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A posthuman approach to human-animal relationships: advocating critical pluralism

Nicklas Lindgren & Johan Öhman

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ABSTRACT

This paper contributes to the debate about the absence of nonhuman animals (The term 'nonhuman animal' is used to emphasise the interconnection with the human being, viewed as a human animal. Using this terminology does not avoid a homogenising, stereotyping and simplifying of a multiplicity of animal (and human) beings. Nonetheless, we think that such a 'simplification' of concepts is inescapable in academic discussions concerning humans and nonhuman animals.) in environmental and sustainable education (ESE) and the challenge of the anthropocentric characterisation of European education. Relating to the debate about a pluralistic approach in ESE as a 'one-species only pluralism', we draw on Val Plumwood's ecofeministic dialogical interspecies ethics and Rosi Braidotti's understanding of a posthuman/nomadic subjectivity. By regarding 'difference' as a constituting force, we present a 'critical pluralistic' approach to human-animal relationships in ESE. Instead of drawing new lines of moral consideration for nonhuman beings, an ethical and political appreciation of what nonhuman others can do in ESE is suggested. Recommendations for educational practice are to recognise nonhuman agency to reveal political and ethical dimensions, recognise the agency of non-living animals and stay in conflicts and 'study up' and develop an immanent critique, which could lead to alternative pedagogical approaches to human-animal relationships in different cross-curricula settings.

Introduction

Within the ESE field, several authors have in different ways promoted a pluralistic approach (Jickling and Wals 2008; Lundegård and Wickman 2012; Ohman 2008). What these authors have in common is that they are sceptical of an education that serves a specified end and instead encourage an education of participation that is open to conflicting views, rather than an education that teaches consensus. In response to this, Kopnina and Cherniak (2015) – starting from animal rights, animal welfare and deep-ecology positions – claim that pluralistic ESE has focused on social and economic issues and that questions concerning the ongoing extinction of animals and their use in the food industry have been marginalised. The critique that educational pluralism may weaken our moral obligations to nonhuman others (Callicott 1990; Eckersley 2002, 2004), with the cost of losing the voice of nature (O'Neill 2006), is also a shared concern amongst environmental educators/researchers. According to Kopnina and Cherniak (2015), a pluralistic approach has become a 'one-species only' pluralism and that a more inclusive pluralism is needed that embraces the nonhuman other in a ‘truly plural position which recognizes...
the diversity of all species’ (2015, 374). What they call for is a shift towards ‘non-anthropocentric’ environment-ethical positions in order to untangle ESE from dominant anthropocentric ideas.

In her review of animal related literature in ESE research, Spannring (2017) displays how theoretical approaches (framed from critical pedagogy, ecofeminist and posthumanist positions) have inspired an ongoing ‘animal turn’ in environmental academic research.

In line with Kopnina and Cherniak (2015), we argue that there is a real need for educational (pluralist) perspectives that recognise an animal vantage point. However, from our pluralist point of view, we claim that what is needed is a critical perspective on taken for granted discourses, rather than a promotion of another position in the human-nonhuman dichotomy. Instead of promoting a non-anthropocentric position, we mean that humanism has other values that we may not want to abandon, e.g. education and political action for the oppressed. Putting human interests aside would therefore leave us with a useless ethics that would be both insufficient and irrelevant for political decision-making and potential environmental concern. Moreover, historical and philosophical examinations of how we ought to approach nonhuman animals are often done from a ‘moral-extensionist’ vantage point that valorise animals’ lives based on their human sameness (ability to feel pain, experience, consciousness, principles of interest etc.). A risk with a moral recognition based on human sameness when approaching different human-animal relationships is to assume a pre-existing exclusion of some aspects of nonhuman agency, e.g. the agency of meat/animality in literature, or nonhuman animals that do not live up to humans’ postulated criteria.

By suggesting a critical pluralist approach, our ambition is to resurrect a pluralism that recognises animal ‘difference’ and engages with the debate about a pluralistic approach in ESE as a ‘one-species only pluralism’. In order to (critically) engage our pluralist approach with questions concerning animals in education, we turn to how in different ways posthuman educationalists have approached human-animal relationalities in ESE-related contexts. In general, posthuman educationalists have developed a seminal critique of the idea that human beings are essentially separated from nonhuman nature(s). Instead, posthumanists have suggested nonhuman elements (and animals) as already existing parts of human (selves), cultures and societies (Clarke and Mcphie 2015; Snaza and Weaver 2015). Following Spannring (2017), a posthuman-pedagogical vantage point could be seen as a deconstructive movement of human superiority that aims to reveal alternative perspectives of how we can understand human-animal relationships in education.

This article contributes to the debate about pluralistic approaches in ESE by connecting pluralism with nonhuman subjectivity and agency by using Val Plumwood’s ecofeministic dialogical interspecies ethics (2002) and Rosi Braidotti’s understanding of a posthuman/nomadic subjectivity (2011, 2013). Underlining the role of subjectivity, we claim that Braidotti’s nomadic subject recognises nonhuman agency without depending on certain valuable criteria, such as mental capacities or human-like characteristics. In order to recognise asymmetrical relationships between humans and nonhuman animals, Plumwood’s suggestion to ‘study up’ is used as a counter-hegemonic move, which pays attention to the ethical stance of the human evaluators and our own moral status.

