

# Renewing Awe in the Urban Experience: Historic Changes in Land-Based Education

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## **Abstract**

*What role can awe play in the practice of environmental education as our lives become increasingly urbanized? This paper looks at the historic emergence of land experience in environmental education and thinking as a means for examining its potential role in an urban academic setting. Many early environmental scholars proposed that the mind is spread out in surrounding ecologies, and it was an idea that fostered curriculum initiatives like land experience, interdisciplinarity, and critical histories. Using archival documents and seminal environmental thought from two academic environmental programs, I consider the potential of renewing the awe-inspiring experience of land education as the context for historic and critical interdisciplinary thought on the urban places where most of us live.*

## **Résumé**

*Quel rôle l'émerveillement peut-il jouer dans l'éducation à l'environnement dans un contexte de plus en plus urbanisé? Cet article explore l'émergence historique de l'expérience sur le terrain dans l'éducation à l'environnement et dans la pensée écologique, et envisage son apport potentiel en milieu scolaire urbain. Pour de nombreux spécialistes de l'écologie, l'esprit se moule à son environnement et cette idée a donné naissance à des initiatives comme l'apprentissage sur le terrain, l'interdisciplinarité et les récits critiques, qui ont été intégrées aux programmes éducatifs. En m'appuyant sur des documents d'archives et sur certains concepts fondamentaux découlant de deux programmes consacrés à l'étude de l'environnement, j'examine la possibilité de renouer avec l'apprentissage sur le terrain et l'expérience d'émerveillement qu'il suscite comme préambule à une réflexion interdisciplinaire historique et critique sur les milieux urbains où vivent la plupart d'entre nous.*

**Keywords:** land experience, urban, interdisciplinary, awe, critical histories

## Introduction

Sitting amidst a spring chorus of chirping birds in a ravine, I am reminded of the importance that land experience has historically played in the environmental movement and environmental education. From Aldo Leopold (1970/1949) to Richard Louv's (2008) recent *Last Child in the Woods*, land experience has consistently been touted as essential for developing an awareness of human-nature

relations, ecological literacy, a critical sense of the human role in current environmental issues, and social responsibility for our broader relations. I sometimes hear such lessons being taught to groups of students that traverse the wetlands below, savannahs up above, and mixed forest of this ravine. Sometimes it is a conservation organization or nature centre that is leading the education, and other times it can be a primary or secondary class related to the EcoSchools initiatives that have emerged over the past two decades in Ontario and elsewhere (e.g., Ontario EcoSchools, 2016). These educational practices are related to an environmental education tradition that has seen the fostering of a nature sensibility through land- or place-based experiences as core to curriculum (see Asfeldt, Urberg, & Henderson, 2009; Curthoys 2007; Greenwood, 2003).

When my eight-year-old daughter returns from such an excursion or camp, she comes back with questions and teachings that fill her with awe for the kind of world she lives in—a land experience that in many ways seems distant from the urban realities that drive our everyday lives. Her exuberance often reminds me of John Livingston's Governor General award-winning book *Rogue Primate*, where he describes natural environments as places where “one sought, and found; when one relinquished, and was free” (1994, p. 197). In the writings of this original co-producer of CBC's *The Nature of Things* and before that a leading conservationist at the *Canadian Audubon Society*, such experiences could free one from the technologically-mediated urban life that enfolds society and environmentalism within “its own conceptions of instrumentality, neutrality and purposiveness” (1994, pp. 133-134). They could free us from what he referred to as “urban delusions.” More recently, Louv has popularly diagnosed a “nature deficit disorder” that is based on the increasing evidence of health benefits for children who have regular contact with nature, and urban expansions that are reducing those experiences (2008). It is a common critique that can predispose environmental educators to search for learning spaces distant from the urban.

My daughter's experience and the educational activities I sometimes observe and other times guide in this ravine are not based in some distant, seemingly wild, park. The hum of traffic hugging Lake Ontario a few hundred yards to the south reminds me and my graduate-level students that this green space and the other sites we enter are surrounded by the urban processes of Canada's most populous city and region, Toronto. This course that I taught for five years is part of the graduate curriculum at York University's Faculty of Environmental Studies (FES) on the northwestern edge of Toronto. The program was founded in 1968 as the first environmental studies program in a Canadian university with its over-arching thematic, “environment,” described as contexts that can shape and influence our thought. As one of its original pedagogical documents states, the term “environment” refers not only to an object of study, but is an adjective that modifies what “is to be studied and also the manner in which it is to be studied” (Carrothers, Kline, & Livingston, 1968/1988, Preamble 1; see also Leduc & Morley, 2015). Contexts can range from land to national to built environments like that of the university or the urban systems of southern Ontario,

with graduate students choosing their own focus like urban gardens, climate change, human-animal relations, or Indigenous-settler relations. One of the co-authors of this document and influence on my approach to environmental education is John Livingston, who wrote much about the awesome transformative potential of land and urban experiences.

