Spinoza, Deep Ecology and Education Informed by a (Post)human Sensibility

Lesley Le Grange
Faculty of Education, Stellenbosch University, Stellenbosch, South Africa

ABSTRACT
This article explores the influence of Spinozism on the deep ecology movement (DEM) and on new materialism. It questions the stance of supporters of the DEM because their ecosophies unwittingly anthropomorphise the more-than-human-world. It suggests that instead of humanising the ‘natural’ world, morality should be naturalised, that is, that the object of human expression of ethics should be the more-than-human-world. Moreover, the article discusses Deleuze’s Spinozism that informs new materialism and argues that stripping the human of its ontological privilege does not deprive the human animal from its ethico-normative distinctiveness. Implications of the discussion for an education aimed at cultivating (post)human sensibilities are explored.

KEYWORDS
Deep ecology; ethics; ethical education; post-human; Spinoza

ARTICLE HISTORY
First published in Educational Philosophy and Theory, 2018, Vol. 50, No. 9, 878–887

Introduction
Duffy (2009) points out that the history of Spinozan scholarship is marked by a number of renaissances. These resurgences range ‘from the polemics on atheism during Spinoza’s lifetime, to the pantheism debate [Pantheismusstreit], which was a prelude to German idealism; from the debate between neo-Kantians and post-Hegelians during the second half of the nineteenth century, to the late twentieth-century Marxist-inspired French and Italian Spinozisms’ (Duffy, 2009, p. 111). The most recent revival in Spinozan scholarship in the fields of philosophy and the history of philosophy occurred in the late 1960s through the 1970s, with key figures being Martial Gueroult, Alexandre Matheron, Bernard Rousset, Gilles Deleuze and Robert Misrahi. These revitalisations were inspired by Spinoza’s, open, controversial and peculiar philosophy.

Merçon (2011) avers that one of the most recent and original chapters in the history of Spinozan scholarship is the application of his ideas to environmental philosophy. In this regard, Spinoza has provided particular inspiration to those who refer to themselves as supporters of the deep ecology movement (DEM). The DEM emerged in the wake of the dawning awareness in the middle twentieth century that we inhabit a planet with finite resources and that human activity is having a negative impact on the environment (the-more-than-human-world). This awareness followed the publication of seminal works such as Aldo Leopold’s, The Land Ethic (1949) and Rachel Carson’s, Silent Spring (1962). Based on his observations of political and social action in diverse cultures during mountaineering expeditions across the world, the Norwegian philosopher Arne Naess, who coined the term ‘deep ecology’ at a conference in Bucharest in 1972 (Naess, 1973), read Spinoza whilst spending time in the mountains, which shaped his understanding of the oneness of humans and the more-than-human-world (nature) and led him to propose that humans should live within the cycles of nature. Naess invoked the term ‘deep ecology’ as an idea distinctive from ‘shallow’ ecology.
Drengson (1999) clarifies that deep ecology is not a philosophy but a movement with a set of principles that could be supported by a range of ecosophies (ecophilosophies). In Naess’s case, his ecosophy was informed by Norwegian friluftsliv (a movement to experience living in the outdoors), Gandhian nonviolence, Mahayana Buddhism and Spinozan pantheism.

Many advocates of the DEM privilege different aspects of Spinoza’s philosophy of naturalism to develop their personal ecosophies. According to Guilherme (2011, p. 64) there are particular themes that all ecosophies aligned with the DEM have in common: (1) intrinsic value (everything has value in itself and this value is not dependent on its usefulness to humans); (2) biocentric egalitarianism (all entities whether a cell, an entity, or an ecosystem, have equal value); (3) self-realisation (everything strives to endure for as long as it possibly could and/or as fulfilling its own purpose). In this article, I shall assess whether these themes align with Spinoza’s philosophy of naturalism and what the implications of such an assessment might be for education.