Our critical pluralist approach does not start in moral or animal rights arguments, but focuses on how the bodies and agency of nonhuman animals can enable humans to act in political and ethical life. Here we include the educational agency of non-living (such as meat or in dissection) and discursive (discussions about climate change, sustainable living etc.) animals. What is suggested is an alternative to the idea of an ethical inclusion of animals based on their moral recognition of human sameness, which begs the question: are they like us? Rather, it should be asked what such interspecies relationships can become and how they may conflict educational practices.

**Outline**

*Three specific claims* guide our argumentation for a critical pluralist approach that recognises animal ‘difference’ in educational practice. We first present a condensed review of posthuman research, which in different ways shows how researchers have approached animals in current ESE contexts. Viewing
human relations with nonhuman bodies and materials as mutually constitutive, a posthuman relation-
ality is not about how individual humans create or form relations to or with the world, but is rather a
recognition that multi-layered relations are always there and influence ‘our intentional or unintentional
actions’ (Rautio 2013, 448; see also Gough 2015).

(i) We therefore emphasise multispecies relations where animal agency is not only encountered
as singular, intentional living beings acting on their own, but also as non-living and discursive.
Animal agency is therefore seen in relation to humans/educational settings and its political and
ethical implications for education. Following a nomadic subject, we do not have to ascribe human-
like properties to nonhumans in order to make animals an integral part of human practice. It is
rather a recognition of animal difference as an already constituting part of educational practice.

In order to recognise asymmetrical relationships between humans and nonhuman animals, we draw
inspiration from Plumwood’s counter-hegemonic move by using anthropocentrism as a methodological
tool, which means ‘studying up’ rather than ‘studying down’.

(ii) Instead of focusing on the qualifications of animal others for ethical inclusion, we claim that
attention should be given to the ethical stance of human evaluators and our own moral status.
In line with our recommendation to study up, we mean that an immanent critique could be used
to accentuate resistance to narratives that mask political, ethical and ecological dimensions when
it comes to human-animal relationships.

Relating to the debate about a pluralistic approach in ESE as a ‘one-species only pluralism’ and
posthuman-philosophical approaches in ESE-related research, we connect Braidotti’s and Plumwood’s
theoretical works with a critical pluralist approach to education/ESE. Here we call for an enlarged sense
of the political and ethical interconnection between human-nonhuman animals, a recognition of non-
human animals as an agential force and a critique from within situated settings rather than from general
principles.

(iii) A central concern in our suggested critical pluralistic approach is to recognise the ‘difference’
of nonhuman species by how animal bodies and agency can enable humans to act in political
and ethical life. By suggesting a critical pluralist approach that aims to recognise the agency of
non-living animals in order to stay in the conflicts that are embedded in different educational set-
tings, our ambition is not to moralise or idealise human-animal relationalities, but to find ways
to grapple with and confront our uncertain ecological future that is entangled with different

Posthuman-educational perspectives concerning human-animal relationships in ESE

In this section we turn to how in different ways posthuman educationalists have approached human-an-
imal relationalities in ESE-related contexts. Before doing this we would like to clarify our understanding
of ‘animal difference’ in this paper. The ambition is not to categorize, explain or find a rigorous definition
of what this difference is (e.g. the difference between a mammal and an amphibian, and from that
concluding which of them that are worthy to consider in educational practice). Instead, embracing
animal difference encourages educators to raise critical, political, ecological and ethical questions,
whether e.g. discussing meat consumption in the school cafeteria or an encounter with a living animal.

Regarding human-animal entanglements that extend conventional educational institutions and
spaces, Gannon (2015) examines how different child-animal encounters in a secondary school wetland
project became the driving force for an affective engagement in issues relating to environmental respon-
sibility and water management. Theorised with new-materialist and posthuman approaches, Malone
(2016) seeks to disrupt anthropocentric views of children’s relations to the more than human world.
By engaging with the terminology ‘intra-action’ (Barad 2003; Rautio 2013) when studying encounters
between children and stray dogs in La Paz, subject and objects are viewed as mutually constituted.
Agency is therefore not the exclusive property of the child but entangled in the relational networks or assemblages that human and animals are caught up with.

However, there is a risk that questions about power relations and the role of politics will be given a peripheral position in posthuman frameworks. As a consequence, some scholars have intersected a posthuman position with feminist or critical positions/pedagogies (Lloro-Bidart 2017a, Lloro-Bidart 2017b; Pedersen 2011). From a feminist-posthumanist position, Lloro-Bidart (2017a) analyses how human and bird relations – between a volunteer member of staff and individual birds in aquariums – are situated in various political contexts. Whilst Lloro-Bidart (2017a) encourages EE researchers to consider nonhuman animals as a constituting part of human communities and networks, she focuses on ‘real living experiences’ and encounters between humans and nonhumans to find ‘embodied, emotional, and affective ways of knowing that allow humans to see nonhumans as persons’ (125).

Acknowledging that learning about human-animal relationships extends what happens in conventional educational institutions and spaces (see Gannon 2015; Malone 2016; Lloro-Bidart 2017a), our ambition is to present human-animal relations as already influencing, agential and co-constituting parts of (traditional) educational practice. Pacini-Ketchabaw and Nxumalo (2015) have studied the (sometimes frictional) entanglement of children and raccoons in an early childcare centre in order to unsettle nature/culture dichotomies. In Pacini-Ketchabaw and Nxumalo (2017), anthropocentric child-pet pedagogies are challenged by proposing common world pedagogies of “staying with the troubles” that multispecies relations bring in the era of the Anthropocene (2).

