

# Beyond multispecies ethnography: Engaging with violence and animal rights in anthropology

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## Abstract

Anthropologists have mediated between discriminated communities and outsiders, helping to influence public opinion through advocacy work. But can anthropological advocacy be applied to the case of violence against nonhumans? Ethical inquiries in anthropology also engage with the manifold ways through which human and nonhuman lives are entangled and emplaced within wider ecological relationships, converging in the so-called multispecies ethnography, but failing to account for exploitation. Reflecting on this omission, this article discusses the applicability of engaged anthropology to the range of issues from the use of nonhumans in medical experimentation and food production industry, to habitat destruction, and in broader contexts involving violence against nonhumans. Concluding that the existing forms of anthropological engagement are inadequate in dealing with the massive scale of nonhuman abuse, this article will suggest directions for a radical anthropology that engages with deep ecology, animal rights, animal welfare, and ecological justice.

## Keywords

Animal rights, animal welfare, conservation, deep ecology, ecological justice, multispecies ethnography, radical anthropology

## Introduction

Let me start this post with a vignette.

On 3 October 2015, at the plenary session of the German Association of Anthropology in Marburg, at which I was the environmental anthropology's panel discussant, Nancy Scheper-Hughes presented a paper on organ extraction.

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Scheper-Hughes, who is part of a task force of social scientists and transplant surgeons who have launched a global investigation of the organ trade, reported her ongoing research on the global traffic in humans (living and dead) for their organs to serve for international transplant patients. This presentation was given in the context of transitional violence, justice, and reconciliation in the slums, shantytowns, and squatter camps of Brazil and South Africa, scanning morgues, prisons, and hospitals, investigating the finding and selling of human body parts for transplantation. The emergences of robust bio-markets and global medical citizenship have encouraged the spread of illicit global networks of trafficking in bodies, dead and alive, whole and in parts.

The presentation was replete with images of organ extraction victims, mutilated bodies, and close-ups of stitched skin surfaces, swollen faces with brains and eyes pulled out, illustrating the horrendous legacy of an industry in organs that preys on impoverished communities. Live donors, photographed by Scheper-Hughes, who have voluntarily offered one of their kidneys, have apparently indicated that they wanted to sell more of whatever they had in two's – their eyes or testicles. Driven to desperation, Scheper-Hughes explained that they could not think beyond dire need. Dead bodies of Brazilian street children who were killed for their organs, all covered in postmortem bruises and abrasions, were displaced on a huge conference screen, bigger and bolder than the newspaper images, which are often censored for shocking or offensive content. Scheper-Hughes has expressed hope that through anthropological evidence she can help to protect the world's poor from human rights abuses. She concluded:

I argue that heretical methods are needed. Radical anthropologists can make public the convoluted and paradoxical forces that have created a world cut in two between lives and bodies can be enhanced at the expense of others whose bodies don't matter except as a source of medical material.

The grim images, as well as Scheper-Hughes' words, conveyed the speaker's repulsion, empathetic pain, and condemnation that blurred the line between political journalism, activism, and what can be termed "applied" or "engaged" anthropology.

The presentation stirred the audience to engage in a passionate discussion shortly after the plenary session.

"Horrible!" a German female conference participant has exclaimed. "They [the organ extractors] are like animals!"

"What I don't understand," the other German female participant chimed in, "is why there would be such a huge trade in human organs anyway? I heard that you can perfectly well use animal organs – pig's hearts, for example."

"Yes, but that is more difficult," explained an Austrian male participant. "The human body rejects them sometimes... I think the best organs for human use are those of chimpanzees."

One of the students who helped to organize this conference then wondered, "But is it ethical?"

“What would you rather do, keep killing humans?”, exclaimed the German speaker indignantly. “What next, doing medical experiments on humans?”

Anthropologists like Scheper-Hughes have historically mediated between communities and outsiders, helping to influence public opinion in favor of vulnerable communities through advocacy work (Lewis, 2005), particularly against violence (e.g., Hastrup et al., 1990; Linstroth, 2015). Anthropologists have paved the way for the robust critique of colonialism and racism (e.g., Cook, 2003; Maklouco-Maclay, 1876 in Parmentier and Kopnina-Geyer, 1996; Pels, 1997), and for acceptance of gender equality (e.g., Adams and Gruen, 2014; Gaard, 1993; Plumwood, 1993). Yet, while anthropological advocacy of disadvantaged groups is well-established, one of the difficulties is that the subjects the researcher speaks for could – and should – speak for themselves (Cohen, 1985). But can anthropological advocacy be applied to the case of nonhumans, who can never speak for themselves? Can “radical anthropology” condemn practices in which animals routinely “donate” their lives and organs? Can “heretical methods” be applied to other instances of nonhuman death, suffering, and subordination?

The issue discussed here is the applicability of anthropology to the subject of use and violence against nonhumans not on the case to case basis, as is typical in anthropology, but in a broader context of industrial farming, medial testing, and habitat destruction. This article will inquire how “traditional” anthropology of the relationship between humans and the rest of the natural world deals with the issues ranging from the use of animals within the medical and food production industries, and in cases when habitat destruction causes biodiversity loss. Building on the existing forms of anthropological engagement, this article will suggest further directions for a radical anthropology that engages with deep ecology, animal rights (ARs), animal welfare (AW), and ecological justice to address nonhuman victimhood.

The central concepts and terms used in this article to underscore the issue of violence against nonhumans are AR, AW, and ecological justice. Nonhumans will be referred to here as animals and other living organisms, including plants and fungi, as well as natural habitats that sustain them (e.g., Garner, 2015).

The need for discussing AR has originated from the realization of large-scale abuse of animals (Regan, 1986; Singer, 1975). AR theorists and activists have a range of ideas about “animal rights.” **These various perspectives can be conceived as a form of multiculturalism which is rooted in social justice, human rights and citizenship, but also in ecological justice, aiming to contest status hierarchies that have privileged hegemonic groups – both human and nonhuman, while stigmatizing minorities (Kymlicka and Donaldson, 2013).** This progressive conception, Kymlicka and Donaldson (2013) reflect, operates to illuminate unjust political and cultural hierarchies, de-center hegemonic norms, and hold the exercise of power morally accountable. **Viewed this way, multiculturalism and ARs flow naturally from the same deeper commitments to justice and moral accountability.** Special strategies for defending progressive causes, whether ARs or human rights, against the danger of instrumentalization and cultural imperialism, have

been developed (Kymlicka and Donaldson, 2013). AR strategies concern a commitment to a number of goals, some of them stemming from the so-called abolitionist perspective which is critical of animal experimentation and calls for the dissolution of commercial animal agriculture, and elimination of commercial and sport hunting (e.g., Kopnina and Gjerris, 2015; Regan, 1986; Singer, 1975). As outlined by the World Animal Protection organization, ARs denote the philosophical belief that animals should have the right to live their lives free of human intervention.

AW, at the very basic, refers to the disturbance of physiological systems to the point that survival or reproduction is impaired). More broadly, concerns with AW denote the desire to prevent unnecessary suffering, while not categorically opposed to the use of animals, wanting to ensure a good quality of life and humane death (WSPA).<sup>1</sup> Though many AW proponents also believe animals deserve rights, the question is about which animals deserve which rights is often disputed, with domestic animals or pets sometimes given preference over wild animals or species (Callicott, 1999).

Animal liberationists and deep ecology proponents care about different units – entire species, or habitats, or individual animals, and sometimes come into conflict (e.g., Garner, 2015; Nelson et al., 2016). Leopold's and Singer's positions have been criticized for implying that single individuals can be sacrificed for the benefit of the whole (Callicott, 1999; Hay, 2002). Conservation often aims to protect species whereas AW protects individual animals. While AR and AW perspectives differ in terms of units of concern (individual organisms vs. entire species), both rights and welfare concerns overlap in the argument that the animals should be treated justly because of their sentience and can experience pain and suffering (Singer, 1975). "Compassionate conservation" converge in recognition of individual animals as well as entire species (Nelson et al., 2016; Waldau, 2013). One of the overarching concerns for both AR and AW proponents is the unfair treatment of nonhumans, associated with concerns for ecological justice.<sup>2</sup> Ecological justice refers to interspecies equality<sup>3</sup> and frames a number of concerns. These range from the situation of animals used for medical and food production industries, as well as that of wild animals (Baxter, 2005; Eckersley, 1995).

