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Anthropology and Anthropocentrism: Images of Hunter-Gatherers, Westerners and the Environment

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After a brief discussion of anthropocentrism and anthropomorphism, this chapter follows Ingold in arguing that identity, for the Mbuti and other hunter-gatherers, is grounded in a sense of sharing with a living environment. However, the inherent dualism in Ingold's absolute opposition between Mbuti and Western approaches to the environment is refuted since both the Mbuti and people in the West move between relationships of identification and opposition to their environments.

Cartesian anthropocentrism has never been the only Western understanding, and is itself giving way to an understanding of ourselves as embodying a living environment. However whether—in academic discourse and environmental policy—a real change in our understanding is underway, and we are moving towards an understanding which is closer to that of hunter-gatherers such as the Mbuti, or whether the Cartesian mentalist cosmology is simply being reproduced at a more refined level, is an open question.

ANTHROPOMORPHISM OR ANTHROPOCENTRISM

Anthropological accounts make ideas considered self-evident in one culture subject to doubt, subject to comparison with alternative styles common in the other. Anthropology is still embedded in contexts, but it is relatively freer of these contexts because it continually opens itself to a diversity of perspectives that challenge its own.
[BOROFSKY 1987: 154]

One of anthropology's explicit tasks is that of highlighting ethnocentrism, enabling us to see fundamental assumptions as products of a particular culture rather than inherent in the nature of being human. However this explicit task rests on the perhaps more fundamental and implicit task of asserting the primacy of our identity as humans who possess culture, in contrast to other species (and our bodily selves) who, we are taught to believe, exist simply within the biological mechanics of nature. Explicit or implicit reference to the belief that humans are distinct from, and superior to, other animals are found in almost all anthropological writings. A simple example is that of Chris Knight [1995: 396] arguing that "chimpanzees and other animal organisms are *not* 'persons', however 'intentional' and even

‘creative’ they may be”. Another example is Lévi-Strauss who, writing on the incest taboo, states that before the prohibition of incest “culture is still non-existent: with it, nature’s sovereignty over man is ended. The prohibition of incest is where nature transcends itself” [1949: 24-25]. The universal presence of this assumption, the need to repeatedly reassert the obvious truth of this ‘fact’ suggests that it is a belief which requires constant affirmation, rather than a ‘fact’ of life. This fits with Wolf’s description of “the development of an overall hegemonic pattern” as depending

not so much the victory of a collective cognitive logic or aesthetic impulse as the development of redundancy—the continuous repetition, in diverse instrumental domains, of the same basic propositions regarding the nature of constructed reality. [1990: 388]

Ingold’s earlier writing reflects this same bias. Taking as his starting point Marx and Engels proposition that men “begin to distinguish themselves from animals as soon as they begin to produce their means of subsistence” [MARX and ENGELS 1977: 42] (cited in Ingold [1986: 102]), he comments that hunters are conventionally seen as collectors rather than producers of food:

Are we to conclude, in consequence, that for the greater part of his history, man has remained the *prisoner of his organic nature*, destined to perform within the *limitations of his own animality*? It seems as though we are caught on the horns of a dilemma: either we deny the hunters their humanity, or we discover production in every branch of animal life. [INGOLD 1986: 102] (emphasis added)

His resolution of this dilemma in 1988 was to argue that the boundary between the social and the ecological “corresponds to that between the intentional and the behavioural components of action, marking the point—in human life—where purpose takes over from, and proceeds to direct, the mechanism of nature” [1988: 285]. ‘Intentionality’, for Ingold, became the key marker which distinguished hunter-gatherers interaction with their environment from that of other species foraging in the same forest or moving across the same tundra.

This analysis neatly restated the mechanistic view of nature—whether nature ‘out there’ or ‘mechanical’ human nature. Quoting Durkheim’s claim that there are two beings in man, “an individual being which has its foundations in the organism...and a social being which represents...society” [1976 (1915): 16] (cited in Ingold [1988: 275]), Ingold here describes this split between our social and biological selves as being central to our humanity, rather than as being one of the central beliefs in our particular culture. This fundamental anthropocentric assumption of anthropology is also evident in the following quote from Godelier: “human beings, in contrast to other social animals, do not just live in society, they produce society in order to live” (cited in Carrithers [1992: 1]). Carrithers argues that the fact that we are social animals lies at the very core of what it is to be human, that “[w]e cannot know ourselves except by knowing ourselves in relation to others” [CARRITHERS

1992: 1] and that “[n]o other species exhibits such intricacy and fecundity of forms of common life” [CARRITHERS 1992: 2]. The Mbuti, the G/wi, and many other peoples would dispute this last statement.

There are three closely related points about this assumption of superiority and distinctiveness. Firstly, why does this belief—that humans have risen above all other species and our own ‘organic nature’—have to be so constantly and habitually reiterated? Secondly, if some societies do not share this belief, then this particular way of relating to other species (or ‘nature’) is clearly a cultural construct, even though anthropologists write as though it is a factual base line upon which all cultures build. Thirdly, if Carrithers is correct in arguing that “[w]e cannot know ourselves except by knowing ourselves in relation to others”, then do not these *others* include not simply the social but the ‘so-called’ physical environment; and, if this is true, then our relationship with other constituents of the environment, including other species, our own bodies, our ‘species life’, informs our most fundamental level of ‘knowing ourselves’.

The desire to assert that we are separate and superior to other species can, in so far as it represents a fundamental assumption within the tradition of anthropology, be traced back to Descartes. As a social science, anthropology traces its ancestry back through the development of science to people such as Descartes, Bacon and Newton who were among the founding fathers (*sic*) of radical doubt and the scientific method. But this question of similarity or difference from other peoples and other species can also be seen to be a paradox that all peoples studied by anthropologists work with. In as far as this question relates to other species: is being human something more, and different from, being an animal? In G/wi thought:

humans in nature were seen simply as creatures among many other creatures, without special favour or disadvantage. Mankind had been given a unique but not otherwise special set of abilities to meet a corresponding set of needs through respectful use of the resources that could be found in the habitat. [SILBERBAUER 1994: 131]

In a similar vein Nuttall describes how the Inuit of north-west Greenland, while depending on whaling and sealing for their livelihood, nevertheless say that “animals have souls just as people do” [1991: 218]. He continues: “Success in hunting is perceived as entailing a reciprocity based on the exchange of respect.... The aim is not to scare the seal by assuming a position of superiority, but to wait until the seal has allowed itself a subordinate position to the hunter in giving itself freely” [1991: 218]. In Silberbauer’s account the G/wi believe that *N!adima*, the being who created the fabric of the universe, has given all creatures equal rights to existence: “none is thought to be uniquely favoured by *N!adima* and to have been set above others by him” [SILBERBAUER 1981: 53].

