**From “education for sustainable development” to “education for the end of the world as we know it”**

In this article, we address the limitations of sustainable development as an orienting educational horizon of hope and change, given that mainstream development presumes the possibility of perpetual growth and consumption on a finite planet. Facing these limitations requires us to consider the inherently violent and unsustainable nature of our modern-colonial modes of existence. Thus, we propose a shift from “education for sustainable development” to “education for the end of the world as we know it.” We contend that this education would require going beyond traditional forms of critique and prescription, because the problems we face are not primarily problems of ignorance that can be solved with more knowledge, nor problems of immorality that can be solved with more normative values; rather, they are problems of denial that are rooted in harmful desires for and investments in the continuity of the securities and satisfactions promised by modernity-coloniality. Faced with these denials, as well as many current and future global challenges, we emphasize a collective need to “grow up”, and outgrow the fantasies that animate modern-colonial habits of being , so that we might “show up” differently to do the work that is needed as we collectively face unprecedented global challenges .

Keywords:sustainability, coloniality, complicity, climate change, denial, global challenges

In the call for papers for this special issue, the editors solicited papers “that address the ‘impossible’ position of ESD in ‘the Capitalocene’ at an urgent juncture in history.” In this article, we take up the editors’ suggestion that education for sustainable development might indeed be “impossible.” However, rather than emphasize the impossibility of education, we emphasize the impossibility of sustainable development itself, and ask what kind of education could enable us to grapple with this impossibility, and its implications. We locate our analysis at the interface of concerns related to the historical, systemic and ongoing violence of modernity-coloniality (Authors 208; 2019; 2020), and concerns related to its prevalent unsustainability. Our work is mostly located in the field of comparative and international education, with bridging scholarship in other fields, such as philosophy of education, when the thematic focus aligns with our research interests (e.g. Author 2016; Author 2019; Author xxx). Inspired by questions and analyses emerging from decolonial, Indigenous and CRT studies, but most importantly, on pedagogical collaborations with artists and with Indigenous communities in Canada and Latin America, this work gestures towards a practice of education “otherwise” (Crawley, 2016).

Our collaborations with artists and with Indigenous communities are centered around psycho-affective and embodies practices. The Indigenous pedagogies that inspire our work could be described as a non-Western form of psychoanalytic cultural somatics (see for example Ahenakew, 2019). These Indigenous pedagogies’ starting point is a recognition of pervasive human irresponsibility stemming from the immaturity and fragility of modern-colonial modes of existence. They invite those socialized in this mode of existence not to turn their backs to the responsibilities of being entangled (Silva, 2016) within what they see as a wider living social-ecological metabolism that is the planet (Authors, 2020). Drawing on insights and scholarship emerging from these collaborations, we propose an educational practice “otherwise” that prioritizes three grounding orientations that are relevant for this article: (1) facing humanity in its full spectrum (Todd, 2008) and being taught by human wrongs (Spivak, 2004; 2012); (2) recognizing the geo-political dynamics of ecologies of knowledges (Santos, 2007), as well as the limits of human knowing (Sheridan and Longboat, 2006; Mika, 2017); and mobilizing relational accountability (Ahmed, 2012; Shotwell, 2016 ; Whyte, XXX) by decluttering the unconscious and decentering and disarming harmful ego-logical desires (Biesta, xxxx). Given space restrictions, we will only focus on the latter in this paper.

Enabling the possibility of this form of education requires an analytical practice that does not fit into traditional forms of critique and prescription. Because this analytical practice starts from the assumption that the problems we face are not primarily problems of ignorance or immorality, these problems cannot be solved with more knowledge or more normative values. Rather, if the problems are rooted in foreclosures (Spivak, 1999) – or socially sanctioned disavowals – they require a different articulation and educational response. We describe the problems through a number of denials and associated fantasies that are rooted in desires for (Spivak, 2004) and investments in the continuity of inherently harmful and unsustainable (modern-colonial) habits of being (Ahenakew, 2019; Donald, forthcoming; Shotwell, 2016). In this article, we both name these denials, and consider some of the educational difficulties of interrupting them and inviting people to imagine and to relate otherwise. Thus, instead of asking how we can reorient education to support sustainable development, we ask what kind of education could prepare people to face the impossibility of sustaining our contemporary modern-colonial habits of being which are underwritten by violence and unsustainability. In other words, rather than reimagine “education for sustainable development” we consider how we might imagine “education for the end of the world as we know it.”

 We begin the article by offering a brief overview of critiques of mainstream responses to climate change that point to the limits of sustainable development as an orienting horizon of social change. Following this, we review a couple of decolonial and Indigenous analytical practices that inform our diagnosis that the current global system is inherently violent and unsustainable. We then expand upon our educational response, which centers on interrupting not only the denial of the unsustainability of this system but also the denial of systemic colonial violence and of our entanglement within a wider socio-ecological metabolism (Authors, 2020). This response emphasizes the unconscious dimensions of modern-colonial modes of existence that lead to irresponsible choices. It issues an invitation for sobriety and maturity that is resonant with Biesta’s invitation to “grow up” (Biesta, 2019) as disinvestment from modes of being that either consume or withdraw from the world. Rather than prescribe what this process might look like, however, we offer two pedagogical frameworks that may support the interruption of harmful recurring patterns and that invite a visceral sense of responsibility “before will” (Spivak, 2004). Through learning to grow up, we might also learn to “show up” differently to do the collective work that is needed in the face of numerous overlapping global challenges.

**The limits of the “sustainable development” paradigm**

In 2002, UNESCO declared that education for sustainable development (ESD) “is an emerging but dynamic concept that encompasses a new vision of education that seeks to empower people of all ages to assume responsibility for creating a sustainable future” (p. 5). However, it was with the development of the UN Sustainable Development Goals (SDGs) that ESD really took off, significantly shaped by the work of existing fields of education, in particular environmental and sustainability education, and global citizenship education (Sund & Pashby, 2018). The umbrella of ESD encompasses a range of perspectives. As Mochizuki (2015) notes, “On the one hand, ESD is open to a diverse array of disciplines and theoretical traditions. On the other hand, ESD lacks a clear definition and there is no consensus on competencies to be fostered through ESD or education for sustainability.” There are, for instance, debates about whether ESD should focus more on technical questions about the transfer of specific knowledge (e.g. scientific knowledge or management strategies), more practical questions about the “how” of changing of attitudes and behaviors, or more moral questions about the purpose of education (Sund & Pashby, 2018).

