Abstract
This article focuses on the role of ethical perspectives such as deep ecology and animal rights in relation to environmental education, arguing that such perspectives are well-placed to reposition students as responsible planetary citizens. We focus on the linkage between non-consequentialism, animal rights, and deep ecology in an educational context and discuss the broader issue of ethics in education. Finally, we discuss how the inclusion of deep ecology and animal rights perspectives would improve current environmental education programs by deepening the respect for nonhumans and their inclusion in the ethical community.

Introduction
Research has demonstrated that care for the environment is strongly correlated with deeper respect and care for animal rights (e.g., Johnson, Garrity, & Stallones, 1992). Despite some distinct positions in environmental ethics, and different zoo-centric positions focusing on animal rights, deep ecology and animal rights perspectives can be seen as extensions of care for the environment and animals that can supplement each other, even though they might sometimes come into conflict (Callicott, 1988, 1999). In this article we focus on the many situations where deep ecology and animal rights positions are able to reinforce...
each other—instead of the situations where they come into conflict. However, in order to understand how perspectives as diverse as deep ecology and animal rights can be unified under a common objective, we need to briefly address the differences between them.

Deep ecology and animal rights are largely based on attempts to affirm an independent place for nature and animals in ethical reflection by arguing, demonstrating, making likely, pointing to, and claiming nature’s ethical importance in itself and its associated rights. While the range between deep ecology and animal rights perspectives is wide, many authors have argued for reconciliation of the divergent views for the sake of mutually strengthening the fields that typically place the interests of ecosystems, species, and/or individuals within the species at the forefront of moral agendas (e.g., Callicott, 1988; Kahn, 2010).

The point of conversion of these perspectives lies in a shared “love of nature” or “biophilia,” as defined by Wilson (1984). The positions can be characterized by the assumption that individual nonhuman entities (in animal rights) and even ecosystems (in deep ecology) have value beyond their instrumental value (e.g., Kopnina, 2012b; Postma, 2002; Rolston, 1985). Even though conflicts can arise between those who wish to protect the rights of individual animals and those who wish to protect an ecosystem from an invasive species, the importance and frequency of these conflicts often seems exaggerated in relation to the many instances where a deepened understanding and appreciation of the intrinsic value of nature and animals, regardless of one’s theoretical position, can be used in support of building a more sustainable relationship between humans and the rest of the planet. In education, such positions are often associated with ecological justice (Bonnett, 2003, 2013; Kopnina, 2014a, 2014b; Payne, 2010).

Drawing on the work of Regan (1986), animal rights has been defined as a commitment to a number of goals, including the abolition of animal experimentation, dissolution of commercial animal agriculture, and elimination of commercial and sport hunting. In education, animal rights has often been taught as part of broader courses associated with education for sustainability, including variations on conservation, biology, and deep ecology courses (e.g., Drengson, 1991; Root-Bernstein, Root-Bernstein, & Root-Bernstein, 2014). In these courses, animal ethics are often incorporated, generalizing non-anthropocentric views of nature to species and individuals within a species. Animal rights are also often associated with systematic criticism of the anthropocentric subordination of nonhuman interests to the interests of humans, such as those visible in intensive animal production systems (Wyckoff, 2014).

A number of educational programs that support the influence of animal ethics have been developed by the Animal Welfare Institute, founded in 1951, and The International Fund for Animal Welfare, founded in 1969, among other organizations. Both organizations are still involved in education for animal rights and welfare. Teaching animal ethics as part of education for sustainability has been established as educational practice, but is practiced ad hoc within and beyond environmental education (e.g., Glasser, 2011; Gorski, 2009; Hickman, 2010).
However, the objective of placing ecology and animal ethics at the centre of education for sustainability has shifted toward education for sustainable development (e.g., Wals, 2012). Over the past two decades, the market economy has increasingly been represented as the solution to issues of sustainability and conservation, embedding economic reasoning within environmental policy, planning, and practice. Environmental management of “natural resources” and “ecosystems services” has become interlinked with finance mechanisms like “species banking,” “biodiversity derivatives,” and “carbon trading.” The ubiquity of these constructs reflects a larger transformation in international environmental politics, including efforts at climate change mitigation (Lidskog & Elander, 2010). This governance has largely come to accommodate an ontology of natural capital, commodifying nature as a natural resource or ecosystem service, culminating in the production of the idea that nature can be seen as merely a property among others. This trend, of presenting nature as capital, has made its way into educational practices as well. Recognition of the intrinsic value of biodiversity rarely appears in the environmental education/education for sustainable development literature,² with notable examples such as this journal’s Volume 16 in 2011, entitled Animality and Environmental Education. Often, education for sustainable development literature is replete with references to natural resources, natural capital, and ecosystem services, conceptualizing nature through a cost-benefit lens where it is simply seen as raw material (Bonnett, 2013). The moral imperatives have shifted toward the elevation of social equality, rather than addressing the limits to growth, in order to continue to serve the global market through perpetuation of consumer culture (Crist, 2012).

