Kopnina, H., Sitka-Sage, M. D., Blenkinsop, S. and Piersol, L. (2019) 'Moving Beyond Innocence: Educating Children in a Post-Nature World.' *Research Handbook on ChildhoodNature*: Assemblages of Childhood and Nature Research. Edited by Cutter-Mackenzie, A., Malone, K., and Barratt Hacking, E. Dordrecht: Springer.

Moving Beyond Innocence: Educating Children in a Post-Nature World

Abstract

This chapter examines some of the challenges of unlearning anthropocentrism - i.e. the deep-seated cultural, psychological and enacted prejudices of human specialness - in nature-based early childhood education programs. We begin with a critical exploration of recent trends in environmental philosophy and the conservation sciences that seek to move beyond the so-called archaic notions of "wilderness" and "nature" towards more managerial models of human dominion over planetary "ecosystem services." We suggest the trouble with these discursive moves is that they shirk from the courageous conversations required from environmental education in a time of ecological emergency. We conclude by drawing on research at nature-based schools in the Netherlands and Canada to illustrate the tenacity of anthropocentric "common-sense" and suggest the beginnings of pedagogy of childhoodnatures guided by notions of rewilding and ecological humility.

Keywords: rewilding pedagogy, ecocentrism; post-nature, wilderness studies, moves to innocence, anthropocentrism, nature-based elementary schools

I. The Trouble with Being Nature

In this chapter, we critically examine what it means to educate children *as* (part of) nature. As stated in the Introduction to this handbook: "the new concept 'childhoodnature' reflects that as children *are* nature this should be redefined in this integrating concept." We wholeheartedly support redefining and disrupting "existing ways of considering children and nature," in order to critique and reject "the view that humans are superior." For us, however, the real trouble is not whether we consider humans biophysically "part of nature"—this is convincingly self-evident—but rather how anthropocentric "commonsense" repurposes such discursive practices into feel-good axioms like "everything is connected" while maintaining business as usual (Kopnina, 2016b). The problem then is not strictly ontological (i.e. children *are* nature). Rather, we argue that the ontological move *must* also consider the politics of interpretation and recognize the deep-seated cultural, psychological and enacted prejudices of human specialness. The challenge of unlearning

anthropocentrism, we submit, thus lies at the crux of any project to (re)define and integrate notions of childhoodnature.

It is true: we *are* nature—all the way down (see Kearney & Treanor, 2015). The trouble with this formulation arises not so much in its truth-claim, but the way such logics are strategically appropriated and redeployed as *moves to innocence*¹ or evasive *bad faith* in the face of grave ecological realities and the eco-ethical implications of *being nature* (Derby et al., 2017; Foster, 2015). In this chapter, we deploy these notions as a means of describing an anthropocentric set of evasions and/or appropriations to reconcile ecological guilt and complicity, in order to legitimize a technooptimist future of human dominion as common-sense.

As practicing environmental educators and researchers, any recognition of our co-evolutionary entanglement with/in a multispecies world (see Haraway, 2016) is only meaningful insofar as it contributes to cultivating eco-ethical praxes. In other words, the trouble for environmental educators is two-fold: a. fostering the pedagogic strategies to integrate notions of childhoodnature in the first place (i.e. instilling that we *are* nature) and b. maintaining hypervigilance to the ways in which such lines of thinking are re-appropriated by anthropocentric biases, desires, and discourses.

Admittedly, a host of "complicated conversations" follow from post-anthropocentric lines of thinking. For instance, one might reasonably propose Ebola viruses are also part of nature (Kopnina, 2016b). Here the trouble (from a human perspective) is how to appropriately respond to the expansionist behavior (from a human perspective) of one part of nature given the health, well-being, and flourishing of one's own body, species and the ecological community as a whole? Does/ought the same logic hold for all species? What about issues of animal personhood? Are we ready to weigh the life of a gorilla against that of a human toddler fallen into his cage (B. Taylor, 2016)? Are we ready to seriously consider why one primate should even be in a cage for the sake of another primate's entertainment? More to the point, if we begin to argue that children *are* nature and nature is *natural*: are we not moving towards dangerous appeals to nature whereby whatever children do—be it killing small animals or pouring motor oil down the sink—is rendered *natural*?

-

¹ Janet Malwhinney (1998) develops the notion of "moves to innocence"—i.e. the "seductiveness of the innocent position" (p. 94)—in her critique of the operations of white privilege in anti-racist pedagogy and organizational change. The phrase is drawn from the work of Mary Louise Fellows and Sherene Razack (1998), who originally described a "race to innocence," but deployed by Malwhinney in a slightly different way. Eve Tuck and K. Wayne Yang (2012) further develop the notion in the context of settler colonialism to describe a "set of evasions" that "problematically attempt to reconcile settler guilt and complicity, and rescue settler futurity" (p. 1).

² For an example of the complicated conversations and problematic logics that emerge from this kind of oversimplification applied to urban centers as *natural* see McClaren (2009). The logic goes something like

Obviously, we could never address all these complicated conversations in one chapter, but we will attempt to trouble conceptions of childhoodnature by proposing that: a. ecocentric (i.e. post-anthropocentric) lines of thinking are critical to the project, and b. suggesting rewilding pedagogy as one means to counter the tendency to move to innocence by way of human exceptionalism. In order to illustrate these issues in an educational context, we will draw on research concerning the pedagogical complexities of (un)learning anthropocentrism at nature-based education in the Netherlands and Canada.

As educators interested in integrating notions of childhoodnature, we recognize it is incumbent to explore the complex relationships between material compositions and the contested meanings attached to foundational categories such as nature, wilderness, urban, human, children. This task is all the more pressing in the so-called Anthropocene, where some have suggested it is "the end of nature" (McKibben, 1999) and the time has come to rethink "pristine" notions of wilderness (Cronon, 1996). In light of these proclamations, Robert Fletcher (2015), for example, has suggested pedagogy focused on "saving nature" is no longer relevant as the idea of pristine wilderness embodies a culturally specific, elitist perspective in which immersion in nature is understood as a therapeutic escape from the reputed ills of industrial civilization. Nature thus negates socio-cultural necessities, from social equality to cultural determination, with wilderness preservation seen as a limitation on human progress. According to this line of thinking, the wilderness is an archaic notion and the future of both conservation and environmental education lie in embracing a "post-wild" or "post-nature" world. Typically, this view construes nature as a product of idealized "Western middle-class sensibilities" (Malone, 2016, p. 399). Relating this to early childhood education, Taylor (2017, p. 61) has criticised "entrenched and romantic notions of nature as a separate and pure domain," to which "innocent children might be returned and through which they can be saved," claiming that these notions "are no longer tenable or constructive."

