

Reconceptualizing Nature in the Anthropocene -Towards Learning with Place: A Literature Review

Lu Jiang

Affiliation: Capilano University

E-mail: lujiang@my.capilanou.ca

Abstract

The purpose of this paper is to review the current literature that focuses on environmental education in early childhood education and how children's learning is intertwined and connected with nature. In the current generation, Anthropocene has come into the spotlight as people come together and reflect on human activities and changes in nature. Thus, environmental education has become even more relevant and important than before, calling for actions to educate our future generations—the children—of how to care for or even save nature. In this paper, however, I will deconstruct this humanist stewardship view in environmental education where nature is viewed as human-centered, innocent, and separated from humans and its settler colonialism. Instead, I will rethink the notion of place and introduce other ways of learning with place and its entities to move towards a common world pedagogy. Lastly, I will also introduce pedagogical narration as a tool for educators to make children's learning and connections with nature tangible.

Keywords: *early childhood; environmental education; nature; place-based learning; nature education; Anthropocene.*

Introduction

Education that draws our attention to the environment is necessary as 21st century children are living with the legacies of human actions that have resulted in environmental In this paper, I problematize a stewardship view as position that maintains a view of nature that is human-centered, innocent, separated from humans and its settler colonialism (Taylor, 2011, 2017a, 2017b; Taylor & Pacini-Ketchabaw, 2015; Nxumalo, 2015). Instead, I rethink the notion of place and introduce other ways of learning *with* place and its entities to move beyond and towards a common world pedagogy (Taylor, 2011, 2017a, 2017b; Taylor & Pacini-Ketchabaw, 2015). Lastly, I introduce pedagogical narration as a tool for educators to make children's connections with nature visible, by moving beyond a human centric view and towards common world pedagogies (Blaise, Hamm, & Iorio, 2017).

Deconstructing the Eurocentric humanist perspective of nature

The term *Anthropocene* has been used to define the most current geological epoch as human activity has negatively and permanently altered the earth's geology, climate, and so forth. The term had become a keyword in the past few years in environmental education, with heated debates over how people can "save" the planet, thus creating a human exceptionalism view. Within this view, children's current education of nature mainly focuses on learning *about* the entities as a matter of fact, which doesn't engage their complexities (Taylor & Pacini-Ketchabaw, 2015; Blaise, Hamm & Iorio, 2017). Kimmerer (2013) claims that "science can be a language of distance" (p. 49). Environmental education uses standardized testing to test children's knowledge about nature, without providing children and educators the opportunities to learn from being with nature. These unquestioned assumptions take nature for granted as they represent nature as static, passive, and waiting for human actions. This humanist view creates a nature/culture divide, that magnifies the human-centered view towards nature.

A humanist view maintains the nature-culture divide, where only humans have agency and are separated from nature and its entities (Taylor & Pacini-Ketchabaw, 2015;

Nxumalo, 2015). Nature is considered “natural”, while human culture is considered as “unnatural” as it has been created by humans and therefore is in opposition with nature

(Taylor, 2011). The nature/culture divide maintains other binaries such as good or bad, who belongs or who doesn't, and who is considered as normal/natural or abnormal/unnatural or a “villain”. In order to understand how this binary has influenced Euro-western thinking, it is important to look at the history behind the creation of nature/culture divide.

Thinking that emerged from the Enlightenment period, positioned humans as separate from the rest of the world and placed above all other entities due to our exceptional intelligence and ability to reason (Taylor, 2017b). Thus, this nature/culture divide views nature as something that is “out there”, separated from its culture, society, people, politics and histories (Taylor, 2011; Iorio, Coustley & Grayland, 2018). This view produced the nature-culture divide. Jean-Jacque Rousseau, a philosopher in the mid eighteenth century, famously claimed that “everything is good as it comes from the hands of the Author of Nature; but everything degenerated in the hands of man” (as cited in Taylor, 2017b, p. 5). He argued that children are more natural than adults as they, as a result of their youth, were less contaminated by human culture and activity. This romantic view of children and childhood as belonging in nature is frequently portrayed in literature, popular culture and, more recently, in the environmental education movement.

The humanist perspective, that emerged during the Enlightenment period, positions humans at the center and worthy of ethical considerations over all other beings or matter. This line of thinking exaggerates the power of humans and their societies, while denying ethical implications of other beings and limiting our ability to cross the nature/culture divide (Duhn, 2012; Taylor & Pacini-Ketchabaw, 2015; Nxumalo, 2015). Humans are seen “as the sole knowledge producer, acting upon and transforming materials”, while nature is the object of our knowledge (Hardwood & Collier, 2017, p. 338; Taylor, 2017a).