More than 50 articles addressing pedagogical and philosophical questions in ESD and EE have been published by EPAT since 2010. Three recent texts that examine both the purpose of education and the “how” of changing attitudes and behaviours are relevant for the arguments we would like to put forward. Misiaszek (2020) uses popular education and a reinvented Freirean pedagogy to make the case for problematizing interpretations of development and sustainability in the context of “post-truthism”. Misiaszek argues that mainstream definitions of development are mobilized to “(1) ignore or falsely justify socio-environmental violence; (2) increase polarization between ‘us’ and ‘them’ that justifies socio-environmental violence; upon ‘them’; and (3) ignore or falsify the laws of nature.” (p. 748) His argument aligns with an important moral critique put forward by Kopnina (2016; 2020) who problematizes the fact that economic growth is promoted as a panacea for addressing inequalities and unsustainability challenges. Kopnina argues that the SDGs will likely only lead to more unsustainability by expanding unsustainable resource consumption, and the objectification and commodification of the planet and its elements exacerbating environmental destruction, social tensions and climate change. In a response to an EPAT editorial written by Peters (2018) titled “The Armageddon Club: education for the future of humanity”, Wals (2019) draws attention to a hidden curriculum of unsustainability permeating mainstream education and proposes a critical relational pedagogy of hope as a direction for schools.

Although we find many resonances in Misiaszek’s, Kopnina’s and Wal’s critiques of unsustainability and/or sustainable development, our proposition for a way forward is not grounded on the notions of hope, empowerment and liberation that the authors spouse. Our ontological critique of modernity-coloniality proposes the interruption of a mode of existence grounded on different forms of human exceptionalisms, exaltation, and entitlements, rather than an expansion of those. However, instead of debating how ESD should be articulated and practiced, this paper adds to the problematization of sustainable development, proposes a possible decolonial critique that highlights a “negative” dimension of education, as well as the context and contributions of Indigenous, Black and racialized scholars, and considers the educational implications that follow.

Since at least the October 2018 release of the IPCC report, which concluded that avoiding global temperature rises above 1.5C, would require “rapid and far-reaching” changes to social and economic organization over the next 12 years, there has been a significant increase in public concern about the effects of climate change and the biophysical limits of the planet. This has been evident in policy proposals like the Green New Deal, movements like Extinction Rebellion and student-led climate strikes, as well as more sustained attention on the relationship between increasingly frequent extreme weather events and climate change. The special EPAT issue “The Armageddon Club” mentioned above also engages with related issues. While many were mobilized by the IPCC report, others point to the fact that bodies like the IPCC remain conservative in their assessments. Oreskes, Oppenheimer and Jamieson (2019) “find that scientists tend to underestimate the severity of threats and the rapidity with which they might unfold”, while Spratt and Dunlop (2018) critique reluctance among researchers as well as politicians and other leaders to take seriously ‘worst case scenario’ climate futures. For instance, they note that the IPCC has not given due attention to risks posed by ecological “tipping points” at which we pass “a critical threshold in an Earth climate system component – such as major ocean and atmospheric circulation patterns, the polar ice sheets, and the terrestrial and ocean carbon stores – which produces a step change in the system” (p. 21). They suggest that even if these more dire projections are hardly certain, given the severity of their implications, they warrant deeper consideration. Meanwhile, Bendell (2018) concludes that we may already be too late to avoid catastrophe, and we will likely see the climate dramatically unravel within the next 10 years. Bendell’s paper titled “Deep Adaptation” was rejected by the journal XXX on the grounds of potentially causing public alarm, rather than on the quality of the synthesis of science that it presented. Bendell used the rejection of the paper as an illustration of the extent of negation of the problem that other authors have pointed to.

The dominant paradigm of response continues to be centered on the need to balance continued economic growth with respect for planetary boundaries, as Kopkina (2016;2020) points out. The more absurd results of this balancing act were made evident when the government of Canada approved a contentious oil pipeline expansion just one day after declaring a national climate emergency. Even ambitious proposed programs like the Green New Deal are premised on this assumption. As Baskin (2019) notes, “Sustainable development may be understood as marking a break with earlier purely growth-centric approaches to development. But it is more plausible to see continuities, to understand sustainable development as an effort to ‘green’ the existing growth paradigm rather than replace it” (p. 161). In other words, “‘business-as-usual’ but greener” (p. 165). Fifteen years earlier, Hove (2004) summarized her concerns about sustainable development in three distinct points: “1) sustainable development is Western construct, perpetuating the ideological underpinnings of former approaches, 2) it focuses its efforts on the unsustainable expansion of economic growth, and 3) its broad nature creates dangerous opportunities for actors to reinterpret and mould the approach the way they see fit” (p. 53).

While Hove’s broad critiques capture many of the most significant general concerns about sustainable development, in this paper we specifically emphasize a critique and proposed response to the impossibility of sustainable development that is rooted in a decolonial analysis of modern-colonial modes of existence. This critique emphasizes the need to account not only for the inherent unsustainability of these modes of existence, but also its systemic colonial violence, and its denial of our entanglement with each other and with the wider metabolism of the earth itself. Collectively, these denials facilitate a fourth denial: the denial of the magnitude and depth of the problems we face. Before elaborating on these denials and their implications for how we approach education, we consider the decolonial critiques that enabled us to articulate these denials and their interrelation.

**A decolonial analysis of climate change**

When trying to understand why so many people have been slow to demand action on climate change, some have suggested that it is a product of the fact that the dramatically different climate that is described in some of the worst-case climate scenarios is simply unimaginable for most people, and thus, feels far away, abstract, and potentially less urgent. This perspective, however, is rooted in a particular experience and theorizing of the world that tends to come from a position of relative advantage. In brief, the wealthiest among humanity have generally been the most buffered from climate change – and even when they have faced it, they have had the resources to extend that buffering somewhat. This uneven experience of climate change is no mere coincidence of geography, but rather the result of the systemic extraction, exploitation, and expropriation, of what have come to be known as “natural resources”, as well as human labour, from the Global North to the Global South. It was precisely through these processes that the Global North amassed the wealth and resources that enabled its unprecedented economic growth in the past several hundred years. This is another way of diagnosing the roots of Western ‘development.’ In other words, colonial violence (genocide) and environmental degradation (ecocide) are the ongoing underlying costs of mainstream development.