Framing anthropological work on nonhumans in terms of these concepts, this article is structured in the following way. The section below briefly explores central concepts in environmental ethics, followed by the discussion of anthropological engagement with nonhumans on the level of individual animals, species, and habitats. Consequent sections provide an excursion into an anthropocentric bias in anthropology and outline a discussion of interdisciplinary engagements that instruct the ethical ways forward in addressing nonhuman suffering.

## **Animals, organisms, species, and habitats: Ethical approaches**

Some of the decidedly political fields emerging from AR and AW movements are critical animal studies (e.g., Calarco, 2014; Taylor and Twine, 2014), interspecies

solidarity (e.g., Coulter, 2015), and animal law (Peters, 2016). These streams are rooted in ecocentric or biocentric perspective, which refers to the perception of wholeness, founded on a distinct conception of who or what has intrinsic value – individual organisms, species, habitats, or even the entire biosphere (Dunlap and Van Liere, 1978). According to this perspective, actions should be judged on the basis of their contribution to the stability of the ecological community. Leopold's (1949) *Land Ethic* urges the reader to “think like a mountain.” This calls for envisioning ecological processes as if one were the actual seat of the relationship between wolves, deer grazing, vegetation, and erosion on the mountain's slopes (Descola, 2014). Following Leopold, Naess (1973) has assigned the intrinsic value and moral rights to individual living organisms, including humans, and to collectives such as species and ecosystems.

Ecosystems are seen as valuable due to their intrinsic worth, but also because of their instrumental value as habitats for sentient beings (Eckersley, 1995; Gauger et al., 2012). The idea of “earth rights” is instructive, as explicated by a Higgins (2010) who has argued that ecocide, or direct or indirect killing of nonhumans, needs to be considered as a legal crime. Ecocide refers to “the extensive destruction, damage to or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished” (Higgins, 2010). Crist (2012: 147) unambiguously relates ecocide to genocide: “the mass violence against and extermination of nonhuman nations, negating not only their own existence but also their roles in Life's interconnected nexus and their future evolutionary unfolding.”

Despite some differences, the perspectives of ARs and ecological justice share a unifying element of nonanthropocentric ethics, and concern for individual animals, species, or entire habitats (Callicott, 1999; Kopnina and Gjerris, 2015; Waldau, 2013). Animal liberationists and environmental ethicists share concerns about the entire ecosystems (Kopnina and Cherniak, 2016), often referred to as deep ecology. Shallow and deep ecology (Naess, 1973) distinguishes between different motivations for environmental protection. Shallow ecologists protest overexploitation of natural resources when these affect human welfare, while deep ecologists recognize the intrinsic value and right to life and flourishing of nonhumans independent of human interests.

Recently, a small number of anthropologists, along with the champions of AR and environmental protection, have leveled criticism against the humanist anthropocentric worldview for its presumption that only human beings are morally considerable and that human rights trump those of other species (Sodikoff, 2011). Within the larger discipline of anthropology and related fields, environmental or ecological anthropology (e.g., Kopnina and Shoreman-Ouimet, 2011; Shoreman-Ouimet and Kopnina, 2016) “more-than-human” geography (e.g., Whatmore, 2006), posthumanist anthropology (e.g., Fuentes, 2012; Rajagopalan, 2016; Salazar Parreñas, 2015), and multispecies ethnography (e.g., Kirksey and Helmreich, 2010; Ogden et al., 2013) have all addressed the complex relationship between humans and nonhumans.

Ingold (2012) defined ecological anthropology as a discipline that contextualizes how “human beings and other organisms are bound in webs of life” (p. 428). “More-than-human” modes of enquiry are concerned with the material and ecological fabric and the politics of knowledge through which this fabric is contested and re-made, particularly in situations in which different ecological epistemologies are brought into conflict (Whatmore, 2006). Posthumanist approach refers to the project of “repopulating the social sciences with nonhuman beings, and thus of shifting the focus away from the internal analysis of social conventions and institutions and toward the interactions of humans with (and between) animals, plants, physical processes, artifacts, images, and other forms of beings” (Descola, 2014: 268). Violence against nonhumans has been discussed by anthropologists Desmond (2013) in the case of roadkill, Kohn (2013) in the case of habitats (e.g., forests), Strang (2013, 2016) in the case of social and ecological justice, and by Sodikoff (2011), Rose and Van Dooren (2011), and Van Dooren (2014) in the case of extinction. Some authors started to pay more attention to nonhuman suffering in medical research (e.g., Arluke, 1988; Nading, 2013; Rock, 2016). Many anthropologists have contributed to collective encyclopedias of human–animal relationships (see, e.g., volumes edited by Bekoff, 2013; Rose and Van Dooren, 2011; and Urbanik and Johnston, 2016).

Reflecting on this ethical progress, Ogden et al. (2013) have optimistically observed that the once radical positions advocated by a diverse AW movement have now become the mainstream in anthropology and beyond. Kirksey and Helmreich (2010) explore how animals are previously appearing on the margins of anthropology— as part of the landscape, as food for humans, as symbols – have been pressed into the foreground. The new kinds of relations emerging from non-hierarchical alliances, symbiotic attachments, and interconnectivity of all species characterized the emergence of multispecies ethnography (Kirksey and Helmreich, 2010: 546). **Multispecies ethnography is credited to Haraway (2008) for taking “species” as a grounding concept for articulating biological difference and similarity, with interspecies interactions seen in terms of interdependencies.**

## **Hard realities**

However, empirically, the mere scale of use, abuse, and dispossession of nonhumans has only intensified as human population and consumption increased. It has been estimated that every year about 100 million vertebrates are globally experimented on (Taylor et al., 2008). In the United States, 1 million animals (excluding rats, mice, birds, reptiles, amphibians, and animals used in agricultural experiments), and an estimated 100 million mice and rats are used in medical experiments (US Department of Agriculture, Animal and Plant Health Inspection Service, 2015; PETA). According to People for Ethical Treatment of Animals (PETA) “each year, more than 100 million animals – including mice, rats, frogs, dogs, cats, rabbits, hamsters, guinea pigs, monkeys, fish, and birds – are killed in laboratories, medical training, curiosity-driven experimentation, and chemical, drug, food, and cosmetics



testing. Before their deaths, some are forced to inhale toxic fumes, others are immobilized in restraint devices for hours, some have holes drilled into their skulls, and others have their skin burned off or their spinal cords crushed.”

For every medical test animal, tens time more are killed on the American roads (Desmond, 2013; Scientific American, 2013). In comparison to those used in research, over 1800 times the number of pigs are consumed for food, with 340 chickens consumed for each animal used for medical testing (National Agricultural Statistics Service, 2016). More than 9,000,000,000 farm animals in the United States are used annually to produce meat, dairy, and eggs (Humane Society). Each year in the United States, approximately 2.7 million animals are *euthanized*, including 1.2 million dogs and 1.4 million cats (ASPCA). While American and European statistics are approximations of actual numbers, statistics on animal consumption, experimentation, euthanasia, and roadkill in the rest of the world are either not recorded or not accurate (Humane Society). Also for biodiversity extinction rates, statistics widely vary, but the WWF estimates that the loss of species is between 1000 and 10,000 times higher than the natural extinction rate (WWF).

This empirical reality overrides the idea of “moral progress” in relation to nonhumans. As Marino and Mountain (2015) have emphasized, even though today there are more animal advocacy and protection organizations than ever, the situation for nonhuman animals continues to deteriorate, as illustrated by intensification of factory farming and mass extinction of wildlife species. Industrial farms or medical establishment where the most violence is institutionalized and normalized are rarely questioned by the wider society and academics (Crist, 2012). Mullin (1999) emphasizes that despite theoretical and ethical progress in discussing these issues, anthropocentric focus in anthropology is unlikely to disappear. While some anthropologists find PETA is a shocking, incendiary organization,<sup>4</sup> from the AR point of view, it is no more shocking than a human rights organization documenting the violence.

## **Anthropology and nonhumans**

While anthropological studies frequently incorporate discussions of ethics into their discipline (e.g., Caplan, 2003; Fassin, 2012), there has not been a moral commitment comparable to the anthropologists’ unambiguous stance against colonialism, apartheid, sexism, racism, and other instances of social injustices. While there is a robust body of anthropological literature advocating for the rights of vulnerable communities, colonized nations, and oppressed minorities, human–animal oppression remains depoliticized. Only occasionally has the intersection between anthropology and nonanthropocentric ethics has been evoked as a distinct line of inquiry to address the relationship between humans and animals (e.g., Healy, 2007; King, 2013; Kopnina, 2012; Noske, 1992). Within this line of inquiry, the intersection of medical and environmental anthropology, disease ecology, pertinent to the vignette above has been developed (e.g., Arluke, 1988; Lieban,

1990; Marshall, 1992; Nading, 2013; Rock, 2016). This intersection concerns humans' wellbeing which is seen as intimately dependent on the manifold ways through which human and nonhuman lives are entangled and emplaced within wider ecological relationships (e.g., Carrithers et al., 2011; Nading, 2013; Neves-Graça, 2005). Nading (2013) argues that rather than highlighting fluidity among individual bodies and variation within species, which are essential to biological mutations and evolutionary theory, the disease ecologists have tended to regard nonhuman species as homogenous things.