Another place I am drawn to when considering land-based pedagogy in a Canadian academic context is Trent University in Peterborough, Ontario where John Wadland created a course called *Canada the Land* in 1972—a course that is still offered. Each year he took his students into a critical history of Canadian land relations that included travelling north to Temagami where they engaged old growth pine forests, glacial rocks, carved lakes, and wildlife that could remind them of ecological realities that pre-date southern Ontario’s sprawling urbanity. Though his approach to land resonates with Leopold’s statement that it “is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land” (1970, p. 261), his syllabi highlight many Canadian influences like Livingston, Margaret Atwood, Catherine Parr Traill, and Ernest Thompson Seton who “learned quickly that in the woods, ‘the silent watcher sees the most’” (Wadland, 1978, p. 52). Such thought led Wadland to create interdisciplinary curricula that attempted to experientially ground the thought of his students in the historic cultural ecologies of Canada and, regionally, central Ontario. When I began teaching environmental education I wanted to engage land experiences, but do so from within the urban Toronto environment where my course is situated.

The thought of David Greenwood is particularly critical in my attempt to localize teaching in an urban environment. Drawing upon the insights of place-based education, he argues that environmental issues “challenge all educators to think about how the exploration of places can become part of how curriculum is organized and conceived” (2003, p. 8). To do this, Greenwood proposes bringing together two academic traditions: a critical pedagogy that “offers an agenda of cultural decolonization” with a place-based education that “leads the way toward ecological reinhabitation” (2003, p. 4). Place-based experiences can have an affective impact that is valuable to education, but on their own have not been enough to evoke the broad systemic changes. They need to be brought together with critical interdisciplinary thought on the ways in which local processes are interconnected to global, national, and regional justice processes—from physical changes to social injustices. His approach offered me a way to critically reconsider the pedagogical tradition represented here by Wadland and Livingston in an urban context. I would ask students to bring their specific interests into dialogue with the environmental teachings of various places, ranging from the academic campus, to the urban centre, to urban-water intersections, to a ravine like this one where the city’s drive at times is background for birdsong.

While Greenwood refers to his approach as a critical place-based education and I will sometimes utilize the term “place” in relation to various sites my course enters, I prefer the term “land-based” experience because it evokes more

a sense of our immersion in textures related to geological, climate, ecological, water, and human relations. The paper's grounding in Toronto, Ontario, and Canadian contexts begins by drawing upon some pedagogical insights of historic documents from the York and Trent programs that I have begun describing, but do so as a point of entry into considering potential lessons of land-based experience. My primary focus is on the conundrum we find ourselves in as environmental educators: land-based experiences continue to be seen as vital to a sustainable future, and yet the awe such experiences can evoke is often seen as receding from the urban realities where environmentalism is enacted. In the words of Louv, "society is teaching young people to avoid direct experience in nature" (2008, p. 2) and the affective learning a relation with the more-than-human world can offer. We need an urban renewal of experiences like those described by Livingston as "the dissolution of the ego-centred self, as when one was drawn close, ever closer and at last into the gold-flecked eye of a toad" (1994, pp. 196-197). I have seen my daughter and graduate students have such awe-inspiring experiences in urban Toronto. What I mean by "awe" and its potential value to urban environmental education will unfold as we approach the paper's concluding thoughts on our immersion in a time of change.

### Land-Based Interdisciplinarity

While my environmental education course ended in a ravine setting not far from Lake Ontario, it began on the land that encompasses the York University campus where most FES courses are situated. Here we begin considering the challenges and opportunities of taking education outside the classroom (e.g., Curthoys 2007; Weston 2004), the emergence of environmental education in academia and at York, and place-based approaches to education (e.g., Campbell, 2006; Greenwood, 2003). The aim of Greenwood's pedagogy is to foster critical reflection on the social forces underlying environmental issues from the many "texts" found in the places we are immersed within. In his words, "the 'texts' students and teachers should 'decode' are the images of their own concrete, situated experiences with the world" (2003, p. 5). Being situated at a Toronto university, the most immediate and thus first "text" to be engaged by the class is that of a university campus in an urban surround where Environmental Studies began emerging in the late 1960s and early 1970s at Canadian universities like York (1968), University of Waterloo (1969), University of Winnipeg (1970), Trent (1974), and elsewhere (see Leduc, 2010). Though there were differences in approach and focus across these emerging programs, there were also common features like stressing the importance of an interdisciplinary curriculum that can cut across disciplines.