As educators committed to the health and flourishing of relatively wild places, that is places where there is flourishing biodiversity and for the most part, nature-on-its-own-terms, we tend to view such positions with a measure of suspicion. This is due, in part, to the way these positions are readily appropriated by neoliberal and "neo-green" interests (Kingsnorth, 2014). We call for post-nature thinking which recognizes the significance and intrinsic value of the myriad beings, elements and relations that co-constitute existence (Kidner, 2000; Crist, 2004). Moreover, we hold that the *real* trouble with wilderness is that vast tract of land and sea continue to be colonized for short-term capital gain and it would seem many post-nature discourses either intentionally or naïvely pave the

this: "Humans construct cities. If human constructions are not natural, then what does that make humans? Stated differently, how should humans behave naturally?" (p. 303)

way for increased exploitation. Our issue with *certain* post-nature discourses (i.e. those failing to recognize anthropocentric moves to innocence) is not so much the spirit of their ontological reflexivity—we *are* nature and pristine notions of wilderness *ought* to be troubled—but their ideological naiveté with respect to how these discursive practices are deployed. Disrupting a foundational category like *nature* or *human* is, relatively speaking, the easy part. The real work begins in staying with the complicated conversation and following the implications where they lead no matter what sacred cows or sacred primates need to be sacrificed.

Our vision for pedagogy informed by childhoodnatures is simply this: that it stays with the troubling conversations called for by these historical moments in lieu of deferring to technocratic cheerleaders for the Anthropocene peddling what Donna Haraway has called "a comic faith in technofixes" (2016, p. 3). This is not to say that technical innovation has no role in addressing ecological degradation, but rather it is a critique of the faith-like "rational superstition" (Wilson, 2017) that undergirds the anthropocentric logic of many post-nature discourses. This penchant for "looking away" (Klein, 2014) from displeasing realities to comforting fantasies functions to shut down complicated conversations at the very time they are most required. For instance, witness the way Erle Ellis at the Laboratory for Anthropogenic Landscape Ecology deploys such thinking to both plugs the "amazing opportunity" presented by the Anthropocene and shut down any objections: "Nature is gone... You are living on a used planet. If this bothers you, get over it" (as cited in Wuerthner et al., 2014).

Regrettably, much post-nature thinking currently seems more concerned with appropriating the discourses of science and environmental philosophy to legitimize a managerial approach to "ecosystem services" than engaging in complicated conversations about the eco-ethical implications of the "sixth extinction" (Kolbert, 2014). It would seem this brand of post-nature politics does not view anthropogenic mass extinction or climate catastrophe as a call to conscientization, but rather an evidence of the apotheosis of human and capital to god-like geologic forces (see Moore, 2016). Some may claim we are conflating "nature" with "wilderness;" that the concept of wilderness has been debunked for at least twenty years and we have moved on to more modern and pressing issues such as climate change or ecology without nature (Morton, 2007). We are not conflating as much as drawing a parallel. The discursive strategies that supposedly debunked the notion of wilderness twenty years ago³ appear to have turned now on "nature" writ

-

³ It bears noting the notion that Cronon debunked wilderness twenty years ago is simply not accurate. The wilderness debate "rages on" (Nelson & Callicott, 2008) and has evolved in response to recent environmental scholarship, trends in the conservation sciences and changes in the semiotic-material conditions of the biosphere (see Wuerthner et al., 2014; Kahn et al., 2013; and the September/October 2014 edition of *Orion* for recent debates). It also bears noting that Cronon's original thesis is widely misread and frequently

large. We would be foolish to overlook that one of the reasons Cronon's thesis was so widely received was its compatibility with the ethos of our age; that is, the ease with which it is appropriated and repurposed to align with the dominant interests of Anthropos and Capital. And now that "wilderness" has been permanently fused to archaic notions of "pristine"—a defunct idea brandished by maudlin, sentimental (and potentially racist) simpletons—the next move is to deconstruct nature itself (and conveniently all the lands and "resources" under its aegis). As Christopher Ketcham recently commented, "Wilderness advocates have stopped talking about wildness, because wildness is not commercially viable" (2014, p. 43). We must always bear in mind that we are four decades deep into a calculated restructuring of human-nature relations (Henderson et al., 2017) and our intention is to encourage environmental educators to resist the move to "get over it" due to economic common-sense. In this chapter, we shall try to stay with the complicated conversations and argue that while one of the troubles with wilderness is that it has been deployed as an ahistorical anachronism pandered by sentimental elitists, the other trouble is the fact that the material referent, or what remains of it, continue to be colonized all the while.⁴

For educators interested in integrating notions of childhoodnature, we submit the trouble lies in what post-nature thinking will mean in practice. Will it simply be a novel means of reinscribing human exceptionalism and the managerial responsibilities that come with planetary stewardship (i.e. a move to innocence), or will it involve what Gary Snyder called the "real work" of coming to recognize our place in the world with humility (see Jardine, 2012, p. 220)? We acknowledge that calls to unlearn foundational dualisms and anthropocentric biases in education are not new (Kopnina, 2012a, 2015a; Bonnett 2015; Lupinacci & Happel-Parkins, 2015; Quinn et al., 2015); however, we hope to illustrate some of the challenges inherent in the endeavor based on

appropriated for ulterior motives (as per the thesis of this chapter). See, for example, the foreword to the paperback edition of Uncommon Ground (1996) where Cronon attempts to clarify his position, noting the danger of conflating conceptual critiques with material realities: "Asserting that 'nature' is an idea is far from saying that it is only an idea, that there is no concrete referent out there in the world for the many human meanings we attach to the word 'nature.' There are very real material constraints on our ideas and actions, and if we fail to take these into account, we are doomed to frustration if not outright failure. The material nature we inhabit and the ideal nature we carry in our heads exist always in a complex relationship with each other, and we will misunderstand both ourselves and the world if we fail to explore that relationship in all its rich and contradictory complexity (pp. 21-22)."

⁴ We note that "colonized" in this case does not only signify the imperial practices of accumulation by dispossession within global capitalism as places are reconfigured to compete based on resource endowments (e.g. Fletcher, 2015; Mendoza, 2017). Instead, like Serres (2011), we speak of colonization as the appropriation of both urban and natural spaces with the "disadvantaged" or "dispossessed" including both vulnerable members of the human species as well as other-than-human beings. This does not mean we wish to reinforce a categorical separation between human and nature. We share with Taylor (2017:61) that "it is the deluded hyper-separation of ourselves from nature that distinguishes modern western thinking and has resulted in unsustainable modes of living in the world and produced the anthropogenic ecological crises we now face."

our research with nature-based early childhood education. As we shall discuss below, educational experiences of "direct contact" with "nature" all too often backslide into anthropocentric moves to innocence. Ultimately we suggest any educational initiative aiming to integrate notions of childhoodnature must remain hyper-aware and realistic about such tendencies and appropriations.

