Varhaiskasvatuksen Tiedelehti Journal of Early Childhood Education Research Volume 8, Issue 2, 2019, pp. 296–311





Exploring posthuman pedagogies: the practice and ethics of decentring the human

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ABSTRACT: Philosophical posthumanism attempts to decentre the human so that in a world dominated by humanity we can learn to understand the complex interdependencies in which we are embroiled. This paper examines the practice of decentring the human as an ethical pedagogical method for environmental education working with two posthumanist pedagogies, firstly Taylor's (2013) common worlds and secondly Lenz Taguchi's (2010) intra-active pedagogy. Instances of decentring are drawn from researching the practices of the Manchester Environmental Education Network (MEEN), an environmental education charity working with innercity schools on the 'Workshops for Wildlife' project. As encounters with other beings can be unpredictable the project included pupils' stories of animal encounters. But can such tales decentre humans into re-imagining ethical human/animal relations? Working with the ethics of encounter, inclusion and diffractive methods this paper explores how responsive pedagogical practices decentre the human.

Keywords: practice, decentring, ethics, environmental education

Introduction: Posthuman environmental education

There are numerous theories as to why education for humans is deemed universally important whether it's about preparing the next generation's workforce or helping young people to succeed in their adulthood. However, as David Orr (1994) points out, none of it

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bears any relevance if we find we are unable to continue to safely inhabit the biosphere. He stresses that in the face of planetary crisis, "It is not education, but education of a certain kind, that will save us" (Orr, 1994, p.8) and by this he is meaning that all education should instill environmental awareness.

As the planetary crisis can be attributed in large to human behavior it is necessary for humanity to firstly acknowledge culpability and then to take action to enable the biosystem to reconfigure and re-store itself. A philosophical posthuman perspective is helpful in this matter as it embraces a relational and more inclusive ontology where the biosphere has agency and where there is, "no hierarchical relationship between different organisms (human and non-human) and the material world" (Lenz Taguchi, 2010, p.15). However, in a child-centred, human-centred, education system, engaging schools with environmental education through a flattened ontology, particularly in an ethical manner, is challenging. It has been pointed out that decentring the human "in theoretically coherent and compelling ways and fully realizing it in practice" is "easier said than done" (Pacini-Ketchabaw, Taylor and Blaise, 2016, p.150). However, this paper attempts to examine instances where decentring appears to have occurred whilst children were exploring relations with other animals.

There are a considerable number of theoretical perspectives to draw on around human/animal relations. For example, Haraway (2008, p. 4) presses us to "become with many" and to attend to our "companion species" (2004, p. 301) through our daily encounters with our "significant others" (2003, p. 8). Snaza et al. (2014) consider the importance of affirming human animality as a means for improving human/animal relations whilst Nik Taylor (2011, p. 275) insists on the need to decentre human power. Keeping such notions in mind this paper explores practice through two posthumanist pedagogical methods Taylor's (2013) common worlding and Lenz Taguchi's (2010) intraactive pedagogy. Both pedagogies draw the attention to creative methods and to ethical conundrums which will be explored and discussed through instances of decentring the human.

Posthuman pedagogies - Common worlding

Taylor (2013, p. 78) describes common worlding as, "dynamic collectives of humans and more-than-humans, full of unexpected partnerships and comings together". Inspired by Haraway's notion of queer sensibilities and Latour's (1993) "hybridized networks of relations" common worlding is a process of collective inquiry which involves humans in the form of both educators and young people learning alongside a myriad of more-than-humans about the world in which they co-exist (Taylor, 2013, p. 123).

Describing her research as the act of a bricoleur Taylor (2013, p. 63), "gathers or collects all manner of ideas, things or elements... to create an inventive assemblage" with the purpose of paying "attention to the way that human lives are mutually enmeshed with living and inert non-human others". In this regard the assemblage, or the collective inquiry, attempts to decentre the human through a process of widening inclusion.

The Common Worlds Research Collective regularly cites multispecies ethnography as their preferred research method. In a multispecies ethnography the human becomes one of many species alongside such creatures as ants and worms (Taylor and Pacini-Ketchabaw, 2015), stick insects (Nxumalo and Pacini-Ketchabaw, 2017), wombats, dogs and chickens (Taylor, Blaise and Giugni, 2013) as it aims to move away from critical analysis (Taylor, 2013, p.73). Rather the emphasis is on:

Multispecies relations, engaging with more-than-human others as active research subjects, learning to be affected as researchers, attending to awkward encounters, risking thinking collectively (Pacini-Ketchabaw, Taylor and Blaise, 2016, p. 152).

The word 'collective' denotes more-than-one and shares its root with the notion of collecting therefore, The Common Worlds Research Collective is all about collecting the various parts that make up the world. Who is included and how they are included is discussed as an ethical endevour. Taylor (2013, p. 82) places considerable emphasis on Haraway's "queer kin relations" where our significant other might be an animal or a mobile phone. This relational ethic, as Taylor (2013, p. 83) points out, can generate new relations and understandings between children and more-than-human others, however, it also means there is a need to "grapple with the dilemmas and tensions that inevitably arise when we co-habit with differences". The suggestion is that we need to be "staying with the trouble" (Haraway, 2016, p.1) that difference brings in a way that resists, "the temptation to minimize, negate, sentimentalize, anthropomorphize, or assimilate these relations" (Taylor, 2013, p. 82).

For common worlders it is primarily actual encounter with others that is of interest, yet the instances discussed in this paper attend to responses in relation to encounter by focusing on the ethics of power relations between primary aged children and their animal neighbours. However, firstly it is necessary to outline Lenz Taguchi's (2010) pedagogy.

Intra-active pedagogy

Lenz Taguchi's (2010) "intra-active pedagogy" is drawn from Barad's (2007) agential realism. She states that an intra-active pedagogy:

Shifts our attention from intra-personal and inter-personal relationships towards an intra-active relationship between all living organisms and the material environment such as things and artefacts, spaces and places... (Lenz Taguchi, 2010, p. xiv)

In this regard it too has a relational ethic. Being steeped in Barad's theory that matter matters this theoretical perspective explores a multispecies world, where the human is decentred and the sphere of interest widened to include all matter. In fact, according to Barad (2003, p. 810), everything is matter in 'intra-action'. Barad's theory is a response to a world where, she states, language has come to be "more trustworthy than matter". This might suggest that from a materialist's perspective that the performativity of an encounter has more weight than a story which is told about an encounter. However, Barad (2007, p. 336) describes her theory of agential realism not only as a material-discourse, where "the material and the discursive are mutually implicated in the dynamics of intra-activity", but also as an "onto-ethico-epistemology" where the way we act is inseparable from what we know and is equally an expression of an ethical position. Haraway (2016, p. 35) explores similar threads when she states: "It matters what thoughts think thoughts. It matters what knowledges know knowledges... It matters what stories tell stories". Lenz Taguchi (2010, p.49) sums up and affirms Barad's view when she suggests that the world marks how we think as much as how we think acts on the world.

Therefore, an intra-active pedagogy decentres the human by being inclusive of all matter but equally embraces the necessity to think with all matter as though it matters. Barad (2003, p. 810) states any realist account must include the "materialization of all bodies – human and nonhuman – and the material-discursive practices by which their differential constitutions are marked". In this regard, a human/animal encounter is both a material and a discursive affair. Lenz Taguchi (2010, p. 65) writes, "an interactive pedagogy explicitly focuses on the phenomena produced in the inter-relations, inter-connections, interferences and waves of diffractions that emerge in-between the material, the discursive and human beings."

Diffraction patterns have been explored as a posthuman method (Murris, 2016, p.14) and, as the first story examines how to work with diffraction as a method, it is necessary firstly to define terms. A diffraction pattern refers to wave activities as they overlap, interfere and "break apart in different directions" (Barad, 2014, p.168) and by thinking with diffraction patterns it is possible to think about difference inclusively. Waves merge, they absorb difference yet, in doing so, the matter making up the waves become entangled and

reconfigured into a new wave. With this in mind the first story explores how thinking with diffraction can help us identify instances where humans are decentred. The second story examines the onto-ethico-epistemology of encounters in pedagogical practice in relation to decentring human power in human/animal relations whilst the last story merges the themes from the first two by presenting an ethical teaching activity which offers opportunities to decentre the human through diffracting relations with other beings. But, before exploring how such theories might be applied to pedagogical practice, it is necessary to examine MEEN's Workshops for Wildlife project as both pedagogy and as the field of research practice.