Education for sustainable development primarily promotes human (social and economic) sustainability, placing its focus on a “sense of justice, responsibility, exploration and dialogue,” as well as enabling “us all to live a full life without being deprived of basic human needs” (Nevin, 2008, pp. 50-51). Translated into teaching practice, acceptance of the primal importance of social and economic sustainability is interlinked with conceptions of stewardship, management, and “innovations” (Jickling & Wals, 2008). This “fixing” of the current predicament through innovation is rarely related to ethical concerns about nonhumans, and says little about animal ethics. While ethical considerations about economic and social equality dominate education for sustainable development, there is an almost total absence of consideration regarding animal ethics; animal welfare issues are often only included to the extent that current levels can be improved or maintained while increasing production efficiency (Gjerris, 2014).

While educational research on teaching and learning about animal rights and other aspects of animal ethics has advanced in veterinary training (Rollin, 2006), it has clearly not done so in connection with the broader framework of environmental education. As previously noted, animal rights and speciesism are rarely discussed in environmental education journals (Wyckoff, 2014).
Considering that there is no empirical evidence to prove that instrumental attitudes to nature are sufficient for profoundly addressing issues of animal welfare and rights, raising ethical objectives to anthropocentrism in education seems well-warranted.

As mentioned, many theorists have attempted to demonstrate the precise ways in which environmental ethics and animal ethics are entangled and interdependent, as well as how they differ both in relation to each other and in relation to specific positions within each field. It is not our objective to summarize these arguments. Instead, we focus on the linkages among non-consequentialism, animal rights, and deep ecology in educational contexts. We will discuss the broader issue of ethics in education as a way to counteract the anthropocentric assumptions that permeate education for sustainable development, thus contributing to the current ecological crisis as described by Naess (1973, 1993). According to Naess's analysis, actions proceeding from inclination may be politically more effective than those depending on a sense of duty, and education could help by fostering love and respect for life. Finally, we discuss how the inclusion of the perspectives of deep ecology and animal rights would improve current environmental education programs by deepening the respect for nonhumans and their inclusion in the ethical community.

Pluralism, Animal Rights, and Deep Ecology

The field of environmental ethics offers an array of perspectives within which animal ethics take a more or less implicit position. Various positions within environmental ethics can be positioned along the continuums of deep and shallow ecology (Naess, 1973), strong and weak anthropocentrism (e.g., Norton, 1984), and pragmatic versus monistic ethics (Callicott, 1999; Light, 1996).

Pluralism has been proposed as the basis of environment education/education for sustainable development to encourage active participation and open views, rather than teaching consensus (Jickling, 1994; Jickling & Wals, 2008; Öhman, 2006; Peters & Wals, 2013; Wals, 2012). These scholars propose an education that reflects the diversity of sustainability perspectives, in order to avoid reduction of education to a mere instrument for promoting a specific kind of “sustainable” behaviour (Wals, 2012; Wals & Jickling, 2002).

This turn to a more relativistic and reflective education can be seen as a reaction to what educators fear to be authoritarian tendencies of top-down curriculum. To be fair, pluralism can be approached from many different ideological standpoints, including liberalism, pragmatism, and deliberative democracy. It is the particular kind of pluralism embracing market economy, rather than pluralism as an educational approach to democratic communication in schools, that we will focus on here. This type of pluralism stands in sharp contrast to education for sustainability with its need to address urgent problems (e.g., Kopnina, 2012a).
When talking about “the pluralistic perspective,” we primarily speak of it in the specific context of dominant approaches. This opens up an understanding of pluralism that does not represent variations on only one dominant (neoliberal, anthropocentric) approach—but still enables the critique of the positions that the dominant discourse espouses. Our claim is that it is this narrow notion of pluralism that has led to the reduction and even disappearance of rights related to the nonhuman world in current environmental education/education for sustainable development practices.

