

Ecocentric education: Student reflections on anthropocentrism-ecocentrism continuum and justice.

Abstract

This article will discuss liberal arts college students' perceptions of environmental and ecological justice. Complementing emerging studies of education that tackles human-environment relationships, this article discusses student assignments related to the debates in social/environmental and ecological justice written as part of the course "Environment and Development". Student assignments are analyzed with the aim of gauging their view on the environment and society, identifying reasoning patterns about anthropocentrism-ecocentrism continuum. In conclusion, this article distills recommendations for the design of a university curriculum that can facilitate the development of a non-anthropocentric worldview.

Keywords: anthropocentrism; ecocentrism; ecological justice; environmental education; environmental justice

Introduction

Most commonly environmental justice is associated with social distribution justice in relation to environmental risks (e.g. pollution) and benefits (e.g. natural resources) (Harvey and Braun 1996). Social justice and associated environmental justice often focuses on equalizing power relationship and access to natural resources among different social groups, with specific emphasis on poor, vulnerable, or marginalized communities (Peluso 1993; Büscher and Fletcher 2016; Mollett and Kepe 2018). By contrast, proponents of ecological justice emphasize that we should not stop at social equity and economic redistribution but should also consider non-human species as morally significant moral agents (Baxter 2005; Cafaro and Primack 2014). While in some definitions environmental justice may encompass ecological justice (Schlosberg 2004; Kopnina 2014a), ecological justice is distinct in its focus upon those who are unable to defend their interests within contract situations (Baxter 2005).

Social and ecological justice can be seen as specific implications of an ecocentrism-anthropocentrism continuum in environmental philosophy (Naess 1973; Schlosberg 2004). While social justice can be seen as an extension of Western Enlightenment, with the associated accent on recognizing humanism, rationality, and individualism, ecological justice can be seen as growing out of modern "Western" intellectual ideas, as well as the much older tradition of indigenous worldviews (Shiva 2012; Sponsel 2014). When the concept of environmental justice is mentioned, it is often assumed that human and environmental needs

may coincide, as maintaining the environment for human material benefit is seen as the strongest motivation for nature protection. This view is prominent in pragmatist environmental ethics literature, and particularly Anthony Weston's (1985) "pragmatism in environmental ethics" and Norton's (1991) "convergence theory" papers. Weston and Norton have argued that anthropocentric motivation or self-interest is most effective in protecting the environment on which we depend, ultimately converging on the same practical outcomes as ecocentric positions. In recent applications of this thinking to issues such as biodiversity loss, social justice advocates have argued that the successful and just future of biological conservation is contingent upon land tenure security for local people (Mollett and Kepe 2018).

However, it was noted that while anthropocentrism can produce environmentally positive outcomes in situations where both humans and environment are negatively affected, self-interest does not seek to protect nonhumans without utilitarian value nor guarantee animal rights (Katz 1996; Peterson 2011; Shoreman-Ouimet and Kopnina 2015; Mathews 2016). In fact, it may be the loss of some biodiversity may not affect humanity in the short term, as food and fiber production remains largely undamaged by extinctions of individual species (Crist 2012). Also, animal welfare in industrial food production systems or medical experimentation remains contingent on the will of conscientious consumers (Bisgould 2008; Crist 2013). In this context, one of the largest shortcomings of anthropocentric ethic is ignoring nonhumans as morally significant agents (Crist 2012; Cafaro and Primack 2014; Cafaro et al 2017). In contrast to anthropocentric pragmatism, deep ecology and/or animal ethics supporting ecocentrism, biophilia, animal rights, and welfare are uniquely positioned to protect functionally "useless" species (Katz 1996; Washington et al 2017, 2018).

This functionalism or instrumentalism, very much present in environmental education and education for sustainable development (Kopnina 2012 and 2014b; Bonnett 2017) presents a problem for the broader conception of "sustainable development". While sustainable development rhetoric considers the needs of present and future *human* population, the question of satisfying existential needs of nonhumans is rarely posed. Crist (2012:145) reflects: "How many people, and at what level of consumption, can live on the Earth without turning the Earth into a human colony founded on the genocide of its non-human indigenes?" As Crist (2012) reflects, this question is rarely posed, also by academics, perhaps because they view raising an issue about which silence is observed as a non sequitur.

While worldviews on environment differ according to gender, education level and place of origin (Chawla and Derr 2012; Kopnina 2015), education targeted at the development of environmental values seems most effective in young people (Boeve-de Pauw and Van Petegem 2010; Wray-Lake et al 2010). Surprisingly, however, ecocentric approaches and/or human-animal relationships have so far attracted little interest among educational

scientists (Kopnina 2014b; Spannring 2015). Little research has been conducted on what factors influence student beliefs about the environment in general or animals in particular (Boeve-de Pauw and Van Petegem 2010; Spannring 2015). This lack of interest is especially surprising as the strong impact of education on cultural reproduction of human-environment relationships suggests a rich research area for educational science (Spannring 2015; Bonnett 2017), environmental studies (Wray-Lake et al 2010; Chawla and Derr 2012) and sustainability (McDonough and Braungart 2002).