A more recent intellectual development that has elicited critical discussions on Spinoza (and Spinoza and deep ecology) is an interdisciplinary field referred to as new materialism (matter-realism). New materialism questions the privileging of the human subject in the human/nonhuman binary and holds that all matter (including inorganic matter) has agential capacities. It holds that the human being is not only socially and linguistically constructed, but also materially constructed. One of the key protagonists of new materialism (matter-realism), Rosi Braidotti (2006, 2013), takes issue with Naess’s deep ecology and other geo-centred theories such as Lovelock’s Gaia hypothesis that propose a return to holism and the idea that the whole earth is a single, sacred organism. She argues that deep ecology is spiritually charged in essentialist ways and fails to account for re-readings of Spinoza by thinkers such as Deleuze and Guattari, and Foucault. In a similar vein as she problematises the animal rights movement, she takes issue with deep ecology’s humanisation of nature; arguing that ‘deep ecology anthropomorphises the earth environment’ (Braidotti, 2006, p. 116).

My aim in this article is to show how environmental education processes that draw on either DEM or new materialism fail to adequately align with the core contribution of Spinoza’s ethics. I shall critically explore whether Spinozism allows for deep ecological and/or new materialist appropriations and what implications such an exploration might have for education. I divide the paper into the following main sections: firstly, I discuss Spinoza’s philosophy of naturalism by referring to his notions of substance, mode, attribute and conatus; secondly, I discuss Spinoza and the deep ecology movement; thirdly, I discuss whether Spinozism allows for post-human appropriations; fourthly, I discuss the educational implications of Spinozisms in responding to the challenges of a post-human condition. Fifthly, I share some concluding thoughts.

**Substances, Attributes, Modes and Conatus**

Spinoza’s (2001) first definition in the Ethics reads as follows: ‘By cause of itself [causa sui], I understand that, whose essence involves existence; or that, whose nature cannot be conceived unless existing’ (EID1). This definition is the leitmotif of the Ethics and it is followed by Spinoza’s definitions of substance, attribute and mode. About substance Spinoza writes:

> By substance, I understand that which is in itself and is conceived through itself; in other words, that, the conception of which does not need the conception of another thing from which it must be formed. (EID3)

About attribute Spinoza writes:

> By attribute, I understand that which the intellect perceives of substance, as if constituting its essence. (EID4)

About mode Spinoza writes:
By mode, I understand the affections of substance, or that which is in another thing through which also it is conceived. (EID5)

A substance therefore does not depend on anything outside of itself for its existence. Scruton (1985) points out that for Spinoza a substance is something that we are able to obtain an ‘adequate idea’ about, through which its nature can be understood without recourse to anything outside of it—substance is conceptually and ontologically independent. Spinoza goes on to posit that substance ‘exists from the necessity of its own nature alone’ (EID7). In other words, existence belongs to the nature of substance—the essence of substance involves existence and therefore it cannot be conceived except through existence. Therefore Scruton (1985, p. 44) argues, that Spinoza provides the first answer to the enigma of existence: ‘substance exists, and exists necessarily.’ Spinoza’s monism is the inspiration for the DEM’s adherence to metaphysical holism—the view that humans can apprehend ontological interconnectedness through ‘self-realisation’ (Devall & Sessions, 1985, pp. 67–69). More about this follows later.

For Spinoza, mode is something that cannot exist on its own, but only in some other thing on which it depends. So a rock, a human, a tree, etc. are all modifications of substance. The difference between substance and mode is captured best in Spinoza’s own words in his letter to Oldenburg in October 1661:

When I say that I mean by substance that which is conceived through and in itself; and that I mean by modification or accident that which is in something else, and is conceived through that wherein it is, evidently it follows that substance is by nature prior to its accidents. For without the former the latter can neither be nor be conceived. Secondly, it follows that besides substances and accidents nothing exists really or externally to the intellect (Spinoza, 1955, p. 275).

Following Spinoza’s definitions of substance and mode, he proposes that God or Nature is substance because the existence of God or Nature does not depend on an ‘external cause’. And, that it is in God’s nature to exist, therefore God necessarily exists. Moreover, for Spinoza God or Nature is the only substance. Spinoza posits that all things that exist in the plural are a mode and not a substance. He writes:

[A]ll things which are conceived to exist in the plural must necessarily be produced by external causes, and not by the force of their own nature (Spinoza, 1955, p. 351).