The founding of FES occurred in a time of calls for changing human-environment relations, beginning with Rachel Carson's 1962 publication of *Silent Spring*, the 1970 Earth Day, the 1977 UN Tbilisi Declaration on Environmental

Education, and much in between these dates. In this time of change, FES defined its approach to “environment” not in the form of ecology or environmental issues but as “contexts”:

The concept of ‘environment’ may be seen not only to mean the phenomena which are studied, but also to mean an inherent way of studying – environmental thinking. The notion, relatively undeveloped [in the West], is that subject matter has an intrinsic form of thought as well as content, and that the environmental context of substantive concerns may be used to determine form of thought. (Carrothers et al., 1968/1988, Foray Four p. 9)

The influence of Livingston as co-author of this document can be seen, for his classic *The Fallacy of Wildlife Conservation* similarly defines “wildlife conservation not necessarily as an activity, but as a state of mind” (2007, p. 12). Others were making similar connections starting with Leopold’s (1949) essay on *Thinking Like a Mountain*. In 1967 Paul Shepard wrote a seminal essay describing “ecological thinking” as the self extended into “the landscape and ecosystem” (1967, p. 2). A few years later, Gregory Bateson’s influential *Steps to an Ecology of Mind* concluded “the mind is not limited by the skin” (1972, p. 454). Even when terms like an ecology of mind were not explicitly referenced, as with Carson’s *Silent Spring*, there was a sense that the modern awareness was being challenged to transform its assumptions about a rigidly separated natural world that was subservient to human interests (see Code, 2006).

Environmental contexts were clearly much more responsive to human activities than once assumed, and thus our ways of thinking, teaching, and living needed to be transformed in response to a complex world. In defining the emerging environmental field as “undefined and infinite in scope,” FES further proposed that “the conventional disciplines/professions do not in or by themselves provide the basis for defining either the content or the approach for environmental studies” (Carrothers et al., 1968/1988, Index p. 1). Explaining the rise of interdisciplinary environmental studies, Ingrid Stefanovic states the complexity of environmental changes “pushed the disciplines into situations of cooperation and collaboration” (2005, p. 199). This understanding also informed David Orr’s influential analysis of environmental education that likewise pointed to the necessity of fostering an ecology-mind relation in its title *Earth in Mind*. He argues that the ecological crisis highlights the need for education at all levels to break free “of the straitjacket of discipline-centric curriculum” (2004, p. 33). Using the terms of Greenwood, the structure of university programming is a kind of “text” that environmental issues were highlighting as in need of change—all of which we could reconsider on this campus.

There was not one way that academic environmental studies came to define interdisciplinary curriculum (see Leduc, 2010), as can be seen 140 kilometres northeast of Toronto in the Trent University context of Wadland’s *Canada the Land* creation. Though his course emerged in 1972 as part of a new Canadian Studies program, it also became the core curriculum for the Environmental

Resource Studies (ERS) undergraduate program that came into existence at Trent in 1974 with the mission of “aiming more narrowly at natural resource capacities in a Canadian context” (ERS, 1974, p. 10). Despite this difference from FES, its original proposal similarly stated it can neither define itself “in terms of a specific discipline, nor a particular methodology, neither as lying exclusively in the realm of science and fact, nor in the realm of art and value” (ERS, 1974, p. 1). The interdisciplinary nature of *Canada the Land* fit well with an ERS program that packaged several science, geography, and Canadian Studies courses “with an ecological or environmental slant into a new” program (Cole, 1992, p. 134).

Such programming was also consistent with the original vision of Trent as a university that will root students in the study of Canada’s “history, literature, art and institutions” (cited in Cole, 1992, p. 42). The interdisciplinary move was for Wadland only partially responsive to developments in environmental education, for similar questions were being raised in Canadian Studies programs that began emerging in the 1960s and 70s. The disciplinary division of metanarratives about Canada were seen as limiting the potential of a broader interdisciplinary view. Older institutions like the University of Toronto could point to Northrop Frye’s writings on Canada’s “garrison mentality” (Frye, 1971) and Harold Innis’ “staples theory” (Innis, 1995) as Canadian scholarship, but Wadland explains it was “firmly tied to the disciplines, most notably History” (2000, p. 57). At new universities like Trent a space opened for knowledge from disciplines like literature, history, and the eco-sciences to serve interdisciplinary inquiries into “the significance of the land in Canadian culture” and “the traditional idea of the land as the object of man’s [sic] conquest versus the relatively new concern for its quality of sacredness” (Wadland, 1972, 1984-5).

