

Chapter Three

Hunting and gathering as ways of perceiving the environment

That nature is a cultural construction is an easy claim to make, and it is one that figures prominently in recent anthropological literature. It is not so easy, however, to ascertain what might be meant by it. One of my principal objectives in this chapter is to demonstrate that this claim is incoherent. To illustrate my argument I shall consider the anthropological treatment of those peoples classically regarded as operating within a natural economy, namely societies of hunters and gatherers. Comparing this treatment with the understandings that people who actually live by hunting and gathering have of themselves and their environments, I shall show that the latter systematically reject the ontological dualism of that tradition of thought and science which – as a kind of shorthand – we call ‘Western’, and of which the dichotomy between nature and culture is the prototypical instance. I propose that we take these hunter-gatherer understandings seriously, and this means that far from regarding them as diverse cultural constructions of reality, alternative to the Western one, we need to think again about our *own* ways of comprehending human action, perception and cognition, and indeed about our very understanding of the environment and of our relations and responsibilities towards it. Above all, we cannot rest content with the facile identification of the environment – or at least its non-human component – with ‘nature’. For as we saw in Chapter One, the world can only be ‘nature’ for a being that does not inhabit it, yet only through inhabiting can the world be constituted, in *relation* to a being, as its environment.

NATURE, CULTURE AND THE LOGIC OF CONSTRUCTION

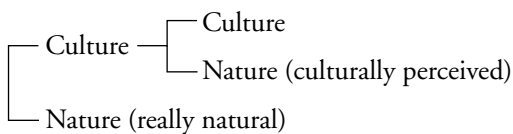
Let me begin by outlining what I take to be a commonly adopted position within social and cultural anthropology. I admit that this has something of the character of a ‘straw man’, and I am indeed setting it up in order to knock it down. Nevertheless, it is one that has proved remarkably resilient, for reasons that will become clear as we proceed.

Of all species of animals, the argument goes, humans are unique in that they occupy what Richard Shweder (1990: 2) calls ‘intentional worlds’. For the inhabitants of such a world, things do not exist ‘in themselves’, as indifferent objects, but only as they are given form or meaning within systems of mental representations. Thus to individuals who belong to different intentional worlds, the same objects in the same physical surroundings may mean quite different things. And when people act towards these objects, or with them in mind, their actions respond to the ways they are already appropriated, categorised or valorised in terms of a particular, pre-existent design. That design, transmitted across the generations in the form of received conceptual schemata, and manifested physically in the artificial products of their implementation, is what is commonly known as ‘culture’.

The environments of human beings, therefore, are culturally constituted. And when we refer to an environment – or more specifically to that part of it consisting of animate and inanimate things – as ‘nature’, then this too has to be understood as an artefact of cultural construction. ‘Nature is to culture’, writes Marshall Sahlins, ‘as the constituted is to the constituting’ (1976: 209). Culture provides the building plan, nature is the building; but whence come the raw materials?

There must indeed be a physical world ‘out there’, beyond the multiple, intentional worlds of cultural subjects, otherwise there would be nothing to build with nor anyone, for that matter, to do the building. Minds cannot subsist without bodies to house them, and bodies cannot subsist unless continually engaged in material and energetic exchanges with components of the environment. Biological and ecological scientists routinely describe these exchanges as going on within a world of nature. It is apparently necessary, therefore, to distinguish between two kinds or versions of nature: ‘really natural’ nature (the object of study for natural scientists) and ‘culturally perceived’ nature (the object of study for social and cultural anthropologists). Such distinctions are indeed commonplace in anthropological literature: examples are Rappaport’s between the ‘operational’ models of ecological science, purportedly describing nature as it really is, and the ‘cognized’ models of native people; and, perhaps most notoriously, the much used and abused distinction between ‘etic’ and ‘emic’ accounts (Rappaport 1968: 237–41, Ellen 1982, Chapter 9, cf. Ingold 1992a: 47–8).

In the formula ‘nature is culturally constructed’, nature thus appears on two sides: on one as the product of a constructional process, on the other as its precondition. Herein, however, lies a paradox. Many anthropologists are well aware that the basic contrast between physical substance and conceptual form, of which the dichotomy between nature and culture is one expression, is deeply embedded within the tradition of Western thought. It is recognized that the concept of nature, insofar as it denotes an external world of matter and substance ‘waiting to be given meaningful shape and content by the mind of man’ (Sahlins 1976: 210), is part of that very intentional world within which is situated the project of Western science as the ‘objective’ study of natural phenomena (Shweder 1990: 24). And yet the notion that there are intentional worlds, and that human realities are culturally constructed, rests on precisely the same ontological foundation. The paradox may be represented as follows:



If the concept of nature is given within the intentional world of the Western scientist, then the concept of culture must – by the same token – be given within the intentional world of the Western humanist. Each, indeed, presupposes the other. Not only, then, must the concept of nature be regarded as a cultural construct, but so also must that of culture. As Carol MacCormack puts it: ‘Neither the concept of nature nor that of culture is “given”, and they cannot be free from the biases of the [European] culture in which the concepts were constructed’ (1980: 6). The fact that ‘culture’ appears twice in this statement at once alerts us to a basic contradiction. For the references, in the second part of the statement, to culture and to the logic of construction take as ‘given’ the very concepts that, in the first part of the statement, are said to be historically relative.

Nor can the problem be contrived to disappear by trying to have it both ways, as Kirsten Hastrup does when she suggests that instead of regarding nature as ‘either a relative cultural category or an objective physical framework around culture’, it might better be seen as ‘both-and’ (1989: 7). For then culture, too, must be both-and, both an objective categorical constructor and a relative category constructed. To attempt to apply this logic is at once to be caught in the vortex of an infinite regress: if the opposed categories of ‘nature’ and ‘culture’ are themselves cultural constructs, then so must be the culture that constructs them, and the culture that constructs *that*, and so on *ad infinitum*. And since, at every stage in this regress, the reality of nature reappears as its representation, ‘real’ reality recedes as fast as it is approached.

In what follows I shall argue that hunter-gatherers do *not*, as a rule, approach their environment as an external world of nature that has to be ‘grasped’ conceptually and appropriated symbolically within the terms of an imposed cultural design, as a precondition for effective action. They do not see themselves as mindful subjects having to contend with an alien world of physical objects; indeed the separation of mind and nature has no place in their thought and practice. I should add that they are not peculiar in this regard: my purpose is certainly not to argue for some distinctive hunter-gatherer worldview or to suggest that they are somehow ‘at one’ with their environments in a way that other peoples are not. Nor am I concerned to set up a comparison between the ‘intentional worlds’ of hunter-gatherers and Western scientists or humanists. It is of course an illusion to suppose that such a comparison could be made on level terms, since the primacy of Western ontology, the ‘givenness’ of nature and culture, is implicit in the very premises on which the comparative project is itself established (see Figure 3.1).

What I wish to suggest is that we reverse this order of primacy, and follow the lead of hunter-gatherers in taking the human condition to be that of a being immersed from the start, like other creatures, in an active, practical and perceptual engagement with constituents of the dwelt-in world. This ontology of dwelling, I contend, provides us with

a better way of coming to grips with the nature of human existence than does the alternative, Western ontology whose point of departure is that of a mind detached from the world, and that has literally to formulate it – to build an intentional world in consciousness – prior to any attempt at engagement. The contrast, I repeat, is not between alternative views of the world; it is rather between two ways of apprehending it, only one of which (the Western) may be characterised as the construction of a view, that is, as a process of mental representation. As for the other, apprehending the world is not a matter of construction but of engagement, not of building but of dwelling, not of making a view *of* the world but of taking up a view *in* it (Ingold 1996a: 117).

