

Contesting 'Environment' Through the Lens of Sustainability: Examining Implications for Environmental Education (EE) and Education for Sustainable Development (ESD)

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Abstract

This article reflects on implications of presenting nature as a social construction, and of commodification of nature. The social construction of nature tends to limit significance of nature to human perception of it. Commodification presents nature in strict instrumental terms as 'natural resources', 'natural capital' or 'ecosystem services'. Both construction and commodification exhibit anthropocentric bias in denying intrinsic value of non-human species. This article will highlight the importance of a deep ecology perspective, by elaborating upon the ethical context in which construction and commodification of nature occur. Finally, this article will discuss the implications of this ethical context in relation to environmental education (EE) and education for sustainable development (ESD).

Keywords: Anthropocentrism, biodiversity, conservation, deep ecology, education for sustainable development (ESD), environmental education (EE), ethics, pluralism, sustainability, sustainable development

Introduction

This *Culture Unbound* special issue seeks to address the question: How does sustainability manifest itself when examined from within the broad field of cultural economy? But what is meant by sustainability? There are different terms that describe sustainability: ‘industrial ecology’, ‘business ecology’, ‘Cradle to Cradle’, ‘green capitalism’, ‘eco-efficiency’, ‘social and environmental responsibility’, and the triple bottom line (People, Planet, Profit). The word ‘sustainability’ is an adjective that means the capacity to support, maintain or endure; it can indicate both a goal and a process. In ecology sustainability describes how biological systems remain diverse, robust, and productive over time, a necessary precondition for the well-being of humans and other species. Distinction is drawn between different types of sustainability, for example between social (in terms of sustaining people’s welfare) and environmental (in terms of sustaining nature or natural resources) sustainability as well as combination of them.

Since the 1980s, the United Nations World Commission on Environment and Development (WCED) defines sustainability as integration of environmental, economic, and social dimensions towards responsible management of natural resources. In *Our Common Future* report, The Brundtland Commission (1987) characterized sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.

The word ‘sustainability’ became so ubiquitous; it can mean almost anything and apply to almost anything. Sustaining plant and animal life or sustaining human lifestyles can be as different (and potentially opposing) as preserving rainforest AND expanding agricultural activities in the same area. The breadth of sustainability as a subject of educational practice is reflected in environmental education (EE) and education for sustainable development (ESD) publications in journals such as *Environmental Education Research*, *Journal of Environmental Education*, *International Journal of Sustainability in Higher Education*, and *Journal of Education for Sustainable Development*.

ESD can be regarded as an ‘ethical education’ that embraces universal aspects and concepts as well as variety of ethical positions (Sund & Öhman 2011; Van Poeck & Vandenabeele 2012). As Arjen Wals and Bob Jickling (2002: 223) have reflected, sustainability issues involve addressing ethical questions and issues about cultural identities, social and environmental equity, respect, society-nature relationships and tensions between intrinsic and instrumental values. Environmental ethics are seen as particularly pertinent to clarifying some of the important pedagogical grounds of environmental education (Jickling 2005; Kronlid & Öhman 2013).

While typically attempting to combine both social and environmental objectives, literature on the relationship between education, ethics and sustainable development also reflects upon potential contradictions and paradoxes embedded in sustainability discourse. ‘When comparing the sustaining of ecological processes with the sustaining of consumerism we immediately see inconsistencies and incompatibilities of values, yet many people, conditioned to think that sustainability is inherently good, will promote both at the same time’ (Wals & Jickling 2002: 223). It is questioned whether the objective of balancing social, economic and environmental triad is achievable, since the expansion of the ‘economic pie’ to the ‘bottom billion’ (Collier 2007) of the poor would lead to a greater crisis of natural resources (Bartlett 2012; Rolston 2015). Washington (2013) argues that mainstream sustainability solutions that do not take environmental integrity as a starting point do not address long term solutions and the issues connected with population and consumption.

In line with the objective of this special issue, this article aims to interrogate manifold and disputed features, uses and manifestations of the term sustainability through critical reflection on paradoxes of sustainable development. However, rather than attempting to come to terms sustainable development and deal with its inability to perform as a coherent concept, this article will argue that the mainstream concept of sustainability is largely influenced by the two trends within sustainability discourse in relation to nature.

The first trend is the social construction of nature, in which nature is seen primarily as a culturally and socially mediated concept. The second trend is commodification in which non-human species are presented as ‘natural resources’ or ‘ecosystem services’. While there are other possible or contrastive trends in this discursive field, the author has selected constructivism and commodification because they represent dominant conceptions in sustainability discourse. The following sections will reflect upon the implications of these trends and will highlight the importance of a perspective oriented towards the intrinsic values of nature, and the relevance of such a perspective to EE and ESD.

Constructing ‘Nature’

On the one hand, construction can refer to actual man-made ‘construction’ (creation or building) of environment by humans, as in the case of urban environments or gardens; and to social construction, that is culturally mediated way of perceiving environment. Historically, humans had a significant influence on their environment, thus parts of nature was literally ‘constructed’ into objects and artifacts by humans.

With the emergence of post-modern philosophy, yet another dimension of construction was added. That dimension can be characterized by fusing nature with human perception of it, which blends not only wild places with cultivated gardens,

but even the *thought* about wild places or domesticated species with their originals. This constructivism reflects the diversity of use of the term 'environment' and examines how the very definition of 'sustainability' fits within the broader history, issues and purposes of what sustainability is supposed to do in relation to nature (Crist 2008). Following a long tradition of epistemological doubt in philosophical thought, the very physicality of nature is fused – and in some cases made subordinate to – human perception of it (Rolston 1997).

Postmodern literary tradition has often blurred the lines between what is natural and artificial. This blending implies that 'nature' is connected to and does not exist outside the human perception of it (Escobar 1996). As William Cronon (1996:70) has asserted: 'Wilderness hides its unnaturalness behind a mask that is all the more beguiling because it seems so natural. As we gaze into the mirror it holds up for us, we too easily imagine that what we behold is Nature when in fact we see the reflection of our Own unexamined longings and desires'. Continuing in this tradition, in 'Trouble with Nature: Ecology as the New Opium of the Masses' (2010), Erik Swyngedouw argues that 'nature' is the empty signifier as

the biological world is inherently relationally constituted through contingent, historically produced, infinitely variable forms in which each part, human or non-human, organic or non-organic is intrinsically bound up with the wider relation that make up the whole...a singular Nature does not exist...there is no trans-historical and/or trans-geographical transcendental natural state of things or conditions or of relations, but rather that there are a range of different historical natures, relations and environments that are subject to continuous, occasionally dramatic or catastrophic, and rarely, if ever, fully predictable changes and transformations (303).

Swyngedouw lays out an argument that: 1. 'Nature' and its more recent derivatives, like 'environment' or 'sustainability' are 'empty' signifiers. 2. There is no such thing as a singular Nature around which an environmental policy or an environmentally sensitive planning can be constructed and performed. 3. The obsession with a singular Nature that requires 'sustaining' or, at least 'managing', is sustained by a particular 'quilting' of Nature that forecloses asking political questions about immediately and really possible alternative socio-natural arrangements.

From this perspective, nature is not only represented by language but created by it, and ultimately becomes little more than an offshoot of social reality. What is worst, concern about environment came to be seen by some as an "elite" preoccupation (Rudy and Konefal 2007; West 2008). While dismissive of overwhelming evidence of grass-roots environmental activism and non-Western (thus 'none-elite') ecocentric perspectives (e.g. Black 2010), as well as anthropocentrism inherent in neoliberal view of environment in much of social science (Dunlap and Van Lier 1978; Kopnina 2012d), this view has found its way into literature on conservation, environmental ethics, and educational research.

