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Abstract

This entry begins by reviewing the definitions of "human", "environment" and "dichotomy", consequently turning to the debates concerning the human–environment relationship. Synthesizing various studies, the capability of advanced tool use; language, hyper-sociality, advanced cognition, morality, civilization, technology, and free will are supposed to be distinctly human. However, other studies describe how nonhuman organisms share these same abilities. The biophysical or natural environment is often associated with all living and non-living things that occur naturally. The environment also refers to ecosystems or habitats, including all living organisms or *species*. The concepts of the biophysical or natural environment, which is artificial - constructed or influenced by humans. The built or modified environment typically refers to structures or spaces from gardens to car parks. Today, one of the central questions in regard to human-environment dichotomies centres around the concept of sustainability.

Keywords: dichotomy; ecological anthropology; environment; environmental anthropology; human; multispecies ethnography; nature; sustainability

Introduction: Definitions

In anthropology and related academic disciplines, there is a proliferation of theories and debates about the relationship between humans and environment, inquiring whether humans are part of the environment, with debates about binaries enlivening the cognitive, natural, and social sciences. This inquiry begins by reviewing the definitions of "human", "environment" and "dichotomy", consequently turning to the debates concerning the impact of "human-environment dichotomy" on current environmental and human predicament.

First of all, what are "humans"? Multiple academic disciplines have grappled with and still continue to explore this question. In biological terms, humans and other *hominids* belong to a taxonomic family of primates that includes great apes. Formulated on the foundations of physical anthropology, evolutionary and molecular biology, genetics, physiology, ecology, archaeology and population dynamics, the science of humanity centres on the *Home Sapiens'* life history since the lineage split from our primate ancestors (Marean 2015; Seymour 2016). The primary focus of social or cultural anthropologists has been on cultural differences assuming that all humanity shares the same cognitive characteristics, including the ability to adapt to any environment and recently, at least in the case of industrial societies, to adapt the environment to their needs (Milton 2002; Shoreman-Ouimet and Kopnina 2016).

As for the *environment*, in the natural science definitions, it includes physical, chemical and other processes that helped shape the *biosphere*, the global ecological system integrating all living beings and/or interconnectedness (relationships) between species. *Biophysical* or *natural environment* (these terms are often used interchangeably), or *nature* or *wilderness* is often associated with all living and non-living things that occur naturally. Biophysical or natural environment also refers to the surroundings of an organism, and the factors that have an influence on its survival, development, and evolution. The environment also refers to *ecosystems* or *habitats*, including all *living organisms* or *species*. The environment can include humans but can also refer to the world outside human existence.

The concepts of *the biophysical* or *natural environment* are often opposed to the concepts of *built* or *modified environment*, which is *artificial* - physically constructed or heavily influenced by humans. The built or modified environment typically refers to structures or spaces from gardens to car parks, from furniture and houses to entire cities. Today, one of the central questions in regard to human-environment dichotomies centres around the concept of *sustainability*. The expansion of human population and industrial economic activity are implicated in a number of environmental problems, including climate change, biodiversity loss and pollution (Kopnina and Blewitt 2018).

Human-environmental dichotomies (sometimes termed *dualisms*) have been a longstanding area of anthropological inquiry. Usually, the dichotomy is defined as a division or contrast between two concepts that are represented as being opposed or entirely different. The human-environment dichotomy has been also conceptualized as an opposition between techno-scientific (utilitarian and mechanical) versus romantic (in some interpretations, holistic and intertwined, in others, "nature as separate other") view of nature (Heidegger 1977). Claude Lévi-Strauss (1963) argued that thought processes require dialectical or binary concepts for organisational purposes.

In this article, the environment will refer to the living organisms and processes including humans. In many languages, such as English, Dutch and Russian, the word "environment" is also associated with social, cultural, or business contexts, as in milieu or social structure. In this article, we will not discuss these types of environment.

The theories rejecting the dichotomy is of particular interest because they both involve novel concepts and methodologies such as *more-than-human geography* (e.g. Whatmore 2006), *multispecies ethnography* (Kirksey and Helmreich 2010) *humanimality* (Freeman 2010), or *ChildhoodNature* (Cutter-Mackenzie et al 2018), but also because they derive from competitive and even conflicting schools of thought.

A number of schools of thought may be distinguished in the discussion of the dichotomy - deep ecologists, animal-welfare and animal-rights focused scholars on the one hand and pragmatic, ecumenical, post-modern, open, plural scholars on the other hand. The first group can be roughly labelled 'ecocentric', 'biocentric' or 'zoocentric' in as much as their focus is on the intrinsic value of the ecosystem, biosphere, or nonhuman animals. The latter group may include positions that can be roughly associated with shallow ecology, combining both strong and weak anthropocentrism. Both groups reject the dichotomy for different reasons, drawing on the diametrically opposed ethical assumptions.