Complementing emerging studies of education that tackles human-environment relationships, this article discusses how students perceive different types of justice. In doing so, this article describes the Bachelor-level course *Environment and Development* offered by Leiden University College in The Netherlands between 2016 and 2017. As part of the course, the students were asked to write an essay related to the debates in social/environmental and ecological justice. The research based on this assignment was intended in part as an attempt by the lecturer and researcher to ‘learn from students’. This article compares student assignments with the goal of glancing their view on nature and distilling recommendations for the design of a university curriculum that can facilitate the development of a non-anthropocentric worldview.

Methodology

There were twenty-two (twelve females and ten males) international students enrolled in the course. This group consisted of the majority of Dutch students (although of mixed ethnic backgrounds) and international students, including European citizens (also of mixed ethnic backgrounds) and two from the Middle East. However, the cross-tabulation of student views and national/ethics characteristics was not conducted here due to concerns about privacy and anonymity. The European Commission’s code of research ethics was followed (EC n.d. p. 42). Classroom ethnography strategy was employed. Classroom ethnography refers to the application of ethnographic research methods to the study of discourse, incorporating participants’ perspectives – in this case through student assignments - in semi-formal educational settings (Watson-Gegeo 1997).

The lecturer who is also an author of this article has assured students that excellent argumentation and critical analysis, rather than a choice of any position would count toward a higher grade. No students objected to their assignments being used for research after the researcher asked for their permission to use anonymized segments. The researcher saved original information that links data to students in a password-protected file.

In-class debate “Justice for people should come before justice for the environment” was styled after the similar debate held during the World Congress of the International Union

of Anthropological and Ethnological Sciences hosted by Manchester University in 2013 (this debate is described in Shoreman-Ouimet and Kopnina 2015 and Abram et al 2016 and recorded (<https://www.youtube.com/watch?v=oldnYTYMx-k>). This debate reflects a larger discussion in cross-disciplinary fields of environmental social science and biological conservation.

The students were asked to watch the recorded conference debate as well as consider a number of articles representing different sides of the debate. In their position paper on the subject of the proposition, the students were asked to define and discuss a number of terms and articulate and defend their stance towards the central proposition statement.

Description of the debate

John Gledhill, a member of the organizing committee, invited each of the four invited speakers to present their ideas. Two proponents were Donald Nonini, Department of Anthropology at Stanford University and Amita Baviskar, Institute of Economic Growth, University of Delhi. The two opponents were Veronica Strang, at the University of Auckland, and Helen Kopnina, at The Hague University of Applied Sciences, both anthropologists. The presentation was followed by the discussion with contributions from the floor, and the summary by the speakers commenting on what has been said.

Nonini and Baviskar have argued that justice for the environment entails neo-colonial processes that disadvantage vulnerable communities. Nonini argued that “elite legislators” recreate “processes of violent dispossession which have historically been associated with imperialism and the triumph of supposed ‘civilization’ over those who are ‘primitive’” (in Abram et al 2016:12). Since it is “only humans who can seek and obtain justice—not other living or nonliving forms of matter” (Ibid, p. 11), this

requires that some humans legislate, in the interest of justice, that other humans who are part of specific environments other than the environment of such legislators be removed from these other environments in order to be more just to the non-human elements of those environments that remain (Ibid, p. 11-12).

This process involves “violent dispossession”. The label “elites” in Nonini’s presentation also referred to academics defending environmentalism. According to Nonini, these elites align themselves with “a broad principle that humans ought to be extracted from the environment they depend upon in order to save it, improve it, protect it, etc., is distilled down to, and hypothesized into, the ugly facts of colonialism and imperialism, of ‘native removal’, ethnic cleansing, and the like” (in Abram et al 2016:12). Supporting this accusation, Baviskar gave an example of the Biaga, a tribe of shifting cultivators in central India:

The colonial government took pains to explain that the Baiga practice of shifting cultivation was environmentally harmful. It was in order to protect the forests, to

better conserve them, that the Baiga had to be confined to a reservation. The Baiga, who had lived in the forests for centuries without noticeably depleting them, were now blamed as destroyers of the forest, a problem for the new regime of 'scientific forestry', the technique of replacing diverse tropical forests with simplified monocultures of teak and sandalwood that fetched the highest revenue (in Abram et al 2016:4).

Baviskar suggested that biocentrism is "not a soft-hearted romantic view of respecting the earth" (in Abram et al 2016:6), but the "exercise of Northern privilege":

Speaking on behalf of those voiceless species, Northern biocentrism has supported the creation of large conservation areas, driving out forest dwellers and extinguishing their rights to subsistence. An even larger, even obscene, injustice is that even as they expect the Global South to give up the little that it has, the bio-centrics choose to ignore the inequities in which they themselves are complicit (in Abram et al 2016:6).