Workshops for Wildlife

As both the researcher collecting data in the field and as the MEEN practitioner delivering the project a diffraction pattern is already being enacted as two, seemingly distinct activities, that of the environmental educator and that of the academic, are merged. The knowing and the doing are 'mutually implicated' in this paper whilst the aim is to explore a third thread which is to examine how a posthuman pedagogy can be delivered ethically.

The Workshops for Wildlife project was created to support school eco teams in discovering whom they shared their school space with and, if possible, devise ways of improving human/animal relations in the school community. To begin the project each school group was asked to explore their grounds looking for evidence, or traces, of wildlife and once they had mapped any animal activity to undergo practical work to improve the habitats in the school grounds.

MEEN's practice tries to model ethical human/animal relations whilst also recognising the value of encounter. Consequently, activities such as a school bird watch or the introduction of bird feeders were organised as mutually beneficial and respectful encounters. However, the project also valued story-telling about encounters with pupils being given time to share their experiences of watching foxes at night through the bedroom window or trying to stop a cousin from stamping on a frog. Furthermore, such storytelling enabled the inclusion of the many animals who would not be encountered in inner city school grounds during daylight hours.

Once each eco team had decided which animals interested them the most they were tasked with improving the habitats in their school grounds for those animals. One school, for example, decided to build log piles in their field to provide insects with habitats which, in turn, would feed the birds. In the meantime, as their habitat became enriched, they also decided to maintain bird feeders. Once each eco team had completed their habitat

improvements the pupils were then tasked with sharing their knowledge and skills with their peers, families, neighbourhoods and the general public. To this end pupils devised games and activities to help them share their learning.

The research material for this paper was gathered in keeping with the ethnographic processes of common worlding as bricoleur (Taylor, 2013, p. 63). As the researcher I recorded ethnographic notes after the sessions and photos were taken as the project unfolded. I also recorded discussions with small groups of pupils to explore their experience of the processes involved in the project. Consequently, I have taken my material from a range of data sources including field notes and focus group transcriptions and have drawn on instances which caught my attention as being relevant to the exploration of a posthuman pedagogy. The following three stories have been included as they are instances where difference has come to matter through the decentring of the human. The first story explores shifting perceptions of the human/nonhuman divide as they unfold and diffract through a classroom. The second story explores the ethical issues of inclusion/exclusion in relation to human/hedgehog encounters whilst the third story details how a process of becoming more-than-human enables a pupil's inclusion in an educational activity.

Beings diffracting in the classroom

This first story taken from field notes explores the flexible boundaries criss-crossing the human/animal divide as experienced by a group of nine year olds as they were in their classroom making games about the lives of others. They are going to run a stall as part of an exhibition on wildlife and extinction by engaging with the public and encouraging them to take steps to support local wildlife.

The classroom is busy and noisy. Some pupils are making simple true and false games, a couple are about animal identification, whilst several others are creating board games which represent the trials and tribulations of the lives of others. One boy, who is making a game looking at the world through the eyes of a hedgehog, gains the attention of the rest of the class when, in exasperation, he states, 'It's so hard to be an animal trying to survive in this city!'

'Perhaps it depends on which animal you are?' I ask, adding, 'Aren't you an animal?' The room erupts. Some children gasp, two girls pull horrified faces. One shocked voice asks, 'Are you calling me an animal?' in a tone accusing me of insult.

I reframe the question, 'So you're not animals?'

A chorus of voices affirm that they are human beings: one voice states emphatically, 'You're mad!'

The room settles, reflects and in the pause a voice pipes up, 'I think we're probably mammals'.

I'm excited by such controversy being aired and continue to ask questions which prompt the children to consider their status and position in the world. I will try to ask a similar question in the other schools I'm working with to see what their response might he

This intra-action seems to tell two stories. Firstly, there is the boy whose exasperation triggers the debate. His vexation is prompted not by an actual encounter with a hedgehog but by thinking with-hedgehog. He has become immersed in hedgehogness to the extent where his humanness has been decentred. By trying to tell the hedgehog's story his perspective has shifted, his human identity has loosened. Barad (2012, p. 32) queries the idea of identity suggesting it is not enough to simply include others as actors with agency, "but rather to find ways to think about the nature of causality, agency, relationality, and change without taking these distinctions to be foundational". Furthermore, she argues that individual entities are not "bounded and propertied objects", rather that material-discursive intra-actions are entangled phenomena which have implications for how we view the notion of identity. To quote:

Identity is a phenomenal matter; it is not an individual affair. Identity is multiple within itself; or rather, identity is diffracted through itself – identity is diffraction/difference/differing/deferring/differentiating (Barad, 2012, p. 32).

Taylor (2013, p. 66) describes such reconfigurations as "a human/more-than-human double act" but to read this so-called double act through Barad's quantum based agential realism, the boy's cry might better be described as the emergence of a diffraction pattern. According to Barad (2014, p. 172) a diffraction pattern is not about reflection or representation but rather the direct observation of any differences that have appeared.

This puts the emphasis on the performativity of the material-discourse, where the boy and hedgehog are, "Neither one nor the other. A strange doubling, A queer experimental finding" (Barad, 2014 p. 173) where the boy's identity has expanded to include hedgehogness. I would argue that, in this instance, the performativity of a diffraction pattern has enabled a decentring of the human.

Such momentary shifts may appear small but, as this paper argues, they make differences that matter in our relations with other beings. Furthermore, they are popping up in a cultural and educational context which still largely embraces Cartesian dualism, an issue which Karen Murris, (2016, p. 47) in her book 'The Posthuman Child' discusses in some depth. Although the aim of this paper is to attend to instances that decentre the human it is valuable to include the responses of the pupils who objected to being called animal, as it reminds us how the enlightenment story of human exceptionality is "written into our bones" (Barad, 2007, p. 233). These pupils considered themselves more sophisticated and

civilized than animal, more nurtured than natural, whilst I was 'othered' through the idea that I must be mad.

Interestingly though, the seeming divide was addressed through pupils sharing their stories of relations with other beings with each other, and not just in the above story. Having managed to include a similar question around human/animal identity with two more eco teams, it is worth including their responses too. In those cases, there was an underlying sense that animals are different to humans but the pupils in they were less adamant these differences mattered. All three groups however, concluded their discussions by sharing stories, experiences and observations of living with dogs and/or cats. Pupils described the animals they lived alongside as friends (in one case their best friend) with whom they played and shared a mutual understanding. Pupils without the experience of animal companions, listened, asked questions and shared in discussions where animals were reframed as emotional, intelligent beings, worthy of companionship. It was the telling of these peer stories, the sharing of experiences, that shifted the mood of each group from defending their humanity to thinking with animals as though they mattered.

These storied encounters may have made a difference, but they are not examples of diffraction patterns. The stories found common ground between humans and animals in a process Snaza et al. (2014, p. 45) describe as, "Affirming our own animality" in such a way that, "we can begin to think about our inter-relations with other-than-human animals animality" differently". Equally, "affirming seems to be different anthropomorphism. Anthropomorphism is about humans giving animals human characteristics whilst "affirming our own animality" is about understanding human/animal similarities. Both actions, I want to argue, are valuable methods for decentring the human and I concur with Barad when she states:

I am deeply interested in anthropomorphizing as an intervention for shaking loose the crusty toxic scales of anthropocentrism, where the human in its exceptional way of being gets to hold all the goodies like agency, intentionality, rationality, feeling, pain, empathy, language, consciousness, imagination and much more. (Barad, 2012, p. 27)

A diffraction pattern however, by showing where "the effects of difference appear" will include instances not only where identities are loosened but where some of that experience is entangled and reconfigured, even if only momentarily. In another example, from a focus group, a pupil reflected on the contents of a game he had made by using a simile of himself as a bee. As he put it, "As a bee I need flowers, just lots and lots of flowers. I like flowers." In this quote the pupil, by becoming bee, leaves the listener unable to know

whether it is the pupil, the bee or the "strange doubling" of "pupee" or "beepil" that likes flowers. I would argue that, in this instance, it is a "strange doubling".

Such examples highlight how pupils when given the opportunity to think with other beings can decentre the discourse that names them human. From the perspective of a posthuman environmental educator these subtle differences, where diversity is diffracted, are of interest as they also point to widening the sphere of inclusion. However, the Workshops for Wildlife project has a variety of stories to tell around inclusion and, in this next section, the story focuses on the ethics of who is included, how they are included and what this means for human power relations with other beings.