At the abstract level, our anthropocentric assumption that humans operate in a distinctly separate and superior sphere to the merely biological one informs the whole of anthropology through the presupposition of the distinction between culture and nature. It is in hunter-gatherer studies, however, that this fundamental assumption becomes clearly visible, in its blatant or tenaciously subtle forms, since here we are dealing with people who may

understand their world in a way that is not informed by this anthropocentric premise, while at the same time we are attempting to understand *their* understandings through anthropologists whose writing is informed by this premise. How appropriate, for example, is it for Silberbauer to describe animals as ‘resources’ (above) given that this term carries our impersonal sense of inanimate nature, a sense which would appear to contradict G/wi belief in the living individuality of each species and each member of a species? In hunter-gatherer studies the term *anthropomorphic* is often used as a way of maintaining our anthropocentric bias in the face of informants explicitly stated beliefs that members of other species are as equally endowed with individuality as humans, and informants beliefs that (*contra* Carrithers above) members of other species also interact with each other within intricate social forms and cultures. Here is Silberbauer again:

the anthropomorphic nature of G/wi ethology (is one) in which...each species is credited with characteristic behaviour, which is governed by its *kxodzi* (customs), and each has its particular *kxwisa* (speech, language).... The special capabilities of some animals are believed to have been arrived at by rational thought and then institutionalized as elements of the species’ *kxodzi* (customs) after having been passed on by the discoverers or inventors in that population. ... Some species possess knowledge that transcends that of man. [1981: 64]

According to the G/wi, animals would appear to construct and transmit customs, speech and narratives (*contra* Ingold [1994: 1]); thus they actively shape their social world. This is in marked contrast to the anthropocentric assumption in anthropology evident, for example, when Carrithers [1992: 146] (emphasis added) writes: “We (humans) *are not just animals* who are passively moulded by our respective societies and cultures...”. When Silberbauer comments [1981: 65] (emphasis added) that this G/wi ethology is sufficiently perceptive to enable accurate interpretation of behaviour and efficient hunting “(*d*)*espite* its anthropomorphic bias”, we see again how informants belief that other species are as inventive and intentional as humans is concealed. Their appreciation of other creatures’ intrinsic qualities of individual personhood is concealed by being described as a projection of ‘anthropomorphic bias’. Silberbauer goes on to describe how, when the G/wi are watching a herd to select their target, “hunters classify individual animals by terms used for human attributes of personality and character” [1981: 67]. Yet equally they classify individual humans by terms which refer to animals character, such as when describing a harsh or fierce person as *xamxasi* (literally lionlike [SILBERBAUER 1981: 60]). G/wi understanding of, and interaction with, other species would appear to occur outside of the anthropocentric premise through which we attempt to make sense of human-environmental relations, including those of the G/wi themselves. Their understanding is not anthropomorphic, in the sense of a one way projection from an active social sphere onto a passive natural one, it is—according to Silberbauer’s account, although not his explanation—a process of mutual perception and interaction between species, including humans.

CHANGING PERCEPTIONS OF HUNTER-GATHERER EXPERIENCE

Ingold insists that for hunter-gatherers “sharing *underwrites* the autonomy of the person” [1988: 283]. In hunting and gathering together, in food sharing within the band, they are not obeying Forte’s ‘prescriptive altruism’, emanating from some abstract thing called society, they are experiencing freely entered into ‘companionship’ [INGOLD 1988: 282]. The experience of sharing is in a sense reward enough in itself, a continual re-experiencing of relationship rather than a calculated insurance policy. In this sense, Ingold argues, people in hunting and gathering communities share *one another*.

However, in Ingold’s 1988 paper: sharing, as the central experience of both autonomy and community, of being a person in the hunter-gather context, is still separated from, and superior to, the concurrent level of ecological material reality that is going on. At the ecological level he explains hunter-gatherer behaviour simply in terms of being organisms foraging and co-operating in an environment. Within this separation is also the assumed separation from the environment: hunter-gatherers share as persons, a personhood humans do not share with other species or aspects of the environment.

Bird-David takes this exploration of the importance of sharing further, by showing how hunter-gatherers often use their experience of the social realm as metaphors with which to describe their relationship with their environment. For example, the Mbuti address the forest as ‘mother’ or ‘father’ and beseech it to take care of them in the way that they would expect their parent to [BIRD-DAVID 1992a; 1992b]. While usefully extending the concept of sharing to hunter-gatherers relationships with their environment, Bird-David only extends it as metaphor. As Ingold points out: in her account “what is taken to be *literally* true of relationships among humans is assumed to be only *metaphorically* true of dealings with the non-human environment” [1992: 42]. In Bird-David’s view of hunter-gatherers, the environment is imbued with meaning through the use of anthropomorphic terms. However, there is still this absolute distinction between the social world where meanings are generated, and the environment onto which a given culture projects meanings. In a similar vein Nuttall accounts for Inuit hunters’ description of their relationship with the seals they hunt, by concluding that: “the relationship between the hunter and the hunted is interpreted in anthropomorphic terms” [1991: 218]. The point here is that our paradigm creates a conceptual nature/culture division in which, however much we might appreciate hunter-gatherers way of experiencing their environment, we know that it is not actually true. According to this reductionist scientific view: nature is the level of organism, the given, within us; nature is measurable material reality out there.

Anthropology, with its focus on culture, is happy to look at the way our culture culturally constructs nature, and to contrast this to the cultural construction of nature in other cultures. But there is still the absolute belief that separate from, and contrasted to this, there is a real physical world out there as studied by the ‘natural’ sciences; a physical world which is best understood objectively through the sciences rather than experientially through an individual (or cultures) subjective engagement in it. This is what Ingold calls: our belief in that thing which is “really nature” [INGOLD 1994: 19]. Though the cutting edge of science has moved far beyond this dichotomy, most of us—including the humanities—have yet to

catch up. So how best can we understand the way that the hunter-gatherers Bird-David refers to experience their environment?

In responding to Bird-David's work, Ingold argues that where trust is central to the sharing at the heart of hunter-gatherer social reality, this social reality is just one part of a broader reality which includes all aspects of the environment. Rather than *confidence* in the face of unforeseen dangers, these relationships as a whole are characterised by *trust*. "Trust", Ingold suggests, "... presupposes an active, prior engagement with the agencies and entities of the environment on which we depend; it is an inherent quality of our relationships with them. To trust others is to act with them in mind, on the expectation that they will do likewise" [1992: 41]. He later added [1994: 13] that "any attempt to impose a response...would represent a betrayal of trust and a negation of the relationship", a relationship which "rests on the recognition of personal autonomy".

This recognition of all aspects of the environment as being 'persons', as being intentional agents endowed with consciousness by the very fact of existence, is evident in Mbuti experience of the forest (see Kenrick [1999]). An unsuccessful hunt is seen as an indication that right relationship needs to be restored within the individual, within the community of the camp, and within the wider community of *batata n'endula*, the forest/ancestors. If, instead of the singing which restores harmony, the camp engages in sorcery accusations, then—as Mbuti informants have been at pains to point out [KENRICK 1996]—further division will occur both within the camp and with the *batata n'endula*.

Feit and Scott make clear that for the Cree all animals are experienced as persons. "Human persons are not set over and against a material context of inert nature, but rather are one species of persons in a network of reciprocating persons" [SCOTT 1989: 195]. Scott writes that for the Cree consciousness is not a human addition to animal life but is understood as a state of being "on the verge of unfolding events, of continuous birth" [SCOTT 1989: 195]. Feit, writing of the Waswanipi Cree, says: "the animals, the winds and many other phenomena are thought of as being 'like persons' in that they act intelligently and have wills and idiosyncrasies, and understand and are understood by men" [FEIT 1973: 116]. The division between culture and nature has no place in this context, a context in which everything is recognised and experienced as possessing consciousness, as being persons.¹⁾ A recognition which has consequences for intraspecies and intrahuman relations, since animals will not come to hunters who have killed unnecessarily, or who have not shared the meat fairly within the human community.²⁾ For the Cree there is a direct engagement between all aspects of the environment—the goose and the human are mutually aware and share the same quality of consciousness; a belief or experience that is in direct contrast to Western assumptions that "human cultural intelligence is...such as no other species has or can acquire" [TREVARTHEN and LOGOTHETI 1989: 167].