Following previous posthuman research, there is a tendency to focus educational encounters with living and acting animals, although there are exceptions that focus on different educational encounters with non-living animals, such as Joshua Russel’s (2017) study of children’s experiences of the death of a companion animal. A conclusion from Russel’s study is that ‘children position themselves – and their companion animals – as both “creatures that connect”, and as beings living within “an ecology of subjects”’ (80). A growing body of literature interconnects school lunches with social, political and ecological dimensions (Rowe 2016; Rowe and Rocha 2015; Russell and Semenko 2016; Weaver-Hightower 2011). Viewing school lunch as one of the least critiqued aspect of compulsory schooling, Rowe and Rocha (2015) turn to a posthuman eating as folk phenomenology. By emphasising the biological, ecological and political bonds between nonhuman and human animals, they describe the process of breeding, slaying and consuming animals for school food. Although not starting from a posthuman position, Oakley (2009) highlights research (from a humane education perspective) that raises animal focused, pedagogical and environmental concerns about the practice of animal dissection in North American science classes. A common theme in the review is how animal dissection positions animals as ‘mere commodities, disposable resources for our curiosity and convenience, possessing no value in their own right’ (Selby 1995, 255).

Inspired by scholars who intersect a posthuman position with feminist or critical positions/pedagogies (Lloro-Bidart 2017a; Pedersen 2011), without the ambition of moralising or idealising human-nonhuman relationalities (Pacini-Ketchabaw and Nxumalo 2017), our aim is to suggest a pluralist approach that is sensitive to potential power relations (political or ethical) and embeds different multispecies relations. However, by introducing the idea of a nomadic subject that is sensitive to the ecological destruction and commodification of animal bodies, we do not want to completely reject humanistic ideals, but rather to (critically) locate a human place in different human-animal entanglements. We therefore hope to contribute to a debate about the role of a human standpoint in animal advocacy/posthumanism.

**Nomadic subjectivity and animal agency: re-locating ‘the human’ in human-animal relationships**

In this section we present the philosophical basis for our suggested critical pluralist approach drawing on Braidotti’s (2011, 2013) nomadic subject that recognises nonhuman agency without depending on specified valuable criteria such as human-like characteristics, and Plumwood’s (2002) suggestion
to ‘study up’ which encourage a critical examination of underlying human desires and interests when encountering animal life forms.

**Subjectivity and nonhuman agency**

In what follows, we explain why subjectivity is an important issue when it comes to human-animal relationships. Inspired by posthuman/nomadic subjectivity, we suggest an idea of *subjectivity* that attempts to transcend an essentialist separation between humans and nature and extends the traditional subject-object position. Connected to the idea of a nomadic subject, nonhuman agency is here understood in a relational and collectively manner that does not depend on a singular intentional being that acts on its own.

When tracing the historical roots of environmental education research, it is clear that the educational significance of nonhuman animals has not always been addressed. In order to delineate the domination of positivist science education, Fawcett (2013) goes back to Evernden’s concept of *nature as an object*. The idea of nature as an object reflects a nature that is a ‘storehouse of resources, a bare bones nature with no subjectivity and no personal variables at all: just stuff’ (1988, 11). A number of theories, such as *ecofeminist* (Donovan and Adams 2007; Plumwood 2002), *critical animal studies* (Corman and Vandrovcová 2014; Pedersen 2007, 2010) *vital-materialist* (Alaimo and Hekman 2008) and *posthuman* (Clarke and Mcphie 2015; Mannion, Fenwick, and Lynch 2013; Snaza and Weaver 2015) positions, have therefore problematised the assumption of the human subject as unique, distinct and separated from other nonhuman life forms.

But why is subjectivity an important issue when it comes to human-animal relationships? First, although subjectivity has been a criterion for who is morally accounted for, ‘otherness’ and ‘difference’ have been described as its inferior counterpart (Braidotti 2013). According to Plumwood (2002), a clear subject/object division could deny the agency of the one studied. Therefore, the separation of the human subject (the knower) and the nonhuman object (the known) reproduces the idea of nature as a non-ethical and non-agential sphere. Consequently, when nonhuman animals are deprived of their ethical and political agency, they can easily be instrumentalised, made profitable and commodified into different forms, such as *nutrition* (meat and dairy products) or as objects for *infotainment* (circuses, zoos and safaris).

Therefore, our concern is the notion of ‘animal otherness’ when it is understood as a *passive object* to be exploited by the human subject. Consequently, a nomadic subjectivity is important in order to confront/disrupt situations where the ‘animal other’ is viewed as non-agential, or becomes an unquestionable object for human manipulation.

Second, starting with the concept of the ‘dialectic of self and other’ (Braidotti 2013, 15), *subjectivity* has historically been associated with *individual consciousness* and rationality. When it comes to nonhuman life forms, there is a tendency to shape animals into individual subjects. Milton (2002) critically examines the interconnection between *representations of personhood* and *moral worth* when engaging in nature protection (Milton 2002, 28). Taking wildlife documentaries as an example, humans are invited to follow particular animals that are attributed with personalised names, voices and intentions. Although this individual ‘subjectification’ of some animal species has been central to the work of saving endangered species or preserving different habitats, it raises ecological questions when some animals fall outside the idea of an individual subject. Exemplified by Deleuze and Guattari, organisms that swarm in unidentified packs are de-individualised and, as a result, fall outside the westernised understanding of a bounded subject (Lorimer 2015).

**A nomadic subject and multi-layered relationality**

Starting in the concept nomadology, a nomadic subject recognises nonhuman agency without depending on specified valuable criteria, such as mental capacities or human-like characteristics. Following on from Deleuze and Guattari’s (2004) nomadology is the study of identities that are not linked to a specific
territory(ies) or a fixed worldview(s). Nomadology implies a critique of a westernised way of thinking and its tendency to depart from something given, e.g. a human position or a human subject (Colebrook 2002). Furthermore, the concept aims to transform philosophy into a different kind of praxis, so that it starts from situated activities rather than general principles (and in that cognates with pragmatism, empiricism and ethology).