Opponents of the motion, Helen Kopnina and Veronica Strang, both anthropologists, have argued that they recognize certain grievances associated with the creation of protected areas, and identify with the fate of local communities in cases where evictions have occurred. However, most land displacements happen because of industrial and agricultural developers' and other corporate or government's schemes to commercialize land, not because of biocentric conservation. While Baviskar implied that poverty alleviation comes at the expense of poor people, Kopnina and Strang have argued that the very idea of economic development can be seen imposed by Western elites (indeed, including academics). In fact, it was precisely economic development - not conservation of local habitats - that created social inequalities by presenting indigenous people as backward or literally under-developed.

Additionally, using her own ethnographic example of the Aboriginal community, Strang (2016) has raised the point that it is precisely the indigenous populations that used to foster nature protection, exemplifying it by traditional aboriginal animistic beliefs and rituals. Reflecting on traditional views of the environment, Kopnina gave an example of a Hindu story about the young Ganesha, an elephant-headed deity, hurting a cat while playing. His mother Parvati has developed the same wounds as the cat. Ganesha realized that his mother was hurt by this act since all living beings are seen as connected (in Abram et al 2016:10).

However, in modern India attitudes and behaviors have largely changed. In a similar way, Australian traditional societies have undergone a transformation. While Aboriginal communities have expanded the use of modern technologies, such as cars and weapons, wallaby population on which Aboriginal's hunt has shrunk. Strang has reflected that this made traditional respect and 'balance with nature' more precarious:

The number of wallabies has fallen dramatically, not just because the possession of cars and rifles has enabled new forms of hunting, but also because of the competition for food within a fragile habitat created by intensifying cattle farming. At some point, the population [of wallabies] may drop to unviable levels. Should this be an Aboriginal choice? Should it be anyone's choice? This opens up a question about

justice and cultural relativity, and whether anthropologists should promote cultural relativity to the degree that no universal human – or other – rights carry any weight (Strang 2016:266).

Drawing on the idea of assigning relative weight to issues of justice, Kopnina reflected that injustice goes “beyond the questions of economic benefits and cultural determination” but concerns the “very survival of numerous living beings” (in Abram et al 2016:10). Complementing this, Strang (2016) has argued that long-term sustainability requires a radical reconceptualization of human-nonhuman relationships and the notion of ‘community’ itself. This suggests that there is a need to incorporate the bioethics of non-human and material worlds in order to enable the repositioning of humankind and the inclusion of all species and materials as collaborative partners. In these more inclusive visions, ‘justice for all’ is neither ‘social’ nor ‘ecological’ but is both conceptually and practically reconciled into a single vision of equity and order (Strang 2016).

Opponents of the proposition reflected on how an anthropological focus on cultural relativity is used selectively in cases of human rights versus animal rights. While major abuses of human rights (such as human sacrifice or cannibalism) are seen as an abdication of moral responsibility, abuse of non-human rights (destruction of habitat for wild species, animal experimentation for domestic ones) does not appear to call for the same moral condemnation. Kopnina has also inquired how justice can be served to all the oppressed, considering that nonhuman beings are relegated to the realm beyond moral consideration.

All four speakers have converged on the observation that the largest danger to both vulnerable people and non-humans species are the processes of industrial development and appropriation of land by large industrial developers. Kopnina concluded:

I agree with the proponents of the motion that culpability for ecological problems lies largely with corporate and political elites that perpetuate the industrial economy, mass consumption and commodification of nature. Yet, I disagree that environmentalism is western, elitist, and neocolonial. Environmentalism and the love of nature belong to all people. As Shiva (2012) has said: ‘When nature is a teacher, we co-create with her —we recognise her agency and her rights’ [...] What seems neocolonial to me is not conservation or environmentalism, but the insistence that we should look at everything in monetary terms, that we should abandon nature [...] This thinking is in no way ‘traditional’, but reflective of what proponents of economic development would like us to embrace [...] As Siddharth Chakravarty, a First Officer on the Sea Shepherd vessel said, ‘It is important to preserve the biodiversity of the planet. If the oceans die, we die’ ^[L]_{SEP} (in Abram et al 2016:9). ^[L]_{SEP}

The audience, consisting of about 150 members, mostly anthropologists, was then invited to vote on which side has won the debate (Abram et al 2016). Opponents of the motion have won ninety against thirty (others abstained from voting).

Results: Student assignments

The following segments (snippets of original assignments) were arranged in (sometimes overlapping) themes. In some cases, the author's assignment of the category might be based on subjective interpretation. The themes were marked at the end of the paragraph with the following labels, which are marked in abbreviated form in the segments below:

- Anthropocentrism-Ecocentrism Continuum with sub-sections Unity of Perspectives/convergence (UP); Intrinsic values (IV); Anthropocentrism (A);
- Complexity/Nuance (CN);
- Emotional/Affective Arguments (ES)
- Political Implications (PI)
- Capitalism and industrialism (CI);

The labels were assigned by the author and placed after segments (cut out statements from essays) as indicated below. Original style, grammar, and spelling are retained. The sign [...] indicates that parts of the text were cut by the researcher.