The "species turn" (Haraway, 2008) has been reflected in an increasing number of publications, conference presentations and blogs involving multispecies ethnographies. For example, the Engagement blog of the American Anthropological Association has published a series of essays on the subject of multispecies ethnographies. In the blog *Reflections upon Seeing a Tiger in the Wild for the First Time* Margulies (2016) reflects: "I wish to simultaneously take seriously the material power of signs of tigers and other animals across this contested landscape, and how they are capable of producing new spatial relations between animals and humans mediated by state relations with animals and animal symbols..."

Here not much of a tiger is seen through the lens of academic reflexivity and symbolism, similar to the "classical" conceptualization by Lévi-Strauss (1968). The "agency" of a tiger as a living and feeling being is inevitably overshadowed by the researcher's (sympathetic) gaze. Realizing this, Margulies reflects:

As my narrative suggests, I was at first unable to see the living tiger itself but only the tiger as symbol of itself within a Tiger Reserve, a spatial designation replete with symbolic and powerfully political meanings. I see some potential for such auto-ethnographic encounter narratives to develop as a creative method, or at least informative practice, for interrogating inter-species politics and our position as researchers attempting to study them.

Another example of the auto-ethnographic encounter narrative from the Engagement blog is Salazar Parreñas' (2015) description of a captured orangutan:

The orangutan herself was subjected to constraints of space rooted in colonial and postcolonial histories of making territories. And those constraints were, for her, gendered insofar that her sex affected her relationship to space. For instance, whenever managers thought she should get pregnant, she would be forced into captivity with a male orangutan for the purpose of procreation. (Salazar Parreñas, 2015)

In this quote, colonialism and gender preoccupation overshadow the simple fact that the orangutan was caged and forced to mate.

Typically, such multispecies investigations fall short of recognizing ARs, only touching upon AW. As **Descola (2014: 269) noted the dealings of humans with nonhumans through this symbolism impede the course of purging anthropology from its anthropocentrism, "because nonhumans, devoid of linguistic abilities and**



capacities for symbolism, will always be the passive objects of human cognition and inventiveness, mere bundles of qualities that humans detect and organize in symbolic patterns.” Indeed, “if nonhumans must become agents in their own right, then they have to be able to escape this symbol-induced passivity” (Descola, 2014: 269).

This symbol-induced passivity stems back to the nature-culture dualism or human–environment dichotomy (Descola, 2013; Shoreman-Ouimet and Kopnina, 2015; Strang, 2016; Sullivan, 2016). Part of this dualistic vision presupposes that nature or wilderness as socially constructed (e.g., Fletcher, 2015), denying nonhuman elements their agency and rights. Even when nature’s physical presence is recognized, it is often merely as “background to the human drama which is played out in a diversity of ways in different societies” (Kidner, 2016: 119). Ingold has pointed out that even when the people anthropologists study claim that their lives and practices follow from the features of their natural environment, anthropologists tend to invert this relationship so that the natural world in effect becomes an offshoot of the social (Ingold, 2000: 54). In fact, social construction of nature obscures the grave damage done to nonhumans turning the debate to constructivism (Kidner, 2016). Deconstructing dichotomy can place humans and nonhumans in a zone of profound identity what Calarco (2014) called indistinction. The term indistinction is illustrated within the category of meat, understood as a zone of shared, exposed embodiment among human and animals. Indistinction can be also related to the concept of entanglement (Van Dooren, 2014). Nading (2014: 11) defines entanglement as “the unfolding, often incidental attachments and affinities, antagonisms and animosities that bring people, non-human animals and things into each other’s worlds.” Accordingly, entanglement “is at once a material, temporal and spatial condition” (Nading, 2014: 11).

Sensitive to realization of the nonhuman agency, Palmer et al. (2015) article, titled “Accessing Orangutans’ Perspectives” is instructed by empathy. The authors followed the interdisciplinary methods of ethnoprimateology, using a combination of ethnography and ethology to study orangutans’ relationships with one another and caregivers’ interpretations of orangutans’ bonds at Auckland Zoo. The authors argue that integrating ethnography with both qualitative and quantitative descriptions of animal behavior can be useful for representing both species’ daily lives and for comparing interpretations obtained from different research methods. Palmer et al. suggest that using empathy in research with animals goes some way toward acknowledging animals’ agency and collapsing artificial dichotomy between us and them.

But erasing the human–environment dichotomy can raise uncomfortable questions, as demonstrated by an example of a gorilla shooting in the Cincinnati zoo in May 2016, when the toddler fell into his cage and was attacked by the ape (Taylor, 2016). Some environmental philosophers contend that an individual member of an endangered species is more valuable than an individual human being and that the value of an individual decreases proportionately with the size of its population (Taylor, 2016). Indeed, if the dual category of human and nonhuman is diffused, shooting a gorilla and saving a toddler becomes problematic. And so does keeping

apes in zoo in the first place. Should all animals be treated equally? When the choice between a human and a member of the endangered species is made, what protocol needs to be followed? Should anthropologists support the fact that pigs can now be genetically modified to make them better donors for human transplants (The Economist, 2015)? Obviously, an answer to this question is subject to value judgments – of who is accorded rights, and by which human advocates – since nonhumans cannot argue their own case. **Unless multispecies ethnography is willing to engage with such questions, it is likely to remain apolitical, without realizing the exploitive nature of human–nonhuman relationship.**

Another feature that is characteristic of the multispecies ethnographies is the perception of the nonhuman wellbeing as a prerequisite of human health. For example, Muenster and Schroer (2016) discuss ethical dimensions of what it means to “live well” with other living beings, whose often hidden and invisible “work” is seen as crucial for the creation of human wellbeing. In this sense, animals, plants, fungi, and microbes are involved in creating and maintaining human health, which is constituted through and depended on the active participation of humans and nonhumans in shared social worlds (Muenster and Schroer, 2016). In a similar way, Rock (2016) argues that environmental health justice in anthropology underscores the importance of multi-species entanglements for preventing disease and promoting human well-being. Biomedical laboratories are presented as networked places where select humans interact with select nonhuman animals within spaces of multispecies entanglements (Davies, 2012; Rock, 2016). Yet, these authors remain often oblivious to the nonconsensual, forced, and violent nature of such “networked places” as medical laboratories. No questions are asked about nonhuman wellbeing where elimination of “test subjects” after organ extraction, described in the vignette above, are commonplace.

## **Anthropology, ecosystems, and conservation**

While Leopold (1949) encourages the transposition of a relational experience to habitats, so does Kohn (2013), in his well-received volume *How Forests Think*, encourage the readers to imagine how entire habitats may “think” or “feel” or “dream.” Kohn reflects that “all beings, and not just humans, engage with the world and with each other as selves, that is, as beings that have a point of view” (Kohn, 2013: 132). Kohn challenges a hierarchical value-ordering in western thought regarding the relationships between humans and nonhumans, offering alternative vision from the community that he studies, the Runa, as an example of ontology that perceive nonhumans as imbued with agency and intentionality. Thus, we need “to recognize the fact that seeing, representing, and perhaps knowing, even thinking, are not exclusively human affairs” (Kohn, 2013: 1).

While Kohn’s perspective is sympathetic to nonhumans, he does not take the next step and relate his (and particularly Runa’s) engagement with forests to the more uncomfortable questions related to instances when forest is removed, and when the nonhuman forest inhabitants are threatened. A distinction remains

between those that “do things” such as think, and those that are not: “life thinks; stones don’t” (Kohn, 2013: 100). This perspective can, as Descola (2014) observes, leave a great many nonhumans unaccounted for, since “the stones upon which I stumble ‘do things’ in the world, so does an image of the Virgin, radioactivity, a sundial, and many other ‘lifeless’ and ‘thoughtless’ objects” (p. 271). In much of particularistic and place-based anthropology, the forest is not seen for the trees – or for the people who relate to the trees.