Spinoza’s notions of substance and mode have shaped the ecosophies of many supporters of the DEM and are the basis of the movement’s principle of biocentric egalitarianism. The DEM’s conviction that all organisms have an equal right to live and blossom is derived from the Spinozan idea that all entities other than substance are modes of God or Nature. Therefore, for the DEM, there is no ‘pecking order in … [the] moral barnyard’ (Sessions, 1985, p. 230). In other words, the measure of sentience is irrelevant to how humans should relate to Nature. However, by referring to organisms, supporters of the DEM privilege biota over non-bio bodies.

Spinoza’s definition of attribute has been one of the most puzzling sections of the Ethics. Keizer (2012) argues that the enigma of the definition of attribute might be solved by understanding Spinoza’s definition as having been formulated in purely epistemological terms. However, the epistemological character of Spinoza’s definition hides the ontological definition, which tells us what an attribute is. Keizer (2012, p. 497) avers that ‘what is epistemologically the case in the perceiving intellect … cannot be put on a par with what is ontologically the case in the real world.’ The implication of this understanding is that different modes can have different attributes and different numbers of attributes. The Spinozan notion of attribute is not fully accounted for in the ecosophies of DEM supporters. I shall return to a discussion on attributes later, when discussing the affects produced by modes.

In brief, the discussion on substance, attribute and mode is important in framing what is to follow and in answering the following pertinent questions: Do all modifications of God or Nature have intrinsic value, as supporters of the deep ecology movement hold, and is cosmic
exceptionalism permissible? Can Spinoza’s ideas be used to support the DEM’s attempt to extend morality to all modes of God or Nature? Does Spinoza’s theory of substance and modes flatten ontology so as to deprive the human of its ethico-normative distinctiveness? I shall respond to these questions in the next section on Spinoza, deep ecology and ecosophy. I shall show that from a Spinozan perspective humans hold no privileged place in the cosmos—cosmic exceptionalism is not permissible. This, however, does not imply sameness amongst all modes and therefore human qualities and morality cannot simply be extended to other modes of life, as the DEM seems to suggest.

Before responding to the three questions posed, it is necessary for me to introduce one more Spinozan term: conatus. Spinoza introduced the notion of conatus to explain the separateness and individuality that are apportioned to modes. Conatus is the essence of modes, which is characterised by that which makes the individual thing persist or endure. About the essence of a finite mode, Spinoza writes:

… the essence of anything pertains that, which being given, the thing itself is necessarily posited, and being taken away, the thing is necessarily taken; or in other words, that without which the thing can neither be nor be conceived, and which in its turn cannot be nor be conceived without the thing. (EIID2)

For many of the DEM supporters, the principle of self-realisation finds resonance with Spinoza’s idea of conatus. Supporters of the DEM hold that every organism has the right to strive to endure and to fulfil its purpose. Notice here again that for the DEM, a notion of self-realisation is attributed to organisms whereas Spinoza’s idea of conatus extends beyond that which is carbon-based. But, more about this later. Next, I shall discuss the nexus of Spinozism, deep ecology and ecosophy to explore these issues more fully.

Spinoza, deep ecology and ecosophy

In recent decades (post)modern philosophy has been critiqued for its dualistic thought, which formed the basis of the separation of humans from nature. As part of this critique, we witnessed the emergence of philosophies that emphasise ecocentric values—ecophilosophies. Drengson (1999) argues that just as the aim of traditional philosophy is sophia (wisdom), the aim of ecophilosophy is ecosophy or ecological wisdom. Such wisdom explores a diversity of human—nature interrelationships so as to foster ‘deeper and more harmonious relationships between place, self, community and the natural world’ (Drengson, 1999). Naess (1994, p. 124) defined ecosophy in terms of a normative wisdom:

By an ecosophy I mean a philosophy of ecological harmony or equilibrium. A philosophy as a kind of sofia (or) wisdom, is openly normative, it contains both norms, rules, postulates, value priority announcements and hypotheses concerning the state of affairs in our universe. Wisdom is policy wisdom, prescription, not only scientific description and prediction. The details of an ecosophy will show many variations due to significant differences concerning not only the ‘facts’ of pollution, resources, population, etc. but also value priorities