Students' definitions of the terms

In their essays, a couple of students have noted that environmental justice is often equated with social justice. One student wrote that environmental justice is “associated with social equality in regard to food security, work and income, water and sanitation, healthcare, education, modern energy services, resilience to shocks, gender equality, and participation in political processes”. Quoting the World Bank (nd), a student-defined social justice in relation to poverty alleviation and concerns about unequal exposure to the benefits of economic development, which includes compensation for protected areas.

Anthropocentrism, according to one student, "means the tendency of humans to refer to their own existence as the center of the world and measure of all things". For this reason, ‘environment’ is seen as a mere “resource”, as another student wrote using the work of Eileen Crist (2012). Anthropocentrism thus focuses on social justice and emphasizes the need for an equal distribution of material wealth and socio-political equity among all members of human society. One can also argue that only humans are capable of attributing value and meaning to other entities the more so as value is man-made based on human mind and language (Furlong and Marsh 2010). Yet, it is important not to commit the fallacy of false equivalence, as caring for one’s own kin makes one egocentric in a sense, but it does not imply that one is therefore compelled to include *only* oneself in one’s moral community (Kopnina et al 2018a, 2018b).

An ecocentric or a biocentric approach recognizes the intrinsic value of non-human species, suggesting that all living organisms and that these do not have less importance over

other living elements (Washington et al 2017, 2018). The ecocentric perspective, in contrast, emphasizes the intrinsic value of nature and all living beings. Advocates of this position deny the conceptual dichotomy of nature and culture and stress that all biotic and abiotic aspects of nature – humans included – are connected and interdependent (Kopnina 2016). They argue that all living things stem from the same origin and therefore equal in their right to live (Strang 2016; Naess 1973). This understanding is reflected in the assignments of a few students. One of them states that “intrinsic value [given to nature] is as important as human rights given to all people”. More detailed quotes from student Essays are placed below.

Marina

The destruction of our ecosystems and the growing number of endangered species is largely a result of human impact. Our unsustainable lifestyles, levels of consumption, and polluting practices are changing habitats at a rate faster than many ecosystems can tolerate. [...] (CI)

Human communities depend on non-humans, yet we neglect the issues of justice that arise from our relations with non-human species [...] (UP/IV)

This essay will, therefore, argue that justice for people should be considered equally as important as justice for the environment [...] (UP)

Humans of diverse genders, ethnicities, and wealth [...] are intrinsically concerned about their equal access to rights and opportunities. Yet, only a few advocate for the protection of non-human species, who are equally disadvantaged [...] because they are unable to speak for themselves and assure their fair allocation of resources and right to life. (IV)

As the human population continues to grow, so does our unsustainable increase in consumption of both animals and plants.

Together, humans and non-human species are bounded within Earth's interdependent ecosystem. Any biodiversity loss of non-human species also means a loss in ecosystem services, thereby vulnerably posing health and food supply risks to humans as well. Sponsel (2014:152) states that “destroying biodiversity and ecosystems is ultimately ecocidal for humanity since they are our life-support systems.” [...] (UV)

Desmond (2013) [in her discussion of roadkill] also acknowledges that humans, in essence, prioritize themselves over their environment and animal welfare. This is especially seen in the case of the millions of animals (some of which endangered) that are used for food, clothing, medical experimentation, and entertainment for humans (Crist 2013). While it is now a shared interest amongst many developed countries to make sure marginalized human communities are not left with pollution and resource depletion from the developed world, also known as the shallow ecology movement, there is little discussion surrounding the disadvantaged non-human species who are suffering from destruction of their fragile habitats (Naess 1973). Non-

human species evidently do not gain the same ethical and moral considerations as humans, which I find to be problematic [...] (IV)

Instead, I argue that biospheric egalitarianism is crucial for the future survival of humanity, we are forgetting our future if we do not consider environmental rights [...] (UP)

Humans and non-human species alike are entitled to their own rights, independent of their usefulness to others [...] (IV)

I believe that it is necessary to construct a new framework which recognizes and reintegrates humans and nonhumans is by providing a more balanced instrumental and intrinsic value to all non-human species; extending personhood to all species.

Rather, if we can get humans to intrinsically value plants, insects, and cows the same way they value and protect "cute" dolphins, tigers, and pandas. If more humans can understand that biodiversity loss affects ecological processes, impacts sustainable development, and is thus connected to human survival this will help shift mentalities. Humans will, therefore, realize that they should not discriminate against non-human species and instead protect them for their usefulness to our future. Hence, humans and nature should not be separated since we are connected and greatly depend on our environment. [...] (UP)

However, restricting communities' already limited access to land and economic opportunities creates greater injustice thus we should focus on the pollution and climate change that is negatively affecting people's health and quality of life. [...] (A)

Similarly, anthropocentrists deem that in certain cases there are no negative consequences of destroying a species or ecosystem since humans can live mono-cultured lives [...] (IV)

Nature is about the survival of the fittest and since humans are at the top of the food chain, we are the most developed species by theory to survive. Furthermore, being a predator is part of nature, therefore, we have to consume non-human species to survive, not the other way around. (A)

Both anthropocentric and biocentric views recognize the human's responsibility to the environment but it is just a matter of balancing the two frameworks. I pick the middle road and deem it necessary to have justice for all [...] (UP)

As Strang (2013) contends we need to focus on the underrepresented non-human groups to achieve social justice [...] (IV)

After all, we should not forget that we are the most destructive species in terms of our unsustainable practices and lifestyle. Population growth in combination with large Western appetites have "irreversibly depleted natural resources [...] (CI)

We, therefore, cannot separate ourselves from non-human species because all life is connected and we need to shift our mindsets and value nature for its environmental intrinsic value that is essential to human societies and future generations. (UP/IV)

Monique

In addition, the anthropocentric view also supports the fact that humankind is superior in nature... Advocates believe that there is no carrying capacity, meaning that the human population cannot possibly exceed the earth's capacity, as natural resources will always be sufficient for consumption (A).