In the following three sections I shall move on to examine, in more detail, how this

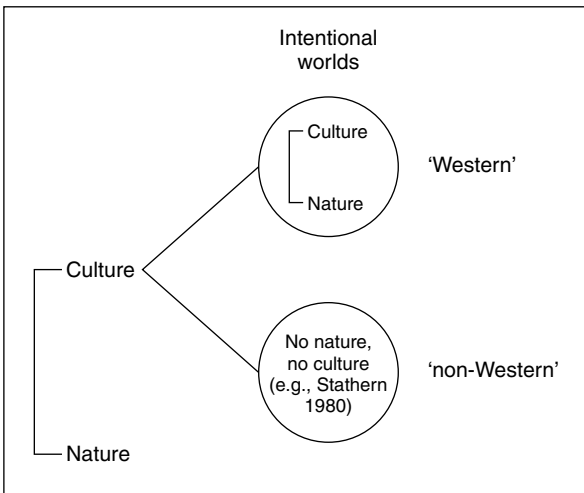


Figure 3.1 A comparison between ‘non-Western’ and ‘Western’ intentional worlds assumes the primacy of the Western ontology, with its dichotomy between nature and culture, or between physical substance and conceptual form.

contrast has been played out in the context of Western anthropological studies of hunters and gatherers. First, I shall consider how certain tropical hunter-gatherer peoples perceive their relations to their forest environment. Secondly, I shall look at the way northern hunters, in particular the Cree of northeastern Canada, understand their relations to the animals they hunt. Thirdly, drawing on ethnographic material from Aboriginal Australia and subarctic Alaska, I shall consider the way hunters and gatherers perceive the landscape. I conclude by showing how anthropological attempts to depict the mode of practical engagement of hunter-gatherers with the world as a mode of cultural construction of it have had the effect, quite contrary to stated intentions, of perpetuating a naturalistic vision of the hunter-gatherer economy.

CHILDREN OF THE FOREST

In his classic study of the Mbuti Pygmies of the Ituri Forest, Colin Turnbull observes that the people recognise their dependence on the forest that surrounds them by referring to it as 'Father' or 'Mother'. They do so 'because, as they say, it gives them food, warmth, shelter and clothing, just like their parents', and moreover, 'like their parents, [it] gives them affection' (Turnbull 1965: 19). This form of reference, and the analogy it establishes between the most intimate relations of human kinship and the equally intimate relations between human persons and the non-human environment, is by no means unique to the Mbuti.¹ Precisely similar observations have been made among other hunter-gatherers of the tropical forest, in widely separate regions of the world. For example, among the Batek Negritos of Malaysia, according to Kirk Endicott, the forest environment 'is not just the physical setting in which they live, but a world made for them in which they have a well-defined part to play. They see themselves as involved in an intimate relationship of interdependence with the plants, animals and *hala*' (including the deities) that inhabit their world' (Endicott 1979: 82). The *hala*' are the creator beings who brought the forest world into existence for the people, who protect and care for it, and provide its human dwellers with nourishment. And again, among the Nayaka, forest-dwelling hunter-gatherers of Tamil Nadu, South India, Nurit Bird-David found a similar attitude: 'Nayaka look on the forest as they do on a mother or father. For them, it is not something "out there" that responds mechanically or passively but like a parent, it provides food unconditionally to its children' (Bird-David 1990: 190). Nayaka refer to both the spirits that inhabit the landscape and the spirits of their own predecessors by terms that translate as 'big father' and 'big mother', and to themselves in relation to these spirits as sons and daughters.

What are we to make of this? Drawing an explicit parallel between her own Nayaka material and the ethnography of the Batek and Mbuti, Bird-David argues that hunter-gatherer perceptions of the environment are typically oriented by the primary metaphor 'forest is as parent', or more generally by the notion that the environment *gives* the where-withal of life to people – not in return for appropriate conduct, but unconditionally. Among neighbouring populations of cultivators, by contrast, the environment is likened to an ancestor rather than a parent, which yields its bounty only reciprocally, *in return* for favours rendered. It is this difference in orientation to the environment, she suggests, that most fundamentally distinguishes hunter-gatherers from cultivators, and it is upheld even when the former draw (as they often do) on cultivated resources and when the latter, conversely, draw on the 'wild' resources of the forest (Bird-David 1990). In a subsequent extension of the argument, and drawing once again on Mbuti, Batek and Nayaka

ethnography, Bird-David (1992a) proposes that hunter-gatherers liken the unconditional way in which the forest transacts with people to the similarly unconditional transactions that take place among the people of a community, which in anthropological accounts come under the rubric of sharing. Thus the environment shares its bounty with humans just as humans share with one another, thereby integrating both human and non-human components of the world into one, all-embracing 'cosmic economy of sharing'.

But when the hunter-gatherer addresses the forest as his or her parent, or speaks of accepting what it has to offer as one would from other people, on what grounds can we claim that the usage is metaphorical? This is evidently not an interpretation that the people would make themselves; nevertheless – taking her cue from Lakoff and Johnson (1980) – Bird-David argues that these key metaphors enable them to make sense of their environment, and guide their actions within it, even though '*people may not be normally aware of them*' (1992a: 31; 1990: 190, my emphasis). There is a troublesome inconsistency here. On the one hand, Bird-David is anxious to offer a culture-sensitive account of the hunter-gatherer economy, as a counterpoint to the prevailing ecologism of most anthropological work in this field. On the other hand, she can do so only by imposing a division of her own, which forms no part of local conceptions, between actuality and metaphor. Underwriting this division is an assumed separation between two domains: the domain of human persons and social relations, wherein parenting and sharing are matters of everyday, commonsense reality; and the domain of the non-human environment, the forest with its plants and animals, relations with which are understood by drawing, for analogy, on those intrinsic to the first domain. In short, hunter-gatherers are supposed to call upon their experience of relations in the human world in order to model their relations with the non-human one.

The theoretical inspiration for this analytical tactic comes from Stephen Gudeman (1986), so let us turn to look at how he approaches the matter. Starting from the assumption that 'humans are modelers', Gudeman proposes that 'securing a livelihood, meaning the domain of material "production", "distribution" and "consumption", is culturally modeled in all societies' (1986: 37). Entailed in the notion of modeling is a distinction between a 'schema' which provides a programme, plan or script, and an 'object' to which it is applied: thus 'the model is a projection from the domain of the schema to the domain of the object' (p. 38). Comparing Western and non-Western (or 'local') models of livelihood, Gudeman suggests that in the former, schemas taken from the 'domain of material objects' are typically applied to 'the domain of human life', whereas in the latter the direction of application is reversed, such that 'material processes are modeled as being intentional' (pp. 43–4). But notice how the entire argument is predicated upon an initial ontological dualism between the intentional worlds of human subjects and the object world of material things, or in brief, between society and nature. It is only by virtue of holding these to be separate that the one can be said to furnish the model for the other. The implication, however, is that the claim of the people themselves to inhabit but one world, encompassing relations with both human and non-human components of the environment on a similar footing, is founded upon an illusion – one that stems from their inability to recognise where the reality ends and its schematic representation begins. It is left to the anthropological observer to draw the dividing line, on one side of which lies the social world of human modelers of nature, and on the other, the natural world modeled as human society.