Interpreted from a feministic lens, Braidotti’s (2013) understanding of a nomadic subject stresses the importance of a localised politics that questions dominant masculine and patriarchal structures. Braidotti’s nomadic subjectivity is open to nonhuman minorities and how they are connected with political and ethical dimensions in everyday life. With that in mind, a nomadic subjectivity entangles nonhumans and contests subjectivity as the exclusive privilege of human beings. The posthuman/nomadic subject is not postmodern in a sense that it claims to be anti-foundational. It is located somewhere, as a feminist ‘epistemology of location’ (Haraway 1988; Plumwood 2002) and as a ‘politics of location’ (Braidotti 2013, 53). This means that any meaningful activity or any (political) resistance has to be generated within different environmental settings or systems (Braidotti 2011). Hence, nomadic subjects are always materially embedded in the environment that they inhabit. In a nomadic perspective, the process of subjectivity starts from the body, rather than abstract universal values.

Furthermore, the nomadic perspective emphasises our emotional and bodily capacity to enter a relation with other types of beings (Braidotti 2013, 96). In this sense, the subject is part of a human/nonhuman continuum that ‘needs to be explored as an open experiment, not as a foregone moral conclusion about allegedly universal values or qualities’ (2013, 80). Recognising that humanity is part of a ‘human-animal continuum’ is important in two different ways. First, it views human-animal relationships as entangled within nature, rather than a dualistic separation between human and nonhuman life forms. Second, it does not presume any pre-existing values, principles or qualities, but views subjectivity as located and embedded in different settings. It therefore invites a radical openness to what these relationships can become in these settings.

Posthuman/nomadic subjectivity rests on a multi-layered form of relationality that emphasises relations and not specific individuals. Here, ‘relationality’ is not about how individual humans create or form relations to or with the world, but is instead a recognition that multi-layered relations are always there and influence ‘our intentional or unintentional actions’ (Rautio 2013, 448; cf. Gough 2015). Connected to the idea of a nomadic subject, nonhuman agency will be understood in a relational and collective manner. It therefore follows that nonhuman agency does not depend on a singular intentional being acting on its own. According to Philo and Wilbert (2000), such a definition tends to uphold the old humanistic idea of a distinction between a rational (human) being who can think and act in the world, while the nonhuman is described as the passive naturalised other. This makes it possible to give non-living animals agency and interconnect ethical, political and environmental dimensions concerning the (ab)use of non-living animal bodies in educational settings. However, this does not mean a complete rejection of the individual human, but is rather a critique of an autonomous and liberal idea of subjectivity that manipulates a ‘passive nature’ and fails to recognise the influence of nonhuman life forms. Although some subject positions are still inevitable and necessary – for identity-formation or in order to establish political or ethical accountability – they are not always unitary or exclusive human privileges. But posthuman approaches have also been criticised for not recognising asymmetrical relationships between humans and nonhuman animals (Pedersen 2013). In order to problematise human-animal irregularities, we turn to Plumwood’s (2002) counter-hegemonic move known as ‘studying up’.

**Anthropocentrism as a methodological tool: ‘Studying up’ as a counter-hegemonic move**

The concept anthropocentrism is defined in a multiplicity of ways. Callicott (2002) describes an uncritical/strong anthropocentrism in which human interest is given a hierarchal position and where nonhuman nature is viewed as a resource that fulfils humans’ needs. Following Fawcett (2013), it is reasonable...
to believe that this view dominates educational and environmental-educational policy. Throughout this text, the definition of anthropocentrism suggested by Plumwood is similar to Gough's (2015) distinction between a hierarchical and an irreducible anthropocentrism. While challenging a hierarchical anthropocentrism (where humans have a superior position and nature is considered as a mere resource), Gough does acknowledge an irreducible anthropocentrism (‘accepting that we, as humans, necessarily experience the world with species-specific biophysical limitations and possibilities’ [8]). In Environmental Culture, the Ecological Crises of Reason (2002), Plumwood starts from a critique of western environmental philosophy and its denial of ecological embeddedness and human animality. As a consequence, this denial is described as a vital part of environmental degradation and the instrumentalised and abusive treatment of animals. According to Plumwood, one problematic feature in the dominating human-centred paradigm is the reductive stance, which aims to reduce the intentionality and agency of ‘earth others’. Such a position has underprivileged our sensitivity and perception of animals in order to exploit them more.

Plumwood suggests that when considering historical and philosophical examinations of how we ought to approach nonhuman others, many grand narratives take a ‘studying down’ or ‘moral-extensionist’ vantage point to valorise nonhuman lives based on their human sameness. When nonhuman lives are valued in this way, philosophers become preoccupied with the question, are they like us? (MacKinnon 1989). Different attempts at answering this question include the idea of nonhuman animals’ possession of a face (Levinas in Calarco 2004) and nonhuman animals’ consciousness and principles of interest (Regan 2004; Singer 1975, 1996). However, the idea of moral consideration based on human sameness (the ability to feel pain, experience, consciousness, principles of interest etc.) has been contested and described as simplistic in ‘attempting to derive principles of justice from the possession of certain valuable capacities’ (Holloway 2007; McCance 2013, 92). There is thus a risk to assume a pre-existing exclusion of some aspects of nonhuman agency, e.g. the agency of meat/animality in literature, or nonhuman animals that do not live up to humans’ postulated criteria.