Construction of Nature in Educational Practice

Construction of nature within EE and ESD is supported by the calls for encouraging plural and open perspectives based on the belief that there are many conceptions of nature and sustainability, and none of them are fixed or objective (e.g. Gough & Scott 2007). This implies that ‘it is a myth to think that there is a single right vision or a best way to sustain the earth’ (Wals & Jickling 2002: 224) and that ‘there are too many realities out and there, and, to make things worse, these realities shift and transform constantly’ (Wals 2010: 144). Sustainability claims are seen as socially constructed, contextual and subject to social and political struggle (Van Poeck & Vandenaabeele 2012: 549). As Van Poeck and Vandenaabeele emphasize, ‘researchers point at the widely accepted observation that we do not and cannot know what the most sustainable way of living is’ (2012: 547). This raises the question: ‘if values are culturally contextual and variable – are educators and education policy-makers then left with relativist positions and arguments?’ (Sund & Öhman 2014). The implications of answering this question for educational practice are profound.

Constructivist view implies that students will be (and are) taught that environmental problems are related to public debates. Instrumental aim of educating *for* the environment can be easily dismissed in favor of pluralistic discussions about what environment and sustainability mean to different people. The perceived danger of having an instrumental education *for* sustainability or *for* nature concerns the ‘difficulty of warranting a set of educational values and norms’ (Sund & Öhman 2014) that is inconsistent with democratic tradition of our (Western, ‘enlightened’) society. Without allowing plural perspectives, we are warned, we may even slip into what Wals and Jickling (2002: 225) called ‘eco-totalitarianism’, a ‘regime that through law and order, rewards and punishment, and conditioning of behavior can create a society that is quite sustainable according to some more ecological criteria’. Wals and Jickling continue, ‘we can wonder whether the people living within such an ‘‘eco-totalitarian’’ regime are happy or whether their regime is just, but they do live ‘‘sustainably’’ and so will their children’ (Ibid). Reflecting on the perceived need to support the democratic responsibilities of public education, researchers find an easy ally in constructivist tradition which tends to dismiss the urgency of education *for* anything in favor of caution *against* instrumentalism.

Criticism of Construction

The fear of the normative dangers of education and a conviction that it is ‘wrong to persuade, influence or even educate people towards pre- and expert-determined ways of thinking and acting’ (Wals 2010: 150) is mediated by using construction of nature and sustainability. Yet, as Holmes Rolston III has reflected:

Too much lingering in the Kantian conviction that we humans cannot escape our subjectivity makes us liable to commit a fallacy of misplaced values. We must release some realms of value from our subject-minds and locate these instead out there in the world, at the same time that we are involved enough to feel the bite that registers values, getting past mere science to residence in a biotic community. If we cannot have that much truth, we have not only lost a world, we have become lost ourselves (1997: 62-63).

Constructivist view of nature makes it impossible to judge one attitude toward nature as better or worse, more beneficial or more harmful than any other for, according to this logic, there is no nature outside the human perception of it (Crist 2008; Kopnina 2012c). Therefore the discussion of environmental problems or conservation is only relevant in as far as human perception of what needs to be sustained, implicitly relying on a humanist perspective about knowledge creation that privileges the cognitive sovereignty of human subject over nature (Crist 2008). In this framework, animal victimhood can be perceived as nothing more than a collateral damage (Desmond 2013).

Another issue with environment's representation as a social construction is that the warning voices about environmental calamities can be dismissed as alarmist 'environmental apocalypticism' (Veldman 2012). Constructivism can thus also apply to construction of environmental problems, and to rendering of issues associated with biodiversity threats, climate change, and many others as an interesting case of discussion among environmental ethicists rather than 'real' issues to be addressed. Indeed, one may argue that projecting doom and gloom may spur some otherwise unmotivated consumers into more sustainable behaviors. Yet, it is not just apocalyptic projections that need to be critically examined when addressing social construction of nature. As Crist (2012: 153) reflects in her projection of the future:

In contrast with many of my colleagues, I do not necessarily foresee a world that collapses by undermining its own life-support systems. It may instead turn into a world that is molded and propped by the strengths advanced industrial civilization has at its disposal: the rational-instrumental means of technical management, heightened efficiency, and technological breakthrough. It is possible that by such means a viable 'civilization' might be established upon a thoroughly denatured planet. What is deeply repugnant about such a civilization is not its potential for self-annihilation, but its totalitarian conversion of the natural world into a domain of resources to serve a human supremacist way of life, and the consequent destruction of all the intrinsic wealth of its natural places, beings, and elements.