In the specific case with which we are concerned, hunter-gatherers' material interactions with the forest environment are said to be modeled on the interpersonal relations of

parenting and sharing: the former, assigned to the domain of nature, establish the object; the latter, assigned to the domain of society, provide the schema. But this means that actions and events that are constitutive of the social domain must be representative of the natural. When, for example, the child begs its mother for a morsel of food, that communicative gesture is itself a constitutive moment in the development of the mother–child relationship, and the same is true for the action of the mother in fulfilling the request. Parenting is not a construction that is projected *onto* acts of this kind, it rather subsists *in* them, in the nurture and affection bestowed by adults on their offspring. Likewise, the give and take of food beyond the narrow context of parent–child ties is constitutive of relations of sharing, relations that subsist in the mutuality and companionship of persons in intimate social groups (cf. Price 1975, Ingold 1986a: 116–17). Yet according to the logic of the argument outlined above, as soon as we turn to consider exchange with the non-human environment, the situation is quite otherwise. For far from subsisting in people’s practical involvement with the forest and its fauna and flora in their activities of food-getting, parenting and sharing belong instead to a construction that is projected onto that involvement from a separate, social source. Hence, when the hunter-gatherer begs the forest to provide food, as one would a human parent, the gesture is not a moment in the unfolding of relations between humans and non-human agencies and entities in the environment, it is rather an act that says something about these relationships, a representative evaluation or commentary.²

In short, actions that in the sphere of human relations would be regarded as instances of practical involvement with the world come to be seen, in the sphere of relations with the non-human environment, as instances of its metaphorical construction. Yet those who would construct the world, who would be ‘modelers’ in Gudeman’s sense, must already live in it, and life presupposes an engagement with components not only of the human but also of the non-human environment. People need the support and affection of one another, but they also need to eat. How then, to stay with the same argument, do hunter-gatherers deal, actually rather than metaphorically, with non-human beings in the practical business of gaining a livelihood? They cannot do so in their capacity as persons, since non-human agencies and entities are supposed to have no business in the world of persons save as figures of the anthropomorphic imagination. Hence the domain of their actual interaction with the non-human environment in the procurement of subsistence must lie beyond that of their existence as persons, in a separate domain wherein they figure as biological objects rather than cultural subjects, that is as organisms rather than persons. This is the *natural* domain of organism–environment interactions, as distinct from the *social* domain of interpersonal relations. In Figure 3.2 (upper diagram) this result is indicated schematically.

There is a profound irony here. Was not the principal objective to counteract that ‘naturalisation of the hunter-gatherer economy’ which, as Sahlins comments (1976: 100), has formed the received anthropological wisdom, in favour of an account sensitive to the nuances of local culture? Yet what we find is that such naturalisation is entailed in the very stance that treats the perception of the environment as a matter of reconstructing the data of experience within intentional worlds. The sphere of human engagement with the environment, in the practical activities of hunting and gathering, is disembedded from the sphere within which humans are constituted as social beings or persons, as a precondition for letting the latter stand to the former as schema to object. The consequences are all too apparent from the conclusion towards which Gudeman moves, in bringing his argument to a close:

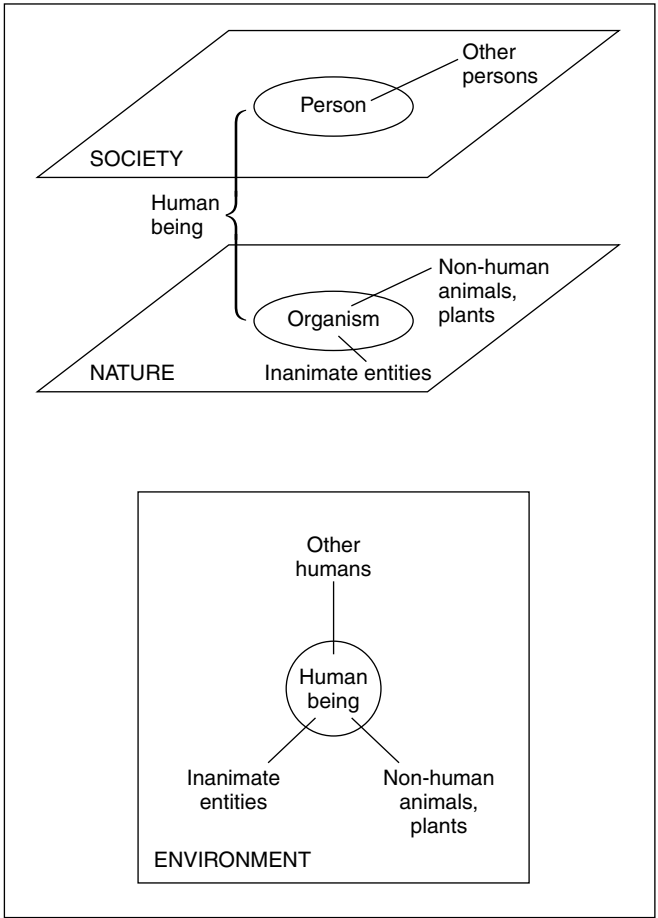


Figure 3.2 Western anthropological (above) and hunter-gatherer (below) economies of knowledge.

In all living societies humans must maintain themselves by securing energy from the environment. Although this life-sustaining process amounts only to a rearranging of nature, a transforming of materials from one state or appearance to another, humans make something of this activity.

(1986: 154)

By his own account, then, the life-process of human beings, shorn of the diverse constructions that are placed upon it, and that ‘make something’ of it, is nothing more than *a rearranging of nature*.

In this connection, we may recall Sahlins’s attempt to treat ‘economy’ as a ‘component of culture’, which led him to contrast ‘the material life process of society’ to ‘a need satisfying process of individual behaviour’ (1972: 186 fn.1). Hunting and gathering, by this account, are operations that take place in nature, consisting of interactions between human organisms with ‘needs’, and environmental resources with the potential to satisfy them. Only after having been extracted is the food transferred to the domain of society, wherein

its distribution is governed by a schema for sharing, a schema inscribed in the social relations which the economic practices of sharing serve to reproduce (see Ingold 1988a: 275). In the economy of knowledge, as conceived in general by Gudeman and specifically for hunter-gatherers by Bird-David, what applies to food applies also to sensory experience. That experience, gained through human organism–environment interactions, provides the raw material of sensation that – along with food – hunters and gatherers ‘take home’ with them. Carried over to the domain of interpersonal relations, it too is assimilated to a social schema, to yield a cultural construction of nature such as ‘the forest is as parent’.

In Figure 3.2 this anthropological conception of the economy of knowledge is contrasted with that of the people themselves. In their account (lower diagram) there are not two worlds, of nature and society, but just one, saturated with personal powers, and embracing both humans, the animals and plants on which they depend, and the features of the landscape in which they live and move. Within this one world, humans figure not as composites of body and mind but as undivided beings, ‘organism-persons’, relating as such both to other humans and to non-human agencies and entities in their environment. Between these spheres of involvement there is no *absolute* separation, they are but contextually delimited segments of a single field. As Bird-David observes, hunter-gatherers ‘do not inscribe into the nature of things a division between the natural agencies and themselves, as we [Westerners] do with our “nature:culture” dichotomy. They view their world as an integrated entity’ (1992a: 29–30). And so one gets to know the forest, and the plants and animals that dwell therein, in just the same way that one becomes familiar with other people, by spending time with them, investing in one’s relations with them the same qualities of care, feeling and attention. This explains why hunters and gatherers consider time devoted to forays in the forest to be well spent, even if it yields little or nothing by way of useful return: there is, as Bird-David puts it, ‘a concern with the activity itself’ (1992a: 30), since it allows people to ‘keep in touch’ with the non-human environment. And because of this, people know the environment ‘intimately, in the way one “knows” close relatives with whom one shares intimate day-to-day life’ (Bird-David 1992b: 39).