For the environment is—for some hunter-gatherers if not for ourselves—differentiated into a myriad of persons whether they are mutually aware of this or not: "humanity and nature merge, for them, into a single field of relationships" [INGOLD 1994: 18]. So should one conclude, not that such hunter-gatherers are on the 'state of nature' side of our division of reality, but that in a sense such hunter-gatherers are on the reality side, not caught up in Descartes division of 'nature' into the conscious human and the world of objects? Despite

Ingold's frequent recourse to Marx, his whole approach appears to be Weberian. In describing the difference between hunter-gatherer and Western ways of experiencing the environment, he would appear to be setting up ideal types. A method which is highly effective in illuminating difference, but misleading if expected to render the complex diversity that makes up an individual or a society.

If our process of knowing is developed and expressed through our physical interaction with our environment [BLOCH 1989; 1992], then the nature of that interaction should shed light on different societies ways of 'knowing'. Following the logic of Ingold's argument, it might be useful to recall his comparison between hunter-gatherers—whose co-operative hunting and gathering he describes as characterised by companionship—and workers whose labour power is “co-operated” and alienated by their employer. He cites Marx' description of workers in the manufacturing process: “in the labour process they have already ceased to belong to themselves” [MARK 1930: 349] (cited in Ingold [1986: 278]); and, Ingold adds, “Whatever relations exist between them as selves, that is as persons, must therefore be extrinsic to the labour process” [1986: 278].

Perhaps one could say that to the extent that our thinking and experiencing is co-opted into the production process of manufacturing this belief in essential separateness (and all the power relations which flow from this), our personhood is extrinsic to our lives. To the extent that we think and act and experience outside of that production process, we regain our personhood, our ability to live as ‘undivided centres of action and awareness’, relating to others in the awareness that they are also such centres. Although this reality underlies hunter-gatherer experience of inter-subjective sociality and companionship, both among humans and with the other aspects of the environment, it runs totally counter to the Cartesian mentalist assumption, an assumption which—up to a point—the work of Ingold (above), Damasio, Gibson and Trevarthen all profoundly question. I will return to the writing of these last three authors after placing Ingold's interpretation of Mbuti experience in the context of my own research.

It is important to note that the logic of Ingold's argument reflects a broader shift in thinking about human-environmental relations in the West. In its more extreme form this shift appears to be an attempt to escape the anthropocentric paradigm, and discard the illusion that, as Keith Thomas put it, our well-being has to depend on “a ruthless exploitation of other forms of...life” [1983: 303]. Instead, this emerging way of thinking suggests that our well-being can be measured by the degree to which we manage to transform relationships of extraction and protection (or, one could say, of abuse and its denial) into ones grounded in interdependence and trust. In the context of conservation in the Ituri, this process begins whenever conservation works to restrain the impact of imposed power relations, and so actively trusts local people to recreate and reinvigorate community through acting in the long term interests of their relationship with their environment [KENRICK 1996].

IS INGOLD'S AND BIRD-DAVID'S UNDERSTANDING OF THE MBUTI CORRECT?

The major flaw in Ingold's argument (and in much radical thinking about human-environmental relations, including the way I have phrased the argument in the preceding part

of this chapter) appears to me to be in its rendition of different cultures (in this case the West on the one hand, and the Mbuti or G/wi on the other) as being in some sense monolithic and uniform in their experience, beliefs and practice. Opposing Westerners perception of their environment in Ingold's work (or Bila perceptions in Turnbull's work) to that of hunter-gatherers such as the Mbuti, illuminates the difference that exists between these as opposing ideal types, but does not reveal the complexity of the actual interactions with other aspects of the environment individuals actually engage in. Morris argues [1995: 206] that it is a mistake to take a "monolithic view of specific cultures" and to see pre-literate communities "as having only a 'sacramental' vision of nature"; just as it is a mistake to see Western culture as containing only an ethic of domination, "thus completely ignoring the diversity and the changing nature of the Western cultural tradition". While suggesting that the 'ethic of domination' towards animal life began with the advent of agriculture [1995: 304], Morris's analysis of Malawian farmers attitudes towards the natural world suggests that the two attitudes, the "sacramental egalitarian—associated with hunter-gatherers", and "the ethic of opposition and control—associated with agriculturalists, do in fact co-exist" [1995: 305]. Both these attitudes are present among the Mbuti, but we misconstrue their relationship with their environment if we see it as being between two fundamentally different worlds: the human and the natural. This is a perception of the situation expressive of our Cartesian understanding, and is one which may misrepresent Western experience as fully as it misrepresents that of the Mbuti.

By setting up an opposition between Western and hunter-gatherer approaches to the environment Ingold uses a strategy similar to Dumont's conceptual opposition between hierarchy and equality [DUMONT 1980; 1986; MACFARLANE 1993]. Here the opposition is between the Mbuti for whom one can see the centrality of an equality of inclusion in relation to each other and the environment, and Western individuality built on opposition to others and the environment. Put like this I am clearly framing the discussion within a Western framework by giving primacy to opposition. However, I am not suggesting that the Western societies of the north Atlantic represent one pole and hunter-gatherers such as the Mbuti represent another in reality. This Weberian ideal type rendition of their differing approaches to social relations has been a useful place to begin, before examining the ways in which both poles are clearly present both for the Mbuti and for people in the West.

One of the crucial points here that Ingold and Turnbull are mistaken to posit a single Mbuti and a single Western or Bila perspective, where there are in fact a range of perspectives. For example Turnbull concentrates on Mbuti identification with the forest, in opposition to Bila fear of the forest [TURNBULL 1965; 1983]. However, this fear or identification (by both Mbuti and Bila) is not with the forest alone, but with the forest as brought alive by people: by the ancestors. If the Mbuti see their forest as alive and worthy of respect, it is because they see their ancestors as alive in the forest and worthy of respect. The forest is not simply some separate parent, godhead, or spirit, to whom respect is due; it is also their parents. Its being alive is experienced and expressed in terms of past and present interaction between its constituent parts: be they human, animal or plant life [KENRICK 1996; 1999].

The selective nature of Turnbull's reading of Mbuti social life is the result both of

historical circumstance, and of his wish to paint a picture of the Mbuti as living in harmony and of the Bila as being preoccupied with domination. In perpetuating Turnbull's sharp distinction between the Bila, who as cultivators make offerings to the ancestors, and the Mbuti, who as hunter-gatherers relate to the forest as a parent who gives unconditionally, both Bird-David and Ingold continue to impose a Western dualistic perspective.

It is ironic that Ingold perpetuates a dualistic analysis by suggesting an intellectual divide between living humans and living forest, and suggesting that hunter-gatherers such as the Mbuti see both as equally alive and intentional where we in the West see only the human half of the divide as truly alive. This results in Ingold becoming caught in an internal contradiction: he claims he is not wanting to impose a picture of 'noble savage in harmony with nature' on such people as the Mbuti, and promptly goes on to do just that. The contradiction results from following Turnbull in making an unbridgeable opposition between the Bila cultivators and Mbuti hunter-gatherers perceptions of their physical and social environment, when in fact opposition is but one of many ways of expressing the interdependence evident both at the level of economy and belief. This interdependence is reflected in the fact that the Mbuti relate to the forest not so much (*contra* Turnbull [1965: 252]) as a spirit or godhead whom they affectionately address as mother or father; they relate to the forest as being their ancestors and themselves. Thus to the extent that they consider the forest to be a parent, it is in the sense of being absolutely full of real parents who are now dead—or rather who are now alive as forest, or in the forest; as expressed in the statement that "the forest and the ancestors are the same. They are one".