Even less cognizant of how forests and their nonhuman inhabitants “think” and “feel” is the robust anthropological critique of biodiversity conservation within the ecosystems. There is a tradition of anthropologists defending “cultural survival” of indigenous practices including slash and burn agriculture, hunting or whaling against the efforts of conservationists (e.g., Brockington, 2002; Einarsson, 1993; Fletcher, 2015; Kalland, 2009; McElroy, 2013). A number of anthropologists have critiqued neoliberalism within the global conservation movement attributing environmental defense to elitist sentiments (e.g., Brockington et al., 2008; Büscher et al., 2012). In their ethnographies of whaling, Einarsson (1993), Kalland (2009), and McElroy (2013) portray anti-whaling environmental organizations as imperialistic and intolerant, trying to deprive the whalers of their natural resources. Benjaminsen et al. (2006) argue that it is ethically problematic to privilege biodiversity protection at the expense of poverty alleviation.

In his much-quoted article in the *American Anthropologist*, Kottak (1999: 33) proclaimed:

Analysis of social forms should not be subordinated to approaches that emphasize the environment at the expense of society and culture, and ecology over anthropology. People must come first. Cultural anthropologists need to remember the primacy of society and culture in their analysis and not be dazzled by ecological data... Ecological anthropologists must put anthropology ahead of ecology. Anthropology’s contribution is to place people ahead of plants, animals, and soil.

Following this lead, some anthropologists criticize prohibition of hunting as neo-colonial (e.g., Einarsson, 1993; Kalland, 2009; McElroy, 2013), arguing against the encroachment of exploitive wealthy elites that profit from conservation (Brockington et al., 2008; Büscher et al., 2012; Fletcher, 2015). In fact, following Kottak (1999) “ecological data” is willfully brushed aside. The preoccupation with exclusively social “environmental justice” is evident in publications of Just Conservation and Survival International and other initiatives that promote themselves as open forums for achieving conservation with justice. These forums are used to “air grievances, concerns or experiences of conservation related human rights abuses” that entirely ignore ecological justice.

The vulnerable communities are clearly identified as primary recipients of anthropological support. Indeed, as the global elites live in perpetually unsustainable affluence, it is hard to argue that anyone should be prevented from enjoying the immediate material benefits that these practices allow (Strang, 2013). Yet, while

critique of elites that derive profit from conservation is a valid point, the question that is not addressed is the efficacy of conservation in protecting nonhumans. While the destructive reach of the corporate land grabbers and industrial developers is globally profound, the local people, whose populations have been expanding, cause deforestation by clearing forest for subsistence agriculture and fuel, or hunting for “bushmeat,” leading to the “empty forest syndrome” (Peterson, 2013). The critics of conservation rarely address the fact that restoration of depleted habitats can help break the vicious spiral in which the poor are forced to overuse natural resources, which in turn further impoverishes them (Elliott, 2013), not to mention offer protection to the critically endangered species. Thus, a thorny question remains as to whether anyone, rich or poor, has the right to priorities their own interests to the extent that those of the nonhuman are deemed expendable (Strang, 2013). To quote Crist (2015: 93):

The literature challenging traditional conservation strategies as locking people out, and as locking away sources of human livelihood, rarely tackles either the broader distribution of poverty or its root social causes; rather, strictly protected areas are scapegoated, and wild nature, once again, is targeted to take the fall for the purported betterment of people, while domination and exploitation of nature remain unchallenged. The prevailing mindset of humanity’s entitlement to avail itself of the natural world without limitation is easily, if tacitly, invoked by arguments that demand that wilderness . . . offer up its “natural resources” – in the name of justice.

More subtly, the anthropological rendering of wildlife killing is carefully crafted in terms of aesthetics or cultural practices. Anthropologists discuss poetics, language and interpretation, embracing the narratives of “mutual ecologies” (Fuentes, 2012). In relation to whaling Neves-Graça (2005) speaks of “whaler aesthetics that entail a holistic epistemology.” These “ecological aesthetics” and “poetics of whaling” tend to obscure not only the point that ARs activists are making but the very the act of violence and actual killing of whales by “social actors.” This is a very different ecological anthropology than the “interconnectiveness” emphasized by Ingold (2012).

### **Anthropology and victimhood: Bottlenecks and paradoxes**

While purportedly defending vulnerable, poor communities, excluding nonhumans from this concern testifies to the double standard morality. While colonial elites have prohibited the practice of tribal warfare, torture, and cannibalism (e.g., Goldman, 1999), few anthropologists would decry the loss of these “traditional practices.” Simultaneously, ARs activists are seen as threatening “cultural survival.” Critics of conservation tend to conflate environmentalism with colonialism, while implicitly supporting colonial prohibition of headhunting as part of traditional ritual, or infanticide as part of traditional birth control. The very idea of “traditional practice” is thus selectively framed.

It is also ironic that the defenders of “indigenous rights” often adopt the “non-traditional” commercial terminology in referring to natural resources and ecosystem services (Benjaminsen et al., 2006). As Pountney (2012: 215) has pointed out:

Arne Kalland’s critique of the discrete categorisation of people into those who whale culturally (Aboriginal Subsistence Whaling) and those who whale commercially without cultural values indicates that the two cannot be meaningfully separated. “Indigenous people” are rarely isolated from global market forces and for coastal whalers whaling is more than a mode of subsistence. However, the author undermined his argument in two ways. First, by polarising the debate and vilifying the opposition (an accuse he himself moves to the anti-whaling environmentalists). Second, by using selective pieces of information, emotive language and at times crude generalisations, it becomes increasingly difficult for the reader to appreciate how the author differs from the people he is decrying.... The book reads more like a smear campaign than an exploration of social engagement with whaling.

This sets a dangerous precedent in reifying “cultural survival” and economic livelihood at the cost of nonhuman lives. Today, there is a growing proportional difference between the number of people (over 7 billion) and a number of nonhumans, especially apex predators, such as tigers and lions, left in the wild. While the apex predators are normally checked by environmental constraints, this is no longer the case for our own species. It seems that “the bigger the population, the faster it grows; the more technology we have, the faster the rate of new invention; and the more we believe in our ‘power’ over an enemy environment, the more ‘power’ we seem to have and the more spiteful the environment seems to be” (Bateson, 1972: 494). As observed by Crist (2012: 145): “as civilized Man’s power over the natural world has grown, so by the same token has his blindness to the wonder of the biosphere’s existence as well as to the grievous violence he has unleashed within it.” Simultaneously, “with the animals in our laps and our mechanized slaughterhouses, we are less sure who they are and therefore who we are” (Shepard, 1993: 289).

Discussing the issue of farm animals might be even more uncomfortable than harm wrought against animals in the wild since it is intertwined with the questions of social justice and growing global demands for affordable food for an increasing number of people. This demand drives the increased use of confined animal feeding operations (CAFOs), in conditions that can be described as animal torture (Crist, 2012) in order to increase the economic efficiency of meat production (Lobao and Stofferahn, 2008). This efficiency is intertwined with other ethical questions, such as availability of affordable food for all people, including those who cannot afford the meat that is produced in more animal-friendly conditions (Haraway, 2008).

As Haraway (2008: 41–42) has reflected:

In principle if not always in personal and collective action, it is easy to know that factory farming and its sciences and politics must be undone. But what then? How can

food security for everybody (not just for the rich, who can forget how important cheap and abundant food is) and multispecies' co-flourishing be linked in practice?

Thus, the trade-offs, potential conflicts, as well as the need to compromise is once again centered on vulnerable human communities and not about other living beings. The unproblematic category of "meat" clearly applies to nonhumans only, and the choice is often framed between people, not between people and nonhumans (Calarco, 2014).

Plumwood (2000) reflects on after her experience of almost being swallowed by a crocodile, and the "shocking reduction" suffered from realizing that she can be seen as a piece of meat, conveys this sense of true unity with nonhumans that is not common in anthropological literature. Routney's (1982) paper "In Defense of Cannibalism" which has caused an academic outcry of indignation at the time of its publication demonstrates the great gap between moral values assigned to the lives and bodies of humans and animals.