That the perception of the social world is grounded in the direct, mutually attentive involvement of self and other in shared contexts of experience, prior to its representation in terms of received conceptual schemata, is now well established. But in Western anthropological and psychological discourse such involvement continues to be apprehended within the terms of the orthodox dualisms of subject and object, persons and things. Rendered as ‘intersubjectivity’, it is taken to be the constitutive quality of the social domain *as against* the object world of nature, a domain open to human beings but not to non-human kinds (Willis 1990: 11–12). Thus according to Trevarthen and Logotheti, ‘human cultural intelligence is seen to be founded on a level of engagement of minds, or intersubjectivity, such as no other species has or can acquire’ (1989: 167). In the hunter-gatherer economy of knowledge, by contrast, it is as entire persons, not as disembodied minds, that human beings engage with one another and, moreover, with non-human beings as well. They do so as beings *in* a world, not as minds which, excluded from a given reality, find themselves in the common predicament of having to make sense of it. To coin a term, the constitutive quality of their world is not intersubjectivity but *inter-agentivity*. To speak of the forest as a parent is not, then, to model object relations in terms of primary intersubjectivity, but to recognize that at root, the constitutive quality of intimate relations with non-human and human components of the environment is one and the same.

HUMANS AND ANIMALS

The Waswanipi Cree of northeastern Canada, according to Harvey Feit, 'say that they only catch an animal when the animal is given to them. They say that in winter the north wind, *chuetenshu*, and the animals themselves give them what they need to live' (Feit 1973: 116). This idea, that the nourishing substance of animals is received by humans as a gift, is widely reported among northern hunting peoples, but in what follows I shall confine my remarks to studies of two other Cree groups. Among the Wemindji Cree, 'respectful activity towards the animals enhances the readiness with which they give themselves, or are given by God, to hunters' (Scott 1989: 204). And for the Mistassini Cree, Adrian Tanner reports that the events and activities of the hunt, though they have an obvious 'commonsense' significance insofar as they entail the deployment of technical knowledge and skill in the service of providing for the material needs of the human population, are also 'reinterpreted' on another, magico-religious level:

The facts about particular animals are reinterpreted as if they had social relationships between themselves, and between them and anthropomorphized natural forces, and furthermore the animals are thought of as if they had personal relations with the hunters. The idealized form of these latter relations is often that the hunter pays respect to an animal; that is, he acknowledges the animal's superior position, and following this the animal 'gives itself' to the hunter, that is, allows itself to assume a position of equality, or even inferiority, with respect to the hunter.

(Tanner 1979: 136)

In short, the animals figure for these northern hunters very much as the forest figures for such tropical hunter-gatherers as the Mbuti, Batek and Nayaka: they are partners with humans in an encompassing 'cosmic economy of sharing'.

Now Western thought, as is well known, drives an absolute division between the contrary conditions of humanity and animality, a division that is aligned with a series of others such as between subjects and objects, persons and things, morality and physicality, reason and instinct, and, above all, society and nature. Underwriting the Western view of the uniqueness of the human species is the fundamental axiom that *personhood as a state of being is not open to non-human animal kinds*. It is for this reason that we are able to conflate both the moral condition and the biological taxon (*Homo sapiens*) under the single rubric of 'humanity'. And for this reason, too, we can countenance an enquiry into the animal nature of human beings whilst rejecting out of hand the possibility of an enquiry into the humanity of non-human animals (Ingold 1988b: 6). Human existence is conceived to be conducted simultaneously on two levels, the social level of interpersonal, intersubjective relations and the natural ecological level of organism–environment interactions, whereas animal existence is wholly confined within the natural domain. Humans are both persons *and* organisms, animals are all organism.

This is a view, however, that Cree and other northern hunters categorically reject. Personhood, for them, *is* open equally to human and non-human animal (and even non-animal) kinds. Here, once again, is Feit on the Waswanipi:

In the culturally constructed world of the Waswanipi the animals, the winds and many other phenomena are thought of as being 'like persons' in that they act intelligently and have wills and idiosyncracies, and understand and are understood by men. Causality,

therefore, is personal not mechanical or biological, and it is . . . always appropriate to ask 'who did it?' and 'why?' rather than 'how does that work?'

(1973: 116)

This rendering of the Cree perspective is echoed by Tanner, who points to the significant implication of the idea that game animals live in social groups or communities akin to those of human beings, namely 'that social interaction between humans and animals is made possible' (1979: 137–8). Hunting itself comes to be regarded not as a technical manipulation of the natural world but as a kind of interpersonal dialogue, integral to the total process of social life wherein both human and animal persons are constituted with their particular identities and purposes. Among the Wemindji Cree, qualities of personhood are likewise assigned to humans, animals, spirits and certain geophysical agents. As Colin Scott writes: 'human persons are not set over and against a material context of inert nature, but rather are one species of person in a network of reciprocating persons' (1989: 195).

Though the ethnographic accounts offered by Tanner and Scott are in striking agreement, their interpretations are not, and it is revealing to explore the contrast between them. The problem hinges on the question of whether, when the Cree hunter refers to animals or to the wind as he would to human persons, he does so within the compass of what Feit, in the passage cited above, calls a 'culturally constructed world'. Tanner is in no doubt that they do. Thus he asserts that 'game animals participate simultaneously in two levels of reality, one "natural" and the other "cultural"' (1979: 137). On the natural level they are encountered simply as material entities, organic constituents of the object world to be killed and consumed. On the cultural level, by contrast, they are 'reinterpreted' as anthropomorphic beings participating in a domain 'modelled on conventional Cree patterns of social and cultural organization' (*ibid.*). In terms of this analysis, then, animals are constructed as persons through their assimilation to a schema drawn from the domain of human relations. This is entirely in accord with Gudeman's theory of the cultural modeling of livelihood, which I discussed in the previous section. Indeed, Gudeman draws for ethnographic support, *inter alia*, on Tanner's study. 'The Mistassini Cree', he writes, 'construct their hunting and trapping activities as an exchange between themselves and animal spirits . . . and the exchange itself is patterned after ordinary human relationships, such as friendship, coercion and love' (Gudeman 1986: 148–9, citing Tanner 1979: 138, 148–50).

I have already shown, in the case of hunter-gatherer relations with the forest environment, how the constructionist argument is founded on an ontological dualism between society and nature, which in this instance reappears as one between humanity and animality. On one side, then, we have the world of human modelers of animals, on the other the animal world modeled as human. If the people themselves profess to be aware of but one world, of persons and their relationships, it is because, seeing their own social ambience reflected in the mirror of nature, they cannot distinguish the reflection from reality. Now by all accounts, as we have seen, the dualism of humanity and animality, and the entailed restriction of personhood to human beings, is not endorsed by the Cree. This does not mean, of course, that they fail to differentiate between humans and animals. To the contrary, they are acutely concerned about such differences. For example, while humans may have sexual relations with certain other humans, and may kill and consume certain non-human animals, the consequences of categorical confusion – of sex with non-humans or killing fellow human beings – would be disastrous (Scott 1989: 197).