My interpretation of Mbuti experience of the forest finds interesting parallels in the work of Laura Rival on the perceptions of the forest of the Amazonian Huaorani 'food collectors' of Ecuador. The central dilemma I am faced with in attempting to reconcile the Ingold/Bird-David view (that for the Mbuti the forest is alive and sacred in itself), with my understanding of Mbuti cosmology (that it is the ancestors as forest who are revered, not the forest *per se*), appears to find its resolution in Rival's description of Huaorani visits to peach palm tree groves which have been planted by their ancestors:

Such visits...provide a crucial link between past and present generations of 'we-people'. It is this link which makes the forest a 'giving environment', since living people, receiving nourishment from the past (palm fruit are seen to result from the activities and lives of past generations) ensure the feeding of future generations through their present *consumption* activities.... (the groves) are a source of pride, security and rejoicing, the concrete and material sign of continuity. [1993: 642]

Thus for the Huaorani, as for the Mbuti, the forest is made a 'giving environment' by virtue of the 'link between past and present generations'. This emphasis on the link between generations as being the key to their experience of the forest as alive and a 'giving environment' would appear to run counter to Bird-David's definition of the 'giving environment'. This description of the Huaorani places their experience of human relations with (past and future) humans at the heart of the experience of the forest as a living and giving environment, whereas for both Ingold and Bird-David the point is that the forest is *in*

itself (literally or metaphorically) seen as a living being who provides for, and shares with, its people, just as they do with each other. However Rival also says that:

there does not seem to be, in this context, a metaphorical projection of society upon nature. It is the link between successive human generations which make the peach palm grove a *gift* from the dead.... [RIVAL n.d.]

This passage restates the Western anthropocentric assumption. Either the groves are seen as an actual gift from their parents, their ancestors, in the sense that they “result from the activities of previous generations”; or they are seen as a gift from their sharing parent, the forest, in which case this is “a metaphorical projection of society upon nature”. The notion that there might not be such a split between society and nature, between previous generations and the forest, is not entertained. Of course, this may well be because the Huaorani make a similar split to the one made in Western thought; the usefulness of Rival’s work for me was that it woke me to the fact that for the Mbuti the link between generations is the key to their experience of the forest as being alive and a ‘giving environment’.

The story Turnbull tells (and which Ingold and Bird-David retell) of the Mbuti experiencing the forest as alive, sacred, and parental *in itself*, is certainly one way of interpreting Mbuti experience, for example in the hunt and in the *molimo* singing. At the other extreme is the cheerful cutting down of the forest to make fields in the period leading up to the *nkumbi*, the use of anything from lucky charms to witchcraft accusations to make sure the antelope are caught in one’s own net and not that of another, and collective ritual at the *endekelele* directed at the ancestors to increase the number of antelope extracted from the forest to exchange with villagers for agricultural produce. The integrating experience at the centre of this spectrum is an awareness of the forest as embodying the presence, activities, stories and power of previous generations. This would appear to be a direct contradiction of the Bird-David/Ingold thesis (it is certainly a direct contradiction of the one sidedness of Turnbull’s picture). However it may be less a contradiction, than an encouragement to take their thesis a step further.

In attempting to reconcile Ingold’s and Bird-David’s work with my understanding of Mbuti cosmology, my problem may well be my own ingrained dualism. Ingold argues that:

Hunter-gatherers do not, as Westerners are inclined to do, draw a Rubicon separating human beings from all non-human agencies, ascribing personhood exclusively to the former whilst relegating the latter to an inclusive category of things. [1992: 42]

In my initial attempts to apply Ingold’s thesis to the Mbuti I may simply have attempted to reverse the usual flow of our dualism. Replacing the usual picture of forager-forest relations (in which the forest is seen as inert and present for human use: both materially and symbolically; e.g. Ellen [1982]), with one in which the forest is seen as a living independent entity sharing with its human inhabitants. The dualism of the earlier picture is retained in the second, since the forest is still seen as essentially separate from its human inhabitants. In

Ingold's words: "The[se] *nonhuman* constituents of the environment..., imbued with personal powers, are indeed supposed to act with the people in mind" [1992: 42] (emphasis added).

I would suggest that while usefully restoring the living nature of the environment to our understanding of the experience of people such as the Mbuti, Ingold nevertheless does not join them in crossing 'the Rubicon'. This would involve recognising that the aliveness of the forest and the presence of past and future generations are inextricably linked. In an important sense the forest is not a "nonhuman constituent of the environment" at all. Not only does the Rubicon not exist; the relationship between people and a separate benevolent forest (which Ingold follows Turnbull in describing) does not exist. This is simply one among many ways of experiencing the forest as being alive, not independently of humans but through interaction with humans, an interaction often acknowledged and expressed through addressing the forest as ancestor.

Perhaps in attempting to describe hunter-gatherers' experience of a living environment we are attempting to describe a vital aspect to being human in any culture (or, indeed, of being alive in any species). Carrithers suggests that attributing intention to ones' environment is a particularly human, rather than particularly hunter-gatherer, ability. "We are particularly good at imagining and understanding things, even material things, when we attribute intentions or plans to them" [1992: 45]. He quickly adds:

This does not, of course, mean that we need really to believe that inanimate objects have minds. For example, a cabinet-maker I know talks of old wood as 'wanting to split', and a painter I know speaks of certain kinds of paint as 'wanting to lift' and even 'getting tired and wanting to let go'; yet they certainly do not believe that wood or paint are actually persons. [1992: 45]

Given the constraints of Western dualism we 'of course' 'certainly' wouldn't want to 'believe that'. The examples Carrithers chooses are, however, highly illuminating. They refer to work which involves an individual responding to—and shaping—the physical world.³⁾

Carrithers goes on to say that "recent psychological research...shows there to be an 'interactional bias' in human thinking. That is, we do indeed tend to reason as if the inanimate world were human- or animal-like, made in the image of thinking, planning, intending beings" [1992: 45]. So whether this attribution of Intentionality to a living environment is seen as reflecting a real belief (as Ingold suggests for the Mbuti), or as reflecting a useful imaginative conceit (as Carrithers suggests for his friends), depends on the status we give to the imagination. If we consider the imagination from a Cartesian perspective, as something obscuring our view of the hard facts of life, then the most it may achieve is a status as craftsmanship or art. If the imagination is experienced as centrally important then it may be a way of understanding, mediating and experiencing relationship within the world (see Abram [1997]). The imagination is clearly at work in this central mediating sense in, for example, the nature of the *molimo* singing.⁴⁾

Thus whether one views this experience of an intentional living environment as being real or imaginary, the experience is one which Western people (to the extent that they are not

caught up in a Cartesian world view) to some extent share with the Mbuti. Just as the Mbuti can share what we characterise as a dominating approach to their environment—as was evident in my fieldwork when one Mbuti man sought (ultimately unsuccessfully) to use sorcery accusations to control both other people and the forest/ancestors in the *molimo*. Taking Ingold's opposition of these ideal types a step further through examining anthropocentrism in anthropology is, I believe, a useful way of becoming aware of the limitations inherent in attempting to make sense of hunter-gatherer or our own relationship with our environment within the limitations of the Cartesian world view which dominates our thinking about environmental issues.

THE HEGEMONY OF CARTESIAN THOUGHT

Fundamental cultural beliefs are more evident in the mundane assumptions and habitual repetitions [WOLF 1990: 388], than in the clash of ideas or beliefs; since the latter are often clashes between opposing interpretations of these assumptions rather than fundamental challenges to them.