The human to environment relationship is yet to evolve and still relatively uncertain within legal frameworks. In addition, this also implicates that both people and the environment differs not only on a national and policy level but also on a societal and individual level. On both these levels, the standpoint towards the environment differs. (CN)

For example, a society within which animals are seen to be transmigrant souls and have spiritual importance is bound to see the environment differently to a society that opposes this belief. This is similar to the example that an individual that is vegan is bound to have a very different position towards the environment than someone who is a carnivore. [...] (CI)

In this case, both social justice and environmental justice are of such great importance that there should be a middle ground. [...] (UP)

This middle ground should be found through considering each issue on a case-by-case basis, encountered through considering the problem from a multitude of disciplines. Finally, a world without justice, environment, and people are not realistic; hence through staying away from the one-sided discourse, justice decisions should incorporate both people, as well as the environment (CN/UP).

Morten

Destruction of the environment would mean the destruction of humans as well. This is because we live in an intertwined world, in which humans depend on the environment.

In the long run, harming the environment harms people in multiple ways. Cutting down trees reduces the amount of photosynthesis being done and therefore increases CO₂ gases and reduces oxygen levels in the atmosphere, causing global warming, rising sea levels, endangering whole countries and therefore millions of people. Many indigenous societies rely on forests. Cutting down such forests impoverished them. (UP)

Thinking about intergenerational justice, we should leave the earth as we have encountered it so that our children and grandchildren will still be able to enjoy as many resources of the world as we do today (A).

A loss in biodiversity can have many unforeseen consequences. Most of our medicines, for example, are originated from the environment. How can environmental justice serve all human beings in the long term if environmental destruction is not stopped? (UP)

Doing harm to the environment has often led to biodiversity loss [...] This might be problematic because many species have already gotten extinct, while there was a chance for each extinct species to carry treatment for cancer or HIV for example. The more species will go extinct the less likely it will become that we can innovate new medicines (A/UP).

However, as arguments go, we should not only care for the environment, because it indirectly also effects us, but also due to moral reasons. [...] (IV)

Anthropocentric views [...] include a "us before them" perspective. As we are humans, we should care for humans more than for the environment. The fact that different animals also seem to only care for themselves justifies this. As humans, we have basic needs and we have to fulfill these needs. If necessary, it is okay to harm the environment during this process. (A)

The question, however, is how we define basic needs and where to draw the line. I think everyone would agree, that it is justified to cut a tree to make a fire to prevent your kids to freeze to death. On the other hand, most people would agree that it is not justifiable to cut down whole forests to make a quick profit for oneself [...] Many people voice their concern about animal testing. Whether animal testing can be justified is also a question of where we draw the line. From a moral perspective, I think that animal testing is wrong, because we are potentially harming animals for the good of humans [...] (NC)

On the other hand, probably even among those who voice themselves against animal testing, most people would prefer to test a new, potentially harmful cosmetic on an animal rather than on themselves (A).

Nathalie

We are limited in our own social institutions (e.g. *language*) when addressing environmental justice. Humans have coined "genocide": a term related to mass atrocity and inhumane events, but exclusively towards *human injustice* [...] Most of the world has managed to overcome huge social injustice such as civil rights suffrage. The manifestations for civil rights movements (e.g. protests) derive from social conventions of human construct. Unfortunately, we may never witness a huge group of trees protesting in the streets, and proactively advocating their rights to government officials. [...] (PI)

Nevertheless, *people* associate with pressure groups that concern *people*, since there is shared suffrage. It is more difficult, or even impossible, to associate with non-human suffrage. Furthermore, even when we are advocating for environmental justice, much of the discourse relates to *human* justice in living healthy lives. (A)

This suggests that a more effective governmental strategy in reducing environmental degradation is to put forth *human interests*. (UP)

Beviskar (2013) mentions that such method used in urban Delhi turns a blind eye on life on Delhi's underclass. In the name of "environment improvement", we see more injustice

towards people and the environment. Environmental justice can be a political tool of the rich [...] (PI)

Rights are advocated for people who are affected by other people's actions towards environmental injustice. At times, this is done *before* advocating for environmental rights. Is it wrong to prioritize justice for the environment if actions involved are at the expense of justice for people? Jane Goodall (2015:22) discusses the TACARE case-study, whereby environmental degradation was due to a local community's strife for survival. Goodall mentions "...ranger forces are underpaid and poorly equipped, making them vulnerable to bribes from poachers" (Ibid p. 24). Effectively, a program for poverty alleviation was enacted. Therefore, if humans do not have *justice* or incentive (e.g. financial), then environmental justice cannot occur. [...] (NC)

