The idea of a quasi-natural way of rural housing, in total harmony with the environment, is therefore a myth. It is a myth that is frequently picked up by newcomers to the countryside and by city dwellers who have a second home there. We shall have to come back to this.

Housing and Production Systems

We must give credit to the French school of geography at the beginning of the twentieth century and its founding role in the study of housing and of the rural dwelling. The monographs published by the great names of this school — Paul Vidal de la Blache, Jean Brunhes, Albert Demangeon, Jules Sion, Raoul Blanchard, Jean Robert et al. — all contain a chapter devoted to peasant housing. True, the geographers were less interested in society and always turned to maps of population density and the distribution of people in their environment. But they were among the first to study French peasant society from a scholarly perspective. They also included in their work on habitats detailed questionnaires and precise cartographical reliefs that clearly situated things in space. [11] The influence of these new tools of analysis was considerable.

Among all these geographers, Albert Demangeon (1872-1940) is one of the most original. In several fundamental articles, he put the dwelling back into the countryside and examined in systematic fashion the relations between housing and the system of agricultural exploitation. For him the personality of a farmstead was grounded principally in the internal order of its buildings; it was an order resulting from agricultural needs. As he put it: "The peasant house provides the solution to a vital problem which is to know how reciprocal relationships between men, domestic animals, and the estate were established." [12] In other words, housing is conceived as a work instrument, and a tool that the peasant has adapted to the conditions of his exploitation. This instrumentalist theory that leaves completely unmentioned the function of housing has been severely criticized. Nevertheless, it did stress certain

interactions that are very real. A historian like Marc Bloch was largely inspired by this perspective in his history of the French countryside, [13] only that his explications were more nuanced in places.

The relations between systems of production and habitation emerge particularly clearly in mountainous regions. For the Alps, for example, Philippe Arbos and later Jean Robert have shown how the arrangement of a series of buildings dispersed across a slope is designed to establish a connection with the agricultural cycle, especially with the movement of the herds on the slopes during the year. [14] One finds such scattered settlements on the slopes of the Himalayan uplands. In those regions, the peasant stock breeders of the same rural community developed several kinds of constructions that are scattered, in the same hillside basin, at different altitudes. From the lower to the upper fields, the same family may own:

— an animal shelter, situated below the village, at around 1500 to 1800 meters in the zone of irrigated fields;
— a house in the village in the proper sense, at 1850 to 2000 meters;
— an animal shelter situated above the village, at 1850 to 2000 meters;
— a shelter higher up at between 2700 and 4000 meters that the stock breeders use during summering.

With the exception of the village dwelling that is inhabited on a permanent basis, these buildings are in use only during certain seasons of the year depending on the agricultural calendar and the movement of the herds. [15] To these four types of dwellings must be added the mobile shelter (*goth*), made of poles and wicker-work. These are being placed by the breeders from field to field with the herds at an altitude of between 1400 and 1500 meters. For the Tamang and the Gurung, these mobile shelters represent a second abode in which part of the family spends the best part of the year at the side of the animals. Such a variety of dwellings, as can be found in all mountainous regions, allows its inhabitants to take advantage of the horizontal stratification that divides the mountain side into zones of natural vegetation and to maximize

the profits to be gained from the different altitudinous zones. It also reduces distances and facilitates the constant coming and going among the inhabitants of the hillsides. It is directly related to a particular agro-pastoral organization and the grazing of the cattle on the commons depending on the seasons and the availability of pasture. The animals and their keepers remain on the summer fields from June to September. They descend successively to lower levels, spend the winter season (January to March) in the lowlands of the communal space and, from April onwards, move up progressively to the higher levels again.

The compact form of the "tribal" communities of the highlands of Central Nepal is also designed to link it with the agricultural economy. In the Ankhu Khola heights, for example, villages located at 1800 to 2000 meters all appear in clusters. This form of rural settlement is in large measure dictated by the system of cultivation. In these regions the peasants exploit the soil by a rigorous biennial rotation. They must have fields on every plot if they want to have a regular supply of cereals from one year to the next. The criss-crossing and the dispersion of these plots that this rotation brings with it leads, as a corollary, to a compact settlement pattern. The peasant does not dare to isolate himself since he cannot concentrate his fields around his farmstead. [16]

A few kilometers away, further south, where the Parbatiya represent the preponderant element in the population, the system of rotation has disappeared. Cultivation is fragmented according to the model adopted in the hills of Nepal, i.e., it is divided into successive horizontal bands, with rice-growing at the bottom and grain-growing higher up. Every zone of cultivation is associated with a plant that is grown predominantly and with a specific kind of rotation. Significantly, this arrangement of plots coincides with a loosening of the pattern of settlement and a scattering of dwellings. All this happens in a way as if the settlement had moved closer to the family fields and the farm buildings closer to the cultivated soil. The new form of rural settlement corresponded to the change in agricultural production.

Such factors relating to the economic system do not, however, explain everything, especially not the diversity of settlements in the interior of the same region. For example, in the valley of Katmandu, where rice cultivation and buffalo breeding predominate, the dispersed settlements of the Parbatiya coexist with those of the Newar. Elsewhere in South Asia we find, in a similar climate and with populations that practise the same type of agriculture, dwellings on piles with perforated partitions and houses with massive walls built on the same plot. And what about France where an identical function, i.e., wine storage, has given rise, depending on the locality, to different forms of construction. So the same production techniques produce different modes of space creation and of house usage. There is no denying that a link with subsistence activities exists, but it is always mediated by other factors, whether social or symbolic.

The Ethnic Identity of the House: Myths and Realities

The linkage between ethnicity and housing is among the most ambiguous that exist. If it is true that the house, through its symbolic and cultural value, acts as a sign of identity that is particularly powerful, it is also correct that different populations can share the same habitat and that, depending on status or stratum, several types of domestic architectural styles can be found within the same ethnic group. The house therefore is at the same time "the most visible and the most personal of ethnic characteristics" [17] and a place caught up in a movement of history which cannot be reduced to a purely tribal or ethnic logic.

The debate is not novel. Already at the end of the last century, the German geographer August Meitzen had tried to establish a relationship between habitats and forms of settlement in different European countries and areas of ethnic divisions. [18] Meitzen distinguished between several types of houses: Celtic, Frankish, Roman, depending on the original occupants. He also postulated a connection between different types of settlements (clustered, dispersed, concentric) and the large population groups in Europe. To all people their house, their village of some sort. This argument

has been refuted by Jacques Flach in the second volume of *L'Enquête sur les conditions de l'habitat en France* (Paris, 1894). This is a study of fundamental significance, edited by Alfred de Foville, on the rural dwellings of the French provinces. In his grand synthesis of the human geography of housing, Maximilien Sorre has stated categorically: "A purely ethnic theory of settlement cannot be defended." [19]

Here, as in other areas, Nepal again provides elements for an interesting comparison. That country is in fact made up of a mosaic of ethnic groups who have preserved much of their customs, having lived until fairly recently rather isolated from one another. Now, what does one find? In the Karnali valley, in the west of the country, the Parbatiya, comprising 75 percent of the population of Nepal and of Indian stock and cultural background, live in houses that are practically similar to those of the Tibetans whose villages are to be found just a bit higher up. In West-Central Nepal, around Pokhara and Baglung, the Magar and the Parbatiya live in dwellings that are on the whole quite similar and are distinguished from one another by the way details are arranged. Even the oval house of the Pokhara region, in which one can occasionally find original Gurung forms, is common to the three predominant population groups of the region. In the east, the Parbatiya (Bahun, Chetri, and Damai) and the Rai and Limbu tribes practically live in the same type of housing, not much different from that in the central regions of the country. If, on the other hand, one looks at ethnic background, we discover that certain groups, such as the Tamang, occupy constructions of dissimilar models yet in neighboring areas that are furthermore subject to identical ecological conditions. Equally, the house of the Tharu in the Dang valley has little in common with that of the Rana Tharu, who live in the far-western corner of the Terai plain, and with that of the Katharya Tharu of Chitwan. [20] Other factors of an economic, geographical and historical nature come into play.

The ethnic groups in the rest of Nepal have never experienced autarky. The compartmentalized character of the landscape and the outline of the hills and mountains of the pre-Himalayan region have impeded relations between the valleys, but they have never

completely blocked them. A number of ethnic groups even give the impression of being families and they speak related languages. This is true in the west among the Thakali, Gurung, Manangba, and Tamang. It also applies in the east to the Rai, the Sunuwar, and the Limbu, for whom there even exists a common term: Kirant. It is not inconceivable that these ethnic groups originally constituted discreet entities and that the present differentiation is a more recent development. The drive for unity of the conquering Shah dynasty in the nineteenth century has with certainty played a role in this process. The code of Laws that Jang Bahadur Rana promulgated in l854 and that classified all inhabitants of Nepal, trying to force them into a common mold by taking the Indian caste system as its principle of categorization, merely accentuated the differences and gave rise to ethnic sentiments. Western linguists and ethnologists have only reinforced whatever peculiarities existed between ethnic groups. Without going so far as to affirm that the notion of tribe was invented by them, not corresponding in any way to the situation in the mid-range hills of Nepal, it must nevertheless be said that eagerness to classify has largely contributed to the reification of a complex and fluid reality.

Otherwise, human habitats throughout the world have undergone a long evolution and are open, like other elements of material culture, to external influences and borrowing. Even before coming into contact with the European world, Nepal furnished numerous examples of important changes in the rural habitat. The Limbu house in eastern Nepal of the beginning of the nineteenth century, for instance, had nothing in common with that of today. According to the accounts of British travelers in the last century, it was a house on piles, doubtless rather similar to the elevated Rai settlements that survive to this day in the Arun valley. The Limbu borrowed their present dwelling — just like rice cultivation and the system of terraced irrigation -from the Parbatiya. [21] This transformation of domestic life-style must be traced back to the process of unification that the Parbatiya promoted in the eighteenth and nineteenth centuries. By breaking up the ancient local chieftainships and extending their rule over all tribal minorities of Nepal, these Hindu populations became the driving force of the medium-

height hills, pulling the other groups along in their wake. In the same way it has been shown recently that the Tharu house in the Dang Valley has not always had the long walls built that constitute their special feature today. At the beginning of the last century this was also a house on piles, made of wood, bamboo, and plants. The change from this form of dwelling to today's resulted from the fact that this ethnic group became more sedentary and from a very strong solidarity among second cousins; it was a solidarity due to the introduction of a peculiar system of tenements and to a reglementation of the economy promulgated in the nineteenth century. [22]

All this — which also applies to other regions on this planet — calls into question the attribute "traditional" that is habitually attached to the word housing, when we speak of dwellings of the "vernacular" type. One cannot be too aware of the ambiguities of this term. "Traditional" in relation to what and whom? If it is true that housing frequently constitutes in the rural world what has been least transformed and the house is the principal witness of a peasant life that has almost disappeared or merely enjoys a stay of execution, it is also true that the forms of rural dwelling have at all times undergone change. What we are looking at, with a touch of romantic nostalgia, as the "traditional" house, that emerges out of the night of time, is in many cases no more than the result of a long evolution, of technological change and of adjustments. It has thus been possible to show that the majority of the constituent elements of Alpine dwellings that touch us today because of their pittoresque style date back to no more than the middle of the nineteenth century. [23] In certain regions — for example, in the Queyras — it is not the outside of the house, its siding, that has survived the centuries, but the layout inside. [24]

The refusal to take into account the history of these buildings results in a stimulating, if highly controversial opposition of "cold societies" vis-à-vis "hot societies," societies deemed to have been outside history and societies (our own) that are sometimes called Promethean. It has also influenced an organicist and hegemonic conception of culture that is characteristic of a large section of

American anthropology. This school evidently attaches an excessive importance to cultural differences; it tends to naturalize cultures and to consider them as worlds in themselves, closed and sealed. This attitude has often obscured the historical aspects. Yet, culture cannot be understood solely synchronically. To use Henri Focillon's words that are right on target: "[Culture] is not simply a reflex, but rather a progressive appropriation and a renewal. It proceeds like a painter, through strokes, through touches of the brush that enrich the image." [25] In all societies, there have been evolutions that have not been precipitated by contacts with the modern world. It is part of the program of ethno-architecture to decipher the earlier forms and to detect the adaptations to successive functions.

The Scholar and the Vernacular: Reflections on Different Models

It has often been said about "vernacular" dwellings that they were built by the occupants themselves and without specialist builders and architects. This notion is quite exaggerated; after all, the so-called "traditional" societies had rigorous rules with respect to status and they generally had competent professionals among them. It has also been asserted that this type of dwelling was built without plans or graphic aids of any kind. This argument is no less dubious than the first one. Thus it has been shown that what is called the French rural — or better still, "rustic" — dwelling has been exposed since the sixteenth century to the influence of professional architects. Most notably the book by Charles Estienne, published in 1564 under the title *L'agriculture et la maison rustique*, outlined a precise architectural project for this type of building. It was not an isolated work. Rather it was the first in a series of publications that, in France as well as in the rest of Europe, put forward an ideal blueprint that bore the marks of rationalist concepts. Here craftsmen found plans, elevations and sections that they could directly apply to construction in the countryside. [26] Although they were used for large farms in particular and were not applied in the same way in all regions (how else can one explain the actual diversity of rural dwellings in France?), these

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models were clearly influential. It is therefore quite wrong to try to establish for France a sharp division between vernacular and academic architecture.

Nor has the notion that regional architectural styles in France derive uniquely from local sources stood up to critical scrutiny. In reality, a number of so-called "regional" architectural styles have been exposed to outside influences. For example, the "neo-Normanic" style that emerged at the beginning of the twentieth century in the spa towns of Deauville, Trouville etc., owed as much to the rural and neo-Gothic styles of Louis XIII as it did to the architecture of the Augeron hinterland. The architects who launched this type of building had no hesitation to mix several models together in order to meet the tastes of a clientele that was susceptible both to the picturesque and to modern comforts. What in the course of the years, came to symbolize the identity of an entire region, initially merely was an eclectic tinkering, falsely considered rustic. [27] This is how traditions arise!

The question of the relationship between professional and popular architecture is also thrown into sharp relief in non-European cultures with a written tradition. Let's take the Katmandu valley. Is it possible there to juxtapose neatly a monumental urban architecture with domestic housing in the villages? Certainly not, and for two reasons. In the first place nothing distinguishes the rural parts of the towns in this region from village housing. Also in other respects very strong ties were established in the course of the centuries between the towns and the countryside. Religious ideas, models taken from the normative texts of classical Indian architecture permeated the farthest corners of the villages. (It should be noted in passing that they were texts that explained more what was to be done to seize hold of a plot and to build on it than how the buildings should be constructed.) It was the carpenters and joiners of the court cities who made up the village artisans and who built the most important buildings in the agricultural hinterland. Over the decades these relations have not ceased to enrich the vocabulary of the architecture to be found in rural areas.

In fact, in Nepal as in many other parts of Asia reputedly educated city populations and populations from rural and mountainous regions largely shared the same ideas about the function of habitation. For both groups the east and north are the directions of good omens; they have an inherent purity and are associated with the highest religious values. The south and the west, by contrast, are the directions of hell and the setting sun; they are associated with death, evil spirits, and various forms of impurity. These associations with the directions of space, stemming from learned Indian ideas, demand a number of daily practices. Things connected with death, excrement, blood, and sex face southward and are associated with the left hand, while things related to prayer, food, and purification face eastward (or possibly northward) and are linked with the right hand.

Monumental religious buildings and private houses are also based on identical representations. The rituals relating to the laying of the foundations, for example, are based on common origins, that have generally survived in written form, and involve the same religious specialists. Both involve the deposition of substances (grain, precious stones, metal) and both operate with the same notions of root-taking and symbolic fertilization. The rituals associated with the other stages of construction equally reveal a common language. Continuities are reinforced by homologies that Indian thought postulates exist between the house, the palace, the temple, and the city. In India, all these spaces rest ideally on the same sacred diagram, that of *vastupurusamandala*, which has to be understood as a sacrificial area. [28]

It follows from these observations that private housing is just as "preconceived" as are masterpieces of architecture; it rests on a definition that is no less elaborate about different categories of space than are the great buildings. These qualifications of the main principles shape the building. They determine the distribution of the furniture inside, the directions, the external architecture etc. To put it differently, even if the house is often based on the plans of an architect, the dwelling of the pre-modern type is also based on religious notions that furnish the builder with a frame-

work. As Amos Rapoport said: "People build houses and cities with an ideal scheme in their mind." Or: "What is decisive for the shape of housing is the vision that a people has of the ideal life." [29]

Nothing illustrates better the impact of these symbolisms upon the usages of dwellings and upon ideas about space than this quotation from an ethno-architectural study relating to the private housing of the Newar:

> "A tantric Karmacarya priest showed us how, for example, such rules determine the location of the kitchen. The stairway that leads to it is located on the right-hand side of the house, so that one has to climb it facing the north. Divinities are placed along the wall that faces east, so that the members of the family can pray looking into that direction. The *ja bhutu*, the foyer with two openings where the daily food is prepared, has its opening to the west so that cooking can take place facing the east. The *bhutu khota*, the actual cooking space that is most likely to get soiled is in the bay at the front, but as far removed as possible from the staircase. Rarely enclosed, it is nevertheless always separated from the rest of the room by a board or a small wall. As to the *yaka bhutu*, the foyer with a single opening, set aside for the meals of the day-laborers, young mothers, for the animals, and additional fires during festivities, is situated away from the former in the bay at the back. However, it frequently also appears adjacent to the main foyer." [30]

Housing as the Symbol of Social Organization

It is obvious that the social structures also play a considerable role in the shaping and internal arrangement of dwellings. Thus the links between strata, castes, and classes frequently translate into different house styles and the use of specific building materials. In Indian society the impure castes at the bottom of the social pyramid are relegated to the periphery of a settlement, whereas the castes that have a more elevated status generally occupy a central position in the locality. In the same way, the distinctions between the sexes and age groups often lead, within those societies which the ethnologist studies, to specific types of housing, such as the collective houses in South America or Oceania that are exclusively

reserved for men and for the young. The organization of a residential unit is lastly always a function of customs in the form of the heritage and of the internal structure of the resident group: rooms, or the division of the storeys by generation or between two married brothers, the great hall where all the members of the family reunite for the meal, the outbuildings next to the master's house that are reserved for the domestic servants, etc.

All this is too well-known to require special emphasis here. The habitat invariably translates and defines a social system. Does a disintegration of kinship groups not inevitably lead to a breakup of the "traditional" habitat? It has been less recognized how truly essential is the relationship of a group to the space it occupies. Here the deepest roots of its identity emerge. Every human group — be it a family, a clan, a village — expresses a need to leave its mark on its territory. This seizure occurs most often through the designation of holy places and through the introduction of a variety of cults that perpetuate this creative social link. As soon as it takes root in a particular space, the group marks the limits of its territory also in other ways: it draws a line between the gods and the evil spirits, between the civilized and the savage, between man and his opposite. The act of implanting assumes, in other words, the establishment of a significant rapport with the environment. In erecting a new building, man assures himself of a strongpoint in a given world.

Here the notion of space touches upon that of time. The majority of preindustrial societies in effect inscribes in the earth the order of the appearance and installation of its component units. Let us take the example of Tamang villages in the Nepalese uplands. The lineages and the lines of local clan segmentation are implanted on the hillsides in the order in which they appeared over time, seen from the most elevated point of the locality. [31] The village grounds may be compared here with a genealogical book that has been projected into space. It preserves the memory of the various lineages as well as the expansion of the clan. Seen in this perspective, the village is an irreplaceable tool for studying the mechanisms of filiation, of family alliances and of residence that

every society combines in its own way. In an enlarged anthropological perspective we may think that, by choosing and fitting up a place, man adopts at the same time a particular form of association with other men. The inhabited space under these circumstances becomes constitutive of elementary social connections.

Another manifestation of housing as a symbol of social organization is the linguistic assimilation between the house and its inhabitants. The local word that designates the settlement is equally used for naming the group that lives there. There are plenty such identities in "exotic" societies. Among the Newar of Nepal the word *che* designates the house and the extended family at the same time. Among the Marma of eastern Pakistan the word *im* — "house of residence" — forms part of numerous composites used to designate the marriage, the couple, or widows. [32] Among the Nayar of South India, the word *tarawad* is deployed in the dual sense of naming the matrilinear clan (or a segment of it) and the mansion in which, until recently, all members of this kinship group lived. [33] And so on. This type of homology is equally current in many European countries. The French word "maison" which is rooted in the Latin *mansio*, thus covers a semantic field that is large enough to spill over into the restricted field of architecture. During the Ancien Régime the group of persons who were in the service of a lord (and sometimes there were several hundred such individuals) were called this way. Likewise in the French South of today the word *oustau* refers both to the built-up space of the house and to the domestic group. [34]

Sometimes this assimilation takes a peculiar turn. In the old rural France, particularly in the South-West, every house carries a name that belongs to it, but is also the name of the family that lives in it. As the studies of Pierre Bourdieu and Pierre Lamaison, among others, have shown, the house here becomes a moral persona that has material and immaterial qualities and that perpetuates itself through the transmission of the name. [35] An individual inherits the patronym of his father and receives a forename during his baptism, but he is ordinarily called after the name of the house

where he lives. In this constellation, the social logic clearly wins over the spatial logic in the strict sense.

Such usages are of great interest to the anthropologist. They frequently reveal formes of intermediary social organization between the elementary structures of kinship and more complex forms of alliance and filiation. Thus, as Lévi-Strauss has suggested, the social unit "house" corresponds here to a structural state "where the political and economic interests that tend to invade the social spheres do not yet have a distinct language and, limited to expressing itself in the only one available to them, i.e., that of kinship, must inevitably subvert it." [36]

Now, this type of institution, sometimes deprived of its biological base, does not just exist in European societies, but also in Asia and Oceania and in stratified groups. To remain within the cultural area with which the author of these lines is most familiar, a recent book by Pascale Dollfus has demonstrated the pertinence of the concept of "house-based societies" with respect to Ladakh. [37] In this region where unilinear kinship groups are practically nonexistent, the "house" is the basic social group. It is a cognitive unit that is transmitted from generation to generation and is endowed with a particular name.

It is possible to extend this concept to other types of localized social units. Let us take the urban parts of the Katmandu valley. These are polyvalent entities that are both residential and social and constitute exogamous social groups. These groups perpetuate themselves through very strict hereditary rules and express their cohesion through certain common cults. These are neither lineages nor clans, but obligatory associations that emerged from a union of groups of distinct descent. Here blood ties and bonds of the soil combine in a manner that is particularly complex. In recent decades one has rather neglected the importance of residential linkages in preindustrial societies — not to labor this point too much.

Like all residential units, housing — to take up an expression by Isac Chiva — is "useful to think." [38] Ethno-architecture not only constitutes an important chapter in the history of architecture and

rural regions; it is also a fundamental branch of all ethnography, suited to clarify modes of social organization that have received little or poor study.

From Basic Research to Applied Research

The first conclusion to emerge is that the "traditional" dwelling is a site that is determined by multiple factors. It results from divergent types of interactions, between man and his milieu, between different institutions — familial, political, religious — that make up a society. The interest of ethno-architecture lies exactly in its pluralistic approach — an approach that is in line with the many facets of the object to be studied. Thus, as we have seen, this discipline takes architectural buildings in the way they exist together with all other components of collective life, be they material or human. It covers all the linkages that connect an architectural structure, its space, with culture and with surrounding societies. It is through a total approach of this kind that one can hope to overcome reductionist systematization, excessive determinism, and cold-shouldering by other disciplines.

However, this still young discipline all too often gets itself into a muddle when it tries to retrieve lost archetypes. Its fathers, it should be remembered, originally rebelled against modern architecture that they judged to be inhuman, rootless, and purely theoretical. What did they look for in preindustrial habitats if not to invent new human spaces that no longer separated the technical from the social and the symbolic? From this also stems a certain propensity to bring out the contrasts between these types of houses and those of the modern world and to underestimate the constraints on the tyrannical aspects of tradition in "exotic" societies. We have now come back to these sharp oppositions. It is no longer possible today to juxtapose, as distinct entities, modern and traditional cultures. Nor is it possible to establish an absolute caesura between the scientific and the vernacular, between the rural and the urban. No attempt is being made here to erase the differences that separate sociologically the pre-modern house from that of our industrial societies. But the former is by no means

static. It is a site of constant rearrangement, that is sensitive to the world of the city. An enormous job of reinterpretation and reflection lies ahead in order to take better account of contexts and of historicizing objects that hitherto have been excessively mythicized.

If it succeeds in overcoming its fascination with the archaic, ethno-architecture may well be able to play a key role in the near future among the social sciences. In fact, the perspectives appear to be very favorable. This discipline is not merely a precious instrument for understanding the majority of human societies; it is also an essential tool for the preservation of the architectural heritage around the world. This is no longer the time when one was only preoccupied with historic monuments. Several years ago, Unesco launched a major program to rehabilitate entire quarters of modest dwellings, judged as equally coherent and important for urban formations as the architecture of historic monuments. [39] Similarly, several countries of the Third World today revive traditional construction materials with the aim of fighting the destructive role of modern technologies that are alien to the local cultures. This aspect of the future and its application requires — as may well be imagined — a profound understanding of vernacular architecture. It lends much weight and actuality to basic ethno-architectural research.

Notes

1. It should be remembered that the word *verna* refers to a "slave who is born in the house," and by extension to the "intimate universe of domestic life."

2. This article takes up the broad outlines of a presentation that the Association for the Study of Traditional Environments at Berkeley invited me to make on the occasion of its third international conference, entitled "Development vs Tradition. The Cultural Ecology of Dwellings and Settlements" and held in Paris on October 8-11, 1992.

3. See C. Lévi-Strauss, *Anthropologie structurale* (Paris, 1958); P. Bourdieu, "La maison kabyle ou le monde renversé," in: J. Pouillon and P. Maranda, eds., *Échanges et communications. Mélanges offerts à Claude Lévi-Strauss*, Vol. II (Paris, 1970), 739-58.

4. A. Leroi-Gourhan, *Le Geste et la Parole* (Paris, 1982).
5. See F. Paul-Lévi and M. Segaud, *Anthropologie de l'espace* (Paris, 1983).
6. See, e.g., P. Claval, "Les sciences sociales et l'espace rural: découverte des thèmes, attitudes, politiques," in: *Habitat et l'espace dans le monde rural*, ed. by La Maison des Sciences de l'Homme (Paris, 1986), 15-40. Idem, *Autour de Vidal de la Blache. La formation de l'école française de géographie* (Paris, 1993).
7. These examples have been taken from the excellent article by F. Calame, "Technologie et architecture rurale," in: *Habitat et espace dans le monde rural*, op.cit., 67-73.
8. Ibid., 72.
9. Ibid., 70f.
10. For a more complete picture of these constraints, see G. Toffin, "Convertures des habitations et milieux au Népal," in: D. Blamont and G. Toffin, eds., *Architecture, milieu et société en Himalaya* (Paris, 1987), 155-58.
11. P. Claval, op.cit., 25ff.
12. A. Demangeon, "L'habitation rurale. Essai de classification des principeaux types," in: *Annales de Géographie*, 1920, 352-73, repr. in *Problèmes de géographie humaine* (Paris, 1942), 260ff.
13. On triennial rotation see esp. M. Bloch, *Les Caractères originaux de l'Histoire rurale française*, Vol. II (Paris, 1968; first publ. 1931). For the close connection between the historians of the Annales School and the French School of Geography during the interwar period, see above all: L. Febvre, *Pour une Histoire à part entière*, Vol. I (Paris, 1962). See also L.E. Hackin, *Initiation à la critique historique* (Paris, 1963).
14. P. Arbos, *La vie pastorale dans les Alpes françaises* (Grenoble, 1922); J. Robert, *La maison rurale permanente dans les Alpes françaises du Nord. Étude de géographie humaine* (Grenoble, 1938).
15. T. Neverre and G. Toffin, "Types d'habitations dans une communauté montagnarde du Centre Népal," in: D. Blamont and G. Toffin, eds., op.cit., 127-51.
16. G. Toffin, "Système agro-pastorale et societé dans une zone montagneuse à grands versants du Népal central," in: *Techniques et Cultures*, 7, 1986, 1-40.
17. A. Leroi-Gourhan, *Milieu et Techniques* (Paris, 1945), 24.
18. A. Meitzen, *Siedelung und Agrarwesen der Westgermanen und Ostgermanen, Kelten, Roemer, der Finnen und der Slaven*, 3 vols. (Berlin, 1895). See also H. Bausinger, *Volkskunde ou l'ethnologie allemande* (Paris, 1993), 118ff., about German scholarship on regional architecture at the beginning of this century.
19. M. Sorre, *Les Fondements de la Géographie humaine*, Vol. I, III: *L'habitat* (Paris, 1952), 116.
20. G. Krauskopff, "De la maison sur pilotis à la grande maison. Réflexion sur les transformations des habitations tharu," in: D. Blamont and G. Toffin, eds., op.cit., 15-39.
21. P. Sagant, *Le pays limbu: sa maison et ses champs* (Paris, 1976).
22. G. Krauskopff, "De la maison sur pilotis à la grande maison," op.cit.

23. M.P. Mallé, "Maison du nord des Hautes-Alpes. L'habitat rural entre histoire et tradition," in: *Terrain*, 9, 1987, 65. See also idem, "Modes et modèles: les maisons à arcades du nord des Hautes-Alpes," in: *Études rurales*, 117, 1990, 85-102.
24. M.P. Mallé, "L'inventaire de l'habitat rural. Un example: les Hautes-Alpes," in: *Habitat et espace dans le monde rural*, op.cit., 59-65.
25. H. Focillon, *Vie des formes* (Paris, 1943), 90.
26. See J. Cuisenier, *La maison rustique. Logique sociale et composition architecturale* (Paris, 1991).
27. *La Côte normande des années trente: Trouville, Deauville. Société et architecture balnéaire, 1910-1940*, ed. by Institut français de l'architecture (Paris, 1992).
28. S. Kramrish, *The Hindu Temple*, Vol. I (Delhi, 1946), 29ff. See also M.L. Reiniche, *Tiruvannamalai. Un lieu saint sivaïtre du sud de l'Inde* (Paris, 1989), 6-11.
29. A. Rapoport, *Pour une anthropologie de la maison* (Paris, 1972), 65 and 67.
30. V. Barré et al., *Panauti, une ville au Népal* (Paris, 1981), 157.
31. G. Toffin, "L'espace social des communautés montagnardes du Népal. Le cas des Tamang du Ganesh Himal," in: J. Bourliaud et al., eds., *Sociétés rurales des Andes et de Himalaya* (Grenoble, 1990),25-31.
32. L. Bernot, *Les paysans arakanais du Pakistan occidental* (Paris, 1967), 419.
33. R. Shetty, "The Impact of Kinship Systems on the Generation of House Types," in: *Traditional Dwellings and Settlements Review*, 2, 1990, 52.
34. C. Bromberger, "L'habitat et l'habitation, des objets complexes. Quelles directions pour une analyse?," in: *Habitat et espace dans le monde rural*, op.cit., 4.
35. P. Bourdieu, "Célibat et condition paysanne," in: *Études rurales*, 5-6, 1962, 32-125. See also P. Lamaison, *L'impossible mariage. Violence et parenté en Gévaudan* (Paris, 1982).
36. See C. Lévi-Strauss, *Paroles données* (Paris, 1984), 191. See also the article "Maison" in: P. Bonte and M. Izard, eds., *Dictionnaire de l'éthnologie et de l'anthropologie* (Paris, 1991), 435-36. See also P. Lamaison, "La notion de maison: entretien avec C. Lévi-Strauss," in: *Terrain*, 9, 1987, 34-39.
37. P. Dollfus, *Lien de neige et de génévriers. Organisation sociale et réligieuse des communautés bouddhistes du Ladakh* (Paris, 1989).
38. I. Chiva, "La maison: le noyau du fruit, l'arbre, l'avenir," in: *Terrain*, 9, 1987, 5.
39. On this topic, see A. Hublin, "Construction populaire et architecture savante," in: *Architectures et cultures* (Cahiers de la recherche architecturale, 27/28), 20-24.