Another example of the double standard is the case of medical experimentation. Rightly the horrors of the Nazi-era medical testing on human prisoners have caused the global abhorrence. Yet, very few anthropologists dispute the use of medical testing on animals. Haraway reflects on her exchange with her friend and colleague Sharon Ghamari-Tabrizi who has asked her:

So if you were going to abandon humanism, in favor of the post-humanism, ahumanism, non-humanism of the process philosophers, of the phenomenologists, of Derrida and Whitehead, I still want to know how specifically laboratory experimental practices get done and get justified . . . . I want to know what you would say when someone buttonholes you and says: I challenge you to defend the slaughter of lab animals in biomedical experiments. (Ghamari-Tabrizi in Haraway, 2008: 86–87)

Haraway (2008: 86–87) responded:

Yes, I will defend animal killing for reasons and in detailed material-semiotic conditions that I judge tolerable because of a greater good calculation. And no, that is never enough. I refuse the choice of "inviolable animal rights" versus "human good is more important." Both of those proceed as if calculation solved the dilemma, and all I or we have to do is choose. I have never regarded that as enough in abortion politics either. Because we did not learn how to shape the public discourse well enough, in legal and popular battles feminists have had little choice but to use the language of rationalist choice as if that settled *our* prolife politics, but it does not and we know it . . . . We feminists who protect access to abortion, we who kill that way, need to learn to revoice life and death in our terms and not accept the rationalist dichotomy that rules most ethical dispute.

Perhaps guilty of the "rationalist dichotomy" thinking, I fail to see how the "material-semiotic conditions" apply to the feminist argument about "killing" in



the case for (or against) abortion. A human embryo is not “killed” for the “greater good,” if the “greater good” (as in the case of animal testing) implies human welfare. Abortion is normally done with the consent of a mother, which cannot be said of nonhuman mothers who are exposed to human-related diseases, subjected to experimental treatments and then exterminated, pregnant or not. Even our beloved pets, who generally tend to receive more recognition and better treatment than do animals used for food production (Haraway, 2008), have their reproductive choices determined by their owners (e.g., sterilization and castration of pets is common practice). More generally, ecofeminism has explicitly linked subordination of nature to gender oppression (e.g., Adams and Gruen, 2014; Gaard, 1993; Plumwood, 1993), without realizing that for nonhumans this oppression is a question of life and death.

Haraway (2008: 88) continues: “Far from reducing everything to a soup of post- (or pre-) modern complexity in which anything ends up permitted, companion-species approaches *must* actually engage in cosmopolitics, articulating bodies to some bodies and not others, nourishing some worlds and not others, and bearing the mortal consequences.” In the same paragraph she adds: “All of this is what I am calling ‘sharing suffering’. It is not a game but more like what Charis Thompson calls ontological choreography” (Haraway, 2008: 88).

I wonder how nonhumans are to engage in cosmopolitics if they cannot speak our language, and would the inevitable choice of “nourishing some worlds and not others” fall upon those who can talk? By default, will not the “bearing the mortal consequences” be done by nonhumans? This muddled justification for not making a choice actually allows those in power to make it anyway.

The lack of moral commitment is exemplary of how multispecies anthropology deals – or rather refuses to deal with – nonhuman suffering. While being sympathetic to nonhumans, Haraway does not take a stance the way that she does against oppression of women in much of her work. This double standard allows dismissal of anything from the production of meat (which, according to humanist logic, has to be cheaply produced) to conservation (which has to, according to the same logic, be primarily fair to vulnerable human communities). When arguing that more attention ought to be paid to life forms, even Ingold does not pose questions about suffering (Rock, 2016).

## **An excursion into anthropocentric bias in our discipline**

Since this article critiques the current dominant conception of the human relationship with the nonhuman world, anthropocentrism needs to be explained in more detail. Anthropocentrism is often associated with “humanism,” a worldview which privileges the aim of improvement of human welfare. Humanism has long been a tenet of socio-cultural anthropology and has underwritten efforts to expose social injustices and improve the welfare of all human beings (Sodikoff, 2011). Humanism has also become part of the Dominant Social Paradigm (DSP) in Western society, positing humans as superior to nature (Dunlap and Van Liere, 1978). Within DSP,

the uniqueness of human beings is manifested in their capacity to effectively control natural resources and use language and technology. The DSP is distinguished by anticipations of continuous abundance and prosperity, achieved through science, technology, and economic growth (Dunlap and Van Liere, 1978). DSP is similar to Horkheimer and Adorno's (2002) notion of "rational sovereignty" of the post-Enlightenment period when humankind has achieved the "mastery" of Nature, manifesting itself in the ever-expanding industrial economy.

It was argued that extreme cultural relativity, in which it is possible to ignore major abuses of human rights, is an abdication of moral responsibility (Caplan, 2003). By the same token, ignoring the scale of nonhuman suffering in favor of case studies can be seen as abdication of moral responsibility to nonhumans. Kohn's idea of autonomy and intrinsic rights of forests, trees, or animals is largely restricted to the "native view" of the Runa community that he studies. This view is typical of much anthropological writing about community perspectives on biodiversity, exploring knowledge systems of indigenous peoples within specific settings (Descola, 2014). Indeed, many anthropologists have pointed out that indigenous worldviews can have radically different ontologies and epistemologies from Western dualism *and* cautioned against reproduction of western concepts and taxonomies of nature (Descola, 2014; Ingold, 2000, 2012; Kopnina, 2015; Sullivan, 2016).

Perhaps due to the tradition of the case-based studies in anthropology, few anthropologists have engaged with the massive *scale* of nonhuman abuse, or with the more radical ecocentric positions. While indigenous ontologies are highly valuable, it has been argued that rather than being due to the ecologically benign ontologies, the low ecological impact within traditional societies has been due to structural factors such as low population density and poor production technology (Ingold, 2000). Also, in the context of planetary biodiversity loss, the local ontologies are not always ecologically benign. When the people anthropologists study indicate that they would rather hunt (endangered species), anthropological critiques of conservation not only represent this view, but actively advocate on behalf of "their" communities against the efforts of those who try to protect the nonhumans (e.g., Einarsson, 1993; Kalland, 2009; McElroy, 2013).

But it is not just the overt critics of conservation that justify anthropocentrism by declaring their support for the vulnerable communities. The well-meant reciprocity, interconnectedness, and entanglements rhetoric tends to ignore the history of human-driven extinctions, and the Thylacine (Tasmanian tiger), the Passenger Pigeon, and the Golden Toad, to name just a few extinct species, remain outside of these narratives. While we may all remember "the last of the Mohicans" will we ever remember the Golden Toad?

The rhetoric of diffusing human–environment dualism does not go far enough in addressing underlying anthropocentrism. While many anthropologists criticize the heritage of Western philosophy, science, and law that all presume a hierarchal distinction between human and nonhuman lives (Descola, 2013; Rock, 2016), anthropocentric bias (Kopnina, 2016), speceism (King, 2013) and human

exceptionalism (Haraway, 2008; Mullin, 1999) positions are still dominant. The practical choice between a gorilla (not to mention a mosquito) and a human is easily made.

Stating this is not a question of demonizing humans but of realizing that the relationship between nonhumans and humans is *not* reciprocal. There are significant distinctions being made between human groups (e.g., those deserving of anthropological sympathy by the virtue of being assigned “poor,” “marginalized,” “indigenous,” or “minority” status; and those to blame: capitalists, neoliberals, conservationists). Yet, a clear moral demarcation between humans (in all their diversity) and nonhumans (as a collective without rights) is retained. It is not the question of whether humans are interconnected with or interdependent with nature (of course they are, as slave owners were also dependent on their slaves), but whether nature should be accorded rights similar to that of humans. Multispecies ethnography has largely steered away from ARs, too academic to be truly political.

## **Ways forward: Interdisciplinary directions**

Some anthropologists have paved the way as to how the responsibility for nonhuman suffering can be assumed. Milton (2002) has spoken of “loving nature” as a cross-culturally present remedy to nature/culture divide. Noske (1992), King (2013) and Shoreman-Ouimet and Kopnina (2015, 2016) have opened up new possibilities for non-anthropocentric anthropology. Strang (2016) has argued that we need a broader conception of environmental justice which encompasses justice between species. If we plan to address ecological justice as a secondary issue, after the social injustice is “solved,” few wild and free nonhumans are likely to remain on this planet.

Rajagopalan (2016) suggests that anthropologists could act as translators between, for example, the bees, the bee keepers and those that control global agricultural markets. She asks to what extent anthropologists can negotiate the taking-seriously of other-than-humans so that it is practically useful for all life. Might a researcher or senior executive working in Monsanto authentically encounter the Great Spirit of the Beehive and how could such an interchange affect the kind of work that an agricultural scientist or entomologist might produce?