An early influence on both Canadian Studies and Environmental Studies in a Canadian context was Innis. He made the point that Canada was moulded by a fur trade that “organized transport over wide areas especially adapted for handling heavy manufactured goods going to the interior and for bringing out a light, valuable commodity” (1995, p. 127). Our political, economic, and cultural institutions have in many ways been centred around resources, and thus this way of conceiving and transforming nature is a powerful social force and influence. Looking at this issue in a governmental context, Paul M. Brown (1992) describes the period of 1973 to 1986 as one in which Environment Canada policy was partially frustrated by the power of the more senior resource-based departments of Indian Affairs and Northern Development and Energy, Mines and Resources. In relation to academic pedagogy, some Canadian and American environmental programs arose in the 1970s out of pre-existing “schools of forestry or natural resource management” (Soulé & Press, 1998, p. 402; see also Leduc & Morley 2015; Luke, 1996). At Trent the inclusion of “resource” in ERS (1974) did not arise from a pre-existing resource school, as the university itself was new, but rather had various influences including the Canadian resource tradition and the 1974

*Limits to Growth* report (Meadows, Meadows, Randers, & Behrens III, 1972).

The connection between resources and arising environmental issues was a space from which Wadland asked students to raise critical questions about Canada's colonial history and its environmental impacts. In Livingston's 1981 classic, *The Fallacy of Wildlife Conservation*, that came to be included in *Canada the Land*, he argues conservation's failures are related not only to external political economic forces, but the internalizing of an economizing resource logic that primarily defines ecology "as a human asset" rather than the source of our lives (2007, p. 166). For Wadland, historic and interdisciplinary perspectives focused on a Canadian context and specific land experiences like Temagami could help students critically reflect on the limits of the long "Western tradition of making nature subservient to human interests" (1978, p. 5; see also Wadland, 1972). It is a grounding approach consistent with what John Robinson describes as a place- or issue-based approach to interdisciplinarity that can allow us to side-step disciplinary constraints and universalizing theories so as to consider "potentially contradictory claims, theories and methods of different domains of research" (2008, p. 81; see M'Gonigle & Starke, 2006). It also gives some focus to interdisciplinary studies that have the potential to spread the learning of students thin and shallow (Soulé & Press, 1998). In a sense, Greenwood offers more specificity by asking us to read the unique "texts" within places like a northern park or urban campus so as to ground our instruction on environmental phenomena and issues.

The colonial Canadian context that Wadland's students engaged are also "texts" that my environmental education class edged into, by a short walk from the York campus to Black Creek Pioneer Village. While we critically decode many of the limited representations at this fabricated village like the lack of an Indigenous presence and its relation to urban Toronto and Canadian identity, we also connect with "texts" like old school-houses to consider the colonial grounding of discipline-centric and banking models of education. Following Greenwood, it is a space where we can self-reflexively "identify, and potentially resist, the colonizing practices of schooling as a function of the larger culture and its political economy" (2009, p. 1). Here we can critically discuss the way our minds and bodies are often conceived as resources in a Canadian culture and economy that has also been based on the conversion of land into resources. More than that, the name of the village, Black Creek, reminds us that York is situated near a creek that finds its way into both the Don and Humber River watersheds.

The class follows these waters that are important to Toronto's and Canada's history in a southerly direction as we edge out to four other places whose engagement is supplemented with interdisciplinary readings about the historically changing local ecologies (from the pre-colonial to the present), relevant genres of environmental education literature, and potential education activities. The places situate our discussion around issues like tensions in urban environmental education between Lake Ontario and the Gardiner Expressway;

renewing outdoor environmental education in urban ecologies like a ravine, and Indigenous environmental education near where the Seneca village of Teieiagon was located on the Humber River. It must be noted that we consider Indigenous views from the moment the course begins by recognizing the three First Nations of these lands (Anishinaabe, Haudenosaunee, and Wendat), discussing colonial issues, and challenging our sense of interdisciplinarity with Indigenous bicultural approaches to environmental education (e.g., Kapryka & Dockstator, 2012). In a Canadian and urban context, this is vital to a decolonizing approach to environmental education that can help us move toward reconciliation with each other and the land, though that is beyond the scope of this paper (see Leduc, 2016).<sup>1</sup>

While Wadland's course grounded itself in central Ontario through land experiences in remote places like Temagami, the more general focus at FES on environment as context stresses the point that our thought and actions are enmeshed in surrounding relations, whether that be a forested hinterland, national systems, or sprawling city. This urban positioning partakes in a broader Canadian context where more than 80 percent of us live in urban spaces, and cities of one size or another are the home for most governmental ministries, universities, and environmental organizations. It is where I needed to situate an environmental education course whose graduate students predominantly end up working in cities around various issues, from gardens to renewables to environmental justice. There are unique inquiries and lessons about our urban positioning that emerge from each place we enter as a class, but it is to the ravine where this paper started that I now want to return so we can focus on this paper's primary concern: the tension of land-based experiences in urban environmental education, and the potential value of evoking awe in the minds of students.