However, it is important to understand that ‘deep ecology’ is a grassroots movement whose principles develop from the bottom up. To appreciate this, it is useful to understand four discourses that Naess identifies: ultimate premises (Level I); platform principles movement (Level II); policies (Level III); and practical actions (Level IV) (for a detailed discussion see Drengson, 1997, 1999; Drengson, Devall, & Schroll, 2011). Drengson (1997, pp. 110–111, 1999) argues that it is at the level of platform principles that we are able to get consensus or agreement across cultures. These principles serve as a basis for the articulation of policies (national or transnational) which in turn serve as the basis for practical actions on the part of governments and civil societies. But deeper questioning of societal principles and environmental concerns enables us to articulate an ecosophy—the level of ultimate norms and premises. This ecosophy could be grounded in several
major worldviews or religions, be it Pantheism, Christianity, Islam, etc. As noted in Naess’s case his ecosophy was informed by a number of philosophies, foremost among these was Spinoza’s philosophy of naturalism. So, although there is an agreement on principles, as in the case of those represented in the DEM (Level II), the ultimate premises/ecosophy (Level I) can differ amongst the movement. Nevertheless, several supporters of the DEM such as Naess (1977, 1978, 1981), Mathews (1988, 1991), Fox (1984), Devall and Sessions (1985) and Jonge (2004) have drawn on some aspects of Spinoza’s philosophy of naturalism to support their own ecosophies. Principles common to all these variants are: intrinsic value of life, biocentric egalitarianism and self-realisation. These common principles are neatly captured in the ecosophy of Devall and Sessions (1985, p. 67):

The intuition of biocentric equality is that all things in the biosphere have an equal right to live and blossom and to reach their own individual forms of unfolding and self-realisation within the larger Self-Realization. This basic intuition is that all organisms and entities in the ecosphere, as parts of the interrelated whole, are equal in intrinsic value.

But, let us now examine whether the principles of intrinsic value, biocentric egalitarianism and self-realisation can be supported by Spinozism. From the Devall and Session’s quote it is evident that the three principles are interrelated. DEM supporters find alignment between the three principles and Spinoza’s metaphysics in his proposition that all things are modifications of God or Nature, and his concept of conatus. If God or Nature is the only substance and all other things are modifications of God, then for supporters of the DEM it follows that all modifications must have equal value and that they have value irrespective of their usefulness to human beings. Moreover, if all modifications of God or Nature have equal value then they should be able to unfold and endure with little interference from human beings.

The view that all modifications have equal value presents several difficulties. The first relates to the fact that total complementarity is not possible from the perspective of finite beings (Merçon, 2011). In other words, the conatus of one being could thwart that of another, and even decimate the other being. Supporters of the DEM do not provide answers as to how we might deal with assigning equal rights to: the human immunodeficiency virus; parasitic protozoans which cause malaria; the tsetse fly; and so forth. Secondly, the idea that all modes are equal in intrinsic value is problematic. Spinoza avers that from the viewpoint of substance nothing has value and that value only exists from the viewpoint of the modifications of a substance (E1A1). In other words, only a mode can value whether another mode will increase or decrease its conatus. To illustrate this, Guilherme (2011) gives the example of a human valuing water or food for its own existence—one mode placing value onto another mode. Therefore, when supporters of the DEM ascribe equal value to all modes then they are anthropomorphising such modes. Lloyd (1980) argues that environmental ethicists (including deep ecologists) have a mistaken assumption that condemning human denigration of the environment implies enlarging the moral community to include the non-human. In other words, the attempt to render morality less anthropocentric by humanising the more-than-human world is flawed. Merçon (2011, p. 167) put it cogently, ‘the objective to which Spinozism aspires … is to naturalise ethics and not to moralise nature.’

Therefore, I argue that supporters of the deep ecology movement should find inspiration in a Spinozism that concerns an ethics of the human being that understands the interconnectedness of all modes (of God or Nature)—an ethics that cares for and enhances all of life. This discussion has many implications for education, to which I shall turn later. Next, I shall discuss the rise of a new materialism as a response to the post-human predicament, focusing on the prospect of the human in such a predicament.