II. Rewilding Pedagogy

We cautiously describe our educational project as rewilding; that is, co-crafting experiences that trouble the taken-for-granted logic of human dominion and seek to recognize our entanglement with/in a more-than-human world. Rewilding pedagogy entails cultivating the historical consciousness and humility to recognize a planetary loss of flourishing "wilderness" (i.e. healthy and biodiverse ecosystems with relatively minimal human involvement). While rewilding in conservation discourses tends to mean reintroducing species, or reasonable facsimiles thereof, to places where that species has gone extinct (Kolbert, 2012), it also refers to committing to the flourishing of places in ways that recognize the reciprocity between humans and other-than-humans (Bekoff, 2013). Rewilding, in this sense, seeks to shift environmental relations from being primarily economic or resourcist towards a more holistic recognition of the necessity of "nature protection" (Washington, 2015; Kidner, 2014). Ultimately rewilding pedagogy entails evoking encounters and experiences that challenge anthropocentric discourses and recognize the interpenetration of culture/nature, organism/environment, urban/wilderness, etc. There is, however, a way in which even these reorientations might slide into anthropocentrism (e.g. we need to save our forests for their educative or health potential for human children). There is nothing inherently wrong with human land use per se, the issue lies in an anthropocentric ethos writ at a planetary scale and amplified by the "paradigm of unlimited economic growth." As Miller et al (2014:4) underline:

the assumption that managing nature for human benefit will preserve ecological integrity is ungrounded and does not address the root causes of biological destruction, such as the paradigm of unlimited economic growth, unabated consumption, and ever-increasing human numbers... We contend that the *ideology* rests more on delusion and faith than on evidence. The ethic of the *ideology* is utilitarian and sometimes parallels neoliberal economic philosophy... the center of traditional conservation is the preservation of biodiversity for ecosystem function and evolutionary potential.

The more ambitious side of rewilding represented by the "nature needs half" movement, for example, challenges the ideology of anthropocentrism by recognizing the intrinsic value of

other-than-human beings, while maintaining the dignity and uniqueness of human beings (Cafaro & Primack 2014; Doak et al 2015). Rewilding in this sense is related to the concept of *bio-proportionality*, seeking not merely viable, but flourishing populations of myriad species and strengthening the case for increasing the extent of protected areas (Mathews 2016, p. 140). Within this framework, setting aside vast tracts of land and sea for "nature" without direct human control or management is necessary to guarantee *abundance*, not just sufficiency (Mathews, 2016). One of the crucial difference between rewilding pedagogy and many of the conventional ESD approaches is this recognition of the intrinsic value of places/beings, and a commitment to supporting bio-proportionality in "the natural world" as well as "urban environments." The trouble, for us, lies less in taking up specific positions on conservation issues and more in the tendency to make faith-like appeals to the metaphysics of mastery in lieu of staying with complicated conversations. With respect to education, we are concerned with the way in which these logics play out, for example, the recent move in some nature education programs to make no distinction between "domesticated" and "wild" species as a pedagogical strategy for the Anthropocene.

III. Case Studies

The Netherlands Case Studies

The Netherlands is a country populated with over 17 million people at a rate of roughly 500 people per km² and rising. Since most land is used for agriculture or industrial development, rewilding initiatives in The Netherlands tend to be couched in the language of "land management" (Kolbert 2012). Dutch rewilding thus mostly involves reintroduction and preservation of smaller species with larger species, such as deer and wild cows, needing annual "maintenance and management," or in other words, culling (Kolbert, 2012; 2014; Shoreman-Ouimet & Kopnina, 2015, 2016). As discussed in the gardening case study below, children are taught to "take care of nature" primarily to ensure human food security. Dutch environmental education includes multiple stakeholders (e.g., schools, communities, garden centers, local businesses, NGOs) and the curriculum typically involves a number of nation-wide nature activities: including schooltuinen, or "school gardens" to learn basic horticulture, and bosweek, or "forest week" (Kopnina 2011a; 2011b). Other ad hoc initiatives include visiting "wild areas" (small parks, populated perhaps by birds and a few small mammals such as rabbits) in order to participate in botany, biology, and geology-related coursework.

Schooltuinen/School Gardens

Between June 2016 and July 2017 the author (Helen Kopnina) conducted a number of indepth interviews with the children and school supervisors involved in a school gardening project. Amsterdam schoolchildren between the ages of 9 and 11 routinely follow a "nature education" course involving gardening. In this case, over 60 children in the summers of 2016 and 2017 were involved in a *schooltuinen* program in an urban park called Westerpark (detailed in Kopnina, 2013b; 2015b; 2015b). Students helped with activities such as trimming, cleaning, and gathering wood and are sometimes rewarded with honey from local bees. The garden itself is an area of the park used exclusively for educational activities where students learn rudimentary facts about Dutch agriculture.

In conversing with students it quickly appeared that they equate "weeds" with something that needs to be destroyed, not, for example, as wild plants contributing to biodiversity beyond human utility. However, we need to note that in biological terms, the category of "weeds" needs to be treated on a case-to-case basis. If the plants are introduced invasive species they might not be contributing to biodiversity and thus may impede the task of agricultural rewilding, which is about growing diverse foods. The practical question is whether "weeds" may create a monoculture that threatens all other plants, or whether any non-edible plants are routinely destroyed just because they are seen as "useless". It was also noted that the fact that the "cultivated land" requires industrial fertilizer after the end of the season was not mentioned during the educational program. This kind of rosy colored and oversimplified understanding of ecological entanglement is also evident on a larger scale when visitors to The Netherlands (not to mention the Dutch themselves) view expansive agricultural fields to the horizon only to wax lyrically on how "green" a country it is. Students also learn that due to generous subsidies to domestic farmers, the Dutch are able to export some of their excess produce to African nations to feed disadvantaged peoples. The manufactured landscape is thus rendered morally beneficent. Students learn to clear weeds and are allowed to harvest their produce and cut flowers to take home. As one of the teachers explained: "This way they [the children] learn how important land is... They learn how to take care of the land." As a reward for taking care of the land, the children, according to the same teacher, learn that "nature feeds them." At the end of October, when harvesting is complete and all crops and weeds are cleared and the land is left bare to be fertilized for next year's gardening activities.

Bosweek / Forest Week

Bosweek takes place in Utrecht province, in the area called Lage Vuursche, where recently planted forest covers about 1150 hectares. The activities include "camping and survival type activities" (e.g. learning how to cut wood and make fires, climb trees, make "wild" river crossings, and discover basic outdoor rules and ethics). On the forest farm, the children are involved in competitive games, talent competitions, music performances, and stories about the past when "dangerous wolves and bears" roamed the forests. Some children were allowed to help with

chopping wood for the fire and were told, as with students in the Canadian case below, that the wood needed to be cut to allow young trees to grow. Significantly, we note that the "thinning" of wood and its use for "green" energy generation is a common practice in all Dutch wooded areas (Kopnina 2015b). In conversation with the children, it emerged that they mostly enjoyed role-playing and musical competitions inside the house as well as chopping wood. A few children said that the things they missed the most, besides parents, were their smartphones and video games; however, most children the author spoke to referred to their experience as "fun."

Reflections

As these case studies illustrate, Dutch children are rarely exposed to natural areas that are not heavily managed "working landscapes;" and yet, educators often frame these experiences as wild encounters. Dominant approaches to agriculture that tolerate little biodiversity or utility beyond human needs are recreated in miniature *schooltuinen* programs in order that students learn how "nature feeds them" and those who are "less fortunate." (quotes here are used to designate terms taken from field notes recording conversations with children or supervisors). Thus the primary lesson drawn from school gardening is that by "taking care of nature" one can sustain not only local needs but "feed the world." While this article does not delve into the details of European agricultural subsidies or the manufactured dependence of the developing world upon agricultural imports, we note that even on a small scale this type of environmental education serves to normalize and celebrate the "metaphysics of mastery" (Bonnett, 2015). This mastery manifests not only as of the divine right to determine what species are "weeds" and "pests," but also instills in children the idea that nature itself is better served if humans take our place as planetary stewards and ecosystem managers.