Through industrialization, innovation, and self-interest, we have consistently gained control over the environment. However, our environment is suffering from human manipulation. [...] (CI)

Separating "environmental justice" and "human justice" as two entities, is primarily where the problem lies. Justice for people must come *hand-in-hand* with justice for the environment. (UP)

Arne

Homo sapiens has been remarkably successful in this process as our population has reached 7 billion, and is still growing. However, sustaining bare life requires resources, and sustaining human life requires even more than that. Many items such as TV's, cars, boats, office buildings, airplanes, cellphones, computers, power plants, headphones, suitcases, magazines, most pharmaceuticals, and lawns are things that we do not need to survive but we like to have because they are nice or help our lives. Because resources, such as unpolluted habitat, food, and water, are used to produce them, the more our numbers increase the smaller the aggregate population of other species must become. It is therefore beyond a reasonable doubt that humans have caused a significant reduction in the habitat that sustains other species' lives. [...] (IV)

This is due to the fact that our way of cultivating promotes monocultures. An example of this would be a standard mining operation. For it to take place, a vast area must be used for digging up the minerals, separating the ores from the dirt, refining the ores, and disposing of the waste that has been produced in this process. All of the areas that were previously the habitat for hundreds, or thousands, of different species, has been devoted to producing a single type of mineral. Furthermore, it is not only the production processes that reduce the available habitats but it is also the byproduct of those processes, namely pollution such as CO₂, methane, fossil fuels, phosphorus drainage from agriculture, chemicals poured into

rivers from cellulose production. When the pollution has only domestic effects it is easy to monitor (CI).

Today, humans have come to understand the interdependencies of different flora and fauna, and the complex ecosystems that they constitute. We can make a simple logical deduction: continuing the same practices we have today indefinitely will wipe out the majority of all existing ecosystems today. This understanding should guide humanity as a collective to change our practices. To preserve a habitable planet for future generations this must become a priority higher than that of economic growth (McDonough and Braungart 2002). To be successful as species we must form a sustainable symbiosis with the planet we live in. When defining justice we must take this interdependence into account. The base for a new concept of justice should be the continuation of life on the planet Earth. When we take this into account, justice becomes ecosystemic justice. There should not be a dichotomous understanding of justice. It is absurd to create a system of justice for one species on Earth and ignore inter-species interdependence that allows that particular species to be successful. To sustain human life on Earth the focus should be in inter-generational wellbeing and not on maximizing the short term economic goals. Justice for people should not come before justice for the environment. (UP)

Fanny

It seems intuitive to agree with the notion that human justice trumps justice for all other beings, this position paper will argue against this. It will be argued that the prioritizing human justice has led to severe environmental destruction, that it is not in line with progressive ethics and that the nature-culture divide the opposition assumes is theoretically false (UP).

It is important to acknowledge that the prioritization of human needs over nonhuman needs is part of what has caused the ecological crisis. Alternatively, if humans had thought themselves equal to nonhumans and therefore recipients of the same rights, would the world be in the same state as it is today? [...] Because we see ourselves as a superior species, we logically prioritize our own needs. In fact, we seem to have completely disregarded other species' needs if we look at how we have pushed other species into extinction and degraded ecosystems. Justice entails getting what is deserved and clearly, our Human Supremacy has led us to believe that the world is our resource. If we didn't, would, for example, the Amazonian rainforest have been converted to agricultural land, resulting in huge biodiversity loss? These actions are only rational if we believe that human justice trumps all other justice (IV).

The idea that justice for people must come before a justice of the animals has not only caused environmental destruction that harms both humans and nonhumans, but it ignores the fact that humans are a part of nature. Strang (2016) states that humans have constructed a false nature-culture dichotomy which has led us to believe we are apart from nature and need to control

nature. However, the dichotomy doesn't hold up, because there are many (especially indigenous) societies in which humans and nature are seen as equal. If we move forward under the assumption that humans are indeed a part of nature, we may be able to move towards ecological justice and biospherical egalitarianism, because it removes the anthropocentrism embedded in this divide. If we are all Nature, why should we prioritize human interests and justice? [...] (UP)

Furthermore, the idea that justice for the people should come before justice for the environment impedes the progression of liberal values [...] Ethics can be seen as progressive: two centuries ago, slavery was abolished, one century ago women were granted the right to vote, etc. The rights of animals have become increasingly important (PI).