The next step for sympathetic anthropologists who recognize animal selfhood, sentience, and agency as well as biologically determined instincts, interests, and natures, and believe that they should be permitted to live their lives free from avoidable suffering, is to broaden their interdisciplinary involvement to less mainstream key areas. As mainstream environmentalists have become “much more sensitive, well behaved, well spoken,” radical environmentalism that seeks to address large scale suffering is among the least understood of all contemporary opposition movements, not only in tactical terms, but also ethically and philosophically (Best and Nocella, 2011). Understanding these movements can lead to the radical reform, as in the case of social liberation movements, including the

abolition of slavery, and to legal progress supporting gender and racial equality. In order to enable a similar ethical shift in the case of nonhumans, closer engagement with critical animal studies (e.g., Calarco, 2014; Taylor and Twine, 2014), interspecies solidarity (e.g., Coulter, 2015), AW and ARs (Regan, 1986; Singer, 1975), ecological justice (Baxter, 2005; Higgins, 2010) and animal law (Peters, 2016) can be instructive as they radically undercut the human–environment dichotomy. Concretely, an implication of Singer’s focus on the sentience of animals is the need to minimize suffering, and that human beings must justify their interference with nature. The Great Apes Project, for example, is lobbying to include a wide range of simians in the “community of equals” with humans, thus extending the right to life, the protection of individual liberty, and the prohibition of torture.

Part of confronting the violence includes recognition that nonhumans do communicate and share a number of unique psychological characteristics. This is long ago accepted in evolutionary theory – but is only marginally recognized in anthropology. Indeed, the biologically grounded ontologies of being can lead towards more sensitive attunements with nonhumans (Haraway, 2008; Sullivan, 2016). Based on this realization, critical animal studies recognize that animals are not voiceless; they simply do not share a full verbal language with humans (Taylor and Twine, 2014). In resisting both anthropomorphizing and the “naturalizing” of animals, Noske (1992) argues, we need to develop an anthropology of the other animals that encounters them on their terms.

Pragmatically, recognizing that some objects have an agency does not yet say how they should be treated, and thus animal law (Peters, 2016) is very instructive for politically engaged radical anthropology. Ecological justice needs to be embedded in political, legal structures and – last but not least – in culture including academic culture. The key role that culture plays in environmental protection demonstrates anthropology’s direct relevance to environmentalism and its analysis (Milton, 1996 in Efir, 2016). Without engaging political, legal, and ethical discourses centered on animals as valuable in their own right, multispecies ethnography – or for that matter, any anthropology of nonhumans, will remain depoliticized and disengaged.

Returning to Haraway (2008), “shared suffering” might imply volunteering ourselves as human test subjects, consenting to be postmortem meat donors, prohibiting zoo keeping or factory farming, and supporting vegetarian diets and communities that practice them. In the case of conservation, place-specific policies favoring participation of local communities, or, the less desired, fencing off of nature areas, or even the corporate ownership of nature resorts needs to be considered if survival of nonhuman species is to be taken seriously. In the case of biomedical research, animal testing might have to be entirely reconsidered.

To paraphrase Ghamari-Tabrizi challenge and stripping away layers of theories I challenge anthropologists to take a clear stand. Rather than asking why ARs should be considered, it is more essential to ask: why shouldn’t they? What morality, other than “might makes right” can justify nonhuman subordination? It is this type of questioning that needs to be evoked if the multispecies anthropology is

to move beyond mere theorizing and “ontological choreography”. The well-meaning but essentially apolitical academic excursions into multispecies ethnography may need to address multispecies injustice, suffering, and unidirectional violence. An ethical vigor and clear commitment characteristic of the tradition of social advocacy in anthropology is urgently needed.

## Conclusion

What Schepers-Hughes has described is horrendous and anthropologists should indeed actively work against the terrifying trade in organs, particularly as anthropologists have an ethical disposition toward oppressed, downtrodden, and marginalized communities. Yet, if the acceptance of daily animal suffering is to be challenged, real anthropological engagement or even activism is needed. While the rhetoric of entanglements is sympathetic to nonhumans, it remains largely conventional in its micro-analysis of ‘traditional’ anthropological communities, local perceptions and experiences, failing, as it were, to see the forest for the trees. Much of the recent multispecies scholarship has remained rooted in comfortable intellectual and ethical spaces, addressing political issues in a local context and leaving the immensity of the global nonhuman abuse outside the scope of engaged anthropology. In times of industrialization of animal suffering, anthropology needs to transcend “a soup of post- (or pre-) modern complexity” (Haraway, 2008: 88).

While the commitment to the advocacy of ecological justice, deep ecology, and AR seems radical and heretical, so was the commitment to minority rights in the past. As Schepers-Hughes has argued, radical anthropology and heretical methods are needed when we feel truly moved by cases of suffering and violence. To repeat the student’s question quoted in the vignette above: is the use of animals in medical experimentation moral? This article has argued that it is time for anthropologists to take a stance on ARs.

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## Notes

1. Animal right supporters are philosophically opposed to the use of animals by humans, although some accept ‘symbiotic’ relationships, such as companion animal ownership.

The animal welfare includes the following:

- ☐ Freedom from hunger and thirst
- ☐ Freedom from discomfort, including shelter
- ☐ Freedom from pain, injury, and disease

- ☐ Freedom to express normal behavior, including sufficient space and company of the animals own kind
  - ☐ Freedom from distress by ensuring conditions and treatment which avoid suffering (WSPA).
2. Animal rights theory has a complex line of descent that includes a combination of Bentham's utilitarianism, and Kantian natural rights, as well as theories of duty and autonomy. Discussion of animal rights stems from Singer (1975) and Regan (1986) and involves a combination of both liberty and claim rights.
  3. Various application of this theory explore the nature of justice claims as applied to organisms of various degrees of complexity and describes the institutional arrangements necessary to integrate the claims of ecological justice into human decision-making.
  4. This comment on PETA was issued by the editors of the Engagement blog of the American Anthropological Association, when the author attempted to publish a blog in the thematic issue titled "Beyond Multispecies Ethnographies" in 2015 (e-mail from editors of Engagement blog, personal communication). This blog has been published on the author's university website (anonymous author link).

## References

- Adams CJ and Gruen L (eds) (2014) *Ecofeminism: Feminist intersections with other animals and the earth. Anthrozoös: A Multidisciplinary Journal of the Interactions of People and Animals*.
- Arluke A (1988) Sacrificial symbolism in animal experimentation: Object or pet? *Anthrozoös: A Multidisciplinary Journal of the Interactions of People and Animals* 2(2): 98–117.
- ASPCA. The American Society for the Prevention of Cruelty to Animals. <http://www.aspc.org/animal-homelessness/shelter-intake-and-surrender/pet-statistics> (accessed 31 July 2017).
- Bateson G (1972) The roots of ecological crises. In: Bateson G (ed.) *From Steps to an Ecology of the Mind*. Chicago: University of Chicago Press, pp. 494–499.
- Baxter B (2005) *A Theory of Ecological Justice*. New York: Routledge.
- Bekoff M (ed) (2013) *Ignoring Nature No More: The Case for Compassionate Conservation*. Chicago: The University of Chicago Press, pp. 27–44.
- Benjaminsen TA, Rohde R, Sjaastad E, et al. (2006) Land reform, range ecology, and carrying capacities in Namaqualand, South Africa. *Annals of the Association of American Geographers* 96(3): 524–540.
- Best S and Nocella AJ (2011) *The Animal Liberation Front: A Political and Philosophical Analysis*. Herndon, VA: Lantern Books.
- Brockington D (2002) *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania*. Bloomington, IN: Indiana University Press.
- Brockington D, Duffy R and Igoe J (2008) *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas*. London: Earthscan.
- Büscher B, Sullivan S, Neves K, et al. (2012) Towards a synthesized critique of neoliberal biodiversity conservation. *Capitalism Nature Socialism* 23(2): 4–30.
- Calarco R (2014) Being toward meat: Anthropocentrism, indistinction, and veganism. *Dialectical Anthropology* 38(4): 415–429.
- Callicott JB (1999) Moral monism in environmental ethics defended. In: Callicott JB (ed.) *Beyond the Land Ethic: More Essays in Environmental Philosophy*. Albany, NY: State University of New York Press, pp. 171–183.