For example, Morris points out that “the mechanistic philosophy of the Enlightenment with its rigid dualism” was challenged and changed by “the fundamental re-orientation of thought initiated in the nineteenth century by Hegel and Darwin, by the rise of the biological sciences, and by the development of historical understanding, anthropology and the social sciences more generally” [1995: 303]. Carrithers makes a similar point when he claims that Darwin's view of humans as being created from animals rather than being specially created by a deity, sharply contradicted “an attitude of human specialness which is so deeply ingrained in North Atlantic thought that it need not acknowledge its Christian source” [1992: 53]. However this habit is so deeply ingrained that it forms the basis for the very book (*Why Humans have Cultures*) Carrithers makes this statement in; for Darwinian thought supplemented rather than replaced Cartesian thought. The ability to constantly move between an emphasis on absolute opposition and an emphasis on gradual development has been a constant presence in Western thinking. According to Thomas [1983: 17-41] pre-Cartesian European thought and religious belief saw animals both as completely different to man (as present simply for our use), and also saw animals and humans as existing within the ‘great chain of being’. It thus embraced both the dualist and gradualist views which were later reformulated as Cartesian dualism and Darwinian evolution; reformulations which implied the inevitability of development and progress through the power of reason, and through the notion that the higher evolves from the lower. As Morris has pointed out, the ‘ethic of domination’ could be argued to have arisen with the advent of agriculture [1995: 304]; but it would be dangerous to impute to technological changes fundamental changes in belief systems. This is evident if one contrasts the Bila [KENRICK 1996] and Lese [GRINKER 1994] villagers fundamentally different beliefs and forms of sociality despite their relatively identical subsistence modes; and—more to the point—the ‘relational’ and the ‘domination’ ethics are ever present possibilities for the Mbuti, just as they are for people in the West.

Wolf argues that “ideology may mediate contradictions but it cannot resolve them. Alternative systems of ideas and ideologically charged behaviour are continuously generated

by the operations of the modes themselves" [1990: 390]. Thus alternative ways of understanding and behaving may be being generated by the modes themselves—as Capra [1982] and Willis [1990] suggest in physics—or by contradictions such as that between the economic beliefs and activity our culture is engaged in, and the tangible disastrous impact most of us appear to believe this is having on the immediate and wider world: the personal, social and environmental fabric.

However if Cartesian mind/matter dualism is being superseded, it may well not be by a mutualist awareness of interdependence but by an intensification of opposition at a more refined conceptual level. Thus the notion that we can treat the planet as an infinite resource is, for many commentators, being replaced by the notion that the planet must be managed by the experts—the scientific technological elite (Hardin in Simmons [1993: 122]; Heilbronner and Falk in Caldwell [1990: 72-73]). The interrelationship of humans and other life forms is increasingly recognised [BRUNDTLAND et al. 1987], and the planet is increasingly seen as a living whole against the backdrop of the lifeless void of the universe [LOVELOCK 1979; SACHS 1994]. This replicates Cartesian dualism in a new form: the earth as a whole (managed by humans) against the backdrop of the lifeless universe, replaces our seeing humans (elevated by our capacity for culture and thought) as significant and civilised against the backdrop of raw nature. Within anthropology this attempt to collapse the nature/culture divide is undertaken through establishing a continuum over time between nature and culture [CARRITHERS 1990]. Humans being seen as having evolved a capacity for culture as part of their process of adaptation and natural selection; and thus being superior by contrast with other life forms, being significant in contrast to others.

The story of evolution is told as if we increasingly remove ourselves from the base nature of other creatures and ourselves, rather than simply being the story of all creatures changing over time. Yet we have not descended from the existing rocks, plants and other animals; any more than we have descended from contemporary hunter-gatherers. While the Cartesian impulse to objectify relationships enabled the development of technology, the Darwinian view of evolution is used to mirror the 'ethic' of capitalism in exalting competition as 'natural'. As Williams has pointed out, however, evolutionary beliefs about nature being the selective breeder, governing through laws of survival and extinction, do not fit with the diversity of relations in nature, which range "from inherent and inevitable bitter competition to inherent mutuality or co-operation" [1976: 189]. Essentially the Western cosmology, embodied in both the Cartesian and Darwinian approaches, denies the mutuality of relationship and sanctions the twin feelings of superiority and alienation. It sanctions the way political economy approaches the world out there; and the way political economy is refracted through the personal experience that meaning (order) has to be imposed on a meaningless (chaotic) world, denying the reality that meaning (in poetry, thought, the world) arises through relationship, as an expression of relationship.

Just as Wilmsen's [1989] analysis of the !Kung would appear to deny their history, while imposing on them the history of other peoples [GRINKER 1994]; so a focus on ideology (such as Wolf's, or such as I have engaged in this section) prioritises Western ideology in a way which ignores the persistence of peoples creativity. Foucault's archaeology of knowledge, his history of division, of the way in which people are continually resisting and

recreating discourses of domination in the West [RAMAZANOGLU 1993], is only one side of the story; and it is to the other side of Western experience, to the ecology of experience, the reality of relatedness, that I now wish to turn.

THE ECOLOGY OF EXPERIENCE

In *Descartes' Error* [1994] Damasio, a professor of neurobiology, argues that bodily sensations, gut feelings, and emotions, are at the heart of the mind's decision making process: emotion is at the heart of reason rather than being opposed to it. Thus consciousness is a consequence of, and present in, all of our bodily selves rather than residing in a mental state which differs from our physicality.

Likewise Gibson's ecological approach to perception directly contradicts the 'old doctrine' that we are only able to approach the environment through the diverse determining lenses of different cultures [1979: 258]. In the 'old doctrine' the mind is believed to be separate from, and superior to, nature, and "seeing something is quite unlike knowing something" [GIBSON 1979: 258]. It is concepts which endure and which make sense of the body's sensations which are only fleeting and temporary. In this earlier understanding, the chaotic images that are picked up by the eye can only be made sense of by learnt cultural concepts which impose order on chaotic experience once the information has been received by the brain. This approach assumes an essential separation between the mental and the physical, implying that all we can know are images of the world [GORDON 1989: 150] since our minds are separate from our bodies and the world around us, and there is no direct relationship between the individual and the environment.

This approach is evident in anthropology in the notion that cultural concepts are needed to impose order on raw nature: "in a chaos of shifting impressions" [DOUGLAS 1966: 36], order is achieved by the individuals "perceptual controls" structured by imposed "cultural constraints" [DOUGLAS 1982: 1].

In the 'old doctrine' the mind is separate from, and superior to, nature. It is concepts which endure and which make sense of sensation which is only fleeting and temporary: "whereas knowing is having permanent concepts stored in memory" [GIBSON 1979: 258]. This elevation of the enduring mind above transient sensation mirrors Ortner's view that men are seen as free to create enduring culture while women are encumbered by the transience of their bodily involvement in 'species life' [1974]. In contrast to this, Weiner demonstrates that for the Trobrianders it is women's work which endures, whereas it is men who seek temporary permanence through securing their fame in kula exchange [1988]. In contrast to the Cartesian split between the mind and the body—and the identification of men with the mind, permanence and culture; and women with the body, transience and nature—Gibson argues for continuity: "To perceive the environment and to conceive it are different in degree but not in kind. One is continuous with the other" [1979: 258].

Just as Damasio argues that reason and consciousness are embodied rather than residing in some separate mental realm; so in the ecological approach to perception the individual is understood as moving through the landscape [GIBSON 1979: 303], seeing objects in context and picking up information through bodily sensations. "The parts of it he can name are called concepts, but," Gibson asserts, they "are nothing but partial abstractions from a rich

but unitary perception" [1979: 261]. In other words, seeing and understanding precede cognition and conceptualisation. We see far more than we can think, but this does not mean that chaos lurks beyond the bounds of our concepts (threatening nature beyond taming culture) for it is a 'unitary perception', contiguous and continuing.