In order to avoid this problematic question of sameness, Plumwood advises us to approach ‘the question of the animal’ as a methodological question. Instead of studying down and highlighting nonhuman others’ qualifications for ethical inclusion and attention, we should be more attentive to studying up, i.e. paying attention to the ‘ethical stance of the human evaluator and their own moral status’ (2002, 11). In line with Derrida (2008) and his concept of carnephallologocentrism, a studying up perspective is a ‘deconstructive move’ and an examination of the way in which distinctions between human and animals are encapsulated within masculinist and rationalistic foundations. To paraphrase Cora Diamond ([1978] 2001), a reason for this deconstructive move is that humans cannot fully learn about the differences (or similarities) between humans and animals by scientifically observing dolphins or chimpanzees. These separations between humans and animals encapsulate the fundamental idea of what it means to be human. Differences between human and animals are therefore not only a question of observation, but also of self-reflection and contemplation. It therefore follows that a shift to a studying up perspective allows for a critical examination of underlying human desires, projections and interests when valuing and categorising nonhuman life forms.

A studying up perspective is therefore part of an immanent critique, where students are encouraged to ask who they will become in relation to ‘the animal’. In this study, an immanent critique signals a move that places interspecies relationships within moral/political practice, rather than ethical/philosophical principles. The concept does not thereby not reflect Deleuze’s and Guattari’s (metaphysical/ontological laden) ‘plane of immanence’ concept (Colebrook 2002). When embracing the idea of studying up rather than studying down, we do not claim that this perspective can undo every asymmetrical relationship or the ongoing displacement of nonhuman others. The point is not to abandon a sense of a human-centred location(s), but to encourage a critical examination of human privilege and how being human is a criterion for a hierarchical valuing of nonhuman (and human) lives.
Animal difference (as a constituting force)

As discussed above, when subjectivity is a criterion for who is morally accounted for, animals have usually been described as inferior counterparts to human beings. Animality and its difference from humans has therefore been understood in pejorative forms (a lack of soul, self-awareness and intellectual capabilities). As a consequence, animal bodies are used as material resources in agricultural, cosmetic, pharmaceutical and scientific industries or experiments. By combining Braidotti’s nomadic subject with Plumwood’s idea of studying up, a turn towards ‘difference as a constituting force’ is suggested. As already indicated, when viewing animal difference as a constituting force, we do not have to overcome differences by ascribing human-like properties to nonhumans in order to make them a considerable element of human practice. Rather, it is a recognition of the nonhuman agency that is already a constituting part of the human. The educational human subject is therefore seen as constituted and affected by nonhuman animals’ material agency (Gough 2015). When approaching human-animal relationships, we do not have to be ‘restricted by’ or ‘reject’ any potential difference between human and nonhuman species (cf. Derrida 2008). Instead, the animals we watch on TV (or watch TV with), the ones we eat or are frightened of, or those who try to teach us a moral lesson, are no more or no less nature/agential. Animal bodies and agency could therefore be recognised as agential forces that become different shapes in different situated settings.

In previous sections we have described how, at a theoretical level, a posthuman/nomadic notion of subjectivity can de-establish traditional subject-object positions that human-animal relationships are traditionally entangled in. Furthermore, if we acknowledge Braidotti’s and Plumwood’s ideas of difference as a constituting force, human-animal relationships do not have to be restricted by or reject any potential difference. If pre-existing metaphysical and ontological criteria for who should be morally accounted for can be avoided, human-animal relationships can be approached with openness in terms of what they can become/do in ESE.

Critical pluralism in educational practice

In the light of the mass extinction of nonhuman species and its disastrous environmental impact (Bailey, Froggatt, and Wellesley 2014; Ceballos et al. 2015; NRC 2009), we suggest a critical perspective on taken-for-granted discourses, rather than a promotion of another position in the human-nonhuman dichotomy. Having said that, our intention is not to reject Kopnina and Cherniak’s call for a more inclusive pluralism. Acknowledging that a ‘one-species-only pluralism’ in education will risk giving students plural choices and perspectives that are ‘between different shades of anthropocentrism’ (372), we also have to ask how educators can ‘encourage an education that is open to conflicting views’ if certain views are precluded as indoctrination? A pluralistic education of participation and openness to conflicting views should therefore be attentive to new/radical perspectives concerning nonhuman lifeforms. Akin to Kopnina and Cherniak’s (2015) animal rights and animal welfare perspectives, a critical pluralist approach pays attention to the suffering of animals induced by humans. However, instead of starting from arguments of individual moral rights, the approach is attentive to the political and economic systems that cause the suffering. The agency of nonhuman bodies is accordingly considered as political and ethical, where animal bodies can consequently give rise to political and ethical responses in different settings (Alaimo and Hekman 2008).

When examining ESE-related research, very few frameworks intersect with pluralist and posthuman perspectives. An exception is David Schlosberg’s (2005) development of a new (more critical) pluralism when considering the environmental justice movement from a political science perspective. With inspiration from Deleuze and Guattari (1983) and Haraway (1988), the ambition is to present a pluralist approach that takes the recognition of difference in contemporary life seriously. Connecting a pluralist approach with questions of subjectivity, subjects are seen as ‘materially constituted through a multiplicity of organisms, forces, energies, materials, desires, thoughts etc.’ (2005, 63). Although Schlosberg does not explicitly recognise this diversity and multiplicity in nonhuman animals, a central concern in
our suggested critical pluralistic approach is to recognise the difference of nonhuman species by how animal bodies and agency can enable humans to act in political and ethical life. Our ambition with a critical pluralist approach is not to moralise or idealise human-nonhuman relationalities, or to put ourselves on either side of a human/nature dichotomy, but to recognise animal difference in order to stay in the conflicts that are embedded in different educational settings.