- Caplan P (2003) *The Ethics of Anthropology: Debates and Dilemmas*. Routledge: New York.
- Carrithers M, Bracken LJ and Emery S (2011) Can a species be a person? A trope and its entanglements in the anthropocene era. *Current Anthropology* 52(5): 661–685.
- Cohen AP (1985) *Symbolic Construction of Community*. New York: Routledge.
- Crist E (2012) Abundant earth and population. In: Cafaro P and Crist E (eds) *Life on the Brink: Environmentalists Confront Overpopulation*. Atlanta: University of Georgia Press, pp. 141–153.
- Crist E (2015) I walk in the world to love it. In: Wuerthner G, Crist E and Butler T (eds) *Protecting the Wild: Parks and Wilderness, The Foundation for Conservation*. Washington/London: The Island Press, pp. 82–95.
- Cook SR (2003) Anthropological advocacy in historical perspective: The case of anthropologists and Virginia Indians. *Human Organization* 62(2): 193–201.
- Coulter K (2015) *Animals, Work and the Promise of Interspecies Solidarity*. Springer. Available at: <http://link.springer.com/book/10.1057/9781137558800>.
- Davies G (2012) Caring for the multiple and the multitude: Assembling animal welfare and enabling ethical critique. *Environment and Planning D: Society and Space* 30: 623–638.
- Descola P (2013) *Beyond Nature and Culture*. Chicago: University of Chicago Press.
- Descola P (2014) All too human (still): A comment on Eduardo Kohn's how forests think. *HAU: Journal of Ethnographic Theory* 4(2): 267–273.
- Desmond J (2013) Requiem for roadkill: Death and denial on America's roads. In: Kopnina H and Shoreman-Ouimet E (eds) *Environmental Anthropology: Future Directions*. New York and Oxford: Routledge, pp. 46–58.
- Donaldson S and Kymlicka W (2013) *Zoopolis: A Political Theory of Animal Rights*. Oxford, UK: Oxford University Press.
- Dunlap RE and Van Liere KD (1978) The new environmental paradigm: A proposed measuring instrument and preliminary results. *The Journal of Environmental Education* 9: 10–19.
- Eckersley R (1995) Liberal democracy and the rights of nature: The struggle for inclusion. *Environmental Politics* 4(4): 169–198.
- The Economist (2015) No pig in a poke: Genome engineering may help make porcine organs suitable for use in people. Available at: [www.economist.com/news/science-and-technology/21674493-genome-engineering-may-help-make-porcine-organs-suitable-use-people-no-pig](http://www.economist.com/news/science-and-technology/21674493-genome-engineering-may-help-make-porcine-organs-suitable-use-people-no-pig)
- Efird R (2016) Perceiving nature's personhood: Anthropological enhancements to environmental education. In: Kopnina H and Shoreman-Ouimet E (eds) *The Handbook of Environmental Anthropology*. New York: Routledge, pp. 441–451.
- Einarsson N (1993) All animals are equal but some are cetaceans: Conservation and culture conflict. In: Milton K (ed.) *Environmentalism: The View from Anthropology*. New York: Routledge, pp. 73–84.
- Elliott J (2013) *An Introduction to Sustainable Development*. London: Routledge.
- Fletcher R (2015) Nature is a nice place to save but I wouldn't want to live there: Environmental education and the ecotourist gaze. *Environmental Education Research* 21(3): 338–350.
- Fassin D (ed.) (2012) *A Companion to Moral Anthropology*. John Wiley & Sons.
- Fuentes A (2012) Ethnoprimateology and the anthropology of the human–primate interface. *Annual Review of Anthropology* 41: 101–117.
- Gaard G (1993) Living interconnections with animals and nature. *Ecofeminism: Women, Animals, Nature* 1–12.

- Garner R (2015) Environmental politics, animal rights and ecological justice. In: Kopnina H and Shoreman-Ouimet E (eds) *Sustainability: Key Issues*. New York: Routledge Earthscan.
- Gauger A, Rabatel-Fernel MP, Kulbicki L, et al. (2012) *The Ecocide Project. Ecocide is the Missing 5th Crime Against Peace*. School of Advanced Study University of London.
- Goldman LR (1999) *The Anthropology of Cannibalism*. Westport: Bergin and Garvey.
- Haraway D (2008) *When Species Meet (Posthumanities)*. Minneapolis: University of Minnesota Press.
- Hastrup K, Elsass P, Grillo R, et al. (1990) Anthropological advocacy: A contradiction in terms? *Current Anthropology* 31(3): 301–311.
- Hay P (2002) *A Companion to Environmental Thought*. Edinburgh: Edinburgh University Press.
- Healy S (2007) Deadly dingoes: ‘Wild’ or simply requiring ‘due process’? *Social Studies of Science* 37(3): 443–471.
- Higgins P (2010) *Eradicating Ecocide: Laws and Governance to Prevent the Destruction of Our Planet*. London: Shephard Walwyn Publishers Ltd, pp. 62–63.
- Horkheimer M and Adorno T (2002 [1944]) *Dialectic of Enlightenment*. New York: Cumming Continuum.
- Humane Society. Available at: [www.humanesociety.org/news/resources/research/stats\\_slaughter\\_totals.html](http://www.humanesociety.org/news/resources/research/stats_slaughter_totals.html).
- Ingold T (2000) *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill*. London: Routledge.
- Ingold T (2012) Toward an ecology of materials. *Annual Review of Anthropology* 41: 427–442.
- Kalland A (2009) *Unveiling the Whale: Discourses on Whales and Whaling*. Oxford: Berghahn Books.
- Kidner D (2016) An anthropology of nature – Or an industrialist anthropology? In: Kopnina H and Shoreman-Ouimet E (eds) *The Handbook of Environmental Anthropology*. New York: Routledge, pp. 119–131.
- King B (2013) Anthropological perspectives on ignoring nature. In: Bekoff M (ed.) *Ignoring Nature No More: The Case for Compassionate Conservation*. Chicago: University of Chicago Press, pp. 201–210.
- Kirksey S and Helmreich S (2010) The emergence of multispecies ethnography. *Cultural Anthropology* 25(4): 545–576.
- Kohn E (2013) *How Forests Think. Toward an Anthropology Beyond the Human*. Berkeley: University of California Press.
- Kopnina H (2012) Towards conservational anthropology: Addressing anthropocentric bias in anthropology. *Dialectical Anthropology* 36(1): 127–146.
- Kopnina H (2015) Revisiting the Lorax complex: Deep ecology and biophilia in cross-cultural perspective. *Environmental Sociology* 43(4): 315–324.
- Kopnina H (2016) Half the earth for people (or more)? Addressing ethical questions in conservation. *Biological Conservation* 203(2016): 176–185.
- Kopnina H and Cherniak B (2016) Neoliberalism and Justice in Education for Sustainable Development: A call for inclusive pluralism. *Environmental Education Research* 22(6): 827–841.
- Kopnina H and Gjerris M (2015) Are some animals more equal than others? Animal rights and deep ecology in environmental education. *Canadian Journal of Environmental Education* 20: 109–123.

- Kopnina H and Shoreman-Ouimet E (2011) *Environmental Anthropology Today*. New York: Routledge.
- Kottak CP (1999) The new ecological anthropology. *American Anthropologist* 101(1): 35.
- Leopold A (1949) *A Sand County Almanac and Sketches Here and There*. New York: Oxford University Press.
- Lévi-Strauss C (1968) *The Savage Mind*. Chicago: University of Chicago Press.
- Lewis D (2005) Anthropology and development: The uneasy relationship. In: Carrier JG (ed.) *A Handbook of Economic Anthropology*. Cheltenham, UK: Edward Elgar, pp. 472–486.
- Lieban RW (1990) Medical anthropology and the comparative study of medical ethics. In: Weisz G (ed.) *Social Science Perspectives on Medical Ethics*. Netherlands: Springer, pp. 221–239.
- Linstroth JP (2015) Urban Amerindians and advocacy: Toward a politically engaged anthropology representing urban Amerindigenities in Manaus, Brazil. In: Sillitoe P (ed.) *Indigenous Studies and Engaged Anthropology: The Collaborative Moment*. New York, London: Routledge, p.115.
- Lobao L and Stofferahn C (2008) The community effects of industrialized farming: Social science research and challenges to corporate farming laws. *Agriculture and Human Values* 25(2): 219–240.
- Marino L and Mountain M (2015) Denial of death and the relationship between humans and other animals. *Anthrozoös* 28: 5–21.
- Margulies J (2016) Seeing a tiger in the wild for the first time. Available at: <https://aesengagement.wordpress.com/2016/01/08/reflections-upon-seeing-a-tiger-in-the-wild-for-the-first-time/>
- Marshall PA (1992) Anthropology and bioethics. *Medical Anthropology Quarterly* 6: 49–73.
- McElroy A (2013) Sedna's children: Inuit elders' perceptions of climate change and food security. In: Kopnina H and Shoreman-Ouimet E (eds) *Environmental Anthropology: Future Directions*. New York/Oxford: Routledge, pp. 145–171.
- Milton K (2002) *Loving Nature: Toward an Ecology of Emotion*. New York: Routledge.
- Muenster U and Schroer SA (2016) 'Humans and Other Living Beings'. Panel for European Association of Social Anthropologists Network. EASA 2016, 20–23 July, University of Milano-Bicocca.
- Mullin MH (1999) Mirrors and windows: Sociocultural studies of human–animal relationships. *Annual Review of Anthropology* 28: 201–224.
- Nading AM (2013) Humans, animals, and health: From ecology to entanglement. *Environment and Society: Advances in Research* 4(1): 60–78.
- Nading AM (2014) *Mosquito Trails: Ecology, Health, and the Politics of Entanglement*. Berkeley: University of California Press.
- Naess A (1973) The shallow and the deep: Long-range ecology movement. *A summary*. *Inquiry* 16: 95–99.
- National Agricultural Statistics Service (2016) Available at: [www.nass.usda.gov/](http://www.nass.usda.gov/).
- Nelson MP, Bruskotter JT, Vucetich JA, et al. (2016) Emotions and the ethics of consequence in conservation decisions: Lessons from Cecil the lion. *Conservation Letters*. Open access, 1–5.
- Neves-Graça K (2005) Chasing Whales with Bateson and Daniel. *Australian Humanities Review*. Available at: [www.australianhumanitiesreview.org/archive/Issue-June-2005/katja.html](http://www.australianhumanitiesreview.org/archive/Issue-June-2005/katja.html)

- Noske B (1992) Deconstructing the animal image: Toward an anthropology of animals. *Anthrozoös* 5(4): 226–230.
- Ogden LA, Hall B and Tanita K (2013) Animals, plants, people, and things: A review of multispecies ethnography. *Environment and Society: Advances in Research* 4(1): 5–24.
- Palmer A, Malone N and Park J (2015) Accessing orangutans' perspectives. *Current Anthropology* 56(4): online.
- Parmentier RJ and Kopnina-Geyer H (1996) Maklouco-Maclay in Palau, 1876. *ISLA: A Journal of Micronesian Studies* 4(1): 71–108.
- Pels P (1997) The anthropology of colonialism: Culture, history, and the emergence of western governmentality. *Annual Review of Anthropology* 26: 163–183.
- PETA. Animal experiments: Overview. Available at: [www.peta.org/issues/animals-used-for-experimentation/animals-used-experimentation-factsheets/animal-experiments-overview/](http://www.peta.org/issues/animals-used-for-experimentation/animals-used-experimentation-factsheets/animal-experiments-overview/).
- Peters A (2016) Global animal law: What it is and why we need it. *Transnational Environmental Law* 5: 9–23.
- Peterson D (2013) Talking about Bushmeat. In: Bekoff M (ed.) *Ignoring Nature No More: The Case for Compassionate Conservation*. Chicago: Chicago University Press, pp. 64–76.
- Plumwood V (1993) *Feminism and the Mastery of Nature*. London: Routledge.
- Plumwood V (2000) Being prey. *Utne Reader* 100: 56–61.
- Pountney J (2012) Book review: Kalland, Unveiling the whale. *Anthropology Journal* 18: 215–217.
- Rajagopalan DM (2016) Bees, theories, and whether Posthumanism comes to matter. Available at: [www.envirosociety.org/2016/04/a-research-question-bees-theories-and-whether-posthumanism-comes-to-matter/#sthash.oaIGaZln.dpuf](http://www.envirosociety.org/2016/04/a-research-question-bees-theories-and-whether-posthumanism-comes-to-matter/#sthash.oaIGaZln.dpuf)
- Regan T (1986) A case for animal rights. In: Fox MW and Mickley LD (eds) *Advances in Animal Welfare Science*. Washington, DC: The Humane Society of the United States, pp. 179–189.
- Rock M (2016) Multi-species entanglements, anthropology and environmental health justice. In: Kopnina H and Shoreman-Ouimet E (eds) *Handbook of Environmental Anthropology*. New York: Routledge, pp. 356–369.
- Rose DB and Van Dooren T (eds) (2011) Unloved others: Death of the disregarded in the time of extinctions. *Australian Humanities Review*. Canberra: Australian National University. p. 59.
- Routney R (1982) *In Defense of Cannibalism*. Discussion Papers in Environmental Philosophy No. 2. Canberra: Australian National University.
- Salazar Parreñas J (2015) Multispecies ethnography and social hierarchy. Available at: <https://aesengagement.wordpress.com/2015/09/15/multispecies-ethnography-and-social-hierarchy/>.
- Scientific American (2013) Rise in Roadkill Requires New Solutions. Available at: [www.scientificamerican.com/article/roadkill-endangers-endangered-wildlife](http://www.scientificamerican.com/article/roadkill-endangers-endangered-wildlife)
- Shepard P (1993) On animal friends. In: Kellert SR and Wilson EO (eds) *The Biophilia Hypothesis*. Washington: Island Press, pp. 275–300.
- Shoreman-Ouimet E and Kopnina H (2015) Reconciling social and ecological justice for the sake of conservation. *Biological Conservation* 184: 320–326.
- Shoreman-Ouimet E and Kopnina H (2016) *Culture and conservation: Beyond anthropocentrism*. New York: Routledge.
- Singer P (1975) *Animal Liberation: A New Ethics for Our Treatment of Animals*. New York: Random House.
- Sodikoff G (ed.) (2011) *The Anthropology of Extinction: Essays on Culture and Species Death*. Bloomington: Indiana University Press.

- Strang V (2013) Hallsworth Plenary Debate: Justice for People Must Come Before Justice for the Environment. Manchester, UK: IUAES World Anthropology Congress. Available at: [www.youtube.com/watch?v=oldnYTYMx-k](http://www.youtube.com/watch?v=oldnYTYMx-k)
- Strang V (2016) Justice for all: Inconvenient truths and reconciliations in human and non-human relations. In: Kopnina H and Shoreman-Ouimet E (eds) *Routledge Handbook of Environmental Anthropology*. Oxford/New York: Routledge, pp. 259–275.
- Sullivan S (2016) What's ontology got to do with it? On the knowledge of nature and the nature of knowledge in environmental anthropology. In: Kopnina and Shoreman-Ouimet (eds) *Handbook of Environmental Anthropology*. New York: Routledge, pp. 155–170.
- Taylor B (2016) The value of a gorilla vs. a human. Available at: [www.huffingtonpost.com/bron-taylor/the-value-of-a-gorilla\\_b\\_10214928.html](http://www.huffingtonpost.com/bron-taylor/the-value-of-a-gorilla_b_10214928.html)
- Taylor K, Gordon N, Langley G, et al. (2008) Estimates for worldwide laboratory animal use in 2005. *ATLA (FRAME)* 36(3): 327–342.
- Taylor N and Twine R (2014) *The Rise of Critical Animal Studies: From the Margins to the Centre*. New York: Routledge.
- Urbanik J and Johnston C (eds) (2016) *Humans and Animals: A Geography of Co-existence*. ABC-CLIO Press.
- Van Dooren T (2014) *Flight Ways: Life and Loss at the Edge of Extinction*. New York: Columbia University Press.
- US Department of Agriculture, Animal and Plant Health Inspection Service (2015) *Annual Report Animal Usage by Fiscal Year*, 2 June.
- Waldau P (2013) Venturing beyond the tyranny of small differences: The animal protection movement, conservation, and environmental education. In: Bekoff M (ed.) *Ignoring Nature No More: The Case for Compassionate Conservation*. Chicago: The University of Chicago Press, pp. 27–44.
- Whatmore S (2006) Materialist Returns: Practising Cultural Geography in and for a More-Than-Human World. *Cultural Geographies* 13(4): 600–609.
- World Society for the Protection of Animals (WSPA). Education for sustainable development. Available at: [www.animalmosaic.org/Images/Education%20for%20Sustainable%20Development\\_tcm46-29460.pdf](http://www.animalmosaic.org/Images/Education%20for%20Sustainable%20Development_tcm46-29460.pdf).
- WWF. Biodiversity. Available at: [http://wwf.panda.org/about\\_our\\_earth/biodiversity/biodiversity](http://wwf.panda.org/about_our_earth/biodiversity/biodiversity) (accessed June 2016).

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