Trevarthen's research stresses that from at least the moment of birth, an individual is self-aware and can "enter into an exchange of feelings", the experience of inter-subjective sociality is present from the start [TREVARTHEN and LOGOTHETI 1989: 167]. By co-operating, we reason with feelings; and the co-operative mental powers in infants mean that the biological and cultural can no longer be seen as mutually exclusive categories. Thus "the human mind does not build itself, at least not in childhood, by power of reason and by mastery of emotions, as Descartes thought, but by emotional regulation of a sharing of ideas with others. Private reason, the thinking 'I' postulated by Descartes, stands in contrast with the idea of a self with feelings that flourish in a community. The former depends upon the latter" [TREVARTHEN and LOGOTHETI 1989: 181]; but the Western 'I' learns to deny that dependency.

Gibson, Damasio and Trevarthen point to a very different awareness of human subjectivity and intersubjectivity, one which runs counter to the Cartesian mentalist assumption of the isolation of the individual, and of the need for the mind, the culture, the adult, to impose order on otherwise chaotic experience. The experience of interdependence, of inherent order emerging from within relationship, in fact appears to be fundamental to consciousness of self and other in Western society; just as it evidently is in Cree, G/wi and Mbuti societies. However even when one pillar of the palace of alienation is removed as being a distortion of experience, it is often removed in a way which strengthens the pillars around it. This is the case, for example, when Trevarthen and Logotheti state that: "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] (emphasis added).

The reductionist notion that we can reduce personhood to the human individual, and within the individual to a mentality that is separate from the body, would appear to be ill-founded. Thus the idea that individual organisms are "by nature, closed to each other" [DURKHEIM 1960 (1914): 337] (cited in Ingold [1990: 211]), would appear to reflect the dominant Western belief system but not the underlying nature of experience for people in the West as elsewhere; for "life itself depends on the fact that organisms are not closed but open systems" [INGOLD 1990: 211]. Turning selfish gene theory on its head, Ingold asks whether "when all is said and done, are not organisms and persons but relationships' way of making further relationships?" [INGOLD 1990: 225].

At a fundamental level personhood in the world would appear to be better represented as the consciousness present in the relationship between different aspects of the environment, rather than as the possession of discrete human (or animal) individuals in isolation.

For the Cree, consciousness is not a human addition to animal life but is understood as a state of being "on the verge of unfolding events" [SCOTT 1989: 195] and "the animals, the winds and many other phenomena are thought of as being 'like persons' in that they...understand and are understood by men" [FEIT 1973: 116]. Similarly, Trevarthen's research demonstrates that "communicating with persons is possible from birth" [1993: 121];

and, if we drop the word 'human' from the following sentence, it could equally well apply to Mbuti, G/wi or Cree experience of all aspects of their environment (including humans):

It is in the nature of ['human'] consciousness to experience being experienced: to be an actor who can act in relation to other conscious sources of agency, and to be a source of emotions while accepting emotional qualities of vitality and feeling from other persons by instantaneous empathy. [TREVARTHEN 1993: 121]

Thus, although Western culture places great importance on the particular form of cultural knowledge gained by isolating aspects of reality and reconfiguring them in inventive ways, the core of this isolated cognitive experience of self is still an embodied experience of interrelationship:

The core of every human consciousness appears to be an immediate, unrational, unverbilized, conceptless, totally atheoretical potential for rapport of the self with another's mind. [TREVARTHEN 1993: 121]

Trevarthen makes a fundamental leap towards inclusiveness by arguing that both our core and 'highest' ability is something humans of all cultures and all ages share: there is no opposition here between base nature and high culture. So from where does the alienation (self from society), the isolation (the questions of structure and agency), arise? The argument of this thesis is that it arises from exclusion, from the division of the world (including ourselves) into persons and things. If we possess real consciousness, but they do not possess it at all, or not in the same quality: then we cannot trust that they will act in all our best interests, and so our well being must depend on coercion, on controlling them. If they possess consciousness, then our well being depends on the rapport, rather than control, we can achieve with them.

Although this rapport may be morally and practically beneficial to us as a species [cf. CARRITHERS 1992: 53], it is impossible to achieve through seeking ever more effective control; as those implementing conservation policies in Central Africa often discover, and as those Bila and Mbuti who sought to dominate others discovered as their fear outstripped their attempt to impose control [KENRICK 1996]. Rapport is secured only by relinquishing control through trusting relationship [cf. INGOLD 1994: 13]. A trust which itself creates the conditions for inclusion and understanding: as a Bila fisher farmer, Bisaili, found when he walked over to share a fellow Bila and his Mbuti wife's evening meal despite having disparaged Mbuti women:

Today, as under colonialism, what underpins Bila/Mbuti relations can be a laughable or oppressive structural opposition in which the Bila seek to control the Mbuti, whilst experiencing themselves as being controlled by more powerful forces. More often, though, it is the usual fluid movement between forest and village that both Bila and Mbuti are entwined in.

A good example of this is the Bila 'chief' Banye and his Mbuti wife Alimoya, who move with the other Bila and Mbuti between the river, forest and road. One evening Bisaili complained to me that Banye *shouldn't* have an Mbuti wife. "They don't know how to cook, nor look after a home", he said; before heading over to eat a meal she had prepared from the fish they had caught that day. And I watched the three of them laughing over some joke, as the firelight played on their faces and on the huge trees overarching the hunting camps small clearing: the reality of relationship dissolving his protestations of power. [KENRICK 1996: 106]

Relinquishing control, and trusting the emerging patterns of relationship, is also what happens during the weaving of harmonies amongst the Mbuti singers, and between the singers and the forest, in the night-long *molimo*. It also happens when they stay alert to each other and the ever-changing forest during the net hunt. The *molimo* and the hunt mirror each other: as individuals move on the edge of the unknown, "on the verge of unfolding events", and in this situation it is easier to experience personhood as the consciousness that emerges out of relationship, rather than as a possession which the individual's mind must defend. This is also evident in the following example when a *Belele*, which is both an ancestor spirit and spirit of the forest, enters a hunting camp just after the hunting group has itself arrived and been setting up camp near the Ituri River:

Nahto (one of the most powerful elder women in the camp) led the singing, with everyone (especially the children) singing the refrain: a repetitive eerie chanting that was very restrained, totally unlike the *molimo* singing it lacked any individual variation or exuberance. Using a stick, Nahto beat on the ground and called out to the spirit of the forest to come out and meet her. The *Belele* emerged out of the darkness of the forest at the edge of the camp: a figure totally covered in green leaves, moving very slowly in an inhuman jerky way. Nahto cried out to it, "you are always here when I come", and the *Belele* replied, "*Im, kaku—I never die*". She then called on it to bless the camp and to help the hunt to give us lots of animals; after which the figure disappeared into the pitch-black night forest, a host of children and youths following it, blundering through the forest and being thrashed by it.

When such *Baketi* come into camps and bless both the camp and the hunt, the *Baketi* often dance wildly and tear at huts. They are often covered in extraordinary points of light given off by the phosphorescence of decomposing plants. It is often an elder woman of the camp, although sometimes a man, who takes the lead role in addressing such spirits on behalf of the camp. [KENRICK 1996: 118]

In this example of the *Belele* spirit arriving in the Mbuti forest camp, when the *Belele* says to Nahto, the elder woman of the camp, "I am always here, I never die", it is not simply speaking to the camp as the spirit of the forest/ancestors, but as the voice of the Mbuti camp itself since the figure is *Za*, Nahto's brother, covered in leaves. The power of its presence is in its ambiguity, in its representing the meeting point, in the openness of one aspect of the

environment to another. The consciousness of self and other present in the exchange with the *Belele* is in the awareness of the forest as alive and the camp as able to both meet and represent that unending presence: the same presence which they embody in the *molimo*.