**Educational recommendations for future ESE**

Below we demonstrate how the posthuman influenced approach described above could be used in educational practice to transcend traditional subject-object positions, emphasise human-nonhuman agency and elucidate (often) forgotten conflicts when it comes to human-animal encounters, especially those concerning animals in livestock industries. This is done by suggesting three recommendations for educational practice that imply a radical openness to what nonhuman animals can do in education: (i) recognise nonhuman agency to reveal political and ethical dimensions, (ii) Recognise the agency of non-living animals and stay in conflict and (iii) ‘study up’ and develop an immanent critique. The ambition is to encourage educators to see alternative pedagogical courses of action when it comes to human-animal relationships in different cross-curricula settings. These recommendations are closely connected, but for illustrative reasons are disposed in different topics/themes. Our recommendations are illustrated using real examples from (traditional) educational practice.

**Recognise nonhuman agency to reveal political and ethical dimensions**

When animals are objectified as non-ethical agents separated from educational settings, already existing ethical and political dimensions may be obliterated. In this recommendation, we encourage educators to connect the ideas of a nomadic subjectivity and nonhuman agency in order to engage with existing political and ethical dimensions of environmental and sustainability issues. With the ambition of transcending traditional subject-object positions and exploring how teachers and pupils are affected by animals’ material agency, our connections with non-living animals could raise a wide range of ethical, political and ecological questions about educational settings and everyday practices.

In European curricula, animals are generally dealt with in the natural sciences and divided into subject-object positions. In the national curriculum in England (DfE 2014) and Denmark (Undervisningsministeriet 2009) and in the Comprehensive teaching plans in Berlin (Senatsverwaltung für Bildung, Jugend und Wissenschaft 2012), students are encouraged to work scientifically by observing, comparing and contrasting different animal species and learning about the adaptation of animals in their natural habitats. In the Swedish curriculum, ‘animals’ are referred to twice and the goal is to learn about ‘Animals and plants in the local environment and how they can be categorised, grouped and their species determined, and also the names of some common species’ (The Swedish National Agency for Education 2011, 106).

Consequently, educators and students are expected to approach animals as manipulated objects that can be sorted or categorised in order to accomplish fixed educational goals. We are not suggesting that categorisation is analogous with viewing animals as manipulated objects. Just like humans (class, ethnicity, sex etc.), animals can be categorised without being instrumentalised or abused. For instance, the categorisation and presentation of ‘charismatic animal species’ (human-like properties that trigger human affection), such as elephants, tigers and polar bears, have been central in the work of saving endangered species or preserving different habitats (Lorimer 2015). The problem is rather that the only time animals are recognised is in this type of ‘natural scientific narrative’. Beside the presentation of animals as the entitled object for the human learner, these educational documents also manifest what Philo and Wilbert (2000) call a ‘geographical othering’. This refers to how animals are presented in fixed physical environments that are separated from humanly occupied locations. In the curricula, the separation between human and nonhuman environments is frequently manifested when students are encouraged to ‘learn about the adaptation of animals in their natural habitats’. Following these
educational documents, educators and students are encouraged to go outdoors (or bring ‘nature’ back to school) in order to engage with different human-animal encounters.8

Inspired by Braidotti’s nomadic subjectivity we therefore suggest more attention and openness to how animals are already influencing, agential and co-constituting parts of educational practice. An example of how such openness can expose political and ethical dimensions is when some Swedish schools decided to introduce a ‘meat free day’ and the Federation of Swedish Farmers (LRF) and Swedish Young Conservatives (MUF) protested by offering meat-based barbecues outside the schools’ refectories. On account of this action, in an interview about the decision to offer meat in such a way the former regional chairman of LRF said that: ‘It is important [to eat meat], especially for girls who are still growing, work out a lot and want to become good-looking’.9

If educators acknowledge animals as an already agential force in educational practice, in the above situation illustrated as meat, the meat becomes something more than just a matter of taste. In the example of meat-free days in a school context it becomes political (the interest of young conservatives to promote people’s own rights to decide on their food consumption and the farming organisation’s interest to sell its ‘product’). The meat also connects with sexist ideas about girls’ bodies (‘girls should eat meat to become good-looking’). As illustrated above, an openness to what these relationships might become can highlight the interplay between political and ethical dimensions, which in turn connects to the ecological impact on the livestock industry (Bailey, Froggatt, and Wellesley 2014).

### Recognise the agency of non-living animals and stay in conflict

A central aspect of our critical pluralist approach is to recognise animal difference in order to stay in (potential) conflictual situations that are embedded in different educational settings.