As Foster, Holleman and Clark (2019) note, this “leaves [Global South] nation-states with outsized ecological costs while, in consumption terms, the benefits of the natural resources go mainly to the rich countries under conditions dominated by unequal ecological exchange” (n.p.). These ecological costs are many layered, as not only is there the immediate degradation that results from instituting and reproducing extractive material and economic infrastructures, but there is also the long-term impact of climate change resulting in shrinking (and less nutritious) agricultural yields, declining biodiversity, toxic and even deadly air and water quality, increasingly unliveable temperatures, rising sea levels as well as the rising occurrence of extreme weather events, all of which disproportionately affect those living in the Global South with the greatest intensity and the fewest buffers. Ecological destruction is not limited to the Global South, however, as Indigenous, Black, and other marginalized communities in the Global North have also been targets of the paired projects of ecocide and genocide (such as in the US, Canada, and Australia). As Simpson (2019) notes, “Indigenous peoples have witnessed continual ecosystem and species collapse since the early days of colonial occupation” (np). Thus, she suggests, “We should be thinking of climate change as part of a much longer series of ecological catastrophes caused by colonialism and accumulation-based society.” Not only have those populations that were subject to European colonialism, enslavement, and forms of indirect rule been experiencing the effects of ‘climate change’ since the 15th century, but those same populations are generally the most vulnerable to new and intensifying climate crises (Gomez-Barris, 2019).

These decolonial critiques, among others from Black, Indigenous, Global South, post-colonial and other anti-colonial practices, have informed our conclusions about the impossibility of sustainable development, as well as our proposed response. As noted in the introduction, a starting point of our response is the analysis that the biggest barrier to difficult conversations about climate change – including conversations about the impossibility of sustainable development – is not ignorance. Rather, it is enduring investments in the modern-colonial mode of existence, and thus, in a series of denials that support the continuity of that existence. This mode of existence is constituted through colonial violences that naturalize human exceptionalism, the separation of humans from a larger ecological metabolism, and rationalize the perpetual racialized extraction of labor and ‘natural resources’ As Davis and Todd (2017) note, colonialism is, at its core, premised on “a severing of relations between humans and the soil, between plants and animals, between minerals and our bones” (p. 770). We view this severing and its resulting (illusion of) separation as the foundation of modern existence, which we summarize using the metaphor of “the house modernity built” (Authors, 2017, 2018). Coloniality is the disavowed constitutive underside of this “house”, and therefore, the true cost of the promises that the house offers to its inhabitants. Thus, despite the myth that the house was self-made by the particular ingenuity its architects, it was largely built on the stolen lands and broken backs of those whom it now excludes, or relegates to its basement floor, as well as [non humans]. The relationship between the modern promises offered by the house and the colonial processes that subsidize them are summarized in Table 1 below. This is also the first pedagogical framework that we introduce in this article as part of our approach to an “education for the end of the world as we know it.”

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| **Element of the house** | **Modern promise** | **Colonial process** |
| **Foundation of separation**  | Unrestricted autonomy (for certain people); relationality and responsibility are optional/ individual choices | Refusal of relationships and responsibilities to each other and the well-being of the ecological metabolism; racialized hierarchies of existence  |
| **Roof of global capitalism** | Unending economic growth and wealth accumulation | Racialized expropriation and exploitation of humans and other than-human-beings  |
| **Wall of the nation-state**  | Security and order through property; social cohesion through national identity  | Sanctioned state violence (e.g. policing, border securitization, global militarism) |
| **Wall of universal knowledge** | Certainty, predictability, and meaning through a single path forward through knowledge  | Denigrating other knowledge systems and mobilizing knowledge to rationalize violence, authority, and control  |
| **Stairs of social hierarchy** | Status and socio-economic mobility as rewards for hard work and ‘natural ability’  | Ascribing differential and conditional value to the lives and work of humans and other-than-human beings  |

Table 1: Modern promises and the colonial processes that subsidize them

As Whyte (2018) notes, for many Indigenous peoples, “It is not a given that today’s social-ecological systems are ones that are important to conserve. For the state of these systems today is already, for some, an Indigenous dystopia” (p. 299). The question that then emerges is: what are we seeking to “sustain” with the project of sustainable development, and why? Broadly speaking, the sustainable development paradigm both presumes and aspires not only to the conservation but also the expansion of the house modernity built, that is, a global system that is premised on: an economic system organized by capitalism, a political system organized by nation-states, a knowledge system organized by universal and totalizing reason, and a relational system organized by utility-maximizing individuals. It does not take into consideration the externalized costs that make the continuity and expansion of this system not only violent and harmful, but likely impossible, given the biophysical limits of the planet.

If, as Davis and Todd (2017) argue, the root problem of climate change “is the severing of relations through the brutality of colonialism coupled with an imperial, universal logic” (p. 776), then only once we intellectually face and viscerally feel this difficult knowledge will we be able to “address not only the immediate problems associated with massive reliance upon fossil fuel and the nuclear industry, but the deeper questions of the need to acknowledge our embedded and embodied relations with our other-than-human kin and the land itself” (p. 776). Further, if we fail to do the slow and difficult work of disinvesting from a modern habit of being, and remaking these violent relations, then our efforts to address climate change may reproduce the same harmful colonial patterns that caused climate change in the first place (Whyte, 2018, 2019).

Whyte (2019) therefore points to the need to attend not only to ecological tipping points, but also relational tipping points. He suggests that there are at least two possible scenarios for responding to climate change. The first involves “sweeping global action to lower greenhouse emissions,” led by those with the most global power, but in ways that fail to respect “the relational qualities of consent, trust, accountability, and reciprocity” (p. 2). This first scenario may avert an ecological tipping point, but will cause further environmental injustices to Indigenous and other vulnerabilized peoples through things like displacement and land dispossession. In the second scenario, those with the most power emphasize the need to establish or restore good relations – that is, address the relational tipping point that was “crossed long ago through systems of colonialism, capitalism, and industrialization” – before implementing any practical projects to curb emission. Repairing relationships takes time, however, which means that these projects will take longer to unfold and could result in us passing an ecological tipping point, but would prepare us for “urgent, justice-oriented coordination” going forward (p. 3).