It is the question of this intrinsic wealth that is being seriously undermined by constructivist thinkers. The danger of constructivism is in forgetting that nature can exist outside of human politics, assumptions and desires, and to channel the questions of stewardship, responsibility, and guilt into an amorphous realm of academic discussions.

Commodifying Nature

Related to constructionism, nature is often framed as a ‘common good’ and putting a price on ‘ecosystem services’ or ‘natural capital’ became increasingly prominent in international political debates since the nineteen eighties. The Economics of Ecosystems and Biodiversity (TEEB), is an example of a global initiative focused on drawing attention to the economic benefits of biodiversity including the growing cost of biodiversity loss and ecosystem degradation. Commodification of nature refers to an area of research within critical environmental studies concerned with the ways in which natural entities and processes are made exchangeable through economic valuation. Commodification view of biodiversity is summarized in the World Bank’s mission statement on environment and sustainable development: ‘The World Bank’s mission is to alleviate poverty and support sustainable development. Biological resources provide the raw materials for livelihoods, sustenance, medicines, trade, tourism, and industry...’ (<http://go.worldbank.org/08H25N3QY0>).

In an interview with *The Ecologist* (Lee 2010), Paul Collier has explicitly linked the moral objective of lifting poverty with the idea of nature as a commodity, pointing out that its preservation is only important in so far as it serves economic interests of the poor. In discussing ethical implications of preserving or destroying nature, Collier argues that the only ethical responsibility and only rights lie between present human communities and future generations of humans:

If you take a rights-based view, we don't have the right to plunder our natural assets and not leave anything to the future or plunder our natural liabilities and leave a huge load for the future. The question is: what is the nature of these rights? This depends upon how much value is created when we burn down nature.

Sometimes, in poor societies, it is very important to burn down nature and convert it into more productive assets and hand these on. This is the ethical imperative – that's what stewardship is. Using natural assets productively, creating more value and passing them on is how we will reduce poverty.

But in other cases, the same thought experiment will come up with a different answer – the future may say you are proposing to leave us a nasty climate and we will be awash in man-made assets...Once you come from a doctrinal, ideological position that ‘nature has to be preserved’, it will condemn poor societies to poverty (Collier in Lee 2010).

Collier criticizes ‘romantic environmentalists’ who argue that nature should also have rights – instead he argues that ‘simple ethics of nature – different from the conventional economic ethics of the future and also different from the romantic environmentalist position’ relates to human rights to exploit nature.

Commodification of Nature in Educational Practice

Referring to the objectification of non-human species into ‘resources’ Crist (2012: 150) notes that the ‘genocide of nonhumans is something about which the main-

stream culture, observes silence'. Academics, including educational practitioners, seem to follow suit, perhaps because they view raising an issue about which silence is observed as a non sequitur. Relating this back to EE and ESD, combating social problems are acknowledged in all ESD objectives, speciesism is considered to be a non-issue as overview of ESD indicators suggest (Reid et al. 2006; UNESCO 2013a). The recent review of articles in leading EE and ESD journals have revealed that there is little mention of ecological justice, or discussion of the rights of non-human species (Kopnina 2012a, 2013a). In the widely accepted anthropocentric curriculum, conceiving controlling the growth of human population and limiting consumption becomes inconceivable, while distribution of natural resources – aka species of plants and animals either directly used for consumption or swiped away during clearing of 'productive lands' become normalized. EE explicitly addressing consumption in Western countries or global population growth are rare (e.g. Kopnina 2013b).

The key areas outlined in the documents of the Decade for Education for sustainable Development (2005-2014) are mostly social or economic, such as cultural diversity, poverty reduction, gender equality, health promotion, peace and human security (UNESCO 2013a). The 'environmental' areas such as water, climate change or biodiversity are explicitly linked to human concerns. Limits to growth, and population growth seem to be subordinate to the aim of reconciling protection of biodiversity with 'growth of human activities' (UNESCO 2013b).