**Spinoza and a (Post)human Sensibility**

The planet is changing in two significant ways. Firstly, human destruction of the planet is deepening through ongoing decimation of plants and animals, pollution of the oceans, atmospheric change,
growing social inequalities. Secondly, the rapid growth of new technologies is changing the planet to the extent that humans have become interconnected with technologies, making it difficult to determine the unit of reference for the human now. Moreover, and ironically so, the technologies (intelligent computers, robots, drones, ecophages) that humans are producing could have capabilities of destroying all life on the planet. The first planetary change above has made environmentalists posit a new geological epoch, the Anthropocene. The second planetary change has produced a historical moment referred to as the post-human predicament.

It is in response to the two planetary changes that we have witnessed the rise of new materialism. New materialism is marked by a return to realism because post-war discourses of structuralism and poststructuralism have become more or less exhausted—have become inadequate responses to the post-human condition. New materialism questions the privileging of subjectivity and representation, and according to Braudotti (2012, p. 171) replaces textual and other deconstruction with an ontology of modulated presence. New materialists find inspiration in thinking with Deleuze, and in particular the late Deleuze who collaborated with Guattari in placing the human on an immanent plane, thereby stripping it from its ontological privilege.

Ansell-Pearson (2016) contends that for Spinoza, naturalism means that the human is fully part of nature and does not enjoy any special metaphysical value or privileged place. He points out further that no cosmic exceptionalism is allowed—that every mode plays by the same rules. However, this does not mean that all modes possess the same number of affects, power and ideas. Kisner (2011, p. 59) points out that whilst Spinoza accepted that rocks have minds he had no difficulty in acceding that these minds were not capable of things such as deliberation or responding to reasoning.

Ansell-Pearson (2016) argues that Deleuze’s Spinozism does not flatten ontology in the way that some new materialists do, where there is little concern for issues of normativity and what is distinctive about the existence of the human animal. The latter is, for example, evident in Grosz’s strong anti-humanism, where she rejects the possibility of any humanism, even one that includes its excluded others. For Grosz, any humanism falls into a phallocentric economy of the same (Sharp, 2011, p. 168). However, Ansell-Pearson (2016) provides a different reading of Spinoza. He avers that Deleuze’s reading of Spinoza in the 1960s provides important insights that Deleuze develops into the ethical task of human emancipation. For Deleuze, Spinoza offers a philosophy of nature, but also belongs to a great tradition of practical philosophy whose main task is that of demystification. Ansell-Pearson points out that the two projects are linked in that it is through understanding how nature works that we find out how we are implicated in it, which can move us from a human condition of passivity and reactivity to a better active condition. Moving from the human condition of passivity to activity is at the heart of Spinozon ethics. Understanding the link between the two projects is important because a (post)human sensibility involves not only understanding the interconnectedness of all modes, and appreciating that the human animal holds no special ontological place, but concerns a deep awareness of the need to take action in respecting and caring for the more-than-human-world. It is important because of the human animal’s individual and separate conatus that enables it to produce a greater number of affects and ideas. As Deleuze (1988, p. 124) writes:

You will not define an animal, or human being, not by its form, its organs, and its functions, and not as a subject either; you will define it by the number of affects it is capable of.

In acknowledging that there is a difference between the human animal and other modes of God or Nature, this difference should be used by humans as part of a life of experimenting. As Ansell-Pearson (2016, p. 28) writes:

We do not know what affects we are capable of in advance, and this suggests that there is an empirical education in life, involving a ‘long affair of experimentation, a lasting prudence’ and a wisdom that implies constructing a plane of immanence. In terms of our becoming-ethical we can say that we do not know what a body can do: it is a mode of practical living and experimenting, as
well as, of course, a furthering the active life, the life of affirmativity, for example, cultivating the active affects of generosity and joyfulness, as opposed to the passive and sad affects of hatred, fear and cruelty.

A (post)human sensibility is akin to a life of experimentation, of infinite becoming. Such a sensibility is important in averting technophobia, which Braidotti (2013) argues is an unhelpful stance in the times we live in. A such a sensibility also concerns pursuing an active life, conscious that ontologically the human holds no privilege place, yet it can use the affects endemic to its conatus to enhance all of life. I use the parenthesis in (post)human because the ontological oneness of all modes and substance, and placing of the human on a plane of immanence do not deprive the human of its ethico-normative distinctiveness—a least not according Deleuze’s Spinozism.