### Landing in an Urban Paradox

A spring ravine is wonderful as life energy overflows in newly budded trees, bird activity, and blooming flowers, all of which the class participates in as our steps become lighter and energized with winter behind us. It is a time when an awe for participation in beauty arises easily, and thus is conducive for discussing the value of land-based experiences akin to Livingston's "dissolution of the ego-centred self." With the urban hum audible just beyond the tree-line, his thought is particularly valuable here because it emerged from a series of early 20th century nature experiences in Toronto's east-end. As a child he spent much time in the ravines and marshes near the Don River where he became aware of "hundreds of kinds of birds, plants, butterflies and other forms of life" (2007, p. 163). But it was not simply these positive experiences that led to his life work. He also experienced the shock of having those relations erased by Toronto's radiating urban development. Reflecting on this experience,



Livingston writes of being in a paradoxical position where the “things I value—such as birds—are being destroyed by other things I also value: human life” (2007, p. 164). This paradox infuses his writings with strong critiques of a technological imperative that forever expands the urban form and the dominance of human stimulation, as well as calls for fostering awe-inspiring land experiences beyond the human. An urban ravine is a great place for environmental educators to consider our paradoxical challenge.

The ecological impacts of human developments led many environmentalists and naturalists to value land experience in places seemingly distant from the human. Wilderness experience was such a prevalent idea in environmental thought that in the 1990s William Cronon (1995) argued in his classic article, “The Trouble with Wilderness,” that the idea of an untouched wilderness is deeply problematic for at least two reasons: such places do not exist; and it leads to an undervaluing of the urban places we often live in. His critique highlighted the need for a more nuanced approach to how we look upon land experiences in light of our predominantly urban lives. As with ecofeminist thought like that of Val Plumwood (1993), there was a rising awareness of a need to bridge the gulf of dualistic conceptions that continue to afflict Western approaches to human-nature relations. It was an issue Livingston (1994) also struggled with as he came to promote the experience of humans within a primarily wild surround that does not require a focus on wilderness as a particular place.

The sacred “wilderness” experience was clearly a dimension of Wadland’s *Canada the Land* as he took students north to Temagami, but there were other conceptions of nature related to Canada’s colonial history that his students considered and which are relevant to education in a Toronto ravine. In Atwood’s (1972) classic *Survival*, she contends that the difficult northern land realities of Canada fostered a view of nature that contrasted the European and American literary traditions. The former tended to deify the wild as places where monstrous presences exist that are essentially of a good nature and requires people and society to adapt to. In America, the wild tended to be depicted as a challenging landscape that could be tamed and managed. For Canadians, she saw the dominant motif being of nature as a wild monster that brings to all a certain death. Offering a similar view, Frye writes that colonials to Canada arrived in isolated communities that were “confronted with a huge, unthinking, menacing, and formidable physical setting,” and consequently situated themselves within protective towns and developed “a garrison mentality” that was intertwined with the view of nature as resource (1971, p. 225). Others have since displayed the way in which the European deifying, American management, and Canadian garrison mentalities have co-existed in the national imagination (e.g., Altmeyer 1995; Glickman 1998), not to mention other cultural perspectives like Indigenous ones (see Leduc, 2016).

There continue to be places in Toronto where the awe-inspiring contours of the land can teach with historic depth and interdisciplinary breadth about not only ecology and human impacts, but also our participation in cultural

conceptions of nature ranging from sacred wilderness to managed ecology to fearful monster. Ravine corridors like this one follow the myriad rivers and creeks that flow through Toronto from the Oak Ridges Moraine to the north, and thus offer a sense of the land's pre-colonial texture despite all the modernizing changes of the past two centuries. It is based on places like this that Wayne Grady critiques Frye, stating that "Canadians are not afraid of nature, and cities are not garrisons; or at least if they are, they are highly ineffectual ones, for there is as much of nature in the city as there is out of it" (1995, p. 3). The urban structures of Toronto are built on top of nature and thus do not completely "displace the plants and animals that live there" (1995, p. 3). In fact, it is in these ravines that urban conservation and environmental efforts began in Toronto when the city council initiated in 1954 a "park system based on the major river valleys," with the green space increasing from 67 hectares in 1954 to 3,161 in 1974 (Roots, Chant, & Heidenreich 1999, p. 234). The greening of corridors and other spaces continue today as one urban response to climate change. But it is not simply an expansion of external greening that is taught here, for the urban rivers and ravines have also experienced a proliferation of environmental education initiatives aimed at teaching about the history of conservation, the science of wetlands, the diversity of birds, the role of urban gardens in food security, and so much more (e.g., Toronto Regional Conservation Authority, 2016).