**Facing the depth of the problem (interrupting our denials)**

What becomes clear when we apply decolonial critiques to the issue of sustainable development is that modern promises – including the promise of mainstream forms of development – can only be fulfilled within a colonial system that is premised on the dominance of a particular subset of humanity at the expense of the well-being of all other humans, and the environment itself. Thus, the modern-colonial mode of existence is both inherently harmful, and inherently unsustainable. Furthermore, because we are all entangled as part of the same social-ecological metabolism, it is not possible to buffer oneself from the sum effects of climate change; ultimately, it is and will affect us all, albeit in highly uneven ways. However, because the illusion of separation is so powerful, it seems reasonable for those of us who live inside of the house to frame ourselves not only as outside of the threat of experiencing catastrophic climate change (because we believe we can protect ourselves from its harshest dimensions, as we have thus far), but also outside of responsibility for climate change itself (because we do not see how modern existence is fueled by the very processes that cause climate change). As we have suggested, we understand this illusion primarily as a problem of denial, rather than a problem of ignorance (lack of information) or immorality (lack of values). In particular, with our research collective, we have identified three primary orienting denials that are maintained through a continued investment in the continuity (or sustainability) of this modern-colonial habit of being and its associated institutions. This includes denial of:

1. *Systemic colonial violence* that underwrites the maintenance of the dominant system, which is premised on racialized exploitation and expropriation. This denial leads to the belief that violence is either entirely external to or exceptional within the system, or otherwise occasionally justified in the service of a larger purpose (e.g. progress, development);
2. *Ecological unsustainability* of the dominant system, which is premised on unending growth and consumption that ignores the planetary limits. This denial leads to either outright refusal that climate change is real, or to the search for solutions to climate change that can be found within the existing system (e.g. green consumerism, carbon trading, green jobs, green technological innovation, environmental protection legislation);
3. *Condition of entanglement*, which is premised on framing relationality as a willed choice rather than a fact of our collective existence on a shared, finite planet. This denial leads to either outright refusal of entanglement and assertion of individualism and unrestricted autonomy, or else framing relationships either through utilitarian (utility-maximizing), or self-congratulatory (e.g. enactments of moral responsibility) means.

There is a fourth denial that supports the first three, which is a *denial of the extent and depth of the problems* we are facing. This denial reproduces the illusion that with a few simple and quick fixes, we can go on living as we are, and even exporting this way of life elsewhere.

In this paper, we consider how we might face these four denials educationally. However, it is important to note that one can arrive at the conclusion that the status quo is untenable from many different starting points, and where one starts will shape what approaches one proposes in response.

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 [The school strikes illustrate this diversity, we have also written about rationalist, reactionary… elsewhere] The school strikes have been portrayed in the liberal media as a hopeful movement led by youth, that can motivate the greening of the house. However, the strikes can also be seen as problematic in terms of the current demographics of youth protestors that have the attention of the media, as well as the historical weight of the absence of youth who could be marching if it weren’t for the racialized and colonial violence inflicted by the house. In a recently published special issue of the Arts Journal titled “Indigenous artists against the Anthropocene”, Horton makes a similar point, albeit in a different context. She uses the example of the art piece “Where are the generations” by Key WalkingStick - a copper disc carved with a lament for unborn Indigenous children - to draw attention to how “the contemporary world order continues to be the reign of colonial elites over a disenfranchised earth” (p. ) The articles in the special issue also point to the fact that, unlike the current youth protestors, Indigenous people have been “striking” for years, without being able to mobilize the same level of media support or sentiment of hope.

Thus, while it may be that growing recognition of the severity of the climate crisis offers unprecedented opportunities to address the violent colonial relations at its roots, it is by no means the case that this will necessarily lead to deepened concern about colonial violence or a transformation of enduring colonial relations. This is a double-edged opportunity, as the other possibility is that people will protect even more fiercely the securities that have been promised by the house modernity built – no matter the cost. In the next section, we describe our own educational response, which emphasizes the need to break narcissistic mirrors, re-activate numbed senses and re-generate exiled dispositions and practices. This is an education for “facing the end of the world as we know it”, which requires that we “grow up” and “show up” differently.

**Education for the end of the world as we know it**

Silva (2014) writes that decolonization requires nothing less than “the end of the world as we know it”, by which she means not the end of the world *as such*, but rather the end of the specific modern-colonial world and associated habit of being. It is this world that ended, or tried to end, so many other worlds, and that forecloses possibilities for alternative worlds to emerge or regenerate. To some, then, the imperative is to bring about this end so that these other worlds can thrive. Yet the contemporary moment suggests that the end is coming whether we like it or not; the question is not how, but when. From this perspective, the educational task is not, how do we make “the house modernity built” more sustainable, nor even how do we prepare people living inside the house for the moment when it fails to live up to the promises it has made for those inside its walls, which indeed is already happening. Rather, it is, how do we prepare people for the moment when the house can longer provide even the basic resources necessary to sustain human life? And how do we ensure that, as the house is collapsing, it does not bury underneath it those on whose lands and backs the house was violently constructed in the first place?

This educational work addresses those who are engaged in “low intensity” (also low risk, low stakes) struggles, a category we include ourselves in. “Low intensity” struggles contrast with “high intensity” (also high risk and high stakes) struggles, in which people are fighting for their lives as a result of the very system that many of us in low intensity struggles are fighting to maintain. Most people in low intensity struggles have had their sensibilities forged by privilege or aspirations for privilege. As is the case with an airplane, those who are flying the highest (or moving up) have the furthest to fall when the system crashes. Those living outside of the house may therefore be better prepared to face its end, and may even welcome it; however, they are also the most vulnerable to backlash from those inside the house, and the aftershocks of the house’s fall. In turn, those living inside the house have the most to lose (at least in terms of what is valued from inside the house) – which also means that they might inflict the most harm if they remain attached to the promises of the house and are willing to kill others or die themselves in a bid to get those promises back. Thus, the fall of the house may open up many previously unimaginable possibilities, but it also presents many risks, particularly if those of us socialized inside of the house (in low intensity struggle) do not learn quickly from the mistakes that created the house in the first place, and disinvest from its promises. We might end up just wanting to build another house, because we are still invested in the securities that it offered us. If we want to learn to live together differently, then we will also need to learn to “grow up” so that we can face unprecedented global challenges without falling apart – or perhaps, so that we can fall apart in a generative way that opens up new possibilities for collective existence.