But, a (post)human sensibility involves more that cultivating active affects instead of passive affects. It also concerns understanding that as humans we do not inhabit the earth but that the earth inhabits us. An understanding that is captured in Burkhart’s (2004) revision of Descartes cogito, ‘I think, therefore I am to “We are, therefore I am”. The ‘we’ refers to the more-than-human-world. Spinozan ethics therefore involves a ‘long affair of experimentation’ through cultivating active affects and through being open to be affected by non-human modes, including non-sentient ones.

**Some Implications for Education**

We live at a time when the planet we inhabit (or that inhabits us) is on the brink of ecological disaster and where new technologies are affecting our lives to the extent that it is becoming increasingly difficult to know how the human is situated. In such times education needs to be concerned with cultivating (post)human sensibilities. As my discussion on deep ecology suggests, an ethical education should not involve anthropomorphising the more-than-human-world, but in understanding that the conatus of the human animal makes the latter an ethical agent. Moreover, that it is the separate conatus of the human animal that makes education different to learning and teaching of non-human sentient beings. The interest should therefore not be to extend this endeavour to the more-human-than-human world but to shift education’s focus from only/chiefly promoting the interest of human beings to an interest in enhancing all of life. An education that cultivates (post)human sensibilities is one that opens up the pathways for learners to expand their powers of enhancing life, where knowledge becomes concerned with the development of capabilities that expand the powers of enhancing life. For Spinoza, ethics is doing what enhances life and one of the central concerns of an ethical education is to construct viable (productive) notions of good and evil.

The challenges facing planet Earth in twenty-first century transcend local places and national boundaries. Environmental problems such as climate change might have local effects, but they are global problems. Efforts (including educational ones) to address environmental concerns therefore require collective action from humans across the globe. Such efforts might be at odds with Spinoza’s notion of conatus that concerns the self-preservation of the individual human or human species. However, Dahlbeck (2017) and Singer (1988) argue that self-preservation is not at odds with benevolence and that working together with others to address common problems might serve the interest of self-preservation. It is when self-preservation and benevolence are not at odds, that education becomes possible and that local educational programmes can have global concerns in mind.

As mentioned, what makes ethics and education possible is the view that the human animal produces affects unique to its conatus, but that these affects cannot be known in advance. This lack of knowledge implies that education should involve experimentation with the real, whereby educational encounters (pedagogical episodes) are moments in a life-long affair of experimentation. Such practical experimentation would enable the student to judge which actions enhance and which thwart life (which is good and which is not). However, the educational process
of experimentation does not simply involve exposing students to different things. As Dahlbeck (2017, p. 548) writes:

If it were so then we would not need education at all. The trick, instead, is to reorder the ideas that we have by ‘breaking old associations between accidently formed ideas and replacing them with new associations, ones forged by order of reason’

But, education should be about creating newness in the world. Education becomes banal when the body’s *conatus* is determined chiefly by passions, rendering it impotent in terms of what we are capable of doing. Whereas newness is created when the virtual power of action, that is capable of transforming and inventing, is released. Newness occurs when the body’s *conatus* is determined by active affects that transform the world. This requires a rethinking of both the subject and pedagogy. As Le Grange (2016, p. 34) writes:

The subject of sustainability education who is post-anthropocentric is not an atomised individual but is ecological; embedded in the material flows of the earth/cosmos, constitutive of these flows, making the subject imperceptible. Pedagogies that are produced in the classroom are not performed on the earth but bent by the earth—teacher and student/learner become imperceptible and represent a microcosm of the living wholeness of the earth/cosmos … [[Improvisation could also be expanded to not only be concerned with the human that reverberates from within and is animated, but to include the vibrations of the earth, its flows, rhythms and creative intensities.