Jane Goodall (2015) describes a situation where participatory conservation of chimpanzees in Tanzania improved both the lives of the chimpanzees and the local people. The poverty of the local people caused them to use local resources unsustainably, but by working to alleviate their poverty and make them stewards of the land. Furthermore, traditional human-nature relationships are often characterized by equality, harmony, and reciprocity. Humans are traditionally seen as part of nature. Both have rights and obligations towards each other. Indigenous people can also engage in unsustainable practices because they are not without flaws and do not live completely outside the reach of Western influences. [...] (UP)

However, there are also those who argue that an ecocentric view could lead to the creation of an eco-totalitarian society in which sustainability is prioritized over the happiness of its members. [...] (A)

“Convergence theory” argues that environmental and human objectives and interests largely coincide or converge, so anthropologically motivated environmentalism can adequately address the ecological crisis (Norton 1991). Adopting an ecocentric worldview is therefore superfluous. If we acknowledge that we need healthy ecosystems to survive, protection will happen [...] (UP).

However, this type of motivation for environmental protection has been empirically shown to be inadequate [because of intrinsic values that are not addressed] (IV).

Instead, there should be justice between species or ‘biospherical egalitarianism’, which requires humans to learn to see themselves as a part of nature and not continue to propagate a nature-culture divide. This divide is between ‘social’ and ‘environmental’ is theoretically inadequate. [...] (UP)

Furthermore, prioritizing justice for people impedes the progression of ethics. Conservation is also not just a Western ideal. Furthermore, while some find the concept of deep ecology problematic, but it is argued here that it is absolutely necessary for environmental protection (IV).

David

Without achieving justice for the environment, long-term justice for people is extremely unlikely. For future generations to benefit from the environment as much as the preceding generations, a quite drastic rethinking of the human interaction with the environment is necessary (A/UP).

Rose

Justice for the material environment serves both humans and non-humans. If we strive to find a balance in our ecosystem that maximizes profitability for all organisms humans cannot be favored when it comes to the material environment (UP).

Nelly

Without the environment and its non-human species, we wouldn't have the resources and goods that we are able to enjoy today, thus we need to respect it and find solutions in order to reduce the harm instead of putting our selfish needs first. We need to change our mindset from justice for people to a more balanced mindset between these two components. (UP)

Aukje

Simultaneously achieving justice for the people and justice for the environment can go hand in hand. We are currently not able to afford to achieve just justice for the people, prioritizing it over our harmed, disrupted and endangered environment... The idea of 'Western neocolonial environmentalists' is inadequate, as environmental activism is spread and advocated by people all around the world. We should urge to achieve a reconciliation between the two in order to sustain the world for future generations (UP).

Stefan

Deep ecologists are said to be Western and suppress traditions such as hunting. [...] (A)
It is ironic that Baviskar talks about Indians as fooled by Westerners and Kopnina uses quotes from Indians, like Vandana Shiva, or Siddharth Chakravarty from the Sea Shepherd, or Hindu myths to illustrate that we can actually learn from Indian ecocentric traditions. Traditional values can also help protect the environment. (UP)

Discussion: Complexity, nuance, and political implications

One of the aspects that students note is that justice for people, defined in terms of economic well-being, is largely contingent on ecological integrity. This supports the "convergence"

hypothesis. Aukje's view that "achieving justice for the people and justice for the environment can go hand in hand", or Marina's reflection that "communities depend on non-humans" or Nelly's assertion that without the environment, "we wouldn't have the resources and goods that we are able to enjoy", or Morten's belief that "destruction of the environment would mean a destruction of humans" finds reflection almost in all the essays. In Rose's formulation, if "we strive to find a balance in our ecosystem that maximizes profitability for all organisms", ecological and social justice appear inseparable.

The question of 'tradition', 'modernity' and 'universality' also arises. On the one hand, as Fanny argues, "traditional human-nature relationships are often characterized by equality, harmony, and reciprocity" and "Humans are traditionally seen as a part of nature". On the other hand, as Stefan reflected "Deep Ecologists ... suppress traditions such as hunting". The question of changing "traditions", such as Indian traditionally vegetarian diets giving way to increased meat consumption (Devi et al 2014), is notable here. While social justice proponents may be defending traditional right to hunt or live on ancestral land (as Nonini and Baviskar in Abram et al 2016 have argued), other scholars actually suggest that traditional societies were, in fact, more ecocentric (Naess 1973; Sponsel 2014), also in the case of India (Shiva 2012; Gautam and Rajan 2014).

This traditional ecocentrism might find reflection in what Aukje observed to be a modern trans-cultural environmental activism, which is "spread and advocated by people all around the world". As in the case of convergence hypothesis, Stefan seems to combine "tradition" as both something to be protected for its own sake and to keep for the sake of nature, as "traditional values can also help protect the environment". This convergence also offers a way to deconstruct certain dichotomies. While Arne notes that there should not be dichotomies between nature and culture, and Fanny asserts that "dichotomy doesn't hold up, because there are many (especially indigenous) societies in which humans and nature are seen as equal", this does imply that students recognize that dichotomies are socially constructed. Aukje notes that opposition between traditional and modern or Western and other cultures is inadequate since environmentalism is a universal phenomenon. What is less obvious that students understand practical implications (and hard choices necessitated by the dissolution of dichotomous thinking). Deconstructing the dichotomy can imply that no discrimination on the bases of being non-human can be tolerated – no medical experimentation, no slaughter of farm animals, no euthanasia or sterilization of pets (Bisgould 2008; Kopnina 2016). It is not clear that a much less comfortable discussion needs to occur once the needs of various species are seriously considered (Mathews 2016) and the question of animal or general environmental rights is considered on the par with human rights (Kopnina and Blewitt 2014; Kopnina et al 2018a, 2018b).