But why ‘stay in the conflict’ when a change to less abusive human-animal relations is (in many ways) desirable? From our pluralist perspective, the idea of a predetermined change that automatically would transform conflictual/confrontational views and opinions into consensual agreements is problematic. The recommendation to stay in the conflict does therefore acknowledge the impossibility of a consensual agreement over what an abusive treatment of animals really is (eating meat or drinking milk? having animals at zoos or use in sports? animal experimentation? etc.) and how/if education has a responsibility to change this. Acknowledging these questions as (inherently) rooted in conflict, entails avoiding a consensual agreement that might mask potential tensions. Akin to Pacini-Ketchabaw and Nxumalo’s (2017) approach, our ambition is not to moralise or idealise human-nonhuman relationalities, but to find ways to grapple and confront our uncertain ecological future that is entangled in this more than human relationality. In the example of a meat-free school day, a conflictual situation occurred when a political party and a farming organisation reacted to the absence of meat in school refectories. Therefore, we encourage educators to use conflictual situations concerning human-animal relationships in educational practice, for example when discussing environmental and sustainability issues such as climate change, meat consumption and sustainable living in ESE, or students’ and/or teachers’ encounters with nonhuman animals (the commodification of animals in veterinary education, see Pedersen [2013]). Human-animal relationships could also be highlighted when students/teachers engage with the agency of non-living animals, for example in animal dissections (De Villiers and Monk 2005; Oakley 2009), conflictual discourses of meat consumption in school lunches (Rowe 2016; Rowe and Rocha 2015) or in the school subject of home and consumer studies (Bohm et al. 2015).

In this recommendation, a pluralistic vantage point is not a-political or non-ethical in the sense that any perspective goes. When emphasising (potential) conflictual situations in human-animal relationalities it is important to highlight how moral reactions are used or not used as a source for ethical reflections in educational settings.10 To exemplify this, a well reputed high school in Oklahoma stopped feline dissections in 2015 after anatomy students performed a ‘cat corpse’s dance’ and posted it online.11 The moral reactions from the societal organisation (PETA) and the school board were sufficient to end feline dissections. However, dissections of animals other than felines continue and the scientific legitimisation of dissection remains uncontested. In this illustrative example, criteria such as consciousness or
sentience were not the driving forces behind the moral reactions to the dissecting of cats. Tied to the idea of a nomadic subjectivity, animals do not have to be acknowledged as individual (living) creatures with human-like properties. Instead, the material agency of the dead bodies was enough to create an emotional reaction and enter an affective relation.

Guided by the above examples, educators could use the agency of non-living animals in school to raise conflictual, ethical, political and ecological questions in a wide range of educational practices and subjects. Educators could also use questions about the scientific legitimation of research on the consumption of animals to engage students in critical discussions. An example of such a question could be: Can the human use of animals as living/dead commodities be avoided, or does our ethical considerations/obligations concerning animal subjects and/or bodies change in different cases, such as medical research or cosmetics, industrialised meat, locally produced or non-meat alternatives? Students could also be encouraged to critically examine the link between meat consumption and economic growth by asking how different organisations using animals as a commodity consider ethical quandaries or the ecological impact connected with their ‘products’.

To conclude, what is suggested is a more critical pluralist perspective, where educational practice pays attention to our already existing (and often abusive) entanglement with the more than human world. But when we approach these ‘more than human’ relationships in education, it does not have to be seen as a linear process that aims to fulfil the ethical demands of all nonhuman beings. Instead, these relationships can be approached as contingent and ‘characterized by difficulties, contradictions and detours’ (Spannring 2017, 8).

‘Study up’ and develop an immanent critique

As already indicated, a critical examination of the ethical stance of the human evaluator is possible in a wide range of educational practices and subjects (not only biology). By proposing an immanent critique, students are encouraged to ask who they will become in relation to the ‘animal other’. In accounting for what Plumwood calls a studying up position, educators are encouraged to critically approach how different human-animal relationships take place within educational practice and to acknowledge everyday situations in which students’ and nonhuman life forms are entwined. This would make it possible to focus on students’ (and educators’) own inconsistencies and contradictions within different human-animal relationships, e.g. why some animals are worth saving and addressed as the ultimate cost of climate change and human exploitation (polar bears and the poaching of elephants and tigers), while others end up on our plates or our sofas. Just as nonhuman animals in livestock industries are a marginal topic in environmental education research, very few studies have been conducted on companion animals (for exceptions, see Lloro-Bidart 2017a; Russell 2017). Educators could therefore connect real-life encounters between students and pets with political, ethical and ecological quandaries (e.g. ‘how do “we” handle the billion dollar business, involving the killing of other animals with the ecological footprints related to pet food industries’ (cf. Swanson et al. [2013]; Ravilious [2009]) that is embedded within this relationality? Other topics that students could be encouraged to critically discuss are human-animal entanglements where animals are used by humans in zoos or circuses, the poaching and hunting of different animals, agricultural animals and livestock industries, wild and endangered animal species and the work of nature conservation and animals used in scientific/medical/cosmetic experiments.

In contrast to a suggested non-anthropocentric vantage point in ESE (Kopnina and Cherniak 2015), we argue that education should not downplay the human centeredness within these relationships. First, a human perspective is a necessary condition for political decision-making and environmental engagement concerning nonhuman life forms. Second, if the human dimension is downplayed when encountering nonhuman life forms in education, there is a risk that questions about power relations and exploiting structures will be peripheral. To exemplify how or why a posthuman idea about a human-nonhuman entanglement can be combined with an immanent critique, we turn to Pedersen’s (2013) critical examination of human-cow relationships in veterinary education.12 Drawing inspiration from a posthuman/Deleuzian sense of subjectivity, ‘bodily and sensory human/animal/technology intimacy enters
education as a pedagogical device’ (51). In the studied educational practice, students were encouraged to ‘share vision’ (a cow’s view during transportation), ‘share feeling’ (embodied engagement with milking machines) and ‘share suffering’ (a cow’s view before/during slaughter). However, this emotive pedagogy and ‘becoming cow’ approach were used to find ways to facilitate the transportation and effectiveness of slaughtering and milking. As this example illustrates, there is a need for an educational approach that further deepens-develops an understanding of how nonhuman agency can be a vital force in environmental education, whilst at the same time remaining critical to how these (often asymmetrical) relationships take place in educational practice.