The ethical conundrum of inclusion/exclusion

It could be argued that to decentre the human is to open up the field of inclusion however, as Taylor (2013, p. 78) comments: "inclusive rhetorics and good intentions alone are not enough, particularly if there is little critical reflection upon the question of who gets to do the including, who gets included and what exactly they are included into."

The ethnographic work of the Common World Childhoods Research Collective positively encourages multispecies inclusion through contact between Early Years children and the likes of worms and ants. The collective present encounters where children enjoy finding and holding worms and get bitten by ants but they also acknowledge that, "Multispecies pedagogies are filled with difficult decisions, unanswered questions and ethical conundrums" (Taylor and Pacini-Ketchabaw, 2015, p.18). The common worlds approach, as cited by Nxumalo and Pacini-Ketchabaw (2017), adopt Haraway's (2016) phrase when they stress the need to 'stay with the trouble' inherent in child/animal relations. They extrapolate that, "staying with the trouble entails continually questioning our responses and accountabilities and remaining curious about the ethical implications of certain acts of caring" (Nxumalo and Pacini-Ketchabaw, 2017, p. 1416), a position with which MEEN's practice concurs.

However, as Nik Taylor (2011, p. 275) points out on the ethics of human/animal encounters, it is most often the animals that "tend to lose out" because in most cases there is a power imbalance in favour of the human. Considering the evidence at a macroscale by including the current extinction rate (Ripple et al. 2017) it is clear humans are devastating the population of others, instant by instant, death by death. Nik Taylor's (2011, p. 275) response is to explore and challenge how power can be de-centred in our relations with other beings and, having witnessed moments where human/animal encounters overwhelmingly disrupt, even end, the lives of animals, the de-centring of human power

is an ethical imperative. The question therefore, is not only how can the decentring of power be enacted but how can it be done responsibly?

Therefore, the next example drawn from the Workshops for Wildlife project field notes develops the discussion on how to decentre human power and practice ethical relations by focusing on the debate and the decision making of a group of young participants and their relations with an invisible hedgehog.

Ethical enactments with traces of hedgehog

A school team, keen to work with local hedgehogs, have many stories about hedgehog sightings in local gardens or seeing them squashed on the road. At a meeting of the project they decide to help hedgehogs in the school grounds but they don't know whether there are any. A member of staff shares a story of a hedgehog being spotted near the perimeter fence early one morning. The children are excited that they might get to meet a hedgehog. In response, one of the pupils suggests putting food out and a night camera. Another pupil suggests using a trap that could hold a hedgehog over night, but the other pupils are concerned this is not a hedgehog-friendly option. There is also the possibility of inviting someone from a hedgehog hospital to school with a recovering hedgehog which they also decide is a bad idea as hedgehogs sleep in the day and need their sleep, especially if they are trying to get better.

In order to find out whether there are likely to be hedgehog visitors the team decide to explore for 'hedgehog superhighways'. Very quickly the pupils find a point of access in the school grounds. Hidden behind a hedge they discover a mammal track under the fence and, after a discussion, the team decide to work out who is using the highway by mixing water and mud to create a 'track trap' encouraging hedgehogs to investigate the 'track trap' by leaving a big helping of hedgehog food.

The following morning a print is found and photographed. The children are thrilled and, in response, the team decide to put a hedgehog home in the undergrowth, to regularly distribute tasty snacks and maintain a water source to help the hedgehogs, amongst others, survive.

This account addresses issues of human/human and human/animal power relations. Firstly, as the environmental educator 'in charge' of the project there was an attempt to decentre the power of the role by asking the eco team what they thought should be done in the circumstances. This meant a need not only to offer possibilities for actions to take but also to be able to respond to the pupils' ideas and choices once they were made. Such an open-ended approach would seem to be in keeping with Lenz Taguchi's (2010, p. 162) claim that a posthuman pedagogy only plans lessons in order to diverge from them and must model, "an ethics that is inclusive of children's and student's different strategies, experiences and thinking".

Having devolved the project plan to the pupils their discussion was robust and their choices clear: they did not wish to disrupt the lives of local hedgehogs, to trap them or hold them but rather wanted to locate and feed them. Initially they had been excited at the thought they might have an actual encounter with a hedgehog but, through a process of weighing up the ethical considerations and decentring their own wishes to come face to face with a hedgehog, they put the well-being of hedgehogs at the centre of their decision making. By making these choices the team were, in effect, enacting ethical relations by deciding in favour of a virtual encounter rather than an actual encounter. It could be argued that, in this instance, it is the exclusion of an actual encounter that makes a difference.