Deep Ecology and Animal Rights in Environmental Ethics

A school of thinkers labeling themselves as pragmatists has argued that the intrinsic value discourse of nature has little practical value (Light, 1996; Norton, 1995) and that moral anthropocentrism is unavoidable (Hui, 2014). The consequentialists support the idea that ethics are relative and that animal rights are the result of cultural and historical preferences, rather than a moral absolute. However, the generalized consequentialist school of thinkers is often much less inclined to express its fear of indoctrination in relation to teaching against racism, sexism, or any form of human discrimination.

The second school of critics shares the first school’s assessment of sustainable development objectives as contradictory, and is equally critical of neoliberalism. However, the consequentialist school does not abandon all instrumentalism in education, but only the type that leads students to accept current mainstream neoliberalism. Pluralism thus disguises neoliberalism, masking the dominant neoliberal ideologies under the guise of free choice (Davies & Bansel, 2007). Just relying on pluralism in environmental education/education for sustainable development fails to address anthropocentric bias present in neoliberal educational practices (Kopnina, 2012a, 2014b). Instead of celebrating a diversity of approaches, critical scholars have therefore proposed a re-orientation of environmental education/education for sustainable development’s focus toward environmental sustainability, placing environmental degradation as the root cause of unsustainability. Deep ecology, as understood here, emphasizes the unity of biotic community—including humans—and respect for its integrity of a “whole” as a moral obligation (Naess, 1973), and supports intrinsic value of nature (e.g., McCauley, 2006).

The two schools of thought introduced above agree that sustainability is subject to social and political influences with contradictions in purpose. For example, achieving low mortality (resulting in population growth), economic prosperity (resulting in greater pressures on resources), and ecological sustainability at the same time may be all but impossible (Rolston, 2015). Critics have pointed out that while on the surface, unprecedented concerns with human welfare everywhere are laudable, the implicit model of “social equity” will require continued sacrifices of biodiversity (e.g., Crist, 2012).
Consideration of nonhuman species is marginal in the perspectives dominated by social and economic agendas. While ethical injunctions of sustainable development condemn practices like gender, class, and ethnic and racial discrimination, they rarely address ecological injustice or violations of animal rights. The clearing of pristine areas for agricultural development or industrial activities, or the daily mechanized slaughter of farm animals, is rarely discussed as a nexus of sustainability and ethics (e.g., Crist, 2012; Shepard, 1993), although there are attempts to formulate sustainable ways of animal production that include both environmental and animal concerns (e.g., Gjerris, Gamborg, Röcklinsberg, & Anthony, 2011).

The largest objection to the anthropocentric view of nature is that it does not guarantee protection to habitats, species, or individual animals that are functionally “useless.” The convergence thesis that anthropocentric and ecocentric approaches will be able to achieve the same aims (e.g., Norton, 1995) is empirically questionable. Thompson (2010) asks how biodiversity loss will affect the human race. Will we even notice? Thompson’s answer to the question of whether we need to preserve certain iconic species such as pandas is a resounding No—we do not need to save every species, as humanity is not dependent on them for the ecosystems to provide the services needed to uphold our existence. This makes a portion of biological diversity expendable, because no negative side effects for people ensue when certain species are gone, making the very existence of some species redundant (Cafaro & Primack, 2014). The psychological and existential loss we might experience from wiping out species that are not necessary for our survival is, however, quite another matter (Abram, 1996, 2011).

Not all species are important for human survival. The history of extinctions proves that humans can very well depend on agricultural monocultures. Rolston (1985), Cafaro and Primack (2014), and Crist and Kopnina (2014) argue that it is our moral responsibility to preserve all species—it is not just something we are required to do out of narrow self-interest. Since humans, unlike other predators or viruses, are consciously aware of the consequences of their actions, it is our moral obligation to protect those species that we—as a collective—have driven close to extinction.

As mentioned, we here leave aside all of the differences between animal rights and deep ecology in our attempt to focus on the alternative to anthropocentrism. Our suggestion is that both deep ecologists and individuals concerned about animals, and the lack of respect and care for them, can meet in mutual recognition of at least some ecocentric values and appreciate and respect nonhuman species and the natural world for their inherent ethical importance.

Notwithstanding the differences in perspectives outlined in the section above, the largest gap is between those who see all of nature as instrumental to human needs, and those that see individual animals, entire species, and/or whole ecosystems as deserving of our moral attention and protection. Much of what
passes for environmentalism, at least in the practical sense, is anthropocentric, condemning animals to be subservient to human interests, a position that most deep ecology and animal rights proponents would reject. Generally, both deep ecology and animal rights proponents will be concerned about animals used for medical experimentation and the extinction of animals such as the Thylacine (commonly known as Tasmanian tiger), Passenger Pigeon, and the Golden Toad.

At the core of the concern regarding a narrow pluralistic approach is the realization that there is nothing about democracy that guarantees decisions favouring sustainability (Lidskog & Elander, 2010). If pluralism does not guarantee environmentally benign outcomes, where does it leave education for sustainability? “Anything goes” pluralism easily turns into relativism and renders the deep ecology perspective as just—at best—one of many perspectives (Wals, 2010).

Raising the issue of extinction of an entire species or animal subordination in such a context becomes nothing more than a marginal position (Wyckoff, 2014). Yet, from our perspective, there are no cogent grounds for assuming that humans are “better” than or superior to other animals and living things. The dominant ideologies of neoliberal industrial capitalism seem to have succeeded in propagating the illusion that humans are superior to other species. Thus, the robust anthropocentric bias excludes any serious consideration of nonhuman species that is at the core of deep ecology and animal rights perspectives (Kopnina, 2012a). It is the acknowledgement of this anthropocentric bias that is needed to move beyond conventional assumptions about the role of nonhumans in human lives.

**Alternative Directions**

Currently, perspectives such as deep ecology or animal rights are not central in environmental education, as there is place for any kind of perspective within educational practice. From the pluralistic perspective, deep ecology could be central to environmental education/education for sustainable development, but this possibility is fully contingent upon socio-political and cultural context. This then, obviously, does not guarantee that deep ecology or animal rights perspectives will be given priority or will not be substituted by yet another dominant perspective.

An argument for ensuring that the perspectives of animal rights and deep ecology are given a more prominent position has been put forth by Dobson (2003). He has suggested that future generations and nonhuman animals could be democratically represented through proxy representatives elected explicitly to promote the interests of nonhumans, occurring through real elections. In his later work, Dobson (2014) argues that the overwhelming attention paid to speech rather than listening in politics is a direct result of defining the political being in terms of the capacity to speak. Since animals cannot speak themselves, the ability to recognize their “voice,” or that of their representatives, is of crucial
importance if nonhumans are to be included in democratic and moral spheres of influence, something that bioregionalists have discussed (Lockyer, 2013). This implies that representation of nonhumans could be positively reinforced through educational efforts and through de-politicizing education (Sund & Öhman, 2014), the same way education has helped to forward inclusion of other social minorities or discriminated groups into the moral sphere.

Others have argued that if the objective to recognize that animals are beings with inherent value and whose fundamental interests ought to be protected, then one should speak of fundamental rights, rather than democratic rights (Mataresse, 2010). The core of Naess’ approach is that sustainability hinges on developing consistent views, policies, actions, and indeed educational curricula that are tied back to a well-informed understanding of the state of the planet. According to Glasser’s (2011) analysis, deep ecology helps shine a brighter light on the gap between our attitudes and our generally unsustainable actions and policies. Education could help by fostering love and respect for life, as Naess wrote, and result in wider benefits of a sustainable future for both human and nonhuman inhabitants of this planet. This is the type of non-consequential approach to moral goods, such as sustainability or animal rights, that could be integrated into environmental education and education for sustainable development to create substantial change from the bottom up.

The non-consequentialist approach suggests that there are valid arguments for including nonhuman entities and systems within the moral sphere—and from that point of view, deep ecology should indeed be central to environmental education/education for sustainable development. Combining this top-down approach to ethics with a more experience-oriented ethics of nature, as found in Glendining (1994) or Griffiths (2006), would enable a kind of moral “progress” that more relativistic positions do not have. While at present we have not (yet) recognized that deep ecology is at the core of our moral obligations, rekindling ideas of responsibility and duty beyond anthropocentric conventions might offer a productive way of “moving forward” to the moral summit in which ecocentric values are recognized and progressively achieved. Cultural relativism and pluralism may be too weak to overcome the dominant hegemony.

Returning to the question of pluralism in environmental education, the development of critical thinking and free will of students and citizens is indeed essential for learning about the significance of the animal rights and deep ecology perspectives. However, while some scholars have argued that pluralism does not equal relativism and indifference (Jickling 1994; Wals & Jickling, 2002; Wals 2012), they have not addressed the issue of actual representation of animals and nature in educational practice. We would like to support Bonnett’s (2013) call to develop an appreciation of places that constitute our life-worlds as the “source of meaning, intrinsic value and identity,” in order to critically approach the “unrestrained play of anthropocentrism and the metaphysics of mastery” (p. 269).
Thus, environmental education/education for sustainable development could provide an alternative learning toward recognizing the beauty and mystery of nature. Earnest recognition of the value of outdoor education (Sandell & Öhman, 2010), deep ecology education (e.g., LaChapelle, 1991), and post-humanist education (Bonnett, 2003) may lead to integration of human interests with those of the entire ecosphere.

Reflection

Deep ecology’s philosophy of inclusion is often based on (broadly speaking) phenomenological arguments, including an openness to experiencing animals and nature as more than resources for human needs. Often, these experiences seem too “gentle” in the face of dominant neoliberal ideology, fuelled by economic interests. On the other hand, animal rights arguments are perhaps potentially “too strong”—too far removed from the mainstream dominant morality. For example, animal rights organizations such as Animal Liberation Front (ALF) have been branded radicals and terrorists (Liddick, 2006). In analyzing the influence of (radical) environmentalism on the development of critical eco-pedagogical studies, and the work of Marcuse, Kahn (2010) reflects:

To my mind, Marcuse is one of the preeminent philosophers of education in modern times...because his educational theory was essentially linked to the ecological problem of human and nonhuman relations due to his understanding that education is a cultural activity, and that in Western history such culture has systematically defined itself against nature in both a hierarchically dominating and repressive manner. (p. 138)

Kahn (2010) explores these radical ideas as one of the means to move education beyond the “anything goes” relativism (Wals, 2010) and toward a more engaged and compassionate—in fact, a revolutionary—involvement with the ecological crises (Kopnina, 2014a).

Practically speaking, considering the needs of nonhuman species and indeed, ecosystems as a whole, requires more fully elaborated institutional solutions as well as educational approaches. If there are no institutional guarantees that other species will be considered in decision-making processes, their interests will be constantly neglected (Eckersley, 2004). We therefore argue that “pluralistic learning” can also be understood as a form of indoctrination. First, every education for something is a form of indoctrination, as in the case of mainstream neoliberal doctrines propagated by sustainable development (e.g., Jickling, 1994). Indoctrination that hides its instrumental aims under the guise of “pluralism” simultaneously tends to marginalize or radicalize alternative visions, and de-moralize perspectives such as deep ecology or animal rights.

Perhaps, denial of the fact that there are objective problems associated with unsustainability leaves pluralistic approaches to environmental education and
education for sustainable development counterproductive to the aim of sustainability. In this context, pluralism submerges essential moral questions within ethically convoluted discourse, without acknowledgement of its own anthropocentric bias. Democratic, pluralistic, and open approaches to education assume that the students are able to choose among multiple options, and be taught to be “‘rational, self-managing, self-promoting agents’ [who are] able to ‘make informed choices and manifest endless possibilities’, assuming that all subjects are equally positioned to recognize, mobilize and consolidate productive or successful choices” (Bansel, 2007, p. 298). Yet, essentially, such assumptions leave economically-centered, anthropocentric hegemony intact, marginalizing or radicalizing alternatives and preventing the staff—and students—from distinguishing between more or less viable, realistic, and effective kinds of sustainability knowledge and skills.