In relation to education, this suspicion has crossed over into doubt whether the shifting focus towards social equity issues in EE and ESD may represent abandoning of concerns with preservation of nature in favor of more conventional 'sustainability' solutions geared toward further commodification and construction of nature. Critical authors have emphasized that the current contradictory discourses on sustainability have implications for how the education is carried out, particularly pointing out robust anthropocentric bias in teaching students both to perceive (construct) and use (commodify) nature as subordinate to human interests (e.g. Jickling 2005; Kopnina 2012a).

Criticism of Commodification

Collier's insistence that the only moral obligation in regard to nature is the equitable distribution of its assets to the poor is a prevalent position in mainstream sustainable development discourse, and indeed in many neo-liberal societies. This position however can be criticized from a number of perspectives.

The first objection has to do with ethics. Arne Naess (1973, 1989) is credited with coining the term 'deep ecology' and distinguishing it from 'shallow ecology'. Shallow ecology can be exemplified by environmental concerns motivated by anthropocentric interests, such as the fight against pollution and resource depletion, which is typically associated with sustainable development. Shallow ecology

adheres to the Dominant Social Paradigm (DSP), positing endless progress, growth, and abundance as pre-conditions of human development (Dunlap & Van Liere 1978). Those committed to shallow ecology solutions are treating only the symptoms, and not the source of the symptoms, such as overpopulation and growth in consumption. DSP is opposed to the New Ecological Paradigm (NEP), which highlights the disruption of ecosystems caused by modern industrial societies exceeding environmental limits.

Deep ecology can be summarized in a number of tenants (although many consequent philosophers and ethicists have interpreted them differently). First, the well-being and flourishing of human and non-human life on Earth have value in themselves, and thus possess intrinsic value, independent of the usefulness to humans (Miller et al 2014). Pricing of nature is a problem as many species, landscapes and services are unique or otherwise irreplaceable. Secondly, richness and diversity of life forms contribute to the realization of these values. The ideological change proposed is appreciating life quality dwelling in situations of inherent value, rather than adhering to an increasingly higher standard of living (Naess 1989: 29). Deep ecology perspective suggests that humans have no right to reduce this richness and diversity except to satisfy vital needs (Naess 1973). In the very act of commodifying nature, moral consideration is exclusively reserved to human beings, judging our acts towards nature on the basis of how they affect our social or economic interests (Eckersley 2004).

Comparing deep ecology perspective to that of social liberation movement of the past, prominent anthropologist Veronica Strang (2013) notes that in the last few centuries, large patriarchal societies have embarked upon hegemonic colonial enterprises creating wildly unequal power relations between human societies and that concern with social justice has therefore tended to be concerned with the rights of disadvantaged human groups. However, it is often entangled with notions of ‘development’ and achieving more equitable access to resources.

What sometimes gets lost in the shuffle is that this process of expansion has also exported to all corners of the globe unsustainable economic practices. While these may support human groups, they have had massive impacts on non-human species and ecosystems....However; there remains a thorny question as to whether anyone, advantaged or disadvantaged, has the right to prioritise their own interests to the extent that those of the non-human are deemed expendable (Strang 2013: 2).

Another objection to commodification is the practical (anthropocentric) concern whether – even from an anthropocentric perspective of practical utility – humans (both rich and poor) will profit from depletion of natural resources, and whether human equity questions will be solved by short-term increase and distribution of wealth. Blowfield (2013) suggests that it does not appear logical to include poverty in sustainability challenges, as population growth and heightened

consumption actually deepen sustainability challenges such as water, food and energy.

Strang (2013) argues that discourses on justice for people often imply that the most disadvantaged groups should have special rights to redress long-term imbalances. However, if the result is only a short-term gain at the long-term expense of the non-human, this is in itself not a sustainable process for maintaining either social or environmental equity. Crist (2012) argues that destruction of natural resources presents a greater loss for humanity itself that is *not* resources but the very essence of what makes humans native to the Earth, the magical potency of true inter-connectiveness with other species.