The research of Gibson, Trevarthen and Damasio implies that the Western split between the individual humans mind and the passive environment including our bodies is—like Durkheim's split between the social being and the biological being in man [1915: 337] (cited in Ingold [1990: 211])—untrue not only for the Mbuti, the Cree and the G/wi, but also for people in the West. However, the paradigm which sees culture, the mind, and humans, as separate from and superior to nature, the body, and other species and 'things' continues to define the boundary between 'us' and 'them'. People in the West disagree over where to place the boundary, but the insistence on the division between persons and things persists. The boundary is usually placed between humans and all other species, but increasingly 'human-like' sociality is attributed to dolphins, whales, primates, perhaps even all other animals; Ingold [1990] goes so far as to place the boundary between organic species and other things such as crystals, but even here the boundary itself nevertheless remains.

In the context of conservation and environmentalism, for example, Greenpeace activists claim 'personhood' for whales whilst seeing cod entirely as 'things'; while the Icelandic whalers they oppose see neither cod nor whales as 'human-like' but simply as resources [EINARSSON 1993]. Unlike Nuttal's Inuit [1991] who relate to the seal and whale both as persons and as potential lunch; the Greenpeace activist and the Icelandic whaler operate within a Western paradigm, differing only over where to draw the line between persons and things. The fundamental mistake that Ingold makes—in contrasting hunter-gatherers such as the Mbuti with people in the West—is in assuming that the experience of a living environment is necessarily one characterised by trust, and in assuming that it is only open to hunter-gatherers when it appears, in fact, to be the underlying experience of humans everywhere. If our relationship with our environment is not recognised and attended to, then we are at the mercy of the meanings we make in our interaction with it, thinking them to be the unalterable reality rather than a reflection of the state of the relationship.

A small example from Freiburg in Germany demonstrates the way in which moving beyond a powerless relationship with the environment (by recognising ones ability to shape that relationship and therefore ones sense of self and other) is not restricted to hunter-gatherers such as the Mbuti through rituals such as the *molimo* [VIDAL 1994: 14]. Parents in a particular area of Freiburg were too frightened for their children's safety to let them walk to school because there was too much traffic speeding too fast, and because the streets were therefore empty of other children and parents. The meaning that had been created was one in which the environment—including its human component—was infused with fear, an echo of the fear which some Mbuti attempt (always ultimately unsuccessfully) to conjure up at the start of some *molimo* festivals in an attempt to bolster their personal power [KENRICK 1996: 149-162]. Parents addressed the problem in two ways: on the one hand they lobbied for the roads in the vicinity of the primary school to have a very low speed limit placed on them, and on the other hand they agreed amongst themselves to stop driving their children to school. Thus in place of isolated protective parents making the streets unsafe by hurrying their children to school in cars, they collectively created an environment in which it was safe to

walk to school in the company of other children and parents. This process is reminiscent of the *molimo* restoring right relationship among the members of the camp and the forest; for it is not simply a change in meanings being projected onto the environment, it is a change in the tangible physical and emotional experience of interaction with the environment, including people as part of the environment. It is a move from experiencing an opposition or disharmony between self and other, to an identification or harmonisation of the needs of a multiplicity of selves (see also Rose [1999] on parallel processes in Australian Aboriginal experience).

Thus, although Mbuti hunter-gatherers tend towards an identification with an environment which they recognise as suffused with personhood, and although Western people learn to experience personhood as existing in opposition to a world of things; both are capable of moving between these poles of experience.

To establish trust—both with the environment and with other people within that environment—is something that has to be continually worked at; as was evident in Freiburg, and as we have seen with the Mbuti. If the consequence of such work is that one is able to identify one's own well-being with the well-being of the whole environment of which one is a part, then there may be little practical difference between experiencing the environment as alive with personhood and powerful ancestors, and investing it with anthropomorphic qualities through imaginative empathy and through an awareness of the vulnerability of future generations to one's present actions.

Perhaps the fundamental difference between the two approaches is simply their different starting points. The latter emerges out of a fear that the environment is dying; a fear that tends to orientate us out of the present and towards trying to prevent calamities in the future whilst experiencing the past as inevitable and behind us. By contrast, the former is based on a trust in a living environment and on a trust that we are able to ensure the future through listening to and dialoguing with the past. For the Mbuti the process of dialoguing with the presence of forest/ancestors in the *molimo*, or with the *Belele* on the edge of camp, is fundamentally a process of evoking and engaging with an environment that is experienced as alive with presence, an engagement in which their presence renews the present.

NOTES

- 1) Cf. Willis: "Heisenberg's Uncertainty Principle recognised...that nature at the most elementary level...was possessed of a kind of consciousness" [1990: xxvii].
- 2) Carrithers recognises that "the moral and, we now realise, practical consequences of conceiving ourselves as fellow with other animals, and with the natural world, could be very beneficial" [1992: 53]. While this reflects Cree belief, it does not reflect Cree experience that moral and practical consequences are inseparable. The rich metaphorical nature of language is evident here for although, in this context, "conceiving ourselves" carries the Cartesian mentalist assumption of the mind as separate from experience; "*conceiving* ourselves as fellows with other animals" also carries a meaning akin to Cree conceptions of all life as being "on the verge of unfolding events, of continuous birth" [SCOTT 1989: 195]. Reflecting on words such as 'conceive', 'inspire', 'reflect',

'incorporate', etc., it is hard to agree with Lienhardt [1985: 150] that: "In modern English, moral and mental conditions are spoken of in more or less abstract terms (anger, suspicion, forgetfulness and so on), cut off, for most, from their etymological roots." The roots are there, the embodied nature of experience is present in our language, although we may choose not to see it.

- 3) The abstractions 'culture' and 'nature' both began as words used to describe a process. Nature described the quality or process inherent in something (e.g. the nature of wood is to split). Culture described the process of cultivating or tending something (e.g. cultivating the land). Between 1500 and 1800 these terms gradually came to be used as nouns, as polar opposites [THOMAS 1983; WILLIAMS 1976] similar to Descartes opposition between body and mind. However, their roots are in parallel processes of attention to change, of being able to work with the grain of the wood, or the lie of the land; as verbs these processes are in relation not opposition.
- 4) Abram [1997] points out that the imagination is better understood as being a way in which the senses seek to engage more fully with sensual experience, rather than as a way in which the mind removes itself from experience.

REFERENCES

ABRAM, David

- 1997 *Philosophy on the Way to Ecology*. In David Abram (ed.), *The Spell of the Sensuous*. New York: Vintage.

BIRD-DAVID, Nurit

- 1992a Beyond 'the Hunting and Gathering Mode of Subsistence': Culture-sensitive Observations of the Nayaka and Other Modern Hunter-gatherers. *Man* (N.S.) 27: 19-44.
 1992b Beyond 'the Original Affluent Society': A Culturalist Reformulation. *Current Anthropology* 33 (1): 25-34.

BLOCH, Maurice

- 1989 *Ritual, History and Power: Selected Papers in Anthropology*. London: Athlone.
 1992 *Prey into Hunter: The Politics of Religious Experience*. Cambridge: Cambridge University Press.

BOROFKY, Robert

- 1987 *Making History: Pukapukan and Anthropological Constructions of Knowledge*. Cambridge: Cambridge University Press.

BRUNDTLAND, G. et al.

- 1987 *Our Common Future: World Commission on Environment and Development*. Oxford: Oxford University Press.

CALDWELL, L.K.

- 1990 *Between Two Worlds: Science, the Environmental Movement, and Policy Choice*. Cambridge: Cambridge University Press.

CAPRA, Fritjoff

- 1982 *The Turning Point*. London: Harper Collins.