The point is that the difference between (say) a goose and a man is not between an organism and a person, but between one kind of organism-person and another. From the Cree perspective, personhood is not the manifest form of humanity; rather the human is one of many outward forms of personhood. And so when Cree hunters claim that a goose is in some sense like a man, far from drawing a figurative parallel across two fundamentally separate domains, they are rather pointing to the real unity that underwrites their differentiation. Whereas Western thought sets out from an assumed dichotomy between the human and the animal and then searches about for possible analogies or homologies, the Cree trajectory – as Scott explains – ‘seems rather the opposite: to assume fundamental similarity while exploring the differences between humans and animals’ (1989: 195). To posit a ‘metaphorical’ equivalence between goose and man is not, then, to render ‘one kind of thing in terms of another’ (Lakoff and Johnson 1980: 5), as Western – including Western anthropological – convention would have it. A more promising perspective is offered by Michael Jackson, who argues that metaphor should be apprehended as a way of drawing attention to real relational unities rather than of figuratively papering over dualities. Metaphor, Jackson writes, ‘reveals, not the “thisness of a that” but rather that “this *is* that”’ (1983: 132).³

It follows that the equivalence can work both ways. It is not ‘anthropomorphic’, as Tanner suggests (1979: 136), to compare the animal to the human, any more than it is ‘naturalistic’ to compare the human to the animal, since in both cases the comparison points to a level on which human and animal share a common existential status, namely as living beings or persons. The move, if you will, is not from the literal to the figurative, but from the actual to the potential – for personhood, at root, is the potential to become a man, a goose, or any other of the innumerable forms of animate being. From this perspective, it makes no significant difference whether one renders animal actions in human terms or human actions in animal terms. As Scott puts it:

One might observe that a consequence of the sort of analogical thinking that I have been describing would be to anthropomorphize animals, but that would be to assume the primacy of the human term. The animal term reacts with perhaps equal force on the human term, so that animal behaviour can become a model for human relations. (1989: 198)

This same argument can be applied, *pari passu*, to the metaphor ‘forest is as parent’, considered in the last section. One could just as well say that ‘parent is as forest’, for the force of the metaphor is to reveal the underlying ontological equivalence of human and non-human components of the environment as agencies of nurturance.

What humans and non-humans have in common, for Cree as for other hunter-gatherers, is that they are *alive*. Ostensibly, and barring certain geophysical phenomena that Cree would regard as animate but that we might not, this is a conclusion with which Western thinkers would not disagree. Yet in Western biology, as we saw in Chapter One (p. 19), life tends to be understood as a passive process, as the reaction of organisms, bound by their separate natures, to the given conditions of their respective environments. This carries the implication that every organism is pre-specified, with regard to its essential nature, *prior* to its entry into the life process – an implication that in modern biology appears in the guise of the doctrine of genetic preformation. With this view, personal powers – of awareness, agency and intentionality – can form no part of the organism *as such*, but must necessarily be ‘added on’ as capacities not of body but of mind, capacities that Western

thought has traditionally reserved for humans. Even today, now that the possibility of non-human animal awareness has arisen as a legitimate topic of scientific speculation, the basic dualism of mind and body is retained – for the question is phrased as one about the existence of animal *minds* (Griffin 1976, 1984, see Ingold 1988c). Consciousness, then, is the life of the mind.

For the Cree, life has a different meaning. Scott tells us that ‘the term *pimaatisiwin*, “life”, was translated by one Cree man as “continuous birth”’ (1989: 195). To be alive is to be situated within a field of relations which, as it unfolds, actively and ceaselessly brings forms into being: humans as humans, geese as geese, and so on. Far from revealing forms that are already specified, life is the process of their ongoing generation. Every living being, then, emerges as a particular, positioned embodiment of this generative potential. Hence personhood, far from being ‘added on’ to the living organism, is implicated in the very condition of being alive: the Cree word for ‘persons’, according to Scott, ‘can itself be glossed as “he lives”’ (1989: 195). Organisms are not just *like* persons, they *are* persons. Likewise, consciousness is not supplementary to organic life but is, so to speak, its advancing front – ‘on the verge of unfolding events, of continuous birth’, as Scott (*ibid.*) renders the Cree conception.

Now the ontological equivalence of humans and animals, as organism-persons and as fellow participants in a life process, carries a corollary of capital importance. It is that both can have points of view. In other words, for both the world exists as a meaningful place, constituted in relation to the purposes and capabilities of action of the being in question. Western ontology, as we have seen, denies this, asserting that meaning does not lie in the relational contexts of the perceiver’s involvement in the world, but is rather laid over the world by the mind. Humans alone, it is said, are capable of representing an external reality in this way, organising the data of experience according to their diverse cultural schemata. So when the Cree claim, as indeed they do, that the same events surrounding a hunt afford two possible interpretations, from the points of view, respectively, of the human hunter and of the animal hunted, the Western observer is inclined to regard the former as literal and the latter as figurative, ‘as if’ the animal were human and so could participate with ‘real’ humans in a common world of meanings. And this is precisely what Tanner does (1979: 136–7) when he re-presents to us – his readers – as a ‘cultural’ reality (as opposed to a ‘natural’ one) what the Cree originally presented to him as a ‘bear reality’ or ‘caribou reality’ (as opposed to a ‘human’ one). Note that the distinction between natural and cultural levels of participation is not one that the Cree make themselves. According to Scott, Cree has ‘no word corresponding to our term “nature”’, nor does it have any ‘equivalent of “culture” that would make it a special province of humans’ (1989: 195).

A creature can have a point of view because its action in the world is, at the same time, a process of *attending* to it. Different creatures have different points of view because, given their capabilities of action and perception, they attend to the world in different ways. Cree hunters, for example, notice things about the environment that geese do not, yet by the hunters’ own admission (Scott 1989: 202), geese also notice things that humans do not. What is certain, however, is that humans figure in the perceptual world of geese just as geese figure in that of humans. It is clearly of vital importance to geese that they should be as attentive to the human presence as to the presence of any other potential predator. On the basis of past experience, they learn to pick up the relevant warning signs, and continually adjust their behaviour accordingly. And human hunters, for their part, attend to the presence of geese *in the knowledge that geese are attending to them*. ‘The perceptions

and interpretations of Cree hunters', Scott observes, 'suggest that geese are quite apt at learning in what contexts to expect predation, at learning to distinguish predatory from non-predatory humans, and at communicating appropriate behavioural adaptations to other geese' (1989: 199).

In short, animals do not participate with humans *qua* persons only in a domain of virtual reality, as represented within culturally constructed, intentional worlds, superimposed upon the naturally given substratum of organism–environment interactions. They participate as real-world creatures, endowed with powers of feeling and autonomous action, whose characteristic behaviours, temperaments and sensibilities one gets to know in the very course of one's everyday practical dealings with them. In this regard, dealing with non-human animals is not fundamentally different from dealing with fellow humans. Indeed the following definition of sociality, originally proposed by Alfred Schutz, could – with the insertions indicated in brackets – apply with equal force to the encounter between human hunters and their prey: 'Sociality is constituted by communicative acts in which the I [the hunter] turns to the others [animals], apprehending them as persons who turn to him, and both know of this fact' (Schutz 1970: 163). Humans may of course be unique in their capacity to *narrate* such encounters, but no-one can construct a narrative, any more than they could build a model, who is not already situated in the world and thus already caught up in a nexus of relations with both human and non-human constituents of the environment. The relations that Cree have with the latter are what we, outside observers, call hunting.

PERCEIVING THE LANDSCAPE

Life, of course, is an historical process, embodied in organic forms that are fragile and impermanent. Yet this process is carried on, for terrestrial species, upon the surface of the earth, a surface whose contours, textures and features, sculpted by geological forces over immense periods of time, appear permanent and immutable relative to the life-cycles of even the most long-lived of organisms (Ingold 1989: 504). This surface is what geology textbooks call the 'physical landscape'. How do hunters and gatherers perceive this aspect of their environment?