The relationship between humans and the environment

The debate about human/nature dualism has stretched from the early philosophers and anthropologists up to the present day. The human/nature dichotomy reflects other dichotomies that informed and enlivened the debates of the past—nature/culture, idealism/materialism (Biersack 1999). Emmanuel Kant and Judeo-Christian philosophers often assumed that humans and animals are not only very different physiologically, but also in a number of other characteristics. Rene Descartes stated that only people were creatures of reason, linked to the mind of God, while animals were merely machines made of flesh, justifying the displacement of nonhumans (in Chapman and Huffman 2018).

This involved the ideational and material dislocations of domestic and wild animals into the environmental fringes and human mindscapes alike (Crist and Kopnina 2014). The ideational displacement has been instigated by means of an inquiry: How are humans *different* from all other living beings? The differences identified usually appear as gaping chasms between possession of "good" characteristics and total lack thereof (Ibid). A number of presumably distinctly human characteristics have been identified: the capability of advanced tool use; complex language that allows for hyper-sociality and for social learning, complex brain evolved for advanced cognition, morality, civilization, technology, and free will (e.g. Seed and Byrne 2010; Crist and Kopnina 2014; Marean 2015). However, it was noted that some nonhumans share the same abilities or even exceed humans in some characteristics (e.g. Chapman and Huffman 2018). These ideas have not only exalted humans

as superior but simultaneously portrayed nonhumans as logically inferior in a convenient, albeit not necessarily convincing, hierarchical narrative that allowed for exploitation for environment (Crist and Kopnina 2014).

Alongside this ideational displacement of the environment into "natural capital", "ecosystem services" or "natural resources" for material ends (Crist 2012), the material (physical) displacements have caused deforestation, water, soil and air pollution. Physical power over the nonhumans has buttressed the cultural conviction of human superiority; and that strengthening conviction has worked as justification and guideline for increasing domination over perceived inferior realms of being (Crist and Kopnina 2014). The interplay of cognitive belittlement and physical conquest defines the chief dialectic of anthropocentrism. The synthesis of its mutually reinforcing ideas and strategies of subjugation constitutes its solidification of human dominance into a normative worldview (Ibid).

Dichotomies in anthropology

As discussed in entry "Nature" (Palsson, this volume), "environment" did not play a central role in early social and cultural anthropology. As Palsson notes, "preoccupied with understanding the interconnections of social or cultural phenomena... anthropologists of both European and North American bent tended to assume that nature only played a minimal role in human affairs". In ecological anthropology, however, the notion of the "ecosystem" became more central, although often highly anthropocentric (Shoreman-Ouimet and Kopnina 2016). An anthropologist Conrad Kottak (1999) asserted that it is an anthropological moral duty to prioritize people's interests and 'not be dazzled by ecological data' (P. 33). In this view, biodiversity loss and extinction, and the intrinsic value of nonhuman life are left out of moral consideration (Soulé and Noss 1998). This anthropocentrism stems from the historical anthropological engagement with humanism that assumes that human welfare is of primary moral importance (see entry *Anthropocentrism and Post-humanism* in this Encyclopedia).

Anthropologists inspired by theories of animal rights and animal welfare have levelled criticism against the dichotomies for its presumption that only human beings are morally considerable and that human welfare and economy trump those of animals (Sodikoff 2011). Of particular interest is the theory that rejects the dichotomy between humans and animals based on indigenous cosmologies. *Post-structural* and *post-modern* scholars have deconstructed dichotomies, suggesting that a strong tendency towards binaries was a distinct feature of Western thought (Derrida 1982). Baird Callicott (1991: 348) has argued that the idea of wilderness "perpetuates the pre-Darwinian Western metaphysical dichotomy between 'man and nature'. Indigenous societies are often thought of as rejecting dichotomies (e.g. Snodgrass et al 2008), an idea present in both environmental philosophy and popular imagination, with Hollywood films, from Pocahontas to Avatar, celebrating the "indigenous unity with nature". As argued by anthropologist Veronica Strang (2016), in co-inhabiting the world reciprocally with the non-humans, these indigenous worldviews offer not 'romantic harmony' with nature, but an integrative model without reifying alienating dichotomies.

In anthropology, there is also a long tradition of the so-called constructivism that insists that "environment" is created by the social "actors", a product of language and human perception (Smith 1996). "Ecology" is mostly discussed in symbolic terms, with its physical aspect conspicuously absent. Nature is seen as "an artifact, understood and interacted with by people via culturally specific symbolic systems" (Kang 2003:335). From the constructivist perspective, "environment" is not only represented by language but also created by it. Also, the idea of "wilderness" was disputed arguing that it is supposedly romantic and naïve, or an invention of colonial elites (Cronon 1996; Vogel 1996).

Ultimately, as anthropologist David Kidner (2000:264) noted with concern, the environment becomes little more than an offshoot of social reality. This perception makes it impossible to judge one attitude or action toward nonhuman animals or nature as better or worse. Since human beings are part of nature, it is also assumed that there is no reason to restrict environmentally destructive behaviour (this is discussed in greater detail in Kopnina 2012 and 2017). Politically, as argued by Crist (2004:5), the "constructivist approach fails to take the scientific documentation of the biodiversity crisis seriously; it diverts attention toward discourses about the environmental predicament, rather than examining that predicament itself; and it indirectly cashes in on, and thus supports, human colonization of the Earth". Thus, implying that there is no "nature" outside of human perception of it serves to "excuse" any human action.