In line with our recommendation to ‘study up’, an immanent critique could be used to accentuate resistance to narratives that mask political, ethical and ecological dimensions when it comes to human-animal relationships (as a ‘politics of location’, Braidotti [2013], 53). Related to the environmental impact of the livestock industry (Bailey, Froggatt, and Wellesley 2014), environmental educators might ask why some of the most important agents of climate change are overlooked, i.e. cows, chickens and pigs. Hence, in the illustrated human-cow relationship, educators could encourage students to engage in critical discussions about the ecological consequences of human impact and interest in the breeding and commodification of farm animals. What is suggested is not a complete rejection of an educational content that presents animal life forms within different school-scientific areas. However, when animals are consistently framed within a ‘natural scientific narrative’ as the entitled object for the human learner, this type of knowledge seems to avoid critical questions about ethical considerations and power relations. Therefore, an immanent critique could help to ‘unmask’ the underlying ethical, political and ecological dimensions in education.

**Concluding remarks: education and a human position**

When considering the relationality between human and animals, we do not claim that educators can undo all power relations or create educational settings in which we can morally include or speak for all nonhuman species. Claiming that educational settings could live up to such an altruistic criteria would be to disregard the political and juridical limitations that restrict a majority of educational institutions. However, claiming that there is an inescapably human position in educational systems/settings does not have to be a reinstatement of an essential human-nature dichotomy or a reproduction of a non-environmentally friendly position. In our understanding, a nomadic subjectivity is an appreciation of an alternative subjectivity that is sensitive to the interplay of ecological destruction and the commodification and capitalisation of animal bodies. In recognising animal difference without defining what this difference is on beforehand, educators could raise critical, political, ecological and ethical questions, whether e.g. discussing meat consumption in the school cafeteria or an encounter with a living animal. This is seen as a critical element, as we suggest a radical openness to what these relations can be and become in different situated educational practices. It is not a complete rejection of humanism or humanistic ideals, but rather a (critical) attempt to locate a human place in nature in order to discover what such an ethical and sustainable place might look like.

**Notes**

1. Albeit not starting from a posthuman perspective, Lloro-Bidart (2017b) invokes a political ecology of education to analyse how neoliberal solution through the market (sustainable seafood consumption for e.g.), at Long Beach, California’s Aquarium of the Pacific, may impact research for environmental education and teaching practices.

2. According to Lloro-Bidart (2017a), viewing animals as persons should not be understood as a way of ascribing rational, cognitive and speaking capabilities to nonhuman animals (cf. Snaza and Weaver 2015). The personhood of individual animals should instead be seen as a way of counteracting the view of animals as mere objects without emotional and embodied experiences. Nevertheless, in this approach, human-animal relations focus on the individual and living animals. By that, it does not primarily recognise the agency of non-living animals in educational settings and everyday practices.
3. The authors engage with educators’ and children’s everyday practices of caring for and detaching from an introduced species of Vietnamese stick insects.

4. According to Derrida, the sacrifice of animals (carne), the masculine (phallos) and the ability to speak (logos) are central dimensions of what constitutes a classical conception of subjectivity. Taken as an historical example, it is the male that goes after the animal ‘from hunt to the bullfight, from mythologies to abattoirs… just as it was Adam whom God charged with establishing his dominion over the beasts’ (104).

5. Following Derrida, the question of the animal is not about to undo the difference between human and nonhuman life forms. On the contrary, he says ‘I shan’t for a single moment venture to contest that thesis, not the rupture or abyss between this “I-we” and what we call animals’ (30).

6. This is inspired by the author Jorge Luis Borges’ taxonomy of animals in ‘The analytical language of John Wilkins’ (1942). Interpreted by Braidotti (2011), animals are classified into three main categories: those we can eat, eurohumans we can watch television with and those we are frightened of (wild, exotic, or untamed ones) (81).


8. An exception to the separating of human and animal occupied locations/environments is presented in one part of the Danish curriculum for biology. In one section, students are encouraged to work with and critically discuss the consequences of human impact and interest in evolutionary processes, such as genetic manipulation or the breeding of farm animals (8).


10. Moral reaction refers to situations when we, without any previous considerations or reflections, take spontaneous responsibility for another being. We are personally affected, and experiencing a feeling disgust/care that reaches deep within us. An ethical reflection is a situation when students reflect upon different values /ways of acting, (usually) distant from a situation where they to act morally. Ethical discussions in educational contexts often appear as different forms of exercises, where the students are expected to take a stand on a particular ethical issue and explain/defend their standpoints (cf. Öhman and Ostman 2008).


12. While this example displays a relational encounter with living cows, the cows were mainly understood as a commodity in the process of “becoming meat”. The cows in this educational encounter could therefore be understood as “walking dead” creatures.

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Notes on contributors

Nicklas Lindgren is a PhD student at Örebro University’s School of Humanities, Education and Social Sciences, Sweden. In his thesis he studies human–animal relationships in educational settings. His interest currently lies in educational eating and the environmental, ethical and political contexts of food.

Johan Öhman is a professor at Örebro University’s School of Humanities, Education and Social Sciences, Sweden. His area of research is environmental ethics and democratic issues within the sphere of education for sustainable development, environmental education and outdoor education. His work is based on John Dewey’s pragmatic philosophy and view of the democratic potential of education.

ORCID

Nicklas Lindgren http://orcid.org/0000-0003-0425-1993