CARRITHERS, Michael

- 1992 *Why Humans Have Cultures*. Oxford: Oxford University Press.

DAMASIO, Antonio

- 1994 *Descartes' Error*. New York: Grosset/Putnam.

DOUGLAS, Mary

- 1966 *Purity and Danger*. London: Routledge and Kegan Paul.
1982 Introduction to Group/Grid Analysis. In Mary Douglas (ed.), *The Sociology of Perception*. London: Routledge and Kegan Paul.

DUMONT, Louis

- 1980 *Homo Hierarchicus: The Caste System and Its Implications*. Chicago: University of Chicago Press.
1986 *Essays on Individualism*. Chicago: University of Chicago Press.

DURKHEIM, E.

- 1976 *The Elementary Forms of Religious Life* (translated by J. Swain), 2nd Edition. London: Allen & Unwin (first published in 1915).

EINARSSON, Niels

- 1993 All Animals Are Equal but Some Are Cetaceans. In Kay Milton (ed.), *Environmentalism: The View from Anthropology*. London: Routledge.

ELLEN, Roy F.

- 1982 *Environment, Subsistence and System: The Ecology of Small-scale Social Formations*. Cambridge: Cambridge University Press.

FEIT, H.

- 1973 The Ethno-ecology of the Waswani Cree: Or how Hunters Can Manage Their Resources. In B. Cox (ed.), *Cultural Ecology: Readings on the Canadian Indians and Eskimos*. Toronto: McClelland and Stewart.

GIBSON, J.J.

- 1979 *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin.

GORDON, Ian E.

- 1989 *Theories of Visual Perception*. Chichester: John Wiley and Sons.

GRINKER, Richard Roy

- 1994 *Houses in the Rain Forest: Ethnicity and Inequality among Farmers and Foragers in Central Africa*. Berkeley: University of California Press.

INGOLD, Tim

- 1986 *The Appropriation of Nature*. Manchester: Manchester University Press.
1988 Notes on the Foraging Mode of Production. In Ingold, Riches, Woodburn (eds.), *Hunters and Gatherers 1: History, Evolution and Social Change*. Oxford: Berg.
1990 An Anthropologist Looks at Biology. *Man* 25: 208-229.
1992 Comment on Beyond 'the Original Affluent Society': A Culturalist Reformulation, by Nurit Bird-David. *Current Anthropology* 33 (1): 41-42.
1994 From Trust to Domination: An Alternative History of Human-animal Relations. In A. Manning and J. Serpell (eds.), *Animal and Human Society: Changing Perspectives*. London: Routledge.

KENRICK, Justin

- 1996 *Mbuti Hunter-gatherers and Rainforest Conservation in the Ituri Forest, Zaire*. University of Edinburgh: PhD thesis.

- 1999 Reflections in the Molimo Pool: Gender, Ritual, Economics and the Mbuti of Zaire. In Biesbrouck, Elders and Rossel (eds.), *Challenging Elusiveness: Central African Hunter-Gatherers in a Multidisciplinary Perspective*. Leiden: CNWS.
- KNIGHT, Chris
- 1995 Tools, Language and Cognition, Reply to Latour. *Man* (N.S.) 30: 396.
- LIENHARDT, Geoffrey
- 1985 Self: Public, Private. Some African Representations. In Michael Carrithers, Steven Collins, and Steven Lukes (eds.), *The Category of the Person*. Cambridge: Cambridge University Press. pp. 141-155.
- LÉVI-STRAUSS, Claude
- 1949 (1969) *The Elementary Structures of Kinship* (revised edition). London: Tavistock.
- LOVELOCK, James
- 1979 *Gaia: A New Look at Life on Earth*. Oxford: Oxford University Press.
- MACFARLANE, Alan
- 1993 Louis Dumont and the Origins of English Individualism. *Cambridge Anthropology* 16 (1): 1-25.
- MARX, K.
- 1930 *Capital*. London: Dent.
- MARX, K. and F. ENGELS
- 1977 *The German Ideology*. London: Lawrence and Wishart.
- MORRIS, Brian
- 1995 Woodland and Village: Reflections on the 'Animal Estate' in Rural Malawi. *Journal of the Royal Anthropological Institute* (N.S.) 1: 301-355.
- NUTTALL, Mark
- 1991 Sharing and the Ideology of Subsistence in a Greenlandic Sealing Community. *Polar Record* 27 (162): 217-222.
- ORTNER, Sherry
- 1974 Is Female to Male as Nature Is to Culture? In M.Z. Rosaldo and L. Lamphere (eds.), *Woman, Culture and Society*. Stanford: Stanford University Press. pp. 67-88.
- RAMAZANOGLU, Caroline
- 1993 Introduction. In *Up against Foucault: Explorations of Some Tensions between Foucault and Feminism*. London: Routledge.
- RIVAL, Laura
- 1993 The Growth of Family Trees: Understanding Huaorani Perceptions of the Forest. *Man* (N.S.) 28: 635-652.
- n.d. Domestication as a Historical and Symbolic Process: Wild Gardens and Cultivated Forests in the Ecuadorian Amazon. In William Balee (ed.), *Principles of Historical Ecology*. New York: Columbia University Press.
- ROSE, Deborah Bird
- 1999 Indigenous Ecologies and an Ethic of Connection. In Nicholas Low (ed.), *Global Ethics and Environment*. London: Routledge.
- SACHS, Wolfgang
- 1994 The Blue Planet: An Ambiguous Modern Icon. *The Ecologist* 24 (5): 170-175.

SCOTT, C.

- 1989 Knowledge Construction among Cree Hunters: Metaphors and Literal Understanding. *Journal de la Société des Americanistes* 75: 193-208.

SILBERBAUER, George B.

- 1981 *Hunter and Habitat in the Central Kalahari Desert*. Cambridge: Cambridge University Press.
- 1994 A Sense of Place. In E. S. Burch and L.J. Ellana (eds.), *Hunter-gatherer Research*. Oxford: Berg.

SIMMONS, I. M.

- 1993 *Interpreting Nature: Cultural Constructions of the Environment*. Milton Keynes: Open University.

THOMAS, Keith

- 1983 *Man and the Natural World*. London: Penguin.

TREVARTHEN, Colwyn and K. LOGOTHETI

- 1989 Child in Society, and Society in Children: The Nature of Basic Trust. In S. Howell and R. Willis (eds.), *Societies at Peace: Anthropological Perspectives*. London: Routledge.
- 1993 The Self Born in Intersubjectivity: The Psychology of an Infant Communicating. In Ulric Neisser (ed.), *The Perceived Self: Ecological and Interpersonal Sources of Self Knowledge*. Cambridge: Cambridge University Press.

TURNBULL, Colin M.

- 1965 *Wayward Servants: The Two Worlds of the African Pygmies*. London: Eyre and Spottiswoode.
- 1983 *The Mbuti Pygmies: Change and Adaptation*. New York: Holt, Rinehart and Winston.

VIDAL, John

- 1994 No Visions Please, We're British. *The Guardian* April 3, 1994: 14.

WEINER, Annette

- 1988 *The Trobrianders of Papua New Guinea*. New York: Holt, Rinehart and Winston.

WILLIAMS, Raymond

- 1976 *Keywords*. Glasgow: Fontana.

WILLIS, Roy

- 1990 (1994) *Signifying Animals: Human Meanings in the Natural World*. London: Routledge.

WILMSEN, Edwin N.

- 1989 *Land Filled with Flies: A Political Economy of the Kalahari*. Chicago: University of Chicago Press.

WOLF, Eric

- 1990 *Europe and the People without History*. London: University of California Press.