An urban ravine is a good urban place for critically learning about the complex history underlying human-nature relations, and more importantly the agency of natural processes to shift the trajectory of modern systems and worldviews that for a time considered the environment as merely a backdrop for human activities, including education. "Texts" for interdisciplinary decoding are abundant here, from those that suggest positive changes to those that highlight the continuation of unsustainable patterns. As I am particularly interested in climate change and energy education, one of the latter pervasive "texts" that we consider as a class hums around all these sites: the ever-expanding road system, automobiles, and related greenhouse gas emissions. It is not only that the number of automobiles continues to rise, we also drive more with vehicle-miles driven more than doubling since 1970 (see Leduc, 2016 for more in-depth discussion of these issues). Even the rivers and ravines that run through this city are highly managed and technologized green spaces, with some describing them as the epitome of a cyborg reality that inextricably mixes machine, human, and nature (Boudreau, Keil, & Young, 2009). These patterns can be further decoded to critically relate our ways of living to global climate changes like those impacting the Arctic, and local changes like ecological fragmentation and the urban heat island.

The thought of Livingston (1994) suggests we also must be aware of how the pervasive technological experiences of city life can influence our minding of more-than-human relations. Echoing his concern is the Toronto environmental activist Jane Jacobs who writes: "Everyone in a vehicle has become a prisoner to the grid and the limited and indirect access to it in this exasperating system"

(2005, p. 77). Others offer the more tempered recognition that urban ways are the dominant context for much environmental thought, education, and decision-making, and thus has an influence that needs to be considered (e.g., Lélé & Norgaard 1996, p. 359). As I discuss elsewhere, such powerful contexts are coupled in Canada with its colonial resource economy, and these deeply held cultural narratives are intertwined with our national difficulties in responding to the interconnected climate change and energy crisis (Leduc, 2016). Returning to Jacobs, she connects the grid-like constraints to the education of engineers and planners in a system focused on oil and automobiles. There are potential connections to Louv's "nature deficit disorder" and what others have begun to term "environmental generational amnesia" (see King & Stefanovic, 2012, p. 329). Not only do we have less connection with the land, but our urban relations are with a significantly transformed place that we are often unaware of—from the historic ecological processes to powerful cultural narratives. Not unlike Livingston, we have landed in a deeply paradoxical moment that educators and students need to struggle with as we question what it means to live sustainably.

Urban environmental education requires replacing the land-based desire to engage seemingly pristine "wildernesses" for a more nuanced sense of wild realities that always surround us, even in human-dominated places like Toronto. Despite the critiques of the sacred wilderness concept, land experiences where humans recognize their secondary nature or contextual position have value for how environmental educators conceive the rise of interdisciplinarity and critical history discussed in this article. When we are out in the woods and hear something beyond what the eyes can see, perhaps at night while around a fire, the senses become piqued as we quiet down our human chatter to attend what is around us. In a real sense, interdisciplinary thought and education represents a comparable attentiveness to an uncertain surround of emerging local and global environmental issues; it is our collective attention to something wild moving toward us which we know we must attend more closely. Such a view contrasts the more common assumption that interdisciplinarity is simply a kind of human creation to manage complexity, for it highlights we are in a co-creative dance with a mysterious and more encompassing partner. A historically deep and interdisciplinarily broad approach to land-based urban education can help us face our paradoxical challenge as an awe-inspiring call to expand the green corridors within and without.

### Conclusion: Renewing Awe beyond Texts

With the wild approaching us wherever we live today in the form of global issues like climate change and local events like extreme floods, our time is filled with awe-inspiring lessons about the challenge before us. I am reminded of an article Wadland often used in *Canada the Land* by Wayland Drew that concludes with the following warning:

When [our resources] have been exhausted we shall still face precisely the same problem of self-limitation, but with severely curtailed options and with an impossibly short time remaining...Nature will certainly triumph. Whether it will triumph over us or in us and through us remains to be seen. (1973, pp. 16-19).

That which is awe-inspiring does not only have to be good like the beauty of a spring ravine, for a dark and foreboding extreme storm that floods highways and shuts down the urban hum also evokes awe. In the midst of such experiences our sense of “texts” to decode is seen as indicative of an academic and cultural predisposition toward the “reading” of everything. What underlies all the “texts” we mind in any environmental course are in fact a myriad of presences, from ecological beings to greenhouse gases to historic ancestors.

Urban environmental education also needs to follow Heeson Bai’s call to reanimate the machine-like consciousness that conceives the world “as resources for our consumption” by reawakening our embodied participation in a world that “appears numinously splendid and enchanted” (2009, p. 148). Beyond the often self-confirming idea of the wild as “sacred” or “holy” is the surround as numinous, a prodigious and seemingly monstrous presence of energy that breaks in upon our beliefs, rationalizations, and expectations with an unsettling impact. It is “awakened in the mind; as everything that comes ‘of the spirit’ must be awakened” (Otto, 1924, p. 7). What we are being awakened to today ranges from our participation in the beauty of this world and the possibilities of co-creating (not managing) a new future, to the monstrous potential of being engulfed by this same reality if we cannot renew our ways. An animated approach to education engages all of this as sacred regardless of our interpretative frames, and thus requires a critical and imaginative pedagogy for fostering just responses.