Another question that arises from economic valuation of nature is whether commodification is sufficient to support only those elements of nature most useful to human endeavor, while potentially ignoring anything that might not have manifest value to humans. Some authors have suggested that preservation of ‘some’ biodiversity would be sufficient and that we should not be so concerned about species that are functionally useless to humanity. Haring (2011) argues that only some select species such as agricultural monocultures are needed for human welfare, one should accept the ‘uncomfortable truth about biodiversity’, the fact that not all species are needed (and should be protected) by humanity (Thompson 2010).

Aside from those who espouse deep ecology perspective or represent animal rights, the mainstream sustainability supporters do not seem to consider ecological justice or justice between species, to be part of sustainable development (Baxter 2005). The ethical burden of sacrificing *billions* of non-human species to feed an (growing) segment of human population reveals one of the most striking ethical paradoxes of sustainability.

Cultural economy suggests that markets are sites where actors grapple with questions of valuation and the consummation of an economic exchange involving efforts to qualify the object that is exchanged and hence assessing its value in certain dimensions (Helgesson & Kjellberg 2013: 361). Ecological justice concerns go beyond mere questions of cultural economy.

Reflection

EE/ESD scholars are right to point out the danger of accepting pre-determined, official, mainstream views of sustainability, as most of them are geared toward oxymoronic aims of combining ‘the triple P’ objectives, the empty slogans and hidden agendas of financial institutions and development agencies (e.g. Jickling 2005; Stevenson 2006; Jickling & Wals 2008). Yet, there are a few issues that need to be emphasized in relation to the fear of ‘environmental indoctrination’.

We shall recall the fear of eco-totalitarian society (Wals & Jickling 2002). On the emancipatory end of the continuum Jickling and Wals support a ‘very transparent society’, with ‘action competent citizens’, who

actively and critically participate in problem solving and decision making, and value and respect alternative ways of thinking, valuing and doing. This society may not be so sustainable from the strictly ecological point of view as represented by the eco-totalitarian society, but the people might be happier, and ultimately capable of better responding to emerging environmental issues (2002: 225).

One issue with the horror scenario of ‘eco-totalitarian’ education is empirical – whether EE/ESD scholars really believe that education that teaches students to care about nature can lead to such a frightening unhappy society? There is no literature, to my knowledge, correlating ‘happiness’ (or ‘unhappiness’, for that matter) to better responses to environmental issues.¹ Empirical evidence shows that despite any efforts in education or society, environmental problems such as extinction of species continue unabated and there is not a thread of evidence that any radical environmentalist groups are anywhere close to overtaking educational institutions, let along the public minds (Kopnina 2012b).

Another issue with the ‘eco-totalitarian’ scenario is ethical – is preaching *for* democratic values, equality of genders, races, etc. and *against* ecologically benign governance not a form of indoctrination itself? Following the relativist position, we imagine that it can very well be, and this indoctrination might be much worse than some imaginary ‘eco-totalitarianism’ as it is tacit, hidden, and universally accepted (at least in politically correct, enlightened, Western educational institutions). And is the rhetoric of pluralism, diversity, democracy, etc. not too comfortably close to the discursive preferences of the leading international organizations that ‘inspire’ and most significantly fund the EE/ESD enterprise? Indeed, ‘learning from sustainable development’ seems to gear our educational practice towards articulation rather than resolution of conflicts, avoiding moral (good vs. bad) or rational (right vs. wrong) terms at all costs (Van Poeck & Vandenabeele 2012: 548). What happens then to our ‘deep concern about the state of the planet and a sense of urgency that demands a break with existing un-sustainable systems’ (Wals 2010: 150)? Are we back to Collier’s ‘simple ethics of nature’?

Rather than delving into the intricate depths of environmental ethics debates within EE/ESD, we can simply demand to know how ‘happy’, to use Wals and Jickling’s (2002) expression, can non-human species be when the very act of their ‘distribution’ becomes part of the economic ethics perspective, and their (majority, in a planetary sense) ‘voice’ is completely excluded from the ‘pluralistic’ perspectives? Of course the academics can retreat back into the relativist distance saying that we cannot know whether non-humans are happy or interpret their ‘voice’. But was this not once the argument used for silencing the slaves or underprivileged human groups or denigrating the ‘savages’? How ‘happy’ can we be

ourselves, living in a polluted world stripped of its bicultural diversity, of variety of life that we ourselves are a part?