Among the Pintupi of the Gibson Desert of Western Australia, people say that the landscape was formed, once and for all time, through the activities of theriomorphic beings, ancestral to humans as well as to all other living things, who roamed the earth's surface in an era known conventionally as the Dreaming. The same idea is, in fact, current throughout Aboriginal Australia, but in what follows I shall confine my illustrative remarks to the Pintupi. According to Fred Myers, Pintupi say that, as ancestral beings travelled from place to place,

[they] hunted, performed ceremonies, fought, and finally turned to stone or 'went into the ground', where they remain. The actions of these powerful beings – animal, human and monster – created the world as it now exists. They gave it outward form, identity (a name), and internal structure. The desert is crisscrossed with their lines of travel and, just as an animal's tracks leave a record of what has happened, the geography and special features of the land – hills, creeks, salt lakes, trees – are marks of the ancestors' activities.

(1986: 49–50)

Such features are more than mere marks, however, for in their activities the ancestors did not leave a trail of impressions behind them, like footprints in the sand, while they themselves moved on. They rather metamorphosed *into* the forms of the landscape as they went along. Ever present in these forms, their movements are congealed in perpetuity.

On the land travelled by the ancestors in the Dreaming, people make their way in the temporal domain of ordinary life, pursuing their own everyday activities. Though the paths they take are not constrained to the lines of ancestral travel, in following tracks (as in hunting) and in making tracks themselves they replicate the original, creative movement of the ancestral beings, inscribing their own identities into the land as they go. As Roy Wagner has put it, with reference to the neighbouring Walbiri people, 'the life of a person is the sum of his tracks, the total inscription of his movements, something that can be traced out along the ground' (Wagner 1986: 21, see also Chapter Eight, pp. 144–6). And for the Pintupi, Myers writes that 'for each individual, the landscape becomes a history of significant social events . . . previous events become attached to places and are recited as one moves across the country' (Myers 1986: 68). There is thus a second level in the constitution of the landscape, one tied to the historical actions of ordinary human beings, as opposed to the 'transhistorical' actions of the ancestors (1986: 55). On the first level, named places were created by the ancestral beings at the sites of their activities, or at points where they entered or emerged from the ground, and, connected by the paths of ancestral travel, these places make up what Myers calls a 'country' – a term he offers as one possible rendering of the Pintupi word *ngurra*. But *ngurra* can also mean 'camp' – that is, the place temporarily constituted by virtue of the everyday activities of a group of people who happen to set up there. Such places, unlike the named places envisioned as the camps of the ancestors in the Dreaming, do not endure for ever. Each is identified with the particular people who live there, and will be avoided for many years after someone thus connected to the place has died. But 'despite these identifications, . . . camps are impermanent. Eventually they are overgrown and their associations forgotten, while significant new spaces are constantly being established' (Myers 1986: 56–7).

If persons inscribe their identities into the landscape as historically constituted, it is from the transhistorical level of the Dreaming that these identities are initially derived. Thus each person takes his or her primary identity from a particular named place, and is regarded as the incarnation of the ancestor whose activity made that place. That is why, as Myers notes (1986: 50), 'it is not unusual . . . to hear people describe actions of the Dreaming in the first person'. For in speaking about my ancestor, I am speaking about myself. Throughout life, additional components of identity accrue through association with other named places, such as where one was initiated or where one has long resided, so that who one is becomes a kind of record of where one has come from and where one has been. It follows that the network of places, linked by paths of ancestral travel, is at the same time a network of relations between persons. When social relations are spoken of, as they often are, in terms of relations between places, the comparison does not draw a parallel across separate domains of society and the physical world, but rather reveals that – at a more fundamental ontological level – these relations are equivalent. That level is the Dreaming. It is a level, however, that is not directly given to experience, but rather revealed in the actions and events of the phenomenal world that are its visible signs (Myers 1986: 49).

We might sum up this Pintupi understanding of the landscape in the following four precepts. First, it is not a given substrate, awaiting the imprint of activities that may be conducted upon it, but is itself the congelation of past activity – on the phenomenal level,

of human predecessors, but more fundamentally of ancestral beings. Secondly, it is not so much a continuous surface as a topologically ordered network of places, each marked by some physical feature, and the paths connecting them. Thirdly, the landscape furnishes its human inhabitants with all the lineaments of personal and social identity, providing each with a specific point of origin and a specific destiny. And therefore, fourthly, the movement of social life is itself a movement *in* (not *on*) a landscape, and its fixed reference points are physically marked localities or 'sites'. In short, the landscape is not an external background or platform for life, either as lived by the ancestors in the Dreaming or as relived by their ordinary human incarnations in the temporal domain. It is rather life's enduring monument.

What can we learn from the Pintupi? It could be argued, of course, that their ideas of the Dreaming – though not unique to themselves – are specifically Aboriginal ones, and afford no grounds for generalisation beyond the Australian continent. Indeed, comparisons between Australia and other continents of hunter-gatherers are fraught with difficulty. Nevertheless, in order to indicate that there are genuine similarities in the ways that hunters and gatherers apprehend the landscape and their own position in it, I should like to refer briefly to another study from a quite different region of the world – Richard Nelson's 1983 study of the Koyukon of Alaska.

The Koyukon say that the earth and all the beings that flourish in it were created in an era known as the 'Distant Time'. Stories of the Distant Time include accounts of the formation of prominent features of the landscape such as hills and mountains (1983: 16, 34). An elaborate code of rules, brought down from the Distant Time, establishes forms of proper conduct that people are bound to follow; thus 'the Koyukon must move *with* the forces of their surroundings, not attempting to control, master or fundamentally alter them' (p. 240). As people move around in the landscape, in hunting and trapping, in setting up camp in one locality after another, their own life histories are woven into the country:

The Koyukon homeland is filled with places . . . invested with significance in personal or family history. Drawing back to view the landscape as a whole, we can see it completely interwoven with these meanings. Each living individual is bound into this pattern of land and people that extends throughout the terrain and far back across time.
(Nelson 1983: 243)

Places, however, can possess meaning at different levels. Some have a fundamental spiritual potency connected with the Distant Time story of their creation. Some, where people have died, are avoided for as long as the memory persists. Others, again, are known for particular hunting events or other personal experiences of encounters with animals. On all these levels – spiritual, historical, personal – the landscape is inscribed with the lives of all who have dwelt therein, from Distant Time human-animal ancestors to contemporary humans, and the landscape itself, rather than anything erected upon it, stands in memory of these persons and their activities (Nelson 1983: 242–6).

Now let me turn to the anthropological interpretation of these ways of apprehending the landscape. Astonishingly, we find a complete inversion, such that meanings that the people claim to discover *in* the landscape are attributed to the minds of the people themselves, and are said to be mapped *onto* the landscape. And the latter, drained of all significance as a prelude to its cultural construction, is reduced to *space*, a vacuum to the plenum of culture. Thus Myers can write, of the Pintupi, that they have 'truly culturalized space and made out of impersonal geography a home, a *ngurra*' (1986: 54). A moment

later, however, the Pintupi achievement reappears as an artefact of anthropological analysis: 'we will consider country *as if it were* simply culturalized space' (p. 57, my emphases). The ontological foundation for this interpretative strategy is an initial separation between human persons, as meaning-makers, and the physical environment as raw material for construction; the 'culturalisation of space' is then what happens when the two are brought into juxtaposition, such that social relations are mapped onto spatial relations. The Pintupi are said to superimpose the Dreaming, a 'distinctly Aboriginal cultural construction' (p. 47), onto the 'real' reality of the physical landscape, causing the latter to recede from view, cloaked by the 'perceived' reality enshrined in the stories people tell, of ancestral beings and their activities. This, of course, flatly contradicts Pintupi ontology, which is premised on the fundamental *indissolubility* of the connection between persons and landscape, and on the assumption that phenomenal reality is open to direct perception whereas the order of the Dreaming is not, and can be apprehended only by way of its visible signs.⁴

The same contradiction is apparent in Nelson's account of the Koyukon. His experience of the discrepancy between the Koyukon attitude to the environment and that derived from his own 'Euro-American' background led him, he tells us, to endorse the perspective of cultural relativism, whose basic premise he sets out as follows:

Reality is not the world as it is perceived directly by the senses; reality is the world as it is perceived by the *mind* through the medium of the senses. Thus reality in nature is not just what we see, but what we have *learned* to see.