This perspective positions the environment as a human resource, which we have the power to “alter, damage, and destroy”, but also to “manage, protect and save” (Taylor & Pacini-Ketchabaw, 2015; Taylor, 2017a, p. 1453). A humanistic standpoint focuses on human-centered assumptions and actions, marginalizing belongings, roots, kinship, and more-than-human agencies (Duhn, 2012). This creates a static notion of place, which is problematic because it produces entitlement of place and the “self-sabotaging” heroic acts where humans use science to “reconfirm our superior capacity for knowing” and finding new technologies to “fix” the problems we have created in the first place (Duhn, 2012;

Taylor & Pacini-Ketchabaw, 2015, p. 510-515). Reinforcing human supremacy in thinking so that there is a belief that humans can “rescue” nature through scientific fixes, which ironically, “replays the same kind of anthropogenic interventions that disrupted the Earth’s systems in the first place” (Taylor, 2017a, p. 1449). Further, the nature/culture divide maintains and strengthens a romanticized and idealized utopian notion of “pure” nature that is within the contemporary “wilderness” discourse, which portrays a popular image of pure and innocent childhood in perfect nature (Taylor, 2011, 2017b). The wilderness discourse romantically asserts the absence of human in nature that is “pure and distant..., which only exists ‘out there’, separated from human presence and untainted by human activity” (Taylor, 2011, p. 427). This popular representation of “innocent-children-belong-in-good-nature position” is in opposition of and seen as an antidote to the imperfect, complex, messy, impure, unnatural, and corrupting adult societies (Taylor, 2017a, p. 1452, 2017b; Hardwood & Collier, 2017). It assumes that spending time out in nature can “cure” the “unnaturalness” of children’s urban lives which threatens their well-beings (Taylor, 2017a, p. 1452). This produces the argument that in order for earth and children to be saved, children must be “returned” to nature. Thus, education is to “[bring] the pre-rational child (aligned with nature) into the rational adult world (aligned with culture)” (Taylor, 2017b, p. 62). Within this discourse, childhood is constructed towards adult agendas, which are held as the highest and most developed form of existence, rather than about children themselves (Taylor, 2011).

A humanist understanding of nature privileges Eurocentric thinking and therefore maintains the legacy of colonization in that it acts to erase the Indigenous history, relations, and ways of knowing and being with the land (Nxumalo, 2015). The Eurocentric way of understanding of nature itself is highly problematic as it is “entangled in specific colonial histories and practices that privilege particular ways of knowing the world while intentionally or unintentionally ignoring others” (Nxumalo, 2015, p. 28). In this way Europeans and Eurocentric knowledge is seen as civilized, while other are seen as uncivilized and in need of civilization. This line of thinking maintained either a romanticized image of Indigenous people as somehow closer to nature or people in need of intervention to become civilised.

Moving beyond human exceptionalism

Humanism and stewardship pedagogies, though with good intentions, create an image of nature that is pure, human-centered, and separate from humans. Of equal

importance is that these pedagogies continue to maintain and in strengthen the legacies of colonization. Thus, we need to make a paradigm shift in moving away from humanist stewardship pedagogies and their human exceptionalism assumptions as they place

humans as superiors and separated from nature (Taylor, 2017a). It will take time and hard work to decentralize humanism, trouble the boundaries and borders of nature/culture

division, and the notion of innocent childhood. In early childhood education, this requires us to rethink children's environmental education and build an educational framework that interrogates the intersections between the messiness of political themes in nature and culture (Gruenewald, 2003; Taylor, 2017a). Taking up the invitation from Donna Haraway (2010, n. p.) we need to "[stay] with the trouble" and "[grapple]" with the messiness of entanglements and encounters in our common world and work with these dilemmas (Taylor, 2017b, p. 72). This will require children and educators to engage with interdisciplinary pedagogies which are socially and politically constructed relationships with people, place, and entities (Gruenewald, 2003; Duhn, 2012). In our everyday practices with children, we need to trouble the limits of learning from assumed Eurocentric facts, and work towards learning from places in our shared, common locality. In this way, educators with children, learn collectively with place and its entities, rather than about them. This requires us to see with nature as a collective, a network, and an assemblage of all entities (Taylor, 2011). Learning then is understood as occurring in entanglements of self, matter, and place (Duhn, 2012). What is required, then, is pedagogies which educators with children foster interdependencies and connections between human and more-than-human beings. By engaging with pedagogy of place, learning is constructed through the assemblage of all entities within in that place.