This is not to say that school gardens or forest weeks are inherently anthropocentric, but to reemphasize that in addition to learning to how to grow vegetables, the role of environmental educators in a post-nature world ought to entail provoking students to think about notions such as interdependence, ecological humility and perhaps even a "more-than-human world" as basics for life in the Anthropocene (Affifi, 2016). Concretely, a good starting point might be letting an area grow without or with minimal management (by simply observing what happens to the land without human "care" or "maintenance"). From this one might highlight, for instance, how bees conduct their ritual dance to indicate the location of "flowering weeds" and make honey used for the bees themselves (not only *for* human children). To avoid giving children the idea that humans are "bad" and outside nature, as well as provide healthy activities for the children, a number of non-intrusive in-nature activities are easy to organize. They can include imitating the bee dance and asking other children to locate the hidden flower following the dance, or playing hide and seek, or observing

and naming different types of plants and insects. It seems to us that a pedagogy committed to rewilding or integrating childhoodnatures ought to always be troubling strict adherence to dualisms such as human/nature, culture/nature, human/animal, modern/primitive and human/wilderness. There is nothing inherently wrong with school gardens or forest weeks, just as there is nothing inherently wrong with being a human; the objective here is to push environmental education beyond anthropocentric moves to innocence when addressing the emerging realities of a post-nature world. Even in places where there is relatively more "nature-on-its-own-terms," as we shall see in the next section, integrating notions of childhoodnature can still lapse into ecologically problematic interpretations due to the tenacity of anthropocentric commitments.

Notably, much of the discourse around education for sustainable development (ESD) is informed by the metaphysics of mastery and tends to frame "nature" in resourcist terms. As such, a growing number of critical environmental education scholars have noted "sustainable development," as it is currently conceived, is patently anthropocentric (Kopnina, 2012a; 2015a, Kopnina & Cherniak, 2016; Jickling & Sterling, 2017). As a post-anthropocentric alternative, consider the ecopedagogy movement (Kahn, 2010), which is concerned with the radical reorientation of education toward ecocentric concerns in a more-than-human world. In order to incorporate children as positive actors in such a childhoodnature program, a child who is in an animal rights education could come home with a different ethos and that recognizes the subjectivity of nonhumans (Kopnina and Gjerris, 2015; Kopnina & Cherniak, 2016). Perhaps we would do well to recall that initially, environmental education was concerned with helping students acquire an awareness of the natural world and its current plight, sensitivity to the need for protecting nature, and the acquisition of skills to help address environmental challenges (UNEP and UNESCO, 1976). While more recent social approaches (e.g., that knowledge/awareness, skills developed through social learning, trust, connections, and the importance of collective action) are certainly valuable, the plural perceptions of sustainability tend to take focus away from the ecological crisis (Kopnina, 2012a). We suggest that rewilding pedagogy is, in part, a revitalization of the original aims of Environmental Education.

Canadian Case Study

In comparison to the Netherlands, Canada is a large country with a density of under four people per square kilometer. There are tracts of land comprised of *relatively* healthy ecosystems, which exist, for the most part, beyond the purview of constant human management. The cultural definition of "wilderness" thus varies greatly between continents, as illustrated by a recent contributor to *Orion* who suggested: "Where the American definition of wilderness traffics in philosophical absolutes about what wilderness *should be*, the European definition presents a more

general set of ecological guidelines about what a wilderness *could be*" (Miller, 2017, p. 36). As we have illustrated, many environmental philosophers including Cronon have convincingly challenged the American definition of "pristine" and "primeval" landscapes in recent decades. We too are suspicious of wilderness in terms of "philosophical absolutes," and yet in response to one of the central tenets of environmental education, that is, getting children outside into the natural world, three of the authors (Blenkinsop, Piersol & Sitka-Sage) were compelled to co-create a school where students could be immersed in relatively "wild places" for as much of the school day as possible.

The Maple Ridge Environmental School Project (MRESP), located on the west coast near Vancouver, was initiated with two core assumptions: the first, that "Canadian culture" (i.e. the dominant settler-colonial culture) is predicated upon and aggressively maintains an anthropocentric and colonial relationship with the natural world (Blenkinsop et al., 2016). Secondly, the role of public education, generally speaking, is to induct the next generation into these cultural norms. The central research inquiry was thus what role education might play as an agent of cultural transformation in the move towards more ecologically sensitive ways of being? Supported by a grant from the Social Sciences and Humanities Research Council, the school district, and myriad community partners, the MRESP "opened its doors" in 2011 (see: http://es.sd42.ca). Presently, there are some 88 students (aged four to twelve), four full-time teachers, two support teachers, three educational assistants, and a principal. The school has no permanent buildings (there are some yurts and shelters and students occasionally visit libraries and swimming pools "in town," etc.) and the vast majority of learning occurs outdoors in various forested parks, research forests, rivers, and lakesides. Additionally, the project is shaped by a set of ecological principles that attempt to bring all aspects of conventional schooling into question and guide the pedagogy towards place-based and ecological kinds of understandings. Although legally required to teach the provincial curriculum, the MRESP has significant latitude to experiment and think differently to explore new conceptions of learning, teaching, and assessment, while pursuing a curriculum deeply rooted in place.

The Free Time Politics of Nature-Based Play

One late October day, Sitka-Sage happened to follow students into the small forested area called the "village" for their daily "fort time." Long a staple of environmental education and a component of children's development writ large (Sobel, 2001; also see Donald, 2009 for a critical appraisal of the "fort curriculum") the village is an incredible opportunity for researchers to listen and observe what happens as this mini-society moves from the initial building stages to imaginative social play. For Sobel, this process of building dens, homes in the woods, caves, etc., often out of sight of adults, is part of becoming an adult. Here the students can experiment with who they might want to be and what is socially appropriate to express. This situation also presents a chance

to experiment with what students want their ideal communities to look like. The following comes from research notes from the same "free time" period and all conversations in quotations are verbatim (Note: "I" refers to Sitka-Sage).

On that particular day, I noticed several of the older boys carrying ominous-looking sticks around that they began loading with invisible bullets, cocking back and taking aim at the sky, firing at will upon enemy fighters, and occasionally, a very real robin. They converge upon one of the larger forts and began to modify its structure into a prison. Other students start businesses and beginning hording sticks and twine to "sell" the surplus. I frantically search my rain jacket pockets for my voice recorder and situate myself as a visiting reporter interested in the emerging politics of The Village.

"What kind of buildings are there here in the Village?" I ask a Grade 6 girl.

"Well, I know that there is a McDonalds, and an armory, a twine shop, a tattoo shop, a supplies shop and maybe a doctor. We also have two police stations and a jail."

"That is a lot of police."

"Yeah," she says matter-of-factly, "there are some pretty crazy people around here."