In discussing environmental justice (equal distribution of environmental risks and benefits, including to nonhuman species) and democracy, Dobson (2003) emphasizes that “if harm is being done, then more justice rather than more talking is the first requirement” (p. 26). This requirement should be reflected in education. One way of doing that is giving the speechless a voice. To do that, however, it is not enough just to speak on their behalf, but also to learn how to hear what they have to say. And to do that it is necessary to take the time to experience what it is the world has to say to us. Here we rely on the Danish theologian Løgstrup (1995) and his thoughts about how human knowledge about the world is the result of a silent “dialogue” between the human pre-understanding of the world and how the world presents itself to us. In this it is implied that there is a possibility to experience more than our own needs when experiencing the world (e.g., before the cow becomes a biological reactor producing milk, it is an independent animal that has an ethical importance of its own) (Løgstrup, 1995). So, to answer the question, “What will change, if we take animal rights and deep ecology seriously?,” we need to listen first to the many speechless voices of the world—and then speak up for them.

Because other species cannot engage in “pluralistic” discussion due to their inability to speak our language, the participation of deep ecology educators is essential in sustainability debates to pass on the ability to hear the voices that are speaking in a more-than-human language. In true pluralism, human eco-advocates who “speak for nature” (O’Neill, 2006) will represent the voices of the billions of Earth’s citizens who are absent from one-species-only pluralism. As Regan (1986) has stated:

People must change their beliefs before they change their habits. Enough people, especially those elected to public office, must believe in change—must want it—before we will have laws that protect the rights of animals. This process of change is very complicated, very demanding, very exhausting, calling for the efforts of many hands in education, publicity, political organization and activity. (p. 180)
This type of change will require not the proliferation of increasingly complex academic debates, but affirmative action programs on behalf of what is left of nature.

Conclusion

We suggest that mainstream environmental education/education for sustainable development seems to have internalized the neoliberal agenda and, as a result, has become too anthropocentric in its understanding and evaluation of nature. To undercut the dominance of a neoliberally sanctioned pluralism that is, on the one hand, too narrow (only allowing critique of a specific kind) and, on the other, so open as to become too relativistic to undermine the existing power hegemonies, change is needed. In order to counteract the current notion of pluralism which has led to the reduction and even disappearance of any issues (rights or otherwise) related to the nonhuman world in environmental education/education for sustainable development, we need to ask: why is discrimination against women, ethnic minorities, and LGBTQ individuals\textsuperscript{4} wrong (at least in our “enlightened” western society), but the treatment of animals in the industrial food production system left to individual consumer preferences? Most teachers will be fired for instigating any kind of socially discriminating statements, yet it is “acceptable” to treat extinction as one of the many possible ways of looking at the challenges of sustainability.

The dominant stream of education for sustainable development literature emphasizes an instrumental view of nature that supports the current unsustainable development. In this situation conservation education, education for deep ecology, and education supporting the recognition of animal rights offer ways forward. Here we have outlined an alternative approach with explicit emphasis on the inclusion of animal rights and deep ecology, not as “one of many” perspectives, but as privileged positions that, together with respect and care for individual animals (animal rights in a broad sense), can form the basis of a sustainable environmental education.

A truly pluralistic approach would allow all Earth’s citizens, including nonhuman species, to voice their opinion as to what needs to be sustained. Obviously, animals and plants cannot speak human language, thus they should be represented through human advocates. This alternative would entail a critical education exposing the deficiencies of the mainstream morality of sustainable development. In education, this implies affirmative action programs that seek to sustain and protect not only human interests, but the whole of the more-than-human-lifeworld—sustained in a sense that recognizes that unlike ethnic minorities, women, LGBTQ individuals, or slaves, these co-inhabitants will never be able to speak for themselves, even when threatened with extinction.
In this article, animal rights is sometimes referred to as a distinct position and sometimes used in the context of speaking about ethical reflections on animals, so we also speak more generally of “care for animals” and “animal ethics.”

See, for example, articles in *The Journal of Environmental Education*, *Environmental Education Research*, and the *Journal of Education for Sustainable Development*.

Pluralism is a very broad term and we do not wish to exclude certain pluralistic approaches to teaching environmental education. What we argue is that the “narrow” pluralistic approach presented here is not sufficient in the present situation, and should be replaced with non-antropocentric normative types of teaching.

The abbreviation LGBTQ stands for individuals who identify as lesbian, gay, bisexual, transgender, and/or queer.

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