The intrinsic value of the environment is most contested. While convergence is widely recognized, the question that looms large in sustainable development rhetoric – availability of environmental benefits for future generation of nonhumans (as David expresses it, “future generations to benefit from the environment as much as the preceding generations”) finds greater exposure than the idea that nature should be protected for the sake of other species and their future generations. As Marina reflects, intrinsic value recognition is of central importance in overcoming ecological injustice in which non-human species “do not gain the same ethical and moral considerations as humans”. The cases by medical experimentation or roadkill are particularly significant here as it illustrates the example of “millions of animals (some of which endangered) that are used for food, clothing, medical experimentation, and entertainment” (Marina) that are instrumentally used by humans. Indeed, the question of intrinsic value recognition becomes salient especially in cases of animal welfare and rights, which might not be congruent with human interests (Katz 1996; Bisgould 2008).

It is apparent that win-win scenarios in which both culture and nature are maintained are preferred. In practical terms, examples like Goodall’s program that, in the words of Fanny, involves “participatory conservation of chimpanzees in Tanzania improved both the lives of the chimpanzees and the local people” inspires students’ belief that ecological and social justice can be successfully combined. In terms of sustainability, as Arne notes, convergence is logical as “To be successful as species we must form a sustainable symbiosis with the planet we live in”. In a similar way, Morten sees that well-being of (vulnerable) human communities is contingent on environmental integrity (“Many indigenous societies rely on the forests. Cutting down such forests impoverished them”). Also, Marina links biodiversity loss to “ecological processes, impacts sustainable development, and is thus connected to human survival this will help shift mentalities”.

However, convergence has its limits as empirically, not all human interests, traditional or not, correspond with ecological needs. As Marina notes, as the human population expands and consumption increases, the environment gets damaged “faster than many ecosystems can tolerate”. Monique notes that anthropocentric advocates “believe that there is no carrying capacity, meaning that the human population cannot possibly exceed the earth’s capacity”, which, she reasons, is an incorrect assumption. Fanny’s example of “Amazonian rainforest has been converted to agricultural land” represents an example of an obvious trade-off that governments, or in some cases local communities, make due to increased material needs of expanding populations. A combination of Western-style consumption and population growth cannot be successful with regard to environmental justice, as some students note. On the other hand, as Natalie notes, reflecting on Baviskar’s

argument, “environmental justice can be a political tool of the rich” in which immediate needs of the poor cannot be easily combined with environmental protection.

Another question that arises from the assignments is that of agency – who decides on what is “just” and who carries responsibility for human welfare and ecological integrity. Like Nonini who reasons that because only humans can “seek and obtain justice” (in Abram et al 2016:11) and that since environmental needs are defined by humans, they remain human affair, Marina notes that “*people* associate with pressure groups that concern *people* since there is shared suffrage”. However, some students think that precisely humans have a responsibility to be accountable for their actions. One way of deepening understanding as to how this concern may be addressed may be through a discussion of the intimate relationship between self and a transcendent natural world of intrinsic agency (Bonnett 2017).

Conclusion

This chapter aimed to explain the connection between social and ecological interests on the basis of the recorded debate on different types of ethics and conceptions of justice. The assignment was intended in part as an attempt by the lecturer and researcher to ‘learn from students’. Since it was assumed that the exploration of students’ worldviews reveals larger patterns in ethical reasoning about the environment, the examination of assignments shows that students’ positioning varies between individuals. The most common position though is that of convergence – assuming that human-environmental interests correspond. Intrinsic value acceptance, associated with deep ecology, is well understood by students, although more contested. Despite the differences, most students supported both social and ecological justice.

The students’ views on justice suggest ways in which the educational curriculum could be improved to support ecological sustainability and the ethical treatment of the environment. Pedagogical strategies to further develop students’ appreciation of ecocentrism need to draw on students’ understanding of human dependency on nature, and the interconnectivity of social and ecological concerns. Also, understanding of the complexity of traditional versus modern, or universal versus culturally relative values, calls for pedagogical strategies that employ both empirical case studies as well as theoretical frameworks that strengthen students’ understanding beyond entrenched dichotomies. One way of deepening understanding as to how this concern may be addressed may be through a discussion of ecocentrism that stresses the intimate relationship between self and a transcendent natural world of intrinsic agency (Bonnett 2017) as part of the existing curriculum.

This research served as an opportunity to rethink environmental ethics in relation to justice. One key aspect that emerged is that while anthropocentrism-ecocentrism continuum remains contested, and nuanced and in-between positions are recognized, the students

demonstrated compassion in relation to both oppressed people and nature, and their ability to critically rethink their place within larger environmental systems. Hence this writing exercise was valuable in getting students to think about the necessity to weigh the benefits of mutual resolution of injustice, for people and the environment, and for people as part of the environment.

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