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ECOLOGY OF ENCOUNTERS: THE LOGIC OF COMPOSTING AS AN EDUCATIONAL RESPONSE TO ENVIRONMENTAL COLLAPSE

Ecología de encuentros: la lógica del compostaje como respuