

Chapter Ten

Building, dwelling, living:

How animals and people make themselves at home in the world

This chapter is partly autobiographical, and describes my own attempts over the last few years to find a satisfactory way of understanding the relationships between people and their environments. It is incomplete, in the sense that I cannot claim to have yet found, or that I will ever find, final answers to the questions that are bothering me. Indeed, if one of the main conclusions of what I have to say is that so-called 'ends' or 'goals' are but landmarks on a journey, then this must apply as much to my own thinking and writing as to everything else that people do in the world. The most fundamental thing about life is that it does not begin here or end there, but is always *going on*. And for the same reason, as we saw in Chapter One (p. 20), environments are never complete but are continually under construction. My purpose here is to consider the implications of this point with regard to our ideas about the similarities and contrasts between human beings and other animals in the ways in which they go about creating environments for themselves. I am concerned, in particular, with the meaning of architecture, or of that part of the environment which is conventionally described as 'built'.

In recent years, my own ideas have undergone something of a sea change, which is where the autobiographical element comes in. I began with a view that was – and indeed still is – fairly conventional in anthropology, one that sets out from the premise that human beings inhabit discursive worlds of culturally constructed significance, laid out upon the substrate of a continuous and undifferentiated physical terrain. If I differed from my colleagues, at least in social anthropology, it was in my concern to spell out the implications of this premise for the distinction between human beings and non-human animals. I felt sure that the models developed by ecologists and evolutionary biologists to account for the relations between organisms and their environments must apply as well to the human as to any other species, yet it was also clear to me that these models left no space for what seemed to be the most outstanding characteristic of human activity – that it is intentionally motivated. Human intentions, I argued, are constituted in the intersubjective domain, of relationships among *persons*, as distinct from the domain in which human beings, as biological *organisms*, relate to other components of the natural environment. Human life, I therefore proposed, is conducted simultaneously in two domains – a social domain of interpersonal relations and an ecological domain of inter-organismic relations – so that the problem is to understand the interplay between them (Ingold 1986a: 9).

Starting out from two quite reasonable propositions – that human beings are organisms, and that human action is intentionally motivated – I thus ended up with what appeared to be a thoroughly *unreasonable* result: that unlike all other animals, humans live a split-level existence, half in nature, half out; half organism, half person; half body, half mind. I had come out as an unreconstructed Cartesian dualist, which is perhaps not

so surprising when you remember that the intellectual division of labour between the natural sciences and the humanities – and within anthropology between its biological and sociocultural divisions – rests on a Cartesian foundation. Something, I felt, must be wrong somewhere, if the only way to understand our own creative involvement in the world is by taking ourselves out of it. Eventually, it dawned on me that although the problem was an anthropological one, it would require more than an anthropological solution: what is needed is a completely new way of thinking about organisms and about their relations with their environments; in short, a new ecology. And it is towards this new ecology that I have been groping.

In this task, I have gained inspiration from three principal sources. The first comes from biology, and consists in the work of the handful of courageous scholars – principally developmental biologists – who have been prepared to challenge the hegemony of neo-Darwinian thinking in the discipline (e.g. Ho and Saunders 1984, see also Oyama 1985). The second lies in what is known as ‘ecological psychology’, an approach to understanding perception and action that is radically opposed to the cognitivist orientation of the psychological mainstream (Gibson 1979, Michaels and Carello 1981). And the third comes from philosophical writing of a broadly phenomenological bent, above all the works of Martin Heidegger (1971) and Maurice Merleau-Ponty (1962).¹ Although developed independently, in the different disciplinary contexts of biology, psychology and philosophy, these three approaches have much in common. Though I cannot now explore the commonalities in detail, I want to highlight just two of them that are rather central to what I shall have to say. First, all three approaches reverse the normal order of priority – normal, that is, in the history of Western thought – of form over process. Life, in this perspective, is not the revelation of pre-existent form but the very process wherein form is generated and held in place. Secondly, the three approaches adopt as their common point of departure the agent-in-its-environment, or what phenomenology calls ‘being in the world’, as opposed to the self-contained individual confronting a world ‘out there’. In short, they maintain that it is through being inhabited, rather than through its assimilation to a formal design specification, that the world becomes a meaningful environment for people.

In what follows, I refer to this position as the ‘dwelling perspective’, by contrast to the more conventional position from which I began, and which I shall call the ‘building perspective’. Thus the movement in my own thinking has been from the building perspective to the dwelling perspective. To document this movement, I shall start by spelling out the first of these perspectives, and its implications for the way we understand the construction of the built environment, in greater depth. I shall then explain what is entailed in adopting a dwelling perspective in its place. Finally, I shall consider how this shift from a building perspective to a dwelling perspective bears upon the concept and meaning of architecture.

CONSTRUCTING ENVIRONMENTS AND MAKING WORLDS

Our initial problem may be framed by juxtaposing two statements, the first of which will be familiar to anthropological readers, the second much less so. ‘Man’, Clifford Geertz has declared, ‘is an animal suspended in webs of significance he himself has spun’ (1973: 5). One is led to suppose that non-human animals are not so suspended. Spiders spin webs, and do indeed suspend themselves in them, but their webs are tangible objects – they catch flies, not thoughts. But now consider this passage from the delightful but little

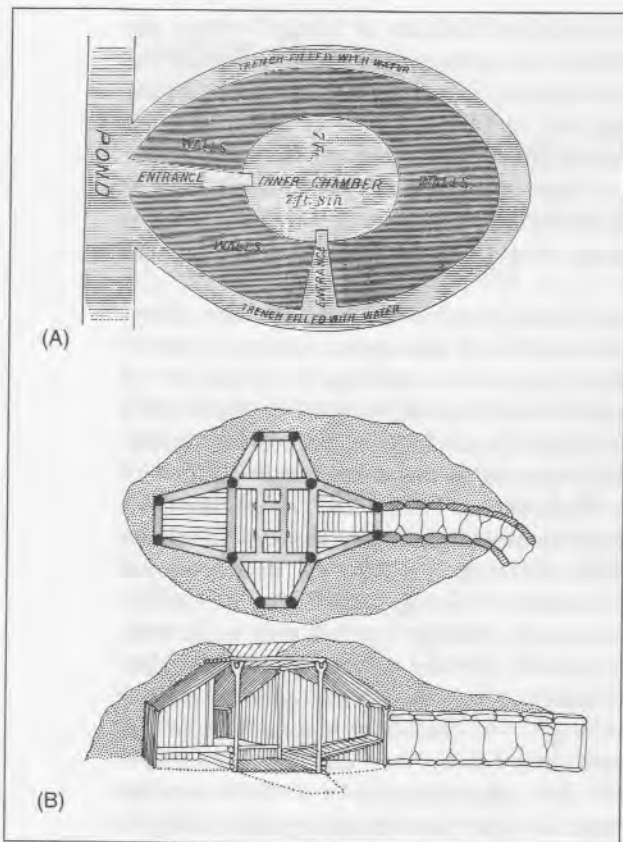


Figure 10.1 Human and animal architecture. (A) Ground plan of beaver lodge (from Morgan 1868: 142); (B) Floor plan and cross-section of Eskimo house, Mackenzie region (from Mauss and Beuchat 1979: 4).

to cities, through construction by humans' (1990: 454). But why should the products of human building activity be any different, in principle, from the constructions of other animals? Or to phrase the same question in another way, by what right do we conventionally identify the artificial with the 'man-made'? And where, in an environment that bears the imprint of human activity, can we draw the line between what is, and is not, a house, or a building, or an instance of architecture (Pearson and Richards 1994: 2)?

My first efforts to deal with these questions all hinged on a crucial distinction, which I thought quite unproblematic at the time, between design and execution. The argument ran roughly as follows: imagine a mollusc shell, a beaver's lodge and a human house. All have been regarded, at one time or another, as instances of architecture. Some authors would restrict architecture to the house, others would include the lodge – as an example of 'animal architecture' (von Frisch 1975) – but exclude the shell, others would include all three forms. The usual argument for excluding the shell is that it is attached to the body of the mollusc, whereas for something to count as an artefact it must be detached

known text of Jakob von Uexküll, *A Stroll through the Worlds of Animals and Men*: 'As the spider spins its threads, every subject spins his relations to certain characters of the things around him, and weaves them into a firm web which carries his existence' (1957: 14). Now the subjects of which von Uexküll speaks are not merely human, nor even close to human. Indeed he begins his stroll with a particular species of parasitic tick! If, as it would seem, what Geertz says of humankind applies equally to ticks, then what – if anything – *does* distinguish human from non-human environments?

Though it might be said, with Nelson Goodman (1978), that human beings are makers of worlds, this only begs the question of how human acts of world-making differ from the processes whereby non-human animals fashion their environments. It was this question that initially led me to focus on the meaning of the built environment: not, that is, on what a built environment means, but on what it means to say that an environment is built. How can we distinguish an environment that is built from one that is not? It is all very well to define the built environment, as do Denise Lawrence and Setha Low in a recent review, to include 'any physical alteration of the natural environment, from hearths

from the body. The shell, it is said, 'just grows' – there is nothing the mollusc can or need do about it. The beaver, by contrast, works hard to put its lodge together: the lodge is a product of the beaver's 'beavering', of its activity. Likewise the house is a product of the activities of its human builders. In their respective forms, and levels of complexity, they need not be that different (Figure 10.1). Should we, then, conclude that the lodge is beaver-made just as much as the house is man-made?

To this question I answered in the negative (Ingold 1986b: 345–6; 1988b: 90). Wherever they are, beavers construct the same kinds of lodges and, so far as we know, have always done so. Human beings, by contrast, build houses of very diverse kinds, and although certain house forms have persisted for long periods, there is unequivocal evidence that these forms have also undergone significant historical change. The difference between the lodge and the house lies, I argued, not in the construction of the thing itself, but in the origination of the *design* that governs the construction process. The design of the lodge is incorporated into the same programme that underwrites the development of the beaver's own body: thus the beaver is no more the designer of the lodge than is the mollusc the designer of its shell. It is merely the *executor* of a design that has evolved, along with the morphology and behaviour of the beaver, through a process of variation under natural selection. In other words, both the beaver – in its outward, phenotypic form – and the lodge are 'expressions' of the same underlying genotype. Richard Dawkins (1982) has coined the term 'extended phenotype' to refer to genetic effects that are situated beyond the body of the organism, and in this sense, the lodge is part of the extended phenotype for the beaver.

Human beings, on the other hand, are the authors of their own designs, constructed through a self-conscious decision process – an intentional selection of ideas. As Joseph Rykwert has put it: 'unlike even the most elaborate animal construction, human building involves decision and choice, always and inevitably; it therefore involves a project' (1991: 56). It is to this project, I maintained, that we refer when we say that the house is *made*, rather than merely constructed. I even went so far as to extend the argument to the domain of toolmaking, criticising students of animal behaviour for their assumption that wherever objects are manifestly being modified or constructed for future use, tools are being made. They are only being made, I claimed, when they are constructed in the imagination prior to their realisation in the material (Ingold 1986a: 40–78). But if the essence of making lies in the self-conscious authorship of design, that is in the construction of a project, it follows that things can be made without undergoing any actual physical alteration at all. Suppose that you need to knock in a nail but lack a hammer. Looking around the objects in your environment, you deliberately select something best suited to your purpose: it must be hard, have a flat striking surface, fit in the hand, and so on. So you pick up an appropriate stone. In this very selection, the stone has 'become' a hammer in that, in your mind's eye, a 'hammer-quality' has been attached to it. Without altering the stone in any way, you have made a hammer out of it.² In just the same manner, a cave may come to serve as a dwelling, a stretch of bare flat land as an airstrip, or a sheltered bay as a harbour.

To deal with situations of this kind, I chose the term *co-option*. Thus the stone was co-opted, rather than constructed, to become a hammer. It follows that there are two kinds of making: co-optive and constructive. In co-optive making an already existing object is fitted to a conceptual image of an intended future use, in the mind of a user. In constructive making this procedure is reversed, in that the object is physically remodelled to conform more closely to the pre-existing image. Indeed it seemed that the history of

things – of artefacts, architecture and landscapes – could be understood in terms of successive, alternating steps of co-option and construction. We press into service what we find around us to suit our current purposes, we proceed to modify those things to our own design so that they better serve these purposes, but at the same time our objectives – or adaptive requirements – also change so that the modified objects are subsequently co-opted to quite other projects for which they are perceived to come in handy, and so on and on. Exactly the same model has been applied to account for the evolution of organisms – Darwin himself used it in his book on orchids (1862: 348).³ To adopt terms suggested by Stephen J. Gould and Elisabeth Vrba (1982), structures adapted for one purpose may be exapted for another, subsequently undergoing further adaptation, only to be exapted for yet another purpose . . . The difference is just that in the case of organic evolution, the selection involved is natural rather than intentional (Ingold 1986b: 200–2).

It was in searching around for ways to express these ideas that I came across the writings of Jakob von Uexküll, Estonian-born aristocrat and a founding figure in the fields of both ethology and semiotics, to whose *Stroll through the Worlds of Animals and Men*, first published in 1934, I have already referred. Reacting against the mechanistic biology of the day, von Uexküll argued that to treat the animal as a mere assemblage of sensory and motor organs is to leave out the subject who uses these organs as tools, respectively, of perception and action:

We who still hold that our sense organs serve our perceptions, and our motor organs our actions, see in animals . . . not only the mechanical structure, but also the operator, who is built into their organs, as we are into our bodies. We can no longer regard animals as mere machines, but as subjects whose essential activity consists in perceiving and acting . . . All that a subject perceives becomes his *perceptual world* and all that he does, his *effector world*. Perceptual and effector worlds together form a closed unit, the *Umwelt*.

(1957: 6)

For von Uexküll, the *Umwelt* – that is, the world as constituted within the specific life activity of an animal – was to be clearly distinguished from the environment, by which he meant the surroundings of the animal as these appear to the indifferent human observer. We human beings cannot enter directly into the *Umwelten* of other creatures, but through close study we may be able to imagine what they are like. But the reverse does not hold: the non-human animal, because it cannot detach its consciousness from its own life-activity, because it is always submerged within its own *Umwelt*, cannot see objects as such, for what they are in themselves. Thus for the animal, the environment – conceived as a domain of ‘neutral objects’ – cannot exist (Ingold 1992a: 43).

Towards the end of his stroll, von Uexküll invites his readers to imagine the manifold inhabitants of an oak tree. There is the fox, who has built its lair between the roots; the owl, who perches in the crotch of its mighty limbs; the squirrel, for whom it provides a veritable maze of ladders and springboards; the ant, who forages in the furrows and crags of its bark; the wood-boring beetle who feeds and lays its eggs in passages beneath the bark, and hundreds of others (Figures 10.2 and 10.3). Each creature, through the sheer fact of its presence, confers on the tree – or on some portion of it – a particular quality or ‘functional tone’: shelter and protection for the fox, support for the owl, a thoroughfare for the squirrel, hunting grounds for the ant, egg-laying facilities for the beetle. The same tree, thus, figures quite differently within the respective *Umwelten* of its diverse

inhabitants. But for none of them does it exist *as a tree* (von Uexküll 1957: 76–9). Now consider the forester, who is measuring up the tree to estimate the volume of timber it will yield. For him, the tree figures as a potential source of valuable raw material, whereas for the little child – again to follow von Uexküll’s example (pp. 73–5) – it seems to be alive and to reveal a frightening aspect. But these different perceptions are not tied, as they are for non-human animals, to the *modus operandi* of the organism. Human beings do not construct the world in a certain way by virtue of what they are, but by virtue of their own conceptions of the possibilities of being. And these possibilities are limited only by the power of the imagination.

Herein, it seemed to me, lay the essential distinction I was seeking between the respective ways in which the subjective existence of human and non-human animals is suspended in ‘webs of significance’. For the non-human, every thread in the web is a relation between it and some object or feature of the environment, a relation that is set up through its own practical immersion in the world and the bodily orientations that this entails. For the human, by contrast, the web – and the relations of which it consists – are inscribed in a separate plane of mental representations, forming a tapestry of meaning that *covers*

over the world of environmental objects. Whereas the non-human animal perceives these objects as immediately available for use, to human beings they appear initially as occurrent phenomena to which potential uses must be *affixed*, prior to any attempt at engagement. The fox discovers shelter in the roots of a tree, but the forester sees timber only in his mind’s eye, and has first to fit that image in thought to his perception of the occurrent object – the tree – before taking action. Or to take another example, suggested recently by Maurice Bloch, the ‘swidden plot’ exists as an image in the mind of the horticulturalist, who has to match that image to an observed stand of uncut forest prior to transforming it into a field (Bloch 1991: 187). As mental representations, the timber and the swidden plot belong to the ‘intentional worlds’ (cf. Shweder 1990: 2) of the forester and the farmer; as occurrent phenomena, the oak tree and the stand of forest belong to the physical environment of ‘neutral objects’. It has been conventional, in anthropological and other writings of Western academic provenance, to refer to these worlds, of human values and purposes on the one hand, and of physical objects on the other, by means of the shorthand terms, culture and nature, respectively. And in a paper written

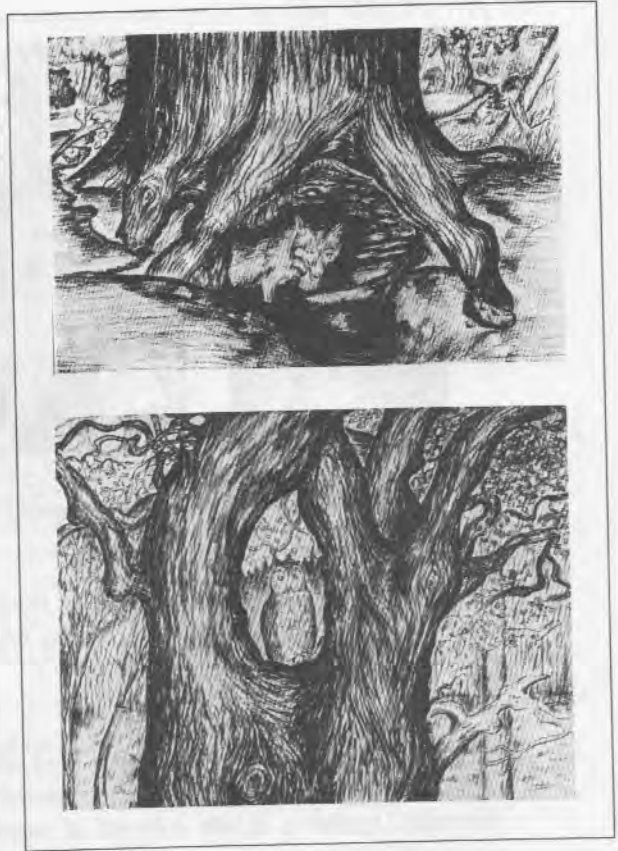


Figure 10.2 Fox, owl and oak tree

From Jakob von Uexküll ‘A Stroll through the Worlds of Animals and Men,’ in *Instinctive Behavior*, 1957, pp. 76–7, illustrations by G. Kriszat.

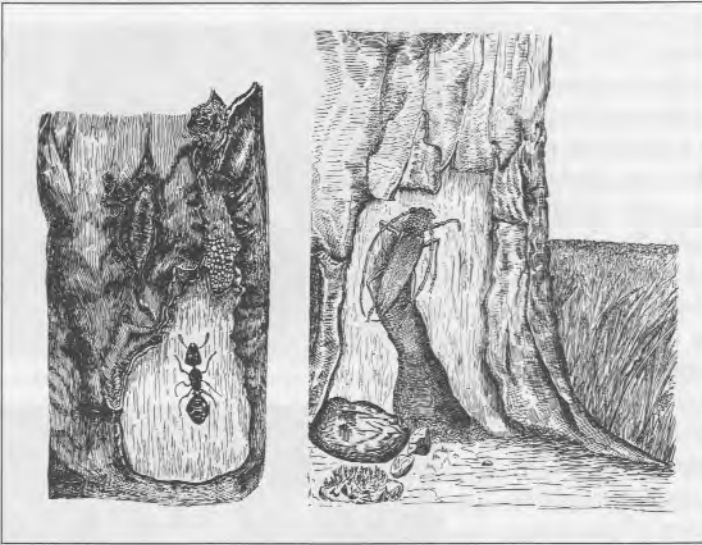


Figure 10.3 Ant, bark-boring beetle and oak tree

From Jakob von Uexküll 'A Stroll through the Worlds of Animals and Men,' in *Instinctive Behavior*, 1957, pp. 78–9, illustrations by G. Kriszat.

in 1987, I concluded that 'making is equivalent to the cultural ordering of nature – the inscription of ideal design upon the material world of things' (Ingold 1989: 506). This statement, I confess, is now a source of considerable embarrassment.

THE BUILDING PERSPECTIVE

In my defence, I can only say that I was singing a tune that has been sung by most anthropologists, in one form or another, for decades, in the context of an encounter with students of animal behaviour whose theories had no place for agency or intentionality at all, except as an epiphenomenal effect of innate predisposition.⁴ This tune is what I earlier called the 'building perspective', and I should now like to elaborate on this perspective with reference to anthropological work other than my own. For a founding statement, we could turn once again to Geertz, and to his assertion that culture – or at least that kind of culture taken to be the hallmark of humanity – consists in 'the imposition of an arbitrary framework of symbolic meaning upon reality' (1964: 39). Reality, that which is imposed upon, is envisioned here as an external world of nature, a source of raw materials and sensations for diverse projects of cultural construction. Following from this, a distinction is commonly made between the *real* environment that is given independently of the senses, and the *perceived* environment as it is reconstructed in the mind through the ordering of sense data in terms of acquired, cognitive schemata. Other conventional oppositions that encode the same distinction, and that we have already encountered (see Chapter Three, p. 41, and Chapter Nine, p. 168), are between 'etic' and 'emic', and between 'operational' and 'cognised'. The starting point in all such accounts is an imagined *separation* between the perceiver and the world, such that the perceiver has to reconstruct the world, in the mind, prior to any meaningful engagement with it.

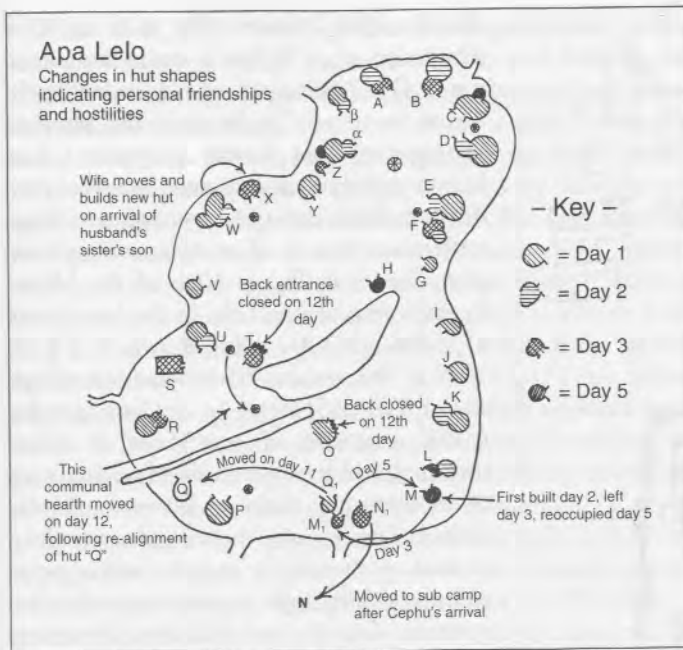


Figure 10.4 The Mbuti Pygmy camp of Apa Lelo

From C. M. Turnbull, *Wayward servants*, published by Eyre & Spottiswoode, 1965, p. 357.

Here, then, is the essence of the building perspective: that worlds are made before they are lived in; or in other words, that acts of dwelling are preceded by acts of worldmaking. A good example of this approach comes from the introduction to Maurice Godelier's book, *The mental and the material* (1986). Here, Godelier is concerned with the proper translation of the Marxian concepts *Grundlage* and *Überbau*, usually rendered in English as 'infrastructure' and 'superstructure'. He likens the *Überbau* to a building: 'The *Überbau* is a construction, an edifice which rises on foundations, *Grundlage*; and it [the *Überbau*] is the house we live in, not the foundations' (pp. 6–7). Human beings, then, inhabit the various houses of culture, pre-erected upon the universal ground of nature – including the universals of *human* nature. For another example, I would like to turn to Peter Wilson's *The domestication of the human species* (1988). In this book, Wilson argues that the most significant turning point in human social evolution came at the moment when people began to live in houses. Roughly speaking, this marks a division between hunters and gatherers, on the one hand, and agriculturalists and urban dwellers, on the other. 'Hunter-gatherers', Wilson writes, 'create for themselves only the flimsiest architectural context, and only the faintest line divides their living space from nature'. All other societies, by contrast, 'live in an architecturally modified environment', inhabiting houses and villages of a relatively enduring kind, structures that – even when abandoned – leave an almost indelible impression in the landscape. In essence, Wilson is distinguishing between societies with architecture and societies without it.

This is a bold generalisation, and like all such, it is an easy target for empirical refutation. That is not my concern, however. I am rather concerned to expose the assumptions entailed in making the distinction between an 'architecturally modified environment' and what is

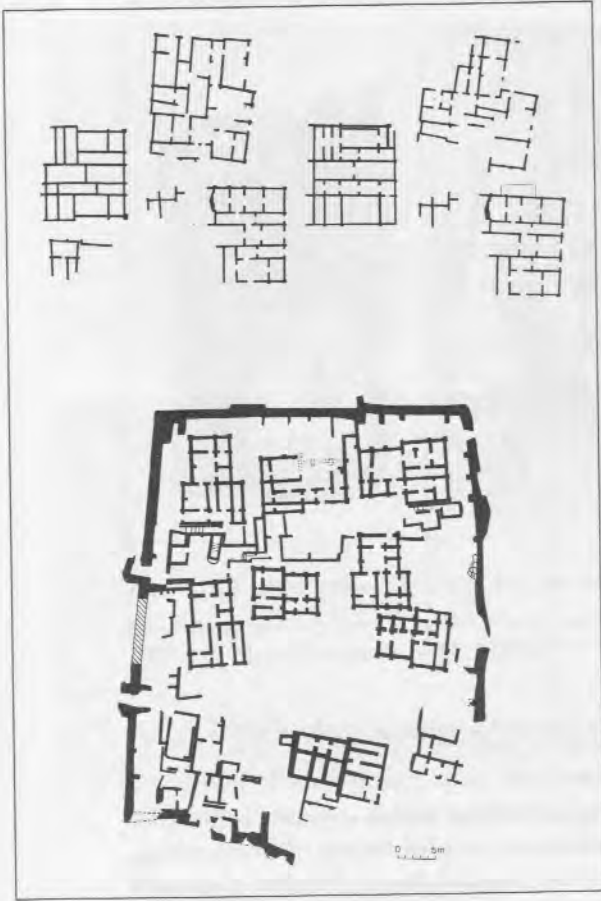


Figure 10.5 Building plans of three periods from the ancient Mesopotamian site of Tell es-Sawwan.

From J. Mellaart, *The Neolithic of the Near East*, published by Thames and Hudson, London 1975.

simply called 'nature'. For it is on this distinction that Wilson's entire argument rests. One objection to it immediately comes to mind. To be sure, the physical arrangement and formal properties of a hunter-gatherer encampment may be very different from those of a permanent village settlement. By way of example, compare the plan, shown in Figure 10.4, of the Mbuti Pygmy camp of Apa Lelo, in the Ituri forest of Zaire, with the plans shown in Figure 10.5 of the ancient Mesopotamian village site of Tell es-Sawwan. In the first case the spatial structure of settlement is loose, informal, and sensitive to the changing state of interpersonal relations between cliques, hosts and visitors. In the second it is tightly packed, geometrically regular, and appears to impose fairly tight constraints on the disposition of people and activities. Moreover, compared with the substantial buildings of the village settlement, the constructions of the hunter-gatherers are scarcely more than shades and windbreaks. Most of life, for hunter-gatherers, goes on around dwellings rather than in them. Nevertheless, the fact remains that hunter-gatherers do build shelters of various kinds. So who are we to say that they have no architecture? And if they do not, how are we to comprehend their building activity?

The answer that emerges from Wilson's account is that among hunter-gatherers, erecting shelters is one of a suite of activities, along with food-collecting, cooking, toolmaking and repair, childminding, and so on, that constitute the daily round for these people. Thus building activity is part and parcel of life in an environment that is already *given* in nature, and that has not itself been artificially engineered. With village architecture, by contrast, nature has to a degree been covered over or transformed, so that what immediately confronts people is not a natural environment but – in Wilson's words – 'an environment of their own making, the cultural' (1988: 8). If hunter-gatherers build as part of their adaptation to the given conditions of the natural environment, villagers adapt to the conditions of an environment that is already built. Either way, the environment is given in advance, as a kind of container for life to occupy. Where, as among hunter-gatherers, building is a part of everyday life, it is not supposed to have any lasting impact on the environment; where, as among villagers, the environment has been manifestly built, the buildings are apparently made before life begins in them. This, of course, is the architect's perspective: first plan and build the houses, then import the people to occupy them.

What, then, of the dwellings of nomadic pastoralists? A recent study comparing pastoral tent dwellings and village houses in Turkey and Iran by the archaeologist, Roger Cribb (1991), found that despite differences in the building materials used and the flexibility they afford, the tent and the house were virtually identical in their underlying organisational templates. What really distinguished the house from the tent was the degree to which the imposed, cultural design – shared by villagers and nomads alike – is actually translated into enduring, material structures. For such structures do not get built overnight; they grow cumulatively in the course of a settlement's continuous occupation, such that 'each new alteration or addition builds on a series of existing structures'. But in the case of a pastoral nomadic camp, 'each occupation is a fresh event', so that the camp 'has no such history but remains permanently retarded in the initial stages of the normal developmental cycle [of the settlement]' (1991: 156). Thus, although pastoralists carry a basic organisational template with them, there is little opportunity for its enduring physical realisation before the camp picks up and moves off somewhere else, where the occupation process starts all over again. In such cases, building never proceeds beyond the first phase of temporary habitation (Ingold 1992c: 795–6).

In a statement that epitomises the building perspective, Amos Rapoport writes that 'the organisation of space cognitively precedes its material expression; settings and built environments are thought before they are built' (1994: 488). In the case of villagers, the environment is ready-built. In the case of nomadic pastoralists, it would seem, the environment, though thought, is never more than partially built. As for the hunter-gatherers, it appears that the building hardly gets started at all: indeed Rapoport refers to the camp sites of Aboriginal people of the Australian Central Desert as exemplars of the situation where the environment is thought but *never* built. On these grounds, as we saw in Chapter Three (pp. 56–7), they are supposed to inhabit a 'natural' rather than an 'artificial' environment.

THE SEARCH FOR ORIGINS

Having spelled out the essence of the building perspective, let me now return to my earlier observation, comparing the forms of the beaver's lodge and the human house, that the first is tied, as it were, to the nature of the beaver itself, whereas the second is both historically and regionally variable. Among non-human animals, it is widely supposed, there can be no significant change in built form that is not bound to evolutionary changes in the essential form of the species. With human beings, by contrast, built form is free to vary independently of biological constraint, and to follow developmental pathways of its own, effectively decoupled from the process of evolution. In his famous paper of 1917, on 'The Superorganic', Alfred Kroeber declared: 'Who would be so rash as to affirm that ten thousand generations of example would convert the beaver from what he is into a carpenter or a bricklayer – or, allowing for his physical deficiency in the lack of hands, into a planning engineer!' (1952: 31). Yet human beings, through practice, example and a good measure of ingenuity, coupled with their ability to transmit their acquired know-how across the generations and to preserve it in long-term memory, have learned all these trades, and many more besides.

However, this argument implies some kind of threshold in the evolution of our own kind, at which point our ancestors were sufficiently endowed with the qualities of intelligence and manual dexterity to become the authors of their own projects of building. Taking off from this point, the history of architecture must be supposed to have proceeded

from the earliest dwellings to the modern construction industry, the species-specific nature of the human organism remaining all the while unchanged. But what *was* the earliest dwelling? According to Kenneth Bock, an event in the history of architecture – such as the construction of a Gothic vault – differs from an event in the evolution of species ‘in that the former involves formation of intent or purpose on the part of an actor while the latter does not’ (1980: 182). The same idea is implied by Joseph Rykwert when he suggests that the essence of architecture lies in ‘taking thought about building’ (1991: 54). But how did it come about that, at some decisive moment, our ancestors began to think about what they built?

As Rykwert shows, in his study of the notion of the ‘primitive hut’ in the history of architecture, this is a question that has long exercised the minds of Western thinkers. And the title of his book, *On Adam’s House in Paradise* (1972), nicely conveys the mythic quality of the many speculative answers that have been proposed. Reproduced in Figure 10.6 is one of the more delightful images of ‘the first hut’, taken from the work of the great French architectural theorist, Eugène Viollet-le-Duc, *Histoire de l’habitation humaine*, published in 1875 (Viollet-le-Duc 1990: 26). Architecture began, for Viollet-le-Duc, when the problem of the need for shelter was met through the procedures of rational planning. In his tale of the building of the first hut the secret is revealed to a hapless primitive tribe, the Nairitti, by a progressive time-traveller by the name of Epergos, bestowed upon them as a gift of his superior intelligence. For Viollet-le-Duc, as for many others, Rykwert notes, it was ‘the difference of conception, the attachment of meaning to his task, that distinguishes man’s first attempts [at building] from those of the instinctually driven beasts’ (1972: 22). These attempts may have been decidedly inferior to the constructions of animals, nevertheless they marked the turning point at which humanity was set upon the road to culture and civilisation.

The search for the first building continues to this day, though it is informed by a much better knowledge both of the archaeological traces left by early human or hominid populations, and of the behaviour of those species of animals – namely the great apes – most closely related to humankind. One of the most peculiar and distinctive aspects of the behaviour of chimpanzees, gorillas and orang-utans is their habit of building so-called ‘nests’. In functional terms, they are not really nests at all: every individual animal builds its own nest afresh, each evening, and uses it for the sole purpose of sleeping. Nor does the nest site mark any kind of fixed point in the animal’s movements; it may be built anywhere, and is abandoned the next morning (Groves and Sabater Pi 1985: 23). Nevertheless, assuming that the common ancestor of apes and humans would have had a similar habit, attempts have been made to trace an evolutionary continuum from this nesting behaviour to the residential arrangements of prototypical human groups (of which the camps of contemporary hunter-gatherers have frequently been taken as the closest exemplars, on the grounds of the presumed similarity of ecological context).

Comparing the nesting patterns of apes with the camping patterns of human hunter-gatherers, Colin Groves and J. Sabater Pi note some striking differences. The human ‘nest’, if we may call it that, is a fixed point for the movements of its several occupants, and a place to which they regularly return. In other words, it has the attributes of what the ethologist, Heini Hediger, would call ‘home’: it is a ‘goal of flight’ and a ‘place of maximal security’ (Hediger 1977: 181). There is a difference, too, in the respective ways in which apes and humans go about building their accommodation. For one thing, apes use material that comes immediately to hand, normally by a skilful interweaving of growing vegetation to form an oval-shaped, concave bed; whereas humans collect suitable materials from



Figure 10.6 The first hut, as depicted by Viollet-le-Duc.

From *The architectural theory of Viollet-le-Duc: readings and commentary*, edited by M. F. Hearn, published by MIT Press, 1990, p. 26.

a distance, prior to their assembly into a convex, self-supporting structure. For another thing, the ape makes its nest by bending the vegetation around its own body; whereas the human builds a hut, and then enters it (Groves and Sabater Pi 1985: 45). There is a sense, as Hediger remarks, in which apes build from the 'bottom up', seeking support for rest and sleeping, whereas humans build from the 'top down' seeking shelter from sun, rain or wind (1977: 184). Yet there are also remarkable similarities between ape and human living arrangements, in the overall number and layout of nests or huts and in the underlying social organisation, and on the grounds of these similarities, Groves and Sabater Pi feel justified in arguing that human campsites are but elaborations of a generalised ape pattern. All the critical differences – the functioning of the site as a home-base, the collection of material prior to construction, the technique of building from the outside – can be put down, they think, to one factor, namely the human ability 'to visualise objects in new configurations, and to bring these configurations into being on the basis of that mental picture' (1985: 45).

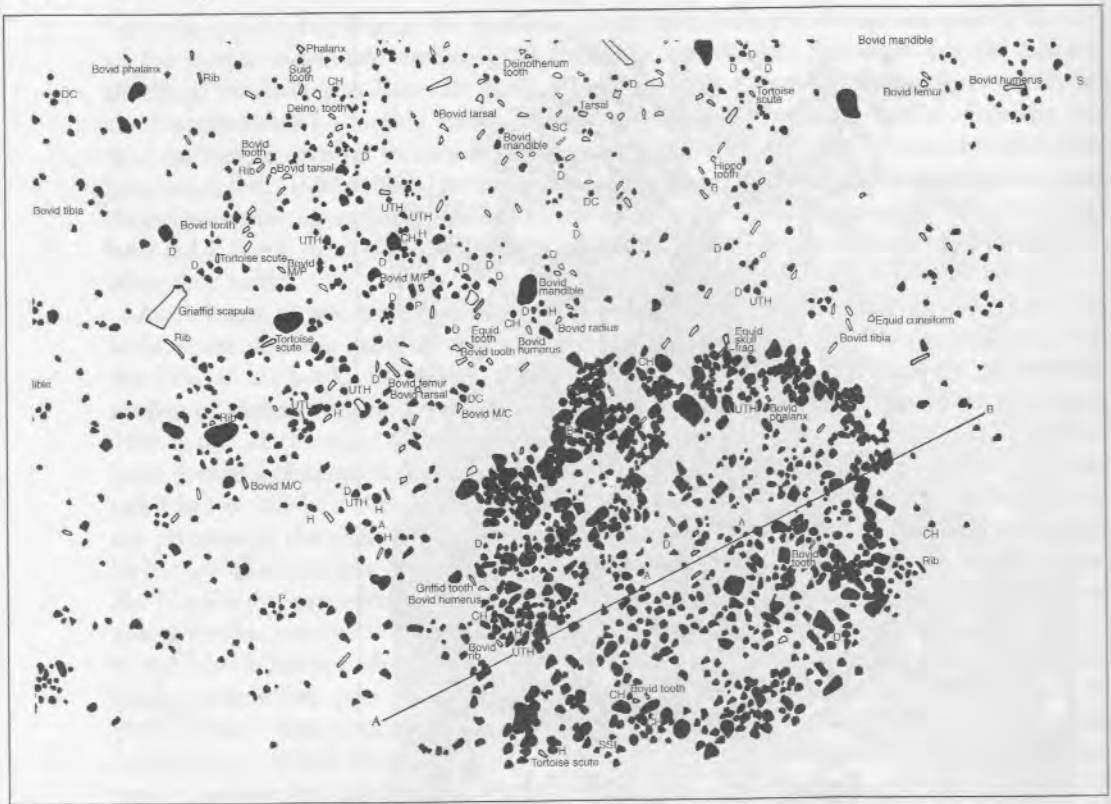


Figure 10.7 The 'stone circle' from Bed I of Olduvai Gorge.

From M. D. Leakey, *Olduvai Gorge* (volume three), published by Cambridge University Press, 1971.

Though in substance based on fact rather than fantasy, the form in which this argument is cast is virtually identical to that of Viollet-le-Duc's tale of the building of the first hut. Equipped, albeit by natural selection rather than providential intervention, with foresight and intelligence, the first builders set to work to execute a plan that was already formed as a picture in their imagination. They had solved the problem of shelter in their minds, prior to putting the solution into practical effect. It is in this light that we can understand the extraordinary significance that has been attached to the so-called 'stone circle' discovered at the famous site of Olduvai Gorge in Tanzania, and dated to some 1.75 million years ago (Figure 10.7). In her interpretation of the circle, Mary Leakey writes that in its general appearance, it 'resembles temporary structures often made by present-day nomadic peoples who build a low stone wall round their dwellings to serve either as a windbreak or as a base to support upright branches which are bent over and covered with either skins or grass' (1971: 24). A photograph of such a dwelling, from the Okombambi people of Southwest Africa, is provided to substantiate the comparison. As always in these matters, the specific interpretation has been challenged. What has not been challenged, however, is the frame of mind that leads us to suppose that if the interpretation were correct, we would have at last discovered the *real* 'first hut', and with it not just the origins of architecture, but the point of transition to true humanity.

For it is the structure of our thought, not the patterning of the archaeological record, that sets up a point of origin at the intersection of two axes, one of evolutionary change – leading from ancestral pongids and hominids to human beings, the other of historical change – leading from Palaeolithic hunting and gathering to modern industry. (Why this should be so is a matter to which I return in Chapter Twenty-one, pp. 388–90.) To explode the myth of the first hut thus requires nothing less than the dissolution of the dichotomy, which in modern scholarship separates the biological sciences from the humanities, between evolution and history, or between the temporal processes of nature and culture. Before indicating how this might be done, I need to introduce what I have called the ‘dwelling perspective’.

THE DWELLING PERSPECTIVE

For this purpose I turn to Martin Heidegger’s evocative essay, ‘Building Dwelling Thinking’, on which I have drawn for my title (Heidegger 1971: 145–61). In this essay, Heidegger asks what it means to build and to dwell, and what the relation is between these two – between building and dwelling. He begins with what might be taken as the hegemonic view, as enshrined in the discourse of Western modernity. This is that building and dwelling are separable but complementary activities, related as means to ends. We build houses so that we may dwell in them (or, as is usual in industrial society, some people build houses for other people to live in). To dwell, in this sense, means merely ‘to occupy a house, a dwelling place’. The building is a *container* for life activities, or more strictly for certain life activities, since there are other kinds of activity that go on outside houses, or in the open air. Yet, Heidegger asks, ‘do the houses in themselves hold any guarantee that *dwelling* occurs in them?’ (1971: 146). To clarify matters, let us call the physical structure, the building in itself, the *house*; and the setting within which people dwell the *home* (Lawrence 1987). Heidegger’s question can then be rephrased as follows: what does it take for a house to be a home (Pearson and Richards 1994: 6)? Merely to pose the question in this form suggests that there must be more to dwelling than the mere fact of occupation. What, then, does it mean, ‘to dwell’?

Heidegger tackles the issue through an exercise in etymology. The current German word for the verb ‘to build’, *bauen*, comes from the Old English and High German *buan*, meaning ‘to dwell’. Though this original meaning has been lost, it is preserved in such compounds as the English ‘neighbour’, meaning one who dwells nearby. Moreover, this sense of dwelling was not limited to one sphere of activity among many – to domestic life, say, as opposed to work or travel. Rather it encompassed the whole manner in which one lives one’s life on the earth; thus ‘I dwell, you dwell’ is identical to ‘I am, you are’. Yet *bauen* has another sense: to preserve, to care for, or more specifically to cultivate or to till the soil. And then there is the third sense: to construct, to make something, to raise up an edifice. Both these modern senses of building – as cultivation and as construction – are thus shown to be encompassed within the more fundamental sense of dwelling. In the course of time, however, this underlying sense has fallen into disuse, such that *bauen* has come to be reserved exclusively for cultivation and construction. Having forgotten how the latter activities are grounded in dwelling, modern thought then *rediscovered* dwelling as the occupation of a world already built.

In short, where before, building was circumscribed within dwelling, the position now appears reversed, with dwelling circumscribed within building. Heidegger’s concern is to regain that original perspective, so that we can once again understand how the activities of building – of cultivation and construction – belong to our dwelling in the world, to the

way we are. 'We do not dwell because we have built, but we build and have built because we dwell, that is because we are dwellers . . . To build is in itself already to dwell . . . *Only if we are capable of dwelling, only then can we build*' (Heidegger 1971: 148, 146, 160, original emphases). I take this to be the founding statement of the dwelling perspective.⁵ What it means is that the forms people build, whether in the imagination or on the ground, arise within the current of their involved activity, in the specific relational contexts of their practical engagement with their surroundings. Building, then, cannot be understood as a simple process of transcription, of a pre-existing design of the final product onto a raw material substrate. It is true that human beings – perhaps uniquely among animals – have the capacity to envision forms in advance of their implementation, but this envisioning is itself an activity carried on by real people in a real-world environment, rather than by a disembodied intellect moving in a subjective space in which are represented the problems it seeks to solve (see Chapter Twenty-three, pp. 418–19). In short, people do not import their ideas, plans or mental representations into the world, since that very world, to borrow a phrase from Merleau-Ponty (1962: 24), is the homeland of their thoughts. Only because they already dwell therein can they think the thoughts they do.

To argue that the forms of buildings arise as a kind of crystallisation of human activity within an environment clearly puts paid to my initial dichotomy between design and execution. No longer can we assume, with Christopher Alexander, that form is 'the ultimate object of design' (1964: 15), as though the one issued quite automatically and unproblematically from the other. To the contrary, a dwelling perspective ascribes the generation of form to those very processes whose creativity is denied by that perspective which sees in every form the concrete realisation of an intellectual solution to a design problem. Where, then, does this leave the constructions of non-human animals? The argument is equally damaging to the conventional biological account, which holds that the outward, phenotypic form – not just of the animal itself, but of the constructions making up its 'extended phenotype' – is the expression of a solution to some specific problem of adaptation, already reached by natural selection, and transferred to the animal at the point of conception, encrypted in the materials of heredity – the genes. That design is thus imported into the organism, as a kind of 'evolved architecture' (Tooby and Cosmides 1992), prior to the organism's development within an environmental context, is indeed one of the great delusions of modern biology. For as I shall show in Chapter Twenty-one, the forms of organisms are in no way prefigured in their genes but are the emergent outcomes of environmentally situated development processes.

For any animal, the environmental conditions of development are liable to be shaped by the activities of predecessors. The beaver, for example, inhabits an environment that has been decisively modified by the labours of its forbears, in building dams and lodges, and will in turn contribute to the fashioning of an environment for its progeny. It is in such a modified environment that the beaver's own bodily orientations and patterns of activity undergo development. The same goes for human beings. Human children, like the young of many other species, grow up in environments furnished by the work of previous generations, and as they do so they come literally to carry the forms of their dwelling in their bodies – in specific skills, sensibilities and dispositions. But they do not carry them in their genes, nor is it necessary to invoke some other kind of vehicle for the inter-generational transmission of information – cultural rather than genetic – to account for the diversity of human living arrangements.

We can now see how, by adopting a dwelling perspective – that is, by taking the animal-in-its-environment rather than the self-contained individual as our point of

departure – it is possible to dissolve the orthodox dichotomies between evolution and history, and between biology and culture. For if, by evolution, we mean differentiation over time in the forms and capacities of organisms, then we would have to admit that changes in the bodily orientations and skills of human beings, insofar as they are historically conditioned by the work of predecessors (along with the enduring products of that work, such as buildings), must themselves be evolutionary. And if, by cultural variation, we mean those differences of embodied knowledge that stem from the diversity of local developmental contexts, then far from being superimposed upon a substrate of evolved human universals, such variation must be part and parcel of the variation of all living things, which has its source in their enmeshment within an all-encompassing field of relations. It is not necessary, then, to invoke one kind of theory, of biological evolution, to account for the transition from nest to hut, and another kind, of cultural history, to account for the transition from hut to skyscraper. For once history is itself recognised as an evolutionary process, the point of origin constituted by the intersection of evolutionary and historical continua disappears, and the search for the first hut – for the beginnings of architecture, history and true humanity – becomes a quest after an illusion.⁶

THE HOUSE AS ORGANISM

Let me conclude by returning to von Uexküll's oak tree. Suppose that it stands, not in the forest, but in the precincts of a house. Now at first glance we might have no hesitation in regarding the house, but not the tree, as a building, or an instance of architecture. For surely the house, as Godelier puts it, belongs to 'that part of nature which is transformed by human action and thought [and] owes its existence to conscious human action on nature' (1986: 5, see also Chapter Five p. 79). The tree, on the other hand, has no such debt to humanity, for it has grown there, rooted to the spot, entirely of its own accord. On closer inspection, however, this distinction between those parts of the environment that are, respectively, built and unbuilt seems far less clear. For the form of the tree is no more given, as an immutable fact of nature, than is the form of the house an imposition of the human mind. Recall the many inhabitants of the tree: the fox, the owl, the squirrel, the ant, the beetle, among countless others. All, through their various activities of dwelling, have played their part in creating the conditions under which the tree, over the centuries, has grown to assume its particular form and proportions. And so, too, have human beings, in tending the tree's surroundings.

But the house also has many and diverse animal inhabitants – more, perhaps, than we are inclined to recognise. Sometimes special provision is made for them, such as the kennel, stable or dovecote. Others find shelter and sustenance in its nooks and crannies, or even build there. And all, in their various ways, contribute to its evolving form, as do the house's human inhabitants in keeping it under repair, decorating it, or making structural alterations in response to their changing domestic circumstances. Thus the distinction between the house and the tree is not an absolute but a relative one – relative, that is, to the scope of human involvement in the form-generating process.⁷ Houses, as Suzanne Blier notes (1987: 2), are living organisms. Like trees, they have life-histories, which consist in the unfolding of their relations with both human and non-human components of their environments. To the extent that the influence of the human component prevails, any feature of the environment will seem more like a building; to the extent that the non-human component prevails, it will seem less so.

Building, then, is a process that is continually going on, for as long as people dwell in an environment. It does not begin here, with a pre-formed plan, and end there, with a finished artefact. The 'final form' is but a fleeting moment in the life of any feature, when it is matched to a human purpose, likewise cut out from the flow of intentional activity. As the philosopher Alfred North Whitehead once remarked, 'from the moment of birth we are immersed in action, and can only fitfully guide it by taking thought' (1938: 217). And this applies, with equal force, to 'taking thought about building', the definitive characteristic of the architectural attitude. We may indeed describe the forms in our environment as instances of architecture, but for the most part we are not architects. For it is in the very process of dwelling that we build.