(1983: 239)

That we learn to see is not in doubt, but learning in this view entails the acquisition of cultural schemata for building representations of the world, in the mind, from data delivered by the senses. So the Koyukon, viewing the world in their mind's eye through the lens of received tradition, are supposed to see one reality; the Westerner, viewing it in terms of the concepts of scientific ecology, sees another. There is, Nelson concludes, no 'single reality in the natural world, . . . absolute and universal'. Yet not only is the existence of such a 'real' reality implied in the very notion that perceived realities are representations, in the mind, of a naturally given world 'out there', but this mentalist ontology also flies in the face of what the Koyukon themselves, by Nelson's own account, are trying to tell us.

This is all about watching and being watched (1983: 14–32). Knowledge of the world is gained by moving about in it, exploring it, attending to it, ever alert to the signs by which it is revealed. Learning to see, then, is a matter not of acquiring schemata for mentally *constructing* the environment but of acquiring the skills for direct perceptual *engagement* with its constituents, human and non-human, animate and inanimate. To recall a distinction I introduced in the last chapter, it is a process not of enculturation but of enskilment. If the Koyukon hunter notices significant features of the landscape of which the Western observer remains unaware, it is not because their source lies in 'the Koyukon mind' (Nelson 1983: 242) which imposes its own unique construction on a common body of sensory data, but because the perceptual system of the hunter is attuned to picking up information, critical to the practical conduct of his hunting, to which the unskilled observer simply fails to attend. That information is not in the mind but in the world, and its significance lies in the relational context of the hunter's engagement with the constituents of that world. Moreover, the more skilled the hunter, the more

knowledgeable he becomes, for with a finely honed perceptual system, the world will appear to him in greater richness and profundity. New knowledge comes from creative acts of discovery rather than imagining, from attending more closely to the environment rather than reassembling one's picture of it along new conceptual lines.

It will at once be objected that I have taken no account of that vital component of knowledge that comes to people through their instruction in traditional lore, for example in the stories of the Dreaming among the Pintupi and of the Distant Time among the Koyukon. Do not these stories, along with the accompanying songs, designs, sacred objects and the like, amount to a kind of modelling of reality, a representation of the world that native people might consult as Westerners would consult a map? I think not. People, once familiar with a country, have no need of maps, and get their bearings from attending to the landscape itself rather than from some inner representation of the same. Importantly, Myers notes that among the Pintupi the meanings of songs remain obscure to those who do not already know the country, and that individuals who are new to an area are first instructed by being 'taken around, shown some of the significant places, and taught to avoid certain sites' (Myers 1986: 150). One might question what use songs, stories and designs could possibly have *as maps* if they are unintelligible to all but those who possess such familiarity with the landscape as to manage quite well without devices of this kind.

I do not believe, however, that their purpose is a representational one. Telling a story is not like weaving a tapestry to *cover up* the world or, as in an overworn anthropological metaphor, to 'clothe it with meaning'. For the landscape, unclothed, is not the 'opaque surface of literalness' (Ho 1991) that this analogy suggests. Rather, it has both transparency and depth: transparency, because one can see into it; depth, because the more one looks the further one sees. Far from dressing up a plain reality with layers of metaphor, or representing it, map-like, in the imagination, songs, stories and designs serve to conduct the attention of performers *into* the world, deeper and deeper, as one proceeds from outward appearances to an ever more intense poetic involvement. At its most intense, the boundaries between person and place, or between the self and the landscape, dissolve altogether. It is at this point that, as the people say, they become their ancestors, and discover the real meaning of things.

Conventional anthropological interpretation tends to range, on two sides of a dichotomy, peoples' practical-technical interaction with environmental resources in the context of subsistence activities, and their mytho-religious or cosmological construction of the environment in the context of ritual and ceremony. Hunters and gatherers are said to be distinctive, however, insofar as they do not seek physically to reconstruct the landscape to conform with their cosmological conceptions, but rather find these conceptions 'ready made' in the world as given. On these grounds they are supposed still to occupy a 'natural' rather than an 'artificial' or 'built' environment. Peter Wilson sets out this view very clearly:

The hunter/gatherer pins ideas and emotions onto the world as it exists: the landscape is turned into a mythical topographical map, a grid of ancestor tracks and sacred sites, as is typical among Australian aborigines . . . A construction is put upon the landscape rather than the landscape undergoing a reconstruction, as is the case among sedentary peoples, who impose houses, villages, and gardens on the landscape, often in place of natural landmarks. Where nomads read or even find cosmological features in an already existing landscape, villagers tend to represent and model cosmic ideas in the structures they build.

(1988: 50)

Once again, we find that the view of the landscape as culturalised space entails the naturalisation of hunting and gathering. Only as represented in thought is the environment drawn into the human world of persons; thus the practical business of life is reduced to material interactions in an alien world of nature, in which humans figure as 'mere organisms'.

Yet the people themselves insist that the real-world landscape in which they move about, set up camp and hunt and gather, is not alien at all but infused with human meaning – that this meaning has not been 'pinned on' but is there to be 'picked up' by those with eyes to see and ears to hear. They are, as their ethnographers have noted (with some surprise, else they would not have cared to remark on the fact), thoroughly 'at home' in the world. The Pintupi, Myers tells us, 'seem truly at home as they walk through the bush, full of confidence' (1986: 54). And the lands of the Koyukon, according to Nelson, 'are no more a wilderness than are farmlands to a farmer or streets to a city dweller' (1983: 246). As this statement implies, it is not because of his occupancy of a built environment that the urban dweller feels at home on the streets; it is because they are the streets of his neighbourhood along which he is accustomed to walk or drive in his everyday life, presenting to him familiar faces, sights and sounds. And it is no different, in principle, for the hunter-gatherer, as the inhabitant of an environment unscarred by human engineering. As I have remarked elsewhere, 'it is through *dwelling* in a landscape, through the incorporation of its features into a pattern of everyday activities, that it becomes home to hunters and gatherers' (Ingold 1996a: 116).

My argument is that the differences between the activities of hunting and gathering, on the one hand, and singing, storytelling and the narration of myth on the other, cannot be accommodated within the terms of a dichotomy between the material and the mental, between ecological interactions *in* nature and cultural constructions *of* nature. On the contrary, both sets of activities are, in the first place, ways of dwelling. The latter, as I have shown, amount not to a metaphorical representation of the world, but to a form of poetic involvement. But it is no different with the activities of hunting and gathering, which entail the same attentive engagement with the environment, and the same exploratory quest for knowledge. In hunting and gathering, as in singing and storytelling, the world 'opens out' to people. Hunter-gatherers, in their practices, do not seek to transform the world; they seek revelation. The intentions of non-human animals, for example, are revealed to Cree hunters in the outcomes of their endeavours. And Pintupi are forever alert to signs in the landscape that may offer new clues to ancestral activity in the Dreaming (Myers 1986: 67). In short, through the practical activities of hunting and gathering, the environment – including the landscape with its fauna and flora – enters directly into the constitution of persons, not only as a source of nourishment but also as a source of knowledge.