So how might this be read from a common worlds perspective, where actual encounters are considered to be of primary interest? Taylor (2013, p. 62) is rightly concerned that by idealizing nature and representing it through our epistemological understandings alone, that the real 'messy connections' with the world are lost. Yet, this story highlights an exclusion based on ethical considerations and just power relations, both of which are fundamental premises in both common worlding and intra-active pedagogies. It was not that the pupils were shying away from difficult or messy relations rather they were taking responsibility for improving relations.

Turning to agential realism Barad is clear that every intra-action, has an ethical reverberation. The idea that agential realism as an onto-ethico-epistemology states that knowing comes through being or, in other words, that we know what we are doing in any intra-action. To reaffirm this Barad states:

Agency is about response-ability, about the possibilities of mutual response, which is not to deny, but to attend to power imbalances (Barad, as quoted by Dolphijn and van der Tuin, 2012).

This story highlights such response-ability as the pupils decentred human power through an ethical exclusion. But would the project have worked without the paw print? The finding of the paw print would seem to be a flimsy outcome which has more in common with Whatmore and Thorne's (2000) idea of finding the "trace" of an animal rather than an actual encounter. However, the excitement of the pupils on seeing the paw print only seemed to confirm their commitment to continued ethical relations with hedgehogs whilst this tiny materialization drew the pupils into the next phase of the project.

In the light of acting "response-ably" and continuing with the idea of thinking-with matter, the next section of this paper explores what I consider to be a posthuman pedagogical

exercise which involves multispecies encounters, the pedagogical observance of ethical relations and further considerations about the imbalance of power.

The Council of All Beings

The Council of All Beings attempts to create, 'a "deep ecological" group experience to directly challenge the anthropocentrism of industrial society' (Macy, 2002). Deep ecology is a philosophy, expounded by Arne Naess (1984), that describes all living organisms as having intrinsic value: it contains eight principles, one of which points out that if humans are the problem then humans also hold the solutions. Devised to immerse humans in the experience of other species MEEN has enjoyed using this pedagogical method with primary aged children. Interestingly no child has ever asked why they are to become another animal, (although they have not been so keen to be a plant or a microbe) or questioned whether it might be an interesting activity. Invariably they look intrigued and open to exploring the lives of other beings.

In the first session pupils choose the being they want to become then find ways to observe, research and get a feel for their chosen relation. This is best achieved by visiting the relation in their habitat, or place of being and, to instil an awareness that the pupils are in a state of becoming other, that they should treat those they visit accordingly. Observation is easy if the pupils choose to be a worm, a bee, or a common bird, but much harder if they choose to become a wolf or an eagle. However, in order not to exclude their chosen being the pupils are encouraged to research their relation either in the library or on-line. Initially they accrue knowledge but then the pupils are given time to explore moving, feeling, vocalising or sounding like their chosen being and, once they have become confident in their embodiment, they are then tasked with creating a mask. A key component in the process is to consider what issues the relation is facing and perform a presentation in their voice to share at the Council of All Beings. These presentations may focus on the joy of living as another or include stories of loss, even extinction. When the Council is called a human representative is also present and the human is often held to account and asked to respond to the stories of others on the Council. As the Council unfolds it can be a very moving experience and I would argue it is a disruption of anthropocentrism as it has the potential to generate diffraction patterns. Equally though, I would suggest for some participants it remains nothing more than a representation or an anthropomorphic drama.

Le Grange (2018, p. 885) argues that the deep ecology movement "anthropomorphises the more-than-human-world" through such activities and that this should be avoided in favour of "expanding the powers that enhance all life". Although a "naturalised ethics", as proposed

by Spinoza (2001), could be the best solution for improving our relations with other beings Le Grange (2018, p. 885) also points out that such ethics are yet to be established. The question therefore, remains for the practitioner as to how a posthuman, relational ontology in the confines of a largely human-centred education system can be practiced. As a practitioner any activities that decentre the human are useful, whether working from an anthropomorphic perspective, from the notion of "affirming animal" (Snaza et al. 2014) or as a diffraction pattern.