While our cultural inertia can at times make us pessimistic about the future, I think Drew was correct in asserting such dark scenarios “might be realistic but it is also intolerable,” for “at this stage the illusions of hope are more pragmatic” (1973, p. 18). Hope is something we can find and feel when we engage the land and climate, whether that be in a remote northern ecology or urban ravine. It is vital we foster in our students critical and imaginative capacities that are grounded in the historic depth and interdisciplinary breadth of these places so that the issues of our time become more real in the sense of being connected to who we are in our intimate relations with family, friends, community, nation, and planet. As Wadland concludes, a sustainable culture “will grow and mature through the ecological changes it effects (and by which it is affected) only if human reason can acknowledge and address its own limitation by nature” (1995, p. 14). The “*only if*” is a fundamental point, for without knowledge informed by love for each other and the lands we live on we may not be able to inspire a sustainable way of living in Toronto or elsewhere on this awe-inspiring creation.

## Notes

- <sup>1</sup> I have begun applying this place-based pedagogy within an Indigenous social work setting focused on healing and reconciling relations between communities, people, and their natural surrounds. There is much potential to contemporary research in this area, particularly with an Indigenous focus.

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## Notes on Contributor

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## References

- Altmeyer, G. (1995). Three ideas of nature in Canada. In C. Gaffield & P. Gaffield (Eds.), *Consuming Canada: Readings in environmental history* (pp. 96-118). Toronto, ON: Copp Clark.
- Asfeldt, M., Urberg, I., & Henderson, B. (2009). Wolves, ptarmigan, and lake trout: Critical elements of a northern Canadian place-conscious pedagogy. *Canadian Journal of Environmental Education* 14, 33-41.
- Atwood, M. (1972). *Survival: A thematic guide to Canadian literature*. Toronto, ON: Anansi.
- Bai, H. (2009). Reanimating the universe: Environmental education and philosophical animism. In M. McKenzie, P. Hart, H. Bai, & B. Jickling (Eds.), *Fields of green: Restorying culture, environment and education* (pp. 135-152). New York, NY: Hampton Press.
- Bateson, G. (1972). *Steps to an ecology of mind*. New York, NY: Ballantine Books.
- Boudreau, J., Keil, R., & Young, D. (2009). *Changing Toronto: Governing urban neoliberalism*. Toronto, ON: University of Toronto Press.
- Brown, P. M. (1992). Organizational design as policy instrument: Environment Canada in the Canadian bureaucracy. In R. Boardman (Ed), *Canadian environmental policy* (pp. 24-42). New York, NY: Oxford University Press.
- Campbell, S. E. (2006). Layers of place. *Interdisciplinary Studies in Literature and Environment*, 15(2), 179-183.

- Carrothers, G., Kline, S., & Livingston, J. (1968/1988). *FESKIT: Essays into environmental studies: Being some interpretations and amplifications of the FES Curriculum Model*. Toronto, ON: Faculty of Environmental Studies, York University.
- Carson, R. (1962/2002). *Silent spring*. New York, NY: Houghton Mifflin.
- Code, L. (2006). *Ecological thinking: The politics of epistemic location*. New York, NY: Oxford University Press.
- Cole, A. O. C. (1992). *Trent: The making of a university, 1957-1987*. Peterborough, ON: Trent University.
- Cronon, W. (1995). The trouble with wilderness; or, getting back to the wrong nature. In W. Cronon (Ed.), *Uncommon ground: Toward reinventing nature* (pp. 69-90). New York, NY: Norton.
- Curthoys, L. P. (2007). Finding a place of one's own: Reflections on teaching in and with place. *Canadian Journal of Environmental Education*, 12, 68-79.
- Drew, W. (1973). Wilderness and limitation. *Canadian Forum*, February, 16-19.
- ERS, Trent University (ERS). (1974). *Report of Sub-Committee on Environmental and Resource Studies and The Environmental and Resource Studies Program* (chaired by J. Lodge). Peterborough, ON: Trent University Archives.
- Frye, N. (1971). *The bush garden: Essays on the Canadian imagination*. Toronto, ON: Anansi.
- Glickman, S. (1998). *The picturesque and the sublime: A poetics of the Canadian landscape*. Montreal, QC: McGill-Queen's University Press.
- Grady, W. (1995). *Toronto the wild: Field notes of an urban naturalist*. Toronto, ON: MacFarlane, Walter and Ross.
- Greenwood (formerly Gruenewald), D. A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*, 32(4), 3-12.
- Greenwood, D. (2009). Place, survivance, and White remembrance: A decolonizing challenge to rural education in mobile modernity. *Journal of Research in Rural Education*, 24(10), 1-6.
- Innis, H. (1995). *Staples, markets, and cultural change*. (D. Drache, Ed.). Montreal, QC: McGill-Queen's University Press.
- Jacobs, J. (2005). *Dark age ahead*. Toronto, ON: Vintage Canada.
- Kapryka, J. & Dockstator, M. (2012). Indigenous knowledges and western knowledges in environmental education: Acknowledging the tensions for the benefits of a "two-worlds" approach. *Canadian Journal of Environmental Education*, 17, 97-112.
- King, S. J., & Stefanovic, I. L. (2012). Children and nature in the city. In I. L. Stefanovic & S. B. Scharper (Eds.), *The natural city: Re-envisioning the built environment* (pp. 322-342). Toronto, ON: University of Toronto Press.
- Leduc, T. (2010). The fallacy of environmental studies? An interdisciplinary foray thru Canada's academic programs. *Environments*, 37(2), 1-28.
- Leduc, T. (2016). *A Canadian climate of mind: Passages from fur to energy and beyond*. Montreal, QC: McGill-Queen's University Press.
- Leduc, T. & Morley, D. (2015). *Five decades of FES at York: The praxis of environmental studies*. Toronto, ON: The ABL Group.
- Lélé, S., & Norgaard, R. (1996). Sustainability and the scientist's burden. *Conservation Biology*, 10(2), 354-365.
- Leopold, A. (1970/1949). *A Sand County almanac, with essays on conservation from Round River*. New York, NY: Ballantine Books.