Certainly, any totalitarian society sounds frightening. Certainly it is good to have alternative visions, especially when the experts lack insight into the complex web of causes and effects and it is 'not clear who will suffer from the consequences' (Van Poeck & Vandenabeele 2012: 547). Unfortunately in this situation it is actually quite clear who suffers the consequences. Only perhaps our own politically correct EE/ESD community may not want to acknowledge the danger of having a democratic society which conveniently condones extermination of other species as one of many (socially constructed) challenges of sustainability. As not-so-politically correct Crist (2013: 137-138) has retorted in her challenge to the Anthropocene, describing human-driven extinction with detachment (and often in passing) sidesteps a matter of unparalleled, even cosmological significance, while also marshalling those facts as favoring the championed geological designator:

Detached reporting on the sixth extinction amounts to absence of clarity about its earth-shattering meaning and avoidance of voicing the imperative of its preemption. This begs some questions. Will the human enterprise's legacy to the planet, and all generations to come, be to obliterate a large fraction of our nonhuman cohort, while at the same time constricting and enslaving another sizable portion of what is left? ... And in a world where the idea of freedom enjoys superlative status, why are we not pursuing larger possibilities of freedom for people and nonhumans alike, beyond those of liberal politics, trade agreements, technological innovations, and consumer choices? (Ibid)

Is it not in itself indoctrination to claim that we need to favor democracy and economic equality at all costs and that teaching the love of nature is similar to Orwell's Big Brother's totalitarianism? Can education for deep ecology which fosters 'ever deepening understanding of the patterns of the place which produce the life there, an ever deepening gratitude to the mountains, trees, rivers and thus a deeper love' (LaChapelle 1991) really be seen as a threat? And if it can, perhaps we should recall the fear of disturbing our established power hegemonies that used to deny rights of disadvantaged groups less than a hundred years ago. In other words, criticizing instrumentalism in education *for* nature, and promoting a slogan-like idea of diversity and pluralism, are we not ourselves guilty of supporting the impotent cacophony of increasingly anthropocentric voices and academic 'doublethink' (Wals & Jickling 2002)? Are the scholars criticizing 'elite' preoccupation with environmental protection not themselves affected by 'elite' (in this case, anthropocentric, neoliberal) thinking that allows them to abandon nature as a marginal concern? As Zaleha (2014) has reflected, many scholars supporting construction of nature perspective or explicitly favor social and economic concerns at the expense of non-humans genuinely lack the biophilia. If that is their affective orientation, anthropocentric scholars can indeed imagine they are maintaining a challenge against elites, and in favor of their intended marginal communities. Yet, love of the non-human biophysical world is not the exclusive domain

of neoliberal elites that are the traditional target of postmodernist critique. In fact, without realizing our connection with nature, can we truly teach students to care about ‘our common future’? Can we presume to teach sustainability when we continue to assume the primacy of economic agendas?

We shall recall the question of whether values can be seen as normative or are culturally contextual and variable and what kind of implications this has for educators and education policy-makers (Sund & Öhman 2014)? We can reason in two principle ways. One, we may assume that assessment of value of nature is neither objective nor ethics-free, and in fact highly contextual and ‘morally loaded’ in association with predominant ideology and issues of political correctness. For example, the value of productive labour of slaves, and indeed of slavery itself can hardly be judged – from the point of view of present-day morality – as something that is simply economically rational or part of cultural economy. Yet it has been seen just as such less than a hundred years ago. In this relativistic case, we can assume that our contemporary (Western, enlightened) ideology of embracing democracy, equality, respect for all persons, sacredness of all *human* life, etc. is a mere product of our time and geographical positioning. In this case, there is hope that sacredness of *all* life on earth will one day be recognized, and current way of *using* nature will be seen as morally inconceivable. We might as well attempt teaching this new morality, acknowledging that what we currently teach (respect for other human beings, importance of ‘global citizenship’, ethical imperative of lifting people out of poverty and curing diseases or whatever) is just as transient.