Decentring the human through a diffraction pattern by thinking with others is one possible way to achieve a shift. When the pupils were asked what they have discovered from performing the Council of All Beings, one pupil reported, "It's so hard surviving as hedgehog!" while the eagle declared, "I don't understand why you humans kill us". Yet another pupil stated, "I liked being a fox, but it's much easier being a human again", whilst another responded by squawking like a magpie.

But Haraway (2004, p. 70) reminds us that, "A diffraction pattern does not map where differences appear, but rather maps where the effects of difference appear" and, in this last encounter, experienced during the process just before a Council, the effects of difference are strongly felt.

One boy is keenly involved in the project and totally enthused by the process of becoming wolf: that is until he's asked to write down and practise reading out his contribution. He acts up and then disappears. I go and look for him and find him under a table crying and he won't come out. So I join him under the table and try to coax him into describing the problem. Eventually, he explains, he's angry because he's unable read back what's been written.

'Do you think that's a problem for wolf?' I ask.
'No,' he replies, 'that's silly wolves don't read.'
'So how about becoming wolf and just telling it as it is?'

After the Council of All Beings had been performed at an event the field notes read: Wolfboy's contribution was brilliant, not because his performance was perfect but because it was spontaneous, confident and heartfelt.

Not being able to read presented a huge challenge to this pupil and the conversation under the table enabled him to move beyond this perceived educational failure in such a way that he was included in The Council of All Beings on wolf terms. Becoming with the wolf opened up a different set of possibilities, it needed him to engage a different skill set and this skill set enabled his inclusion. But it worked because The Council of All Beings was able to respond to his problem differently.

This particular story is, of course, a very specific outcome which is of interest as a researcher because it highlights an instance where pedagogical difference really mattered. What is thought of as human skills, such as reading and writing, were not considered as valuable as the skill of being wolf and although such decentring may seem subtle in a wider educational setting, for wolfboy it was transformative.

However, whether this transformation was inspired by anthropomorphism, the affirmation of human animality or through diffraction is difficult to specify from the story. It may well be that the three methods chosen to explore human/animal relations in this paper are themselves diffracted and entangled in this instance.

Conclusion

The stories drawn from the Workshops for Wildlife project highlight instances where the human has been decentred in different ways. The first story may have highlighted how views of human superiority are still observable in the classroom, but it also presented an instance when trying to think with a hedgehog formed a diffraction pattern which, in turn, decentred the human. It also affirmed the power of storytelling, especially when these ordinary stories are made-with and about our significant others (Haraway, 2016, p. 76) whilst suggesting who tells these stories is also important. Peers sharing their experiences of living with other beings brought an authenticity into the classroom which helped shift human-centric views.

The second story highlighted the possibility that decentring pedagogical power can be achieved at a variety of levels: the educator has a response-ability to decentre power whilst, in this instance, young people also practiced decentring power in relation to hedgehogs. By choosing interventions that supported local hedgehogs the pupils were choosing just behaviours over acts of power. However, this example could be seen as troubling the notion that an ever-widening circle of inclusion and encounter, as Common Worlding suggests, is inherently the most ethical option. In this instance the pupils decided that the ethical choice was an ethical exclusion. Yet, reading this through agential realism it is perhaps an example where the performativity of an ethical discourse became more important than a material encounter.

The third story presents a pedagogical method, The Council for All Beings, which is designed to decentre the human through exploring power relations between beings in an ethical manner. Whether the activity can achieve this depends on who is involved and how they choose to relate to the process. For some it is a process of anthropomorphism,

for others a diffraction pattern may be formed, whilst others may experience an affirmation of being animal.

As a practitioner in search of posthuman pedagogies situated in a largely child-centred education system, all these outcomes have value as they help to decentre the human in different ways. Of course, key questions remain about how such ethical environmental educational activities can become integrated into the curriculum and whether such inclusions can really help humans respond to the planetary crisis. This is especially challenging as the instances seem to be such small shifts in awareness. Yet, thinking with agential realism, and Lenz Taguchi's intra-active pedagogy, we are presented with the need to attend to the details of each and every intra-action so that, as Barad (2012, p. 15) states, we can gain "an understanding of how values matter and get materialized". If each small shift makes a difference yet the objective is to champion a collective shift in our relations with others, then the aim must be to generate more opportunities for such shifts to occur.

Acknowledgements

This work was supported by the Economic and Social Research Council.

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