Double standards abound. While there is a wide discussion about the ethical aspects of eating animals (e.g. Diamond 1975; Friend 2009; Foer 2010), eating human flesh remains extremely controversial. For example, the entry on *Cannibalism* in this Encyclopedia contains an argument that cannibalism as a cultural practice was invented by colonial governments to denigrate the supposedly "primitive societies" (Pickering in this volume). This argument ignores robust historical and archaeological evidence for cannibalism, widespread and largely undisputed outside of the "grievance studies" (Lindsay et al 2018). As Fausto et al (2007:497) argue, if people are animals, how can one abhor cannibalism but consider consumption of other living beings as normative?

Relational values

In the past decade, the anthropological focus has shifted towards the unity of humans and what surrounds them, as discussed by environmental anthropologist Tim Ingold (2000, 2008). One of the persistent questions is whether values humans derive from the environment are *intrinsic, relational*, or *instrumental* in character. Philosophers have distinguished between instrumental and cultural (or aesthetic) environmental value. The "ecosystem services" can be seen as provisioning, regulating, supporting (instrumental, often assigned economic value) versus "cultural", "relational", "aesthetic", or "entangled". Influenced by philosopher Heidegger (1977), Ingold (2008:1799) speaks of entanglements whereas "organisms figure not as externally bounded entities but as bundles of interwoven lines of growth and movement, together constituting a meshwork in fluid space". The environment in this conception comprises "a zone of entanglement" allowing "the intermingling of substance and medium that is essential to growth and habitation" (Ibid).

Hunter-gatherers, supposedly, care for their environment in a relational matter, requiring a deep, personal and affectionate involvement (Milton 2002). The model for this kind of human-environment and human-animal relationship shows no fundamental difference between human-human and human-animal relations, but one social-natural world (Ingold 2000). Some anthropologists have argued that since human-made objects, including roads or parking lots, are products of natural activity – thus, the human co-optation of the elements of the biosphere is as unobjectionable as any other phase of evolution (Cronon 1996; Vogel 1996). As biological products of evolution, humans and the products of their labour are also natural, and the distinction between "natural" and "artificial" is blurred (e.g. Nonini 2013).

The terms "engagement" and "care" articulate different relational possibilities, and deconstruct not only the techno-scientific versus romantic dialectic but also the anthropocentrism-ecocentrism duality (Coeckelbergh 2017). In this context, all values including intrinsic value(s) are also relational, as long as the meaning of "someone" means neither "some *human* one" nor "some *one* entity".

Disputing dualism

The idea of entanglements and relationships supported by Callicott, Ingold and other researchers published in journal *People and Nature*, has been disputed. As environmental philosopher Holmes Rolston (1996:62) has argued that in order to deal with objective environmental problems "we must release some realms of value from our subject-minds and locate these instead out there in the world" (Rolston 1996:62). Following this, Rolston (1991, 1996), Crist (2004), and Kopnina (2016c, 2016d) have argued that there are some discontinuities between culture and nature. For example, products of industrial activity such as nuclear waste can hardly be seen as "natural".

From the deep ecology perspective, humans are indeed also seen as part of nature, and products of evolution; however, they are also one of many species on this planet and not morally privileged in relation to other species. The conception of the environment as inclusive of humans, but rejecting human superiority is central to the debates within deep ecology (Naess 1973), land ethics (Leopold 1949), and animal rights literature (Regan 1983). Partially inspired by these fields, the anthropological sub-disciplines of *ethnozoology* (Alves 2012), emphasizing the interrelationships between societies and the animals, as well as *ethnobiology* (Hunn 2007) and *ethnobotany* (Cotton and Wilkie 1996) have emerged.

Practical implications of deconstructing dichotomies

If the questions of interspecies equity and animal rights were taken seriously, the planet would need to be divided on the basis of species' natural resource requirements and not in accordance to what one single species proclaims to be its entitlement (e.g. Mathews 2016). By displacing entire habitats into human domains, with billions of nonhumans excluded from moral consideration (Soulé and Noss 1998; Shoreman-Ouimet and Kopnina 2015; Kopnina 2016a, 2016b). Reserving some areas exclusively for the use of non-human species is then consistent with the non-dualist stance of deep ecology.

Thus, the issue at stake is not so much whether humans are part of nature or not – of course, in evolutionary terms they are – but whether their influence endangers and discriminates against other species (Kopnina 2016a, 2016b, 2016c, 2016d). Ideally, the rejection of human-environment dichotomy requires recognition of interspecies egalitarianism, equality and equity (Baxter 2005).

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Related Articles (See Also)

Article ID
wbiea1733, Nature, Concepts of
wbiea1978, Nature/Culture Distinction
wbiea2165, Ethnozoology
wbiea1706, Ethnobiology
wbiea2209, Ethnobotany