If, on the other hand, and following Kantian non-consequentialism, moral values such as sacredness of human life, are to be seen as absolute good (and indeed, something that we humans, have morally ‘developed’ toward), than recognition of sacredness of *all* life can be seen as the next step of moral development. EE and ESD educators then need to gather courage to teach ecological justice and deep ecology against the grain of dominant anthropocentric hegemonies, insisting that non-human voices, represented through eco-advocates, have to be included into ‘pluralistic’ discourse and supported by continuous affirmative action as they will never be able to speak for themselves. This is no mundane task and certainly requires going beyond the current EE/ESD debates. The scope of this article does not allow us to investigate the ethical background of these claims in any detail. Yet the main thrust of the argument is that we need to critically evaluate our relationship with nature in ethical terms and urgently address its implications in educational practice.

Michael Bonnett’s call to use ESD not for conventional purpose of indoctrination of students into economically significant ‘values’ but for developing a sense of intrinsic value of nature embodies both the critique of commodification and construction of nature:

In its essential otherness nature participates with us in the production (rather than ‘construction’, which is too deliberative) of places that constitute our life-worlds.

Such places are the source of meaning, intrinsic value and identity, and where nature's voice is absent or silenced, that otherness and mystery that can take us beyond ourselves and gift inspiration is removed, leaving the field clear for the unrestrained play of anthropocentrism and the metaphysics of mastery (Bonnett 2013: 19).

This formulation offers us a hopeful direction as to how nature could be alternatively perceived – and taught – in EE and ESD. As Kronlid and Öhman (2013:31) support the view that environmental ethics has an important role to play in sustainability and EE research and that there is great potential in widening this research in terms of methodology and empirical material. 'Schooling the world' that reproduces mainstream power hegemonies may indeed indoctrinate students into the consumerist system of values (Shiva 1993; Black 2010), yet 'learning in nature' and 'learning from nature' can give the students- and future generations of humans and non-humans alike their world back.

Conclusions

In this article we have emphasized two trends within sustainability discourse in relation to nature. This article has contributed to the emergent theme within the field of environmental education (EE) and education for sustainable development (ESD), namely the ethical implications of a trend to treat nature either as social construction or a commodity. The first trend presents nature as primarily as a culturally and socially mediated concept. The second trend, presents non-human species as 'natural resources'. We have emphasized that while the social construction tends to limit significance of nature to human perception of it, commodification tends to present nature in strict instrumental terms. Both trends exhibit anthropocentric bias that is reflected in pluralistic approaches to EE and ESD. It was suggested that while debates on the aims of sustainable development are not new, earnest recognition of the value of conservation or deep ecology education with its emphasis on ecological values, and ethical responsibility of humans towards other planetary citizens, may lead to true integration of human interests with those of the entire ecosphere.

Rather than attempting to come to terms with the multiplicity of conceptions of sustainability and its inability to perform as a coherent concept, the author has argued that the current calls for emancipatory, plural, and democratic education fail to address the deep ecology perspective. As long as pluralistic interpretations of sustainability and environment remain essentially anthropocentric, they cannot address severe and urgent challenges such as rapid extinction of non-human species. Unless education *for* nature is re-instated, no progress in sustaining Nature (either *for* humans or independently of humans) can be expected.

Of course, responding to this call brings us to quite uncomfortable ethical questions that effect more than just cultural economy and contested uses of the term sustainability. As was the case in the past with abolition of slavery, and the rise in

women's and other minority rights' movements – the claim made in this article that sustainability *needs* to include ecological justice is not 'academic'. Yet, the author hopes that this claim will open up a broader discussion about what our children are missing from their current curriculum in order to make them responsible and happy citizens of this planet.

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Notes

- ¹ There is a huge literature however on the criticism of ecological modernization theory, Environmental Kuznets Curve, and post-material values theories that bring into question the linear relationship between wealthy neo-liberal societies and environmentally benign actions that is regrettably beyond the scope of this article.

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