Education informed by a Spinozan ethics involves both cultivating active affects and in rendering the subject imperceptible. A brief reflection on land education might illuminate these complementary notions. Land education is receiving increased attention in academic literature including special issues of journals such as that of *Environmental Education Research* published in 2014 and *Decolonization, Indigeneity, Education & Society* in 2014. According to Tuck, McKenzie, and McCoy (2014, p. 13), land education puts Indigenous epistemological and ontological accounts of land at the centre, including how Indigenous peoples understand land, their languages in relation to land and their critiques of settler colonialism. There is no space here for a detailed discussion on land education. Suffice to say, land education captures the two complementary elements of Spinozan ethics (or Deleuze’s reading or Ansell-Pearson’s reading of Deleuze’s Spinoza) that I attempt to develop in this article. Land education involves Indigenous agency and land ‘rights’. It involves action that needs to be taken to redress the ‘dispossession’ of the land of the world’s Indigenous people through settler colonialism. This speaks to the first aspect of Spinozan ethics developed in this article, that is, the cultivation of active affects—the affects that could transform the world, in this instance, the injustices of settler colonialism. But, for Indigenous peoples land is not static and it is not something that we possess. And land education does not concern learning *about* land but learning *from* land (Meyer, 2008, p. 219). As Styres, Haig-Brown, and Blimkie (2013) aver, ‘[l]and teaches and can be considered as first teacher’ (in Tuck et al., 2014, p. 13). This speaks to the second aspect of Spinozan ethics developed in the article, that is, the naturalising of the human subject so that education concerns the becoming imperceptible/ecological of the teacher and student.

**Conclusion**

In the article I point out that anthropomorphising the more-than-human-world (as supporters of the DEM unintentionally do) does not align with Spinoza’s philosophy of naturalism because it gives human value to the more-than-human world. Although for Spinoza all things other than God or Nature are modifications, it does not follow that all modes of a substance have equal value because value only exists from the viewpoint of a mode. In other words, from the perspective of God or Nature value does not exist. Qualities of a mode can therefore not be assigned to God. When humans (such as deep ecologists) claim that all modes have equal value then human notions of value are extended to the more-than-human world. For Spinoza, humans should be naturalised,
instead of nature being humanised. The specifics of such a naturalised ethics, however, are yet to be unearthed. Moreover, if deep ecology as a movement is to be sustained, then its project should be to change the focus of its ethical expression to all of life (the more-than-human-world) and not to extend human morality to all of life.

I noted that the interdisciplinary field of new materialism has emerged as a response to the post-human predicament and is in part inspired by Deleuze’s Spinozism. New materialism extends agential capabilities to the more-than-human-world and flattens ontology so that the human holds no privileged place in the cosmos. Grosz’s materialism in particular, is strongly anti-humanist to the extent that she provides no room for any humanism, even if it includes the excluded other. This is of course not the position of all those that we might label ‘new materialists’. For example, Braidotti (2013) points out that she has not fully worked out her (dis)engagement with humanism. In this article, I contend that although Deleuze’s Spinozism does not privilege the human on an ontological level, it does not deny the human its ethico-normative distinctiveness. It is this ethico-normative distinctiveness of the human animal that is at the heart of an education aimed at cultivating (post)human sensibilities; an education that involves expanding the powers that enhance all life. Such an education involves a life-long affair of experimentation. But it does not simply mean exposing students to a range of different experiences, but in breaking old associations and forging new ones through a process of reasoning.

Acknowledgement
I wish to thank the editors of the special issue and the anonymous reviewers for offering helpful comments on an earlier draft of the article.

Disclosure statement
No potential conflict of interest was reported by the author.

Funding
This work was supported by the National Research Foundation [grant number 85561].

Notes on contributor
Lesley Le Grange is distinguished professor in the Faculty of Education at Stellenbosch University, South Africa. He is a former chair of the Department of Curriculum Studies and former Vice-Dean (Research) of the Faculty of Education at Stellenbosch University. Lesley teaches and researches in the fields of environmental education, research methodology, science education, curriculum and assessment. His current research interest is exploring how insights from a range of philosophies, including African philosophies could be brought to bear on environmental education processes. He has 193 publications to his credit and serves on editorial boards of seven peer-reviewed journals. He is a member of the Accreditation Committee of the Council on Higher Education in South Africa and Vice-President of the International Association for the Advancement of Curriculum Studies (IAACS). In 2015, Lesley was elected fellow of the Royal Society of Biology in the UK. Lesley is a rated social scientist in South Africa and is recipient of several Stellenbosch University and national awards and prizes.

References