One of the oldest and largest boys, Travis, emerges quickly as the favored "Prime Minister." He capitalizes on the tangible unrest in the Village over stick stealing and focuses his campaign on a kind of "get tough on crime" enforcement of the law. His party includes most of the older students, who are all promised positions in his caucus should he win the election: social care positions for the girls and military positions for the boys. A group of boys forms a perimeter around their Prime Minister-elect and travel with him throughout the Village armed with stick-bazookas as he asks the younger students whether he can "count on their vote." I manage to inch my way towards them and thrust the recorder in Travis's face.

"Travis, can you tell me what life is like here in the Village?"

He takes on a confident, almost paternal tone, "Until now it has been very unorganized, there has not been a lot of organization."

"Yes, but I have noticed an increase in police stations, weapons... is this part of your campaign?"

"Yes I have made lots of changes, lots of police, there is a police station just over there."

"Is having more police the best way to... organize this village?"

"Well, I find that if we are out and about and we are out there..."

"What do you think is the root of criminal activity?"

"Stolen sticks, there are lots of sticks being stolen... and the forest is getting destroyed."

"Could it be that some people have more sticks than others?" I ask.

"Well, yes, but, if... it's all about... look, we have lots of sticks, it's plentiful, people just do not want to get out there and look, which is why it's not the best thing... Look, I am being sponsored by lots of businesses, I am making sure that they get lots of business."

Reflections

As readers no doubt recognize, this is a complex instance that might be explored in multiple ways, we will focus on a few key observation relevant to the thesis at hand. The first, which we found quite striking, was how easily the imaginative play mimicked the dominant norms of mastery, militarism, and economism. So even though students were consistently immersed in the natural world, surrounded by teachers focused on and interested in transformational change and place-based education, the village rapidly slides from a tranquil forested grove to a patriarchal state with power maintained through a militaristic and competitive hierarchy. All of which undermines the work of the teachers and the place itself, legitimizing an anthropocentric utilitarian ethic. Our sense is that this example, one of many in years of research at the MRESP, troubles a few core assumptions in environmental education. The first, which we will overstate for sake of argument, roughly follows the sentiment that being outdoors engaged in self-directed play is a "good thing" and that young children in these settings are more likely to become compassionate and environmentally engaged adults (e.g. Chawla 2002). The second, related to first, assumes an imaginative range amongst young children that allows them to go beyond the cultural norms, habits, and beliefs of their respective communities that is inspired somehow by being in "direct contact" with nature. The suggestion here is that they are apt, is situated in the right conditions, they will have more compassionate orientations towards each other and the natural world and ultimately be more relational beings. Yet, as this example shows, this is far from a foregone conclusion.

For us, one of the key insights in this discussion is that the work of the human educator is truly complex and involves a great deal of self-awareness, a willingness to be reflexive, and vigilant awareness of how students are engaging with each other and the place and making sense of these encounters. It is incredibly easy for educators to undermine their own good work and that of their non-human co-teachers by way of moving to innocence and naturalizing dominant, utilitarian, and human-centric cultural norms. For example, towards the end of the first year at the MRESP a group of the older students, grade three to seven, walked to the clearcut, a section of the research forest that had been logged with conventional clear-cutting techniques, in order to read *The Lorax* by Dr. Seuss. To our minds, this was an ideal synthesis between place-based experience and language-arts curricular content. Imagine how much more meaningful and effectively powerful the message of *The Lorax* (discussed in Kopnina, 2012b, 2015c) might be while sitting in an actual clearcut compared to a classroom. After the story, however, students and teachers alike seemed unwilling to acknowledge the destructive nature of clearcut logging even as they sat within it. Instead of the discussion rapidly slid into the more conventional language around forestry that permeates British Columbia including naming the potential benefits of clearcutting, how it "opened up the forest"

and "allowed for smaller plants to grow." This educational experience, in spite of what the teachers are proposing they are doing, hardly teaches children that forests have stood there before human species emerged (which is different from the humans *are* nature discourse in important ways), and that natural selection has allowed the old and new trees to regulate themselves.

This kind of double messaging was illustrated again when an excavator came in to dig up some land to "efficiently" make room for the new yurt that students use during the cold winter months. The teachers were asked about how this clearing of the land was approached with the students. One staff member responded, "they're excited about doing it because it was a jumbled mess beforehand. I don't think they're concerned about destroying habitat because there isn't really anything there, to begin with." Another staff member interjected, "a support teacher and a student rescued a ton of salamanders around this log beforehand," apparently unaware this comment contradicted their colleague. The first teacher laughed "Oh ya, we found one this morning. I'm not feeling too bad about it if that's what you're wondering." Firstly, transferring life out of one section of land to another is an instrumental approach to the problem; it treats the ecosystem as a collection of objects rather than a dynamic set of relations and intrinsically valuable beings. Secondly, the laugh potentially indicates that the teacher thinks to worry about the impact, in this case, is ridiculous and moves to the innocence provided by the dominant culture; that is, that salamanders do not matter and should not be mourned "in public." If one deploys the discursive strategy that "there isn't really anything here, to begin with," only a "jumbled mess," it removes us from care and responsibility. This move justifies ethical distance in bad faith. One might claim we are simply being "too harsh" on a teacher "trying his best," which is partially true; however, we offer this instance as a concrete means to think through the challenges of unlearning anthropocentrism. As a single instance it may not seem like a "big deal," but it represents a discursive pattern that we have witnessed time and again in our research, at environmental education conferences and, indeed, in our own behaviors and practices. Our intention here is to underline the need for a reflexive practice to address such moves to innocence as a key component of a childhoodnatures approach to teaching.

A nature-based school of this kind begs some important questions: does rewilding pedagogy have to include total immersion in the natural world, child-centered techniques, extended play, and teachers committed to cultural change as illustrated in this example? We have two responses aimed at teachers drawing from our research. The first suggests environmental educators actively cultivate a reflexive practice characterized by what Foucault called "hyperactive pessimism." Foucault employed this term to describe his practice of being an ongoing and suspicious cultural questioner, but also to underline his sense that cultural change is not so easily achieved as it may appear or as we may desire it to be. Our research observations consistently demonstrated how easy

it was to slip into a kind of common-sense anthropocentrism. This was apparent in the ways teachers responded to students, to the natural world, to parents, to their pedagogic reflexivity, etc. It should be noted it was also a constant tendency within the research team that the place and its myriad denizens were easily ignored. For us, hyperactive pessimism is a necessary orientation to be constantly alert to these moves to innocence and to assume that any enacted habit or uncritically offered belief was likely rooted in the very culture we were aiming to transform (for more on this see Foucault, 1984; Blenkinsop, 2013; Derby, 2015). Secondly, we encourage educators interested in childhoodnature approaches to continue to develop discursive communities oriented humbly towards recognizing the significance of a more-than-human world. It has become patently clear in our research that this work is exceedingly difficult in isolation and it is essential that educators working towards redefining foundational categories and enacting pedagogies informed by childhoodnatures find each other and provide both support and "critical friendship" when needed. Engaging with pre-existing discursive communities and works that, generally-speaking, promote ecocentric perspectives may be useful in this respect (this is not to say there will not be disagreements), for example, deep ecology (e.g., LaChapelle, 1991), posthumanist education (e.g., Bonnett 2015), animal rights (e.g., Ortiz 2015; Kopnina & Cherniak 2016), and animal welfare education (e.g., Gorski 2009). Or educational programs that focus on environmental ethics and post-anthropocentric lines of thinking (Kopnina 2011, 2012, 2014a, 2014b, 2016, Kopnina & Meijers 2014; Kopnina & Gjerris 2015). Anthropocentrism is perhaps the deepest foundational category informing modernity, presumably it will take a broad-based approach to challenge its authority, and we find inspiration in the recent wave of pedagogical approaches seeking to critique and reject a faith-like adherence to human dominion.

III. Conclusion

Given the deep-seated foundation that anthropocentrism provides in the dominant culture, it is not surprising to witness it inculcated and reinforced in modernist educational programs. The fact that it remains so tenacious, even in schools committed to school gardens, forest weeks and full-time immersion in the natural world, speaks to its power and psychological appeal. If we are to integrate notions of childhoodnature in any meaningful way, the struggle will thus be against common-sense habits of mind, the workaday desires of "consumers," and the seemingly sacrosanct myths of "unlimited economic growth, unabated consumption, and everincreasing human numbers" (Miller et al., 2014). Due to these entrenched challenges, it is crucial that childhoodnature educators evoke complicated conversations inasmuch as they are able to consistently trouble anthropocentric moves to innocence.

It must be noted that conservationists and rewilding proponents are often required to make difficult choices between which species "to keep" and which to eradicate (as in the case of invasive species) or whether or not "historical baseline" ecosystem configurations ought to be maintained vis-à-vis human intervention. The authors of this chapter reject the notion of a hard and fast either/or schism between these "two camps" with respect to conservation: strict non-interventionists or intensive ecosystem managers increasingly maintaining "conservation-reliant species." On the one hand, non-interventionists are suspicious about "the language of this new body of ideas about conservation, which frequently uses words like 'engineer' and 'manage,' [and] lacks what environmentalism has always called for: human humility" (Marris, 2015, p. 25). On the other hand, "post-wild" thinkers, like Marris, hold that:

Perhaps, through trying, through intervening... we'll learn more and become more effective at "managing" Earth. And that increased ability to consciously control, rather than just blunderingly influence, may well be distasteful to many. They would rather be mere passengers on Earth, taking our place among the other animals, living as part of an ecosystem but not as its master. Well, me too. That sounds less stressful, more pleasant. But that would mean abdicating our responsibility to the many species and ecosystems we've harmed with our lack of mastery. We owe it to them to improve our scientific understanding, our gardening prowess so that we can ensure their continued persistence into the future. (p. 26)

It is interesting to note the charge of "human exceptionalism" is employed by both sides and leveled at each other with righteous indignation. We remain wary about against drawing too close a parallel between rewilding in conservation and rewilding in pedagogy; however, the instance does present an interesting means of exploring a third way. The trouble, for us, is that the traditional non-interventionists and the "post-wild" engineers both tend to demonstrate a shocking lack of cultural-historical consciousness, political acumen and, at the risk of sounding self-serving, an understanding of the significance of education in a post-nature world. For us, there is little to fret over about, for example, replanting Whitebark pines in Oregon's Crater Lake National Park (Marris, 2015). Indeed, students at the MRESP routinely hike out to various "clearcuts" in Malcolm Knapp Research Forest to participate in replanting efforts. The issue at hand is what discursive practices are deployed in order to frame, make sense and debrief the experience of replanting. There is a world of difference, we suggest, between framing the activity as an example of our gardening prowess and increasing efficiency at managing Earth with mastery, and framing the activity as a gesture of healing in order that we might recognize our interdependence with other-

than-human beings that we share this land with. This kind of rewilding pedagogy also provides a reality check for those who seem to think that "aggressive interventions" (Marris, 2015) like moving species outside of their historical ranges to colder areas ahead of climate change are, a) even possible, b) that such interventions represent anything more than applying a band-aid to a severed limb. In other words, the ecological crisis is not going to be solved by simply improving our scientific understanding as mastery over nature. This position shirks the role that mastery-focused scientific understanding played in precipitating and intensifying the ecological crisis in the first place, but it also neglects the socio-cultural and psychological roots of the problem (as well as the pedagogical aspects of any potential "solutions").

Pedagogy informed by childhoodnature, it would seem, needs to be both realistic and strategic about confronting the deep-seated myth of human supremacy and face some rather difficult realities. Shall we continue to teach our children that nature should be protected because it gives us vegetables, lumber, and honey and provides a fun background for games? Or more to the point, how do we move away from such discourses and practices to instead teach about restraint and carefulness in relation to "nature" so as to respect the varied more-than-human beings that require relative wilderness to exist? How do we sit with the topic of loss without "moving on" to avoid any strong (and perhaps appropriate) reactions to the history of nature and the current state of many ecosystems?

We refuse to simply "get over it"—both the staggering loss of wild places and the wildness within and the push to celebrate the advent of all planet Earth as "rambunctious human-tended garden" (Marris, 2011). For us, integrating notions of childhoodnature, or any brand of post-nature thinking in education requires us to go beyond rhetorical moves such as "children are nature" or "everything is connected," beyond any set of evasive strategies or moves to innocence, to stay with the complicated conversations and do the complex work required of us. One way we might do this, to return to one of the objectives of this handbook, is by critically examining how children are "positioned as active participants, critical explorers, and/or co-researchers?" How, for example, are we to support children to have the imaginative range—the capacity to conceptualize and enact different ways of being in the world—to transcend the problematic ecological norms of the cultures in which they are nurtured (i.e. what would an idealized multispecies "village" look like, for example)? To what extent ought the educator intentionally de-center human interests and perspectives? It seems to us that one of the principal lessons of the so-called Anthropocene is learning how to be human and by nature and still leave space for others to flourish, without pruning, cutting, managing, burning, and domesticating landscapes because of some vague and archaic notions that there is not really anything there, to begin with.