- Livingston, J. A. (1994). *Rogue primate: An exploration of human domestication*. Toronto, ON: Key Porter Books.
- Livingston, J. A. (2007). *The John A. Livingston reader: The fallacy of wildlife conservation and one cosmic instant*. Toronto, ON: McClelland and Stewart.
- Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. New York, NY: Algonquin Books.
- Luke, T. (1996). *Generating green governmentality: A cultural critique of environmental studies as a power/knowledge formation*. Retrieved from <http://www.cddc.vt.edu/tim/tims/Tim514a.PDF>
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W. W. (1972). *The limits to growth: a report for the Club of Rome's project on the predicament of mankind*. New York, NY: Universe Books.
- M'Gonigle, M., & Starke, J. (2006). *Planet U: Sustaining the world, reinventing the university*. Gabriola Island, BC: New Society Publishers.
- Ontario EcoSchools. (2016). *Ontario EcoSchools*. Retrieved from <http://www.ontarioecoschools.org/>.
- Orr, D. W. (2004). *Earth in mind: On education, environment, and the human prospect*. Washington, DC: Island Press.
- Otto, R. (1924). *The idea of the holy: An inquiry into the non-rational factor in the idea of the divine and its relation to the rational*. London, UK: Oxford University Press.
- Plumwood, V. (1993). *Feminism and the mastery of nature*. New York, NY: Routledge.
- Roots, B. I., Chant, D., & Heidenreich, C. (1999). *Special places: The changing ecosystems of the Toronto region*. Vancouver, BC: UBC Press.
- Robinson, J. (2008). Being undisciplined: Transgressions and intersections in academia and beyond. *Futures*, 40(1), 70-86.
- Shepard, P. (1967). Ecology and man: A viewpoint. In P. Shepard & D. McKinley (Eds.), *The sub-service science: Essays toward an ecology of man* (pp. 1-10). Boston, MA: Houghton Mifflin.
- Soulé, M. E., & Press, D. (1998). What is environmental studies? *BioScience*, 48(5), 397-405.
- Stefanovic, I. L. (2005). Challenging traditional academic borders through interdisciplinarity. In J. Goering, F. Guardiani, & G. Silano (Eds.), *Limina: Thresholds and borders* (pp. 195-206). Ottawa, ON: Legas, A St. Michael's College Symposium.
- Toronto Regional Conservation Authority. (2016). *Learning at TRCA*. Retrieved from <http://www.trca.on.ca/school-programs/#sthash.2QNdAw1w.dpbs>.
- UN Tbilisi Declaration on Environmental Education (1977). *Intergovernmental conference on environmental education, organized by UNESCO in cooperation with UNEP*. Retrieved from <http://unesdoc.unesco.org/images/0003/000327/032763eo.pdf>.
- Wadland, J. (1972). *Canada the land syllabus*. Peterborough, ON: Trent University.
- Wadland, J. (1978). *Ernest Thompson Seton: Man in nature and the progressive era, 1880-1915*. New York, NY: Arno.
- Wadland, J. (1984-5). *Canada the land syllabus*. Peterborough, ON: Trent University.
- Wadland, J. (1995). Wilderness and culture. In C. Gaffield & P. Gaffield (Eds.), *Consuming Canada: Readings in environmental history* (pp. 12-15). Toronto, ON: Copp Clark Ltd.
- Wadland, J. (2000). Voices in search of a conversation: An unfinished project. *Journal of Canadian Studies*, 35(1), 52-75.
- Weston, A. (2004). What if teaching went wild? *Canadian Journal of Environmental Education*, 9, 11-30.