Children's attention is a part of the assemblages, as they learn how to co-exist with other beings to work towards a collective common world and how to "be affected by the world" (Taylor, 2017a, p. 1455). These collective learning and meaning-making processes are generated by children's everyday encounters and interactions with the more-than-human entities. Children are already practicing this form of collective thinking and looking beyond the human/nature divide to cross its boundary set by adults. Their playful encounters with other entities have already exceeded our binaries and they are immersed in the process of relational co-existing (Taylor, 2017a).

Nxumalo (2015) suggests re-storying place is a way to move towards refiguring presences of both human and more-than-human beings. Through refiguring presences, we

move beyond seeing other entities as simply representations and interrupt the presence of place to re-configure our relationship with nature to looking for collective thinking and co-existing (Nxumalo, 2015; Taylor, 2017b). Through refiguring place, we re-imagine agency and our place in the world; re-situate humans with other entities; and resituating non-humans within ethical terms (Taylor & Pacini-Ketchabaw, 2015).

Rethinking place towards a common world pedagogy

Attending to the *Anthropocene* obliges us as educators to make pedagogical paradigm shifts by rethinking nature and place towards a common world pedagogy (Taylor & Pacini-Ketchabaw, 2015). In order to rethink a place, we need to view it as an assemblage, where the natural and human forces are complexly intertwined and entangled with each other. These encounters of multiplicities are often overlooked and marginalized by humanism. However, our lives are dependent on the lives of others, often overlooked entities. “The fate of one determines the fate of the other” and humans have always been inseparable from nature (Taylor & Pacini-Ketchabaw, 2015, p. 510). A place-child-educator assemblage is active, engaging and interconnected to response-ability, where we are all entangled in this dance of creating place and making it visible (Nxumalo, 2015; Hardwood & Collier, 2017). When we are being with a place, this place is also being with us. “Whenever we touch any entity, we are also ourselves being touched by that entity” (Abram, 2011, p. 58). Place then is understood as constantly changing and transforming as it’s re-made through these encounters and knowledge production happens in these complex networks of multiplicities, collective thinking, and “intra-acting”, where we experiment, make meanings, and think with place (Duhn, 2012, p. 101; Taylor, 2017a; Blaise, Hamm, & Iorio, 2017; Hardwood & Collier, 2017). Place is political, social, and is filled with knowledge and experiences as it is “co-fabricated” “through human and more-than-human encounters” towards new ways of being and becoming (Gruenewald, 2003; Duhn, 2012, p. 102; Nxumalo, 2015, p. 33). The agencies of other beings matter because they have vitalities and purposes, and they are all contributors of knowledge that are interdependent and intertwined with one another (Hardwood & Collier, 2017). Instone (2010a, p. 373, as cited in Nxumalo, 2015) states that “territory is always an assemblage made up of many elements, many perspectives, many stories—and at times the lines shift, sprout connections, move in unpredictable ways, edges open out and territories change, possibilities blossoms...”. Thus, place is always changing and transforming, and rethinking it brings identities, histories, ethics, politics, familiarities, and agencies of other

beings, where both human and more-than-human entities are “members of multispecies communities that emerge through the entanglements of agential beings” (Blaise, Hamm, & Iorio, 2017, p. 31; Iorio, Coustley, & Grayland, 2018).

Taylor (2017a, 2015) suggests a move beyond environmental stewardship and humanism to reposition children within a common world pedagogy, which acknowledges more-than-human agencies, pays attention to the mutual effects of human-nonhuman relations, pursues more-than-human collective modes of thought and learns from what is already happening in the world (Taylor, 2017a). Through this reposition of human, we are co-inhabiting and co-shaping this place with other entities, and to focus on the relationalities, interdependencies and encounters to be present and learn from other entities (Taylor & Pacini-Ketchabaw, 2015; Taylor, 2017b). “We are inevitably shaped by [other entities] no matter how distant they may be from our consciousness” (Kimmerer, 2013, p. 7). In this common world pedagogy, both human and more-than-human entities are actors in these encounters where relational learning and meaning-making takes place. This common world is made and re-made through encounters, not just with us, but with all other more-than-human entities, through “a dance of relating” (Taylor, 2017a, p. 1454). “Intelligence exists in all of nature, not just the human mind, but throughout the entire human body, in the bodies of plants, animals alike, soil, water, sky” (Griffin, 1995, p. 45, as cited in Leggo, 2006, p. 93). Humans, along with other entities, “reciprocally change each other as active participants in the storying of this place” (Nxumalo, 2015, p. 34).

Childhood from this position is understood as complicated, messy and political when children are “diffused” into the multiplicities of multiple encounters between human and more-than-human entities (Duhn, 2012, p. 102; Taylor, 2017b). Blaise, Hamm, and Iorio (2017) proposes matter of concern in learning to bring in relational context where children are situated, specific and interdependent of the place they live and learn. Childhood is neither cultural nor natural. Instead, it is “a multiplicity of ‘nature-cultures’” and a complex assemblage (Taylor, 2011, p. 430). Children learn from these encounters of how to respond, respect and co-exist from engaging with other entities and forces in their immediate and common world (Taylor & Pacini-Ketchabaw, 2015; Iorio, Coustley, & Grayland, 2018). Through intra-actions, children are experiencing place with others and they are seen as “political actors rather than political objects being acted upon” by adults (Blaise, Hamm & Iorio, 2017, p. 32).

Within common worlds pedagogies, Nxumalo’s (2015) notion of refiguring presence, can unsettle the taken for granted, settler colonialism view of place. The western humanist perspective on nature is only “one of many stories, one of many versions of the story” (Leggo, 2006, p. 76). By rethinking place, it offers a decolonial

discourse to bring the “colonial past-present histories” and emphasize an Indigenous identity (Duhn, 2012; Nxumalo, 2015, p. 29). We question: “whose stories come to matter” (van Dooren & Rose, 2012, p. 3, as cited in Nxumalo, 2015, p. 23). The Indigenous ways of knowing and being are interconnected through onto-epistemologies and they challenge the western notions of place and nature (Taylor, 2017a). Thus, “place is a provocation as a ‘territory that is Indigenous and which has been and continues to be subject to the forces of colonization’” (Iorio, Coustley & Grayland, 2018, p. 149).

Using Pedagogical narration to make children’s learning visible

When educators and children reimagine their relationship with nature, pedagogical narration acts as a tool to make visible children’s entanglements with nature and educators’ interpretations (Blaise, Hamm & Iorio, 2017). In contrast, within a humanist perspective educators observations focus on children as acting on nature and interpret children’s encounters with the world from a child centric focus. Engaging with pedagogical narration, this with posthuman theory, helps us to move beyond this humanist view and towards the assemblages children have created with more-than-human entities (Iorio, Coustley, Grayland, 2018). Pedagogical narrations from a posthumanist focus can illustrate children’s relationships with more-than-human entities and make visible their sense of place towards locality (Taylor, 2017b; Iorio, Coustley, Grayland, 2018). By making children’s encounters with nature visible, there is space for children to develop a sense of belonging by recognizing how they are in this network of multiplicities. Further, pedagogical narrations work as a tool to help educators revisit experiences, form questions, theories, and interpretations (Iorio, Coustley, Grayland, 2018). Through this process of learning, educators, children, families, place, and other entities revisit, question and explore their complex relationships with one another (Iorio, Coustley, Grayland, 2018). It is a reciprocal questioning, experimenting, meaning-making, and interpreting of collective knowledge-producing process. As Rinaldi (2006, p. 193) explains, “dialogues generate research, research generates dialogues” (as cited in Iorio, Coustley, Grayland, 2018, p. 168). In conclusion, place materials, memories, children, educators, and families become the protagonists in this collaborative learning process (Iorio, Coustley, Grayland, 2018).

Conclusion

The current environmental education in schools is insufficient as it focuses on an assumption of nature that creates a nature/culture divide, a human exceptionalism position, an innocent childhood and a Eurocentric settler colonialism. Through this assumption, the children are seen as future stewards, needing to learn about nature in order to save it. However, as this paper had discussed, this Eurocentric humanist perspective of place is problematic and as educators, we need to move beyond this ideas to think with posthumanist theories. These theories make the space for us to see ourselves as one being in this complex network of many other beings and learn from the connections and networks between us. By seeing learning as occurring within relational in encounters with human and non-human entities, we are able to refigure our presence in nature and to resituate ourselves. Children's education of nature should shift towards common world pedagogies, where both human and more-than-human entities, depend on each other and are both affecting and being affected. Nature education should be learning "about, through, and with nature" (Harwood & Collier, 2017, p. 340).

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Author:

Lu Jiang is a student in the School of Education and Childhood Studies at Capilano University.