Narratives that infantilize Black, Indigenous and racialized peoples have been part and parcel to the 500 yearlong construction of the house of modernity. Key Western philosophers, such as Kant and Dewey have participated actively in the reproduction of narratives that justified slavery and colonialism. Modernity is still widely perceived (within the house of modernity itself) to be a civilizational move away from a form of immaturity associated with savagery and racial inadequacy. However, many Indigenous, Black and racialized cultures associate immaturity with the elevation of individualism, fragility and the negation of responsibility (e.g. Sonya Renee Taylor, xxxx), which are characteristics of modernity itself. We understand this immaturity of modernity also creating in modern subjects an inability to hold space for complexity, uncertainty, complicity, failures and difficulties without being overwhelmed, irritated or immobilized. This is a logical consequence of existential investments in certainty, security, linear progress and control through universalizing and totalizing modes of knowledge production.

Therefore, for those socialized within the house of modernity, especially those in low intensity struggle, we stress the necessity to “grow up”. Our argument resonates with Gert Biesta’s (2019) notion of “growing up”, which contrasts “growing up” with “infantilization”, and emphasizes that this is not about one’s literal age, but rather about the way we encounter and engage the world. Although some cultures, especially cultures that elevate youth, may find the call to grow up patronizing or ageist, we believe it is a generative notion because it prioritizes a call for relational accountability that is onto-metaphysically pertinent to many Indigenous modes of existence that relate to the land and other-than-human kin as older and wiser relations and that see healthy and compassionate eldership as the main goal of education (Ahenakew, 2017). Our call to maturity also resonates with Biesta’s assertion that grown-up-ness is rooted in a deep acknowledgement that “the world is not just a construction of our mind or our desires, but actually has an existence and hence an integrity of its own” (p. 57). Here we emphasize that the world Biesta refers to is not the particular (modern/colonial) “world” to which we refer in our idea of “education for the end of the world as we know it.” We instead interpret it as signifying the collective, living social-ecological metabolism of the planet, of which we are all a part. This metabolism exceeds any human worldings that we can imagine or construct (Ermine, 1995; Mika, 2012 ). This understanding also echoes Gayatri Spivak’s (2012) imperative to “imagine ourselves as planetary accidents rather than global agents” (p. 339). She states that, in order to do so, “the dominant and the subordinate must jointly rethink themselves as intended or interpellated by planetary alterity, albeit articulating the task of thinking and doing from different ‘cultural’ angles” (p. 347). For Spivak, this kind of imagining demands, of those socialized within the house of modernity in particular, an “epistemic performance of a different kind” than Western reason allows (p. 345).

We add to Biesta’s notion of *growing up* an emphasis on *showing up*, that is taking responsibility – which we see not so much as an active choice, but rather a recognition of a responsibility that is already there, before will, which derives from the fact of our entanglement with everyone and everything. We review the notion of growing up first, before elaborating what we mean by showing up.

***Growing up***

Biesta contrasts a grown-up approach to being in and with the world to engagements with the world that are premised on imposing one’s will and desires upon the world (which risks “world destruction”), or conversely, withdrawing entirely from the world because we find it too complex and difficult (which risks self-destruction). Through a grown-up way of being, we can face the world in all of its complexity, plurality and indeterminacy, and see and sense ourselves as part of it, without projecting our human desires onto the world or treating it as an extension of the individual self. Through growing up we might develop the stamina, as well as the intellectual, affective, and relational dispositions, to live outside of a system that we have been socialized to desire, but which has always been destructive, and which is no longer sustainable. Like the mycelium that works as an underground network to feed the mushrooms that pop up above ground, only once we have reactivated and recalibrated these affective and relational dispositions can we reimagine healthier possibilities for the economic, political, and ecological organization of collective life on a shared planet (Authors, 2018).

Within the house of modernity, many movements that address oppression have mobilized the notion of desire as a benevolent force against historical repressive forces. Many have fiercely fought for liberation through arguments based on the proliferation of human desires as a dialectical response to the suppression of perceived entitlements in the fulfilment of the promises issued by the house itself. Although we do not want to diminish the importance of these strategies in terms of harm reduction within the house, the positive connotation of desires and the proliferation of desires within the house fails to address the ways in which the house allocates harmful desires through the very promises it projects. In this sense, transgressive strategies that emphasize the expansions of the same promises and entitlements often reproduce the violence and unsustainability required for the house to exist. This is a very difficult topic for people involved in these movements akin to remembering that we are stuck in the space between a rock and hard place, also because any critique of strategies of liberation or inclusion can be easily weaponized against those who are vulnerable, which exacerbates systemic violence – we address this conundrum somewhere else (Authors, 2020).

Scholars informed by Western psychoanalysis and Eastern cultural traditions have also drawn attention directly or indirectly to this problematic pattern in different contexts (refs – Ahmed; Shotwell; Kapoor; our paper about Spivak and Deleuze; negative education paper). Gayatri Spivak, for example, illustrates how harmful desires are at work in liberal attempts of “righting wrongs” (Spivak, 2004). She proposes that education should be an “uncoercive rearrangement of desires” (2004, p.) geared towards “an ethical imperative towards the other, before will” (Spivak, 2004, p.). We interpret Spivak’s assertion as the need to interrupt the satisfaction we seek or gain from harmful desires (e.g. desires for consumption, mobility, security, certainty, protagonism, purity, status, validation, etc., at the expense of other bodies and the planet). We also extend the interpretation of her reference to the imperative towards “others” to include other-than-human beings.