But reciprocally, persons enter actively into the constitution of their environments. They do so, however, from *within*. For the Pintupi, the world was created in the Dreaming, but the Dreaming is *trans*historical, not *pre*historical. The events of the Dreaming, though they occurred at particular places, are themselves timeless, each one stretched to encompass an eternity, or what Stanner (1965: 159) called 'everywhen'. And so the landscape, brought into being in these events, is movement out of time. People, as the temporal incarnation of ancestral beings, are not so much creators themselves as living on the *inside* of an eternal moment of creation. Their activities, which replicate on a much smaller scale the landforming activities of the ancestors, are therefore part and parcel of the becoming of the world, and are bound to follow the course set by the Dreaming: life, as the Pintupi

say, is a 'one-possibility thing' (Myers 1986: 53). Likewise, Koyukon are bound to the course of the Distant Time, and must move with it, never against it (Nelson 1983: 240). This understanding of the landscape as a course to be followed could hardly be more different from the Western understanding of the natural environment as a resistance to be overcome, a physically given, material substrate that has first to be 'humanised', by imposing upon it forms whose origins lie in the imagination, before it can be inhabited.

WHAT DO HUNTERS AND GATHERERS ACTUALLY DO?

To this day, the anthropological status of hunters and gatherers has remained equivocal, to say the least. Though no-one would any longer deny them full membership of the human species, it is still commonly held that in deriving their subsistence from hunting and trapping 'wild' animals and gathering 'wild' plants, honey, shellfish and so on, they are somehow comparable in their mode of life to non-human animals in a way that farmers, herdsmen and urban dwellers are not. Nothing is more revealing of this attitude than the commonplace habit of denoting the activities of hunting and gathering by the single word 'foraging'. I am not concerned here with the narrow sense of foraging in which it has sometimes been contrasted with collecting (see, for example, Binford 1983: 339–46, Ingold 1986a: 82–7). I mean rather to draw attention to the way in which 'foraging' has been adopted in a very general sense as a shorthand for 'hunting and gathering', ostensibly on the grounds of simple convenience. 'Forager', it is argued, is less cumbersome than 'hunter-gatherer', and the term carries no unwarranted implications as regards the relative priority of animal and vegetable foods, or of male and female labour.

But the concept of foraging also has an established usage in the field of ecology, to denote the feeding behaviour of animals of all kinds, and it is by extension from this field that the anthropological use of the term is explicitly derived. Thus, introducing a volume of studies on 'hunter-gatherer foraging strategies', Winterhalder and Smith note that 'the subsistence patterns of human foragers are fairly analogous to those of other species and are thus more easily studied with ecological models' (1981: x). And it is precisely the definition of human foragers as those who do *not* produce their food that legitimates the comparison: 'Foraging refers inclusively to tactics used to obtain nonproduced foodstuffs or other resources, those not directly cultivated or husbanded by the human population' (Winterhalder 1981b: 16). In short, it appears that humans can be only either foragers or producers; if the former, their subsistence practices are analogous to those of non-human animals; if the latter, they are not. The producer is conceived to intervene in natural processes, from a position at least partially outside it; the forager, by contrast, is supposed never to have extricated him- or herself from nature in the first place.

I have argued in this chapter that the world as perceived by hunters and gatherers is constituted through their engagement with it, in the course of everyday, subsistence-related practices. These practices cannot be reduced to their narrowly behavioural aspect, as strategically programmed responses to external environmental stimuli, as implied in the notion of foraging. Nor, however, can they be regarded as planned interventions in nature, launched from the separate platform of society, as implied in the notion of production. *Neither foraging nor production is an adequate description of what hunters and gatherers do.* As an alternative, Bird-David suggests 'procurement':

Distinguished from 'to produce' and 'production', as also from 'to forage' and 'foraging', 'to procure' (according to the Shorter Oxford Dictionary) is 'to bring about, to obtain

by care or effort, to prevail upon, to induce, to persuade a person to do something'. 'Procurement' is management, contrivance, acquisition, getting, gaining. Both terms are accurate enough for describing modern hunter-gatherers who apply care, sophistication and knowledge to their resource-getting activities.

(1992b: 40)

This is a suggestion I would endorse. The notion of procurement nicely brings out what I have been most concerned to stress: that the activities we conventionally call hunting and gathering are forms of skilled, attentive 'coping' in the world, intentionally carried out by persons in an environment replete with other agentive powers of one kind and another. The point may be most readily summarised by referring back to Figure 3.2. In the upper diagram, representing the Western ontology, foraging would be positioned as an interaction in the plane of nature, between the human organism and its environment, whereas production would appear as an intervention in nature from the separate plane of society. In the lower diagram, representing the hunter-gatherer ontology, there is but one plane, in which humans engage, as whole organism-persons, with components of the environment, in the activities of procurement.

My argument has been that the 'naturalisation' of the activities of hunting and gathering, as revealed in their apparently unproblematic redesignation as 'foraging', is a product of the 'culturalisation' of the perceived environment. In the case of hunter-gatherers of the tropical forest, we have seen how their perception of the forest environment, as being in some respects like a human parent, has been interpreted anthropologically as due to the application of a schema for metaphorically constructing it, and how, as a result, the forest itself and hunter-gatherers' interactions with it come to be excluded from the domain in which they relate to one another as persons. In the case of the northern hunters, we have likewise seen how the assumption that in their capacity as persons, humans can relate to animals only as the latter are represented within human intentional worlds, leads to the placement of real encounters of hunting beyond the bounds of these intentional worlds, in a separate domain designated as 'natural'. And finally, in examining Aboriginal perceptions of the landscape, we found that by treating the perceived world as culturalised space, the real-world landscape in which people live and move comes to be rendered as an indifferent and impersonal physical substrate, raw material for imaginative acts of world-making.

In short, a cultural constructionist approach to environmental perception, far from challenging the prevailing ecological models of hunting and gathering as foraging, actually reinforces them, creating by exclusion a separate logical space for organism-environment interactions wherein these models are appropriately applied. Those who oppose the designation of hunter-gatherers as foragers (for example, Bird-David 1992b: 38) often do so on the grounds that it makes them seem just like non-human animals, without however questioning the applicability of the foraging model to the animals themselves. I believe that by paying attention to what hunter-gatherers are telling us, this is just what we *should* be questioning, and in doing so laying down a challenge not only to cultural anthropology but to ecological science as well. We may admit that humans are, indeed, just like other animals; not, however, insofar as they exist as organisms rather than persons, as constituent entities in an objective world of nature presented as a spectacle to detached scientific observation, but by virtue of their mutual involvement, as undivided centres of action and awareness, within a continuous life process. In this process, the relations that human beings have with one another form just one part of the total field of relations embracing all living things (Ingold 1990: 220).

There can, then, be no radical break between social and ecological relations; rather, the former constitute a *subset* of the latter. What this suggests is the possibility of a new kind of ecological anthropology, one that would take as its starting point the active, perceptual engagement of human beings with the constituents of their world – for it is only from a position of such engagement that they can launch their imaginative speculations concerning what the world is like. The first step in the establishment of this ecological anthropology would be to recognise that the relations with which it deals, between human beings and their environments, are not confined to a domain of ‘nature’, separate from, and given independently of, the domain in which they lead their lives as persons. For hunter-gatherers as for the rest of us, life is given in engagement, not in disengagement, and in that very engagement the real world at once ceases to be ‘nature’ and is revealed to us as an environment for people. Environments are constituted in life, not just in thought, and it is only because we live in an environment that we can think at all.