Bibliography

- Affifi, Ramsey. "More-than-humanizing the Anthropocene." *The Trumpeter* 32, No.2 (2016): 155-175.
- Barratt, Robert, Barratt-Hacking, Elisabeth, & Black, Pat. Innovative Approaches to Early Childhood Education for Sustainability in England. Research in early childhood education for sustainability: International perspectives and provocations, (2014): 225-247.
- Bekoff, Marc. *Ignoring Nature No More: The Case for Compassionate Conservation*, edited by Marc Bekoff, ed. Chicago: Chicago University Press, 2013.
- Bennett, Jane. Vibrant Matter: A Political Ecology of Things. London: Duke University Press, 2010.
- Blenkinsop, Sean. "Four Slogans for Cultural Change: An Evolving Place-based, Imaginative, and Ecological Learning Experience." *Journal of Moral Education* 41, No. 3 (2012): 353-368.
- Blenkinsop, Sean, Ramsey Affifi, Laura Piersol & Michael D. Sitka-Sage. "Shut-Up and Listen:
- Implications and Possibilities of Albert Memmi's Characteristics of Colonization Upon the "Natural World." *Studies in Philosophy and Education*. (2016): Doi:10.1007/s11217-016-9557-9
- Bonnett, Michael. "Sustainability, The Metaphysics of Mastery and Transcendent Nature." In Sustainability: Key Issues, Edited by H. Kopnina and E. Shoreman-Ouimet. New York: Routledge Earthscan. 2015.
- Cafaro, P., Butler, T., Crist, E., Cryer, P., Dinerstein, E., Kopnina, H., Noss, R., Piccolo, J., Taylor, B., Vynne, C., Washington, H. (2017) If We Want a Whole Earth, Nature Needs Half. A reply to 'Half-Earth or Whole Earth? Radical ideas for conservation, and their implications. Oryx, 51(3):400.
- Cafaro, P. and Primack, R., 2014. Species extinction is a great moral wrong. *Biological Conservation*, 170, 1–2.
- Calderon, D. Speaking back to Manifest Destinies: A land education-based approach to critical curriculum inquiry *Environmental Education Research*, 20(1) (2014):24-36.
- Chawla, L. Spots of time: Manifold ways of being in nature in childhood. *Children and nature:*Psychological, sociocultural, and evolutionary investigations, ed. Kahn, P. and Keller, S. (Boston: MIT Press 2002) pp.119-225.
- Crist, Eileen. "Abundant Earth and Population." In *Life on the Brink: Environmentalists Confront Overpopulation*, Edited by P. Cafaro & E. Crist. (London: The University of Georgia Press, 2012): 141-153.
- -. "Against the Social Construction of Nature and Wilderness." Environmental Ethics 26 (2004): 5-24.

- Cronon, William. "The Trouble with Wilderness, or, Getting Back to the Wrong Nature." In Uncommon Ground: Rethinking the Human Place in Nature, Edited by W. Cronon. (New York: W.W. Norton & Co., 1996), 69-90.
- Derby, Michael, Laura Piersol., & Sean Blenkinsop. "Refusing to settle for pigeons and parks:

 Urban environmental education in the age of neoliberalism." In *Neoliberalism and*Environmental Education, edited by J. Henderson, D. Hursh, & D. Greenwood. (New York: Routledge, 2017).
- Derby, Michael. Place, Being, Resonance: A Critical Ecohermeneutic Approach to Education. New York: Peter Lang, 2015.
- Derby, Michael, Sean Blenkinsop, John Telford, Laura Piersol, & Michael Caulkins. "Towards resonant, imaginative experiences in ecological and democratic education," *Democracy and Education* 21, no. 2 (2013): 1-5.
- Doak, D. F., V. J. Bakker, B. E. Goldstein, and Hale, B. (2015) What Is the Future of Conservation? In *Protecting the Wild: Parks and Wilderness, The Foundation for Conservation*. Edited by G. Wuerthner, E. Crist and T. Butler. (London: The Island Press): 27-35.
- Donald, Dwayne. "Forts, Curriculum, and Indigenous Metissage: Imagining Decolonization of Aboriginal-Canadian Relations in Educational Contexts." First Nations Perspectives 2, no.1 (2009): 1–24.
- Esteva, Gustavo, & Madhu Suri Prakash. Grassroots Post-Modernism: Remaking the Soil of Cultures. New York; London: Zed Books, 1998.
- Fellows, Mary Louise & Sherene Razack. "The Race to Innocence: Confronting Hierarchical Relations Among Women." *The Journal of Gender, Race, and Justice,* (1998): 335-352.
- Fletcher, Robert. Nature is a nice place to save but I wouldn't want to live there: environmental education and the ecotourist gaze. *Environmental Education Research*, 21(3) (2015):338-350.
- Foster, John. After Sustainability: Denial, Hope, Retrieval. New York: Routledge, 2015.
- Goodall, Jane. 'Caring for People and Valuing Forests in Africa'. In Wuerthner, G., Crist, E., and Butler. T. eds Protecting the Wild: Parks and Wilderness, The Foundation for Conservation.

 Washington: The Island Press. (2015) Pp. 21-26.
- Gorski, Paul C. Critical Ties: The Animal Rights Awakening of a Social Justice Educator. Available online http://www.edchange.org/publications/animal-rights-social-justice.pdf (2009)
- Haraway, Donna Jeanne. Staying with the Trouble: Making Kin in the Chthulucene. (Durham: Duke University Press, 2016).
- Instone, Lesley & Affrica Taylor. "Thinking About Inheritance Through the Figure of the

- Anthropocene, from the Antipodes and in the Presence of Others." *Environmental Humanities* 7 (2015): 133-150.
- Jardine, David William. Pedagogy Left in Peace: Cultivating Free Spaces in Teaching and Learning. (New York: Peter Lang, 2012).
- Jickling, Bob & Stephen Sterling, editors. Post-Sustainability and Environmental Education: Remaking Education for the Future. New York: Palgrave Macmillan, 2017.
- Kahn, Richard. Critical Pedagogy, Ecoliteracy, & Planetary Crisis: The Ecopedagogy Movement. New York: Peter Lang, 2010.
- Kearney, Richard & Brian Treanor, eds. Camal Hermeneutics. (New York: Fordham University Press, 2015).
- Ketcham, Christopher. Taming the Wilderness. Orion, Sept/Oct (2014): 4044.
- Klein, Naomi. This Changes Everything: Capitalism vs. the Climate. Toronto: Knopf Canada, 2014.
- Kidner, David. "Fabricating Nature: A Critique of the Social Construction of Nature." *Environmental Ethics* 22, no. 4 (2000): 339–357.
- Kingsnorth, P. (2014) Rise of the Neo-Greens. In *Keeping the Wild*, edited by Wuerthner, G., Crist, E. & Butler, T. (London: Island Press): 3-9.
- Kolbert, Elizabeth. "Recall of the Wild." *New Yorker* (2012): Accessed March 12, 2016. http://www.newyorker.com/magazine/2012/12/24/recall-of-the-wild
- Kolbert, Elizabeth. The Sixth Extinction: An Unnatural History. New York: Henry Holt and Company, 2014.
- Kopnina, Helen. "Of Big Hegemonies and Little Tigers: Ecocentrism and Environmental Justice." The Journal of Environmental Education 47, no. 2 (2016a): 132-150.
- -. "Rejoinder: Discussing Dichotomies with Colleagues." Anthropological Forum. Vol. 26. No. 4, (2016b): 445-449.
- -. "Half the earth for people (or more)? Addressing ethical questions in conservation", Biological Conservation, 203 (2016c): 176–185.
- —. "Metaphors of Nature and Development: Reflection on the critical course of sustainable
- business." Environmental Education Research 22, no. 4 (2015a): 571-589.
- -. "Requiem for the urban weeds: An exploration of green spaces in Amsterdam". Urban Ecosystems. 18(4)(2015b):1125-1137.
- "Revisiting the Lorax complex: Deep ecology and biophilia in cross-cultural perspective.
 Environmental Sociology. 43(4) (2015c): 315-324.
- -. "Future Scenarios and Environmental Education." The Journal of Environmental Education 45, no. 4 (2014): 217–231.

- "Requiem for the Weeds: Reflections in Amsterdam City Park." Sustainable Cities and Society 9 (2013): 10-14.
- —. "Education for Sustainable Development (ESD): The turn away from 'environment' in environmental education?" Environmental Education Research, 18, no. 5 (2012a): 699-717.
- —. "The Lorax Complex: Deep ecology, Ecocentrism and Exclusion". Journal of Integrative Environmental Sciences, 9, no 4 (2012b): 235-254.
- —. "Kids and Cars: Environmental Attitudes in Children." Transport Policy 18, no. 4 (2011a): 573–578.
- —. "'What about that wrapper?" Using consumption diaries in green education." In Environmental Anthropology Today, edited by H. Kopnina and E. Shoreman-Ouimet (New York and Oxford: Routledge, 2011b): 118-139.
- Kopnina, Helen & Brett Cherniak. "Neoliberalism and Justice in Education for Sustainable Development: A call for inclusive pluralism." *Environmental Education Research* 22, no. 6 (2016): 827-841.
- Kopnina, Helen & Mickey Gjerris. "Are some animals more equal than others? Animal Rights and Deep Ecology in environmental education'. Canadian Journal of Environmental Education, 20 (2015): 109-123.
- Korten, David. The Great Turning: From Empire to Earth Community. San Francisco: Berrett-Koehler, 2006.
- LaChapelle, Dolores. Educating for Deep Ecology. *Journal of Experiential Education*, 14, no. 1(1991), 1-18.
- —. "A Political Ecology of Education in/for the Anthropocene. Environment and Society: Advances in Research 6 (2015): 128-148.
- Lotz-Sisitka, Heila, Arjen E. J Wals, David Kronlid, & Dylan McGarry. "Transformative, Transgressive Social Learning: Rethinking Higher Education Pedagogy in Times of Systemic Global Dysfunction." Current Opinion in Environmental Sustainability 16 (2015): 73–80.
- Louv, Richard. Last Child in the Woods: Saving our Children from Nature-Deficit Disorder. London: Atlantic Books. 2005.
- Lupinacci, John & Alison Happel-Parkins. "(Un)learning Anthropocentrism: An Ecojustice Framework for Teaching to Resist Human-Supremacy in Schools. In *The Educational Significance of Human and Non-Human Animal Interactions*, Edited by S. Rice & A.G. Rud. (New York: Palgrave Macmillan, 2016): 13-30.

- Lynas, Mark. The God Species: How the Planet Can Survive the Age of Humans. (London: Fourth Estate, 2011).
- Malone, Karen. Theorizing a child-dog encounter in the slums of La Paz using post-humanistic approaches in order to disrupt universalisms in current 'child in nature' debates. *Children's Geographies*, 14, no. 4 (2016):390-407.
- Manning, Richard. *Rewilding the West: restoration in a prairie landscape*. (Berkeley: University of California Press, 2010).
- Marris, Emma. Rambunctious garden: saving nature in a post-wild world. New York: Bloomsbury, 2011.
- -. "Handle With Care." Orion, May/June (2015): 22-26.
- Mathews, Freya. "From biodiversity-based conservation to an ethic of bio-proportionality." *Biological Conservation* 200 (2016): 140-148.
- Mawhinney, Janet. 'Giving up the ghost': Disrupting the (re)production of white privilege in antiracist pedagogy and organizational change. Masters Thesis, Ontario Institute for Studies in Education of the University of Toronto, 1998.
- McKibben, Bill. The End of Nature. 2nd Anchor Books Ed. (New York: Anchor Books, 1999).
- McLaren, Milton. "The Place of the City in Environmental Education." In Fields of Green:

 Restorying Culture, Environment, and Education Edited by Marcia McKenzie, Paul Hart,

 Heesoon Bai, & Bob Jickling (Cresskill, NJ: Hampton Press, 2009):
- Mendoza, Marcos. Conference Panel 'Political Ecologies of the Violent Environment. 116th American Anthropological Association Annual Meeting. Nov. 29-Dec. 3, Washington, DC. 2017.
- Miller, Brian, Michael E. Soulé, and John Terborgh. "'New conservation or surrender to development?." *Animal Conservation* 17, no. 6 (2014): 509-515.
- Monbiot, George. Feral: searching for enchantment on the frontiers of rewilding. (London: Allen Lane, 2013).
- Moore, Jason, editor. Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism. Oakland, CA: PM Press, 2016.
- Morton, T. (2007) Ecology without nature: Rethinking environmental aesthetics. Cambridge, MA: Harvard University Press.
- Ortiz, Adam. Humane Liberation: Incorporating Animal Rights into Critical Pedagogy. *The Vermont Connection*, 32, no. 1 (2015), 8-30.
- Porritt, Jonathon. *The World We Made: Alex McKay's Story from 2050*. (London: Phaidon Press, 2013)

- Quinn, Frances, Jeremy Castéra, & Pierre Clément. "Teachers' Conceptions of the Environment: Anthropocentrism, Non-anthropocentrism, Anthropomorphism and the Place of Nature." Environmental Education Research, (2015): 1-25
- Seddon, George. Landprints: Reflections on place and landscape. Cambridge: Cambridge University Press, 1998.
- Shiva, Vandana. Earth Democracy: Justice, Sustainability and Peace. Cambridge, Mass: South End Press, 2005.
- Shoreman-Ouimet, Eleanor & Helen Kopnina. "Reconciling Ecological and Social Justice to Promote Biodiversity Conservation." *Biological Conservation*, 184 (2015): 320–326.
- Shoreman-Ouimet, Eleanor & Helen Kopnina. Culture and Conservation: Beyond Anthropocentrism. Routledge Earthscan, New York, 2016.
- Sobel, David. Children's Special Places: Exploring the Role of Forts, Dens and Bush Houses in Middle Childhood. Detroit: Zephyr Press, 2001.
- Taylor, Affrica & Veronica Pacini-Ketchabaw. "Learning with Children, Ants, and Worms in the Anthropocene: Towards a Common World Pedagogy of Multispecies Vulnerability." Pedagogy, Culture, and Society 23, no. 4 (2015): 507-529.
- Taylor, Affrica. Reconfiguring the Natures of Childhood. London and New York: Routledge, 2013.
- —. "Romancing or Re-configuring Nature in the Anthropocene? Towards Common Worlding Pedagogies." In Reimagining Sustainability in Precarious Times. Springer Singapore. (2017): 61-75.
- Taylor, Bron. The Value of a Gorilla vs. a Human. http://www.huffingtonpost.com/bron-taylor/the-value-of-a-gorilla_b_10214928.html
- Tuck, Eve & K. Wayne Yang. Decolonization is Not a Metaphor. *Decolonization: Indigeneity*, Education and Society, 1(1), (2012): 1-40.
- UNEP & UNESCO. Belgrade Charter.

 www.medies.net/ uploaded_files/TheBelgradeCharter.pdf, 1976.
- Van Matre, Steve. Sunship Earth. Martinsville, IN: American Camping Association. 1978.
- Washington, Haydn. Human dependence on nature: how to help solve the environmental crisis. London and New York: Routledge, 2013.
- Wilson, Alexander. Techno-Optimism and Rational Superstition. *Techne: Research in Philosophy and Technology*, 21(2-3), (2017): 342-362.
- Wuerthner, George, Eileen Crist, & Tom Butler, editors. *Keeping the Wild: Against the Domestication of Earth.* (Washington and London: Island Press, 2014).