In many ways, those of us who have grown up in the house have been infantilized by it – being highly dependent on its harmful and unsustainable infrastructures for our daily survival, as well as oriented by the harmful desires that it mobilizes within us. The educational task, therefore, is not only to relay information about the history of the house, and how we arrived at this moment in which the house is likely to crumble (i.e. intervening at the level of the intellect), but also to interrupt the enduring investments in the satisfactions provided by the desires that the house itself mobilizes (i.e. intervening at the level of affect). If we stopped at naming the problems of the house, this might lead people to respond in ways that reproduce more of the same. For instance, seeking quick and simple solutions so that we can move forward (fulfilling the modern/colonial desires for progress and certainty, thereby ignoring complexity, uncertainty, and difference), and/or seeking return to the sense of innocence and benevolence that the house offered (fulfilling the modern/colonial the desires to look good, feel good and be seen as doing good by others, thereby ignoring our structural complicity in harm and capacity for destruction).

Thus, beyond diagnosing how we arrived at the present, an education that prepares us to grow up would also need to interrupt harmful desires. Indeed, Biesta (2019) suggests, “the main principle of education aimed at making a grown-up existence in and with the world possible is that of interruption” (p. 59). We could, of course, just wait for the house to collapse, which would be a grand interruption, and perhaps teach us a great deal. But we can also consider it the task of education to interrupt these desires now, so that they might be rearranged in ways that could “support and sustain a grown-up way of being in and with the world” (p. 58). While the interruption of desires itself may be inherently violent, it is not for us as educators to say how these desires might ultimately be arranged – this part must be uncoercive, as Spivak (2004) suggests. Thus, there is no guarantee that our efforts at interruption will actually lead to something different, and it may in fact be that only once the house actually collapses will we really be able to desire and imagine otherwise (Ashon), and thus, be in and with the world differently.

After all, as Biesta (2019) notes “we live in an environment that is precisely not interested in interrupting and limiting our desires, but rather is focused on the multiplication of our desires, so that we will desire more and therefore will buy more and more” (p. 59). This environment (and the affective and intellectual patterns it supports) is very difficult to challenge, because it offers satisfaction through its neurochemical feedback loops. In this environment, few people willingly chose to critically interrogate, let alone disinvest from, the desires whose fulfilment offers so much (short-lived) pleasure. Because of this, education for growing up must also include opportunities for “suspension,” that is “opportunities for establishing relationships with our desires, make them visible, perceivable, so that we can work on them” (p. 60). In other words, this education should support our the movement of holding space for our internal complexities, paradoxes and complicities while also remaining aware the limits of our ability to be transparent to ourselves.

For instance, this may look like inviting people to observe their own (often conflicting and incoherent) intellectual *and* affective responses to a critical reading of “the house modernity built” that points to its inherent violence and unsustainability. It is often only when our securities and presumed entitlements are challenged that we can see from our responses where we really are at *affectively*, which in turn enables us to understand what work still needs to be done to prepare ourselves to face “the end of the world as we know it” in a generative way. These responses are not individual or inevitable, but emerge out of our conditioning and positioning within a particular set of socio-historical context and affective and relational dynamics. They also have real impacts on others present in a given space. The idea with this activity is therefore neither to shame nor sanction those responses, but rather to have people face the weight of the responsibility for past, present and future harms, as well as the limiting implications of the anxieties and insecurities that are triggered in challenging moments, so that we might learn to respond differently.

 Education for growing up is distinct from trends to make education more “flexible, personalised, and completely tailored to the needs of the individual child or student” (Biesta, 2019, p. 60). While an approach that centers the student may be understood as a critical response to approaches that centered the teacher, we suggest a third option: one that centers the earth itself (in Biesta’s terms, the world; in ours, the planetary socio-ecological metabolism). This form of education therefore creates opportunities for students to “encounter the experience of resistance and work with it… [or] to work through it” (Biesta, 2019, p. 60). Yet this kind of education is disruptive to the sense of self, meaning, security, certainty, futurity, and even reality that has been cultivated for those living within the house modernity built – and thus, it is not something that can be forced upon them. It can only serve as an invitation, and those who take up the invitation need to also be accountable for their own receptivity to being taught. This decision not to turn one’s back to responsibility is perhaps the first step in growing up, so that we might show up differently to the difficult work that needs to be done as we face the decline of a harmful system.

***Showing up***

If growing up emphasizes the disposition to see and sense oneself as entangled with and responsible to a wider world/metabolism, then showing up is about how that sense of responsibility manifests. Taking responsibility means “doing our homework” and coming to the work with a deep commitment to interrupting denials, to digging deeper towards the root causes of our contemporary challenges and to relating “wider” by activating the ethical imperative before will that Spivak talks about . Part of this process is recognizing one’s complicity in a harmful colonial system, and how our livelihoods have been subsidized by invisibilized exploitation and expropriation that do not stop just because of our recognition that they exist. Another part of the process is sitting with our affective investments in this system, working through insecurities, projections, fragilities, harmful entitlements and aspirations and desires for certainty, innocence, authority, exceptionalism, and validation. Doing this kind of homework can prepare people to show up ready to do the work that is at the intersection of what is actually needed and what they can do, rather than what they *want* to do.

This means that showing up is not a gesture of heroic protagonism made in search of recognition or praise for the display of virtues, but rather is rooted in a sense of humility and service that often only emerges when our modern-colonial habits of being are starting to become unsettled or even undone. Further, if we show up to take responsibility based on a sense of guilt, or even a moral conviction about what is just, then showing up is still a choice that we can always chose to make, or not, depending on what is convenient or what feels good (Morris, 2017). Similarly, if showing up is motivated by a desire to sustain or reclaim a position of innocence, then it signals a failure to grapple with our structural complicity and indicates we are not yet prepared to center our collective well-being (Shotwell, 2016), rather than our individual selves. Activating the ethical imperative *before will* means that responsibility cannot be a calculation about moral authority, political righteousness, or virtuous innocence. This kind of responsibility orients us towards the well-being of the social-ecological metabolism, rather than the individual self-interests that drive modern-colonial modes of existence. Thus, alongside intellectual and affective dispositions, we also need to develop our atrophied relational dispositions: the dispositions that enable us to feel entangled with the pain, the brokenness and the ugliness of humanity as well the beauty and the joy of the undefinable world.

In order to sense responsibility before will, we need to feel this entanglement, not only intellectually but also viscerally, and not only with “pleasant” things like birds, trees, flowers, and whales, but also with violence, guns, destruction and suffering. This requires people to un-numb to the collective pain inflicted by the illusion of separation, and to emphasize the integrity, the tensions, the complexities, and the joys of *the process* of restoring and maintaining good relationships that have been violated through the colonial workings of the house, rather than *the outcome.* We note that for a lot of people, there is an aversion towards sensing or re-membering the visceral feeling of entanglement that emerges from a desire to maintain their perceived unrestricted autonomy, and their moral or political purity (Shotwell, 2016), in order not to be contaminated by the violence and toxicity of the presumably “external” world. However, the feeling of visceral entanglement can also remind us that the world that we want to immunize ourselves against is already within us. The promise of separation, and thus, of purity, has always been an illusion.

Part of restoring relationships and taking responsibility for collective work and well-being is also about becoming accountable for showing up to do this work in ways that don’t take up more space or reproduce harm in the process. This means, among other things, developing the sensibility to know when it is important to intervene but also knowing when to get out of the way, and becoming attuned to the potential repetition of colonial patterns and their negative impacts on others (both human and non-human). We use the metaphor of “radars” to describe the sensitivities that those in in low intensity struggle may need to develop in order to interrupt and redirect common patterns that tend to emerge when we try to encounter and engage the world/the collective metabolism differently, but remain (understandably) rooted in modern-colonial modes of existence. Below we describe some of these radars, which were developed from our experience working with communities of educators seeking ecological alternatives to mainstream schooling and/or seeking to collaborate with Indigenous communities. It is also our second pedagogical framework for preparing people within the house modernity built to face the end of the world as we know it:

* **Goody-goody radar**, for sensing the desires to feel, look and do good. To develop this radar, we need to interrupt concerns about our self-image so that we can “grow up” and “show up” differently (with humility) in service of the collective well-being of the wider metabolism;
* **Eye-rolling radar**, for sensing our own arrogance, entitlement, and potential ridiculousness. To develop this radar, we need to consider how we are being read by others, particularly those involved in high intensity struggle, in order to laugh at our own absurdity and take responsibility for the harm that is being done by us acting from what we think is “normal”;
* **Band aid radar**, for sensing efforts to seek our simplistic and often harmful solutions. To develop this radar, we need to be wary of how this offers false comfort, appeases unpleasant feelings, and is premised on colonial hope for guaranteed outcomes and futures;
* **(Personal) smoke** **radar,** for sensing when people are taking up collective spacewith personal stories that do not move anything anywhere. To develop this radar, we need to be wary of false assurances that we are “getting somewhere” and “doing the work”;
* **Self-pity party radar,** for sensing when one’s own or other people’s fragilities have been activated and they demand forms of coddling or compensation as a means to deflect responsibility. To develop this radar, we need to consider how people in dominant positions tend to have little stamina for difficult conversations, especially when those conversations point to our/their complicities;
* **Layering radar,** for sensing the difference between existential and political accountabilities. To develop this radar, we need realize that at one layer we are all one, and at many other layers we are accountable to the many structural violences that are required for us to be who we are and to have the options, opportunities, comforts, and securities that we have.

**Conclusion**

In this paper, we have pointed to the limits of education for sustainable development, and suggested the need to develop forms of education that can prepare us to face the end of the world as we know it. To conclude, we want to briefly consider the implications of the third and final dimension of education for growing up that is described by Biesta (2019), in addition to interruption and suspension: sustenance. Sustenance is required so that we can “endure the difficulty of existing in and with the world” (p. 60). But sustenance, at least in the way we understand it here, does not mean support that is necessarily (or at all) comforting, and even less so dependency-based. If the task of education for the end of the world as we know it is above all about “growing up”, then support here means helping us re-member our connection with the larger metabolism that invariably physically, and otherwise, sustains all of us. This re-membering can help us locate to our intrinsic worth not in personal achievements and external validation, but in the sheer sense of being a part of the larger metabolic body, which has a much longer temporality than the physical bodies we inhabit.

Given our socialization into presumably autonomous, separate, and self-transparent (modern-colonial) subjects, our attachments and investments in this kind of self-image and self-understanding will most likely sabotage our attempts at re-membering the entangled dimension of our existence. For this and other reasons, the reactivation of the visceral sensation of entanglement – if we even come close to it – may be experienced, at initially, as a profoundly nauseating and disturbing experience. Firstly, because the metabolism with which we are entangled is itself sick, and realizing and re-sensing/re-embodying some of that collective (and individual) toxicity can be overwhelming. And secondly, because, re-membering and re-sensing ourselves as part of a wider metabolism will (profoundly) unsettle our sense of self, direction, meaning, and knowing. In other words, pedagogy for the end of the world as we know it also entails the disintegration of the (modern-colonial) sense of self and self-image, and end of way a particular way of knowing and being in the world.

However, once the self-protective barriers, erected to safeguard our imagined and desired autonomy, separability and purity, begin to crumble and open us towards the unimagined possibilities of the unknown and the unknowable, then, together with the difficult work of “growing up” and “showing up,” we may be able to sense other, not-yet-imaginable, but viable and arguably deeper and more sustainable sources of joy that can help nourish the inarticulable yearning within ourselves. Often pedagogical practice, and more obviously our consumer society at large, are geared towards meeting our desires for learning as self-actualization (Biesta’s “learnification”) and both external and self-validation, through an incessant consumption of knowledge, skills, relations, and material goods and services. Alternatively, we refer to those as our desires to look good, feel good and be seen as doing good by others. What distinguishes these desires from a deeper existential yearning is that they are always directed towards a projected, *known* goal that – once reached, is imagined as being able to satisfy our existential thirst. However, because desires are ultimately infinite and the gratification achieved from their realization is fleeting at best, and disappointing at most, this reproduces an incessant spiral of desire, consumption, and destruction. Yearning, unlike desire, cannot be quenched by directing our attention and energy towards a specific, pre-imagined goal, because we do not know (exactly) what is it that we are yearning for, and thus we can also not know how to address it. At least, not as the kind of (presumably) autonomous, self-transparent, control-seeking, separate individuals that those of us socialized within the house of modernity imagine ourselves to be most of the time. However, if that kind of self-perception can be undone, and if we can be taught to sense and embody being differently – with all the nausea, fear, and disgust that this may entail – then, perhaps we may be able to tap into the immense joy that comes from (at least fleetingly) forgetting who and what we think we are, and instead sensing the gift of not only being what we imagine ourselves to be. And to be reminded that, at the end of the day, even that does not make us special.

**Works cited**

Ahenakew, C. (2019). *Towards scarring our collective soul wound.* Guelph, ON: Musagetes Foundation.

Ahenakew, C. R. (2017). Mapping and complicating conversations about Indigenous education. Diaspora, Indigenous, and Minority Education, 11(2), 80-91.

Andreotti, V. (2016). Response: The difficulties and paradoxes of interrupting colonial totalitarian logicalities. Philosophy of Education Archive, 284-288.

Andreotti, V. (2019). The enduring challenges of collective onto- (and neuro-) genesis. Lapiz (Latin American Philosophy of Education Society Journal), 4: 61-78.

Baskin, J. (2019). Global justice and the Anthropocene: Reproducing a development story. In *Anthropocene encounters: New directions in Green Political Thinking* (pp.150-168).

Bendell, J. (2018). Deep Adaptation: A map for navigating climate tragedy. Available at: http://www.lifeworth.com/deepadaptation.pdf

Bendell, J., Little, R., & Sutherland, N. (2018). The seven unsustainabilities of mainstream leadership. In *Innovation in environmental leadership* (pp. 13-31). Routledge

Biesta, G. (2019). What is the educational task? Arousing the desire for wanting to exist in the world in a grown-up way. *Pedagogía y Saberes*, (50), 63-74.

Davis, H., & Todd, Z. (2017). On the importance of a date, or decolonizing the Anthropocene. *ACME: An International E-Journal for Critical Geographies*, *16*(4), 761-780

Ermine, W. (1995). Aboriginal Epistemology. In M. Battiste and J. Barman (Eds.), First Nations Education in Canada (pp.101-112). Vancouver, British Columbia.

Foster, J.B., Holleman, H, & Clark, B. (2019, July 1) Imperialism in the Anthropocene. *Monthly Review*. Retrieved from: https://monthlyreview.org/2019/07/01/imperialism-in-the-anthropocene/

Gilbert, E. (2012). The militarization of climate change. *ACME: An International E-Journal for Critical Geographies*, *11*(1), 1-14.

Gomez-Barris, M. (2019). The colonial Anthropocene: Damage, remapping, and resurgent resources. *Antipode Foundation.* Available at: https://antipodefoundation.org/2019/03/19/the-colonial-anthropocene/

Hickel. J. (2019). The limits of clean energy. *Foreign Policy.* Retrieved from: https://foreignpolicy.com/2019/09/06/the-path-to-clean-energy-will-be-very-dirty-climate-change-renewables/

Hickel, J. (2019). The contradiction of the sustainable development goals: Growth versus ecology on a finite planet. *Sustainable Development*.

Hove, H. (2004). Critiquing sustainable development: a meaningful way of mediating the development impasse? *Undercurrent*, *1*(1), 48-54.

Morris, K. (2017). Decolonizing solidarity: cultivating relationships of discomfort. *Settler Colonial Studies*, *7*(4), 456-473.

Misiaszek, G. W. (2020). Countering post-truths through ecopedagogical literacies: Teaching to critically read ‘development’ and ‘sustainable development’*. Educational Philosophy and Theory*, 52(7), 747-758.

Oreskes, N., Oppenheimer, M., & Jamieson, D. (2019). Scientists have been underestimating the pace of climate change. *Scientific American.* Retrieved from: https://blogs.scientificamerican.com/observations/scientists-have-been-underestimating-the-pace-of-climate-change/

Santos, B. D. S. (2007). Beyond abyssal thinking: From global lines to ecologies of knowledges. *Binghamton University Review*, *30*(1), 45-89.

Shotwell, A. (2016). *Against purity: Living ethically in compromised times*. University of Minnesota Press.

Silva, D. F.D. (2014). Toward a Black Feminist Poethics: The quest(ion) of Blackness toward the End of the World. *The Black Scholar*, *44*(2), 81-97.

Silva, D. (2016), On Difference without Separability. Jochen Volz and Júlia Rebouças (Eds.) Incerteza Viva/ Living Uncertainty: 32ª Bienal de São Paulo, exhibition catalogue (57-65). São Paulo: Fundação Bienal de São Paulo.

Simpson, L. (2019). Indigenous knowledge has been warning us about climate change for centuries. *Pacific Standard.* Available at: https://psmag.com/ideas/indigenous-knowledge-has-been-warning-us-about-climate-change-for-centuries

Spratt, D., & Dunlop, I. (2018). *What lies beneath: the understatement of existential climate risk.*Breakthrough (National Centre for Climate Restoration). Available at: <https://climateextremes.org.au/wp-content/uploads/2018/08/What-Lies-Beneath-V3-LR-Blank5b15d.pdf>

Spivak, G. C. (1999). A critique of postcolonial reason: Toward a history of the vanishing present. Cambridge: Harvard University Press.

Spivak, G. C. (2004). Righting wrongs. The South Atlantic Quarterly, 103(2-3), 523-581.

Spivak, G.C. (2012). An aesthetic education in the era of globalization. Cambridge: Harvard University Press.

UNESCO (2002). Retrieved from: [https://unesdoc.unesco.org/ark:/48223/pf0000127100](https://unesdoc.unesco.org/ark%3A/48223/pf0000127100)

Ward, J. D., Sutton, P. C., Werner, A. D., Costanza, R., Mohr, S. H., & Simmons, C. T. (2016). Is decoupling GDP growth from environmental impact possible?. *PloS one*, *11*(10), e0164733.

Whyte, K. (2018). Indigeneity in geoengineering discourses: Some considerations. *Ethics, Policy & Environment*, *21*(3), 289-307.

Whyte, K. (2019). Too Indigenous climate justice: Ecological and relational tipping points. *WIREs Climate Change.* 1-7.

Yellowhead Institute (2019). “Decolonizing” clean energy policy in Canada? Retrieved from:

<https://yellowheadinstitute.org/2019/09/26/decolonizing-clean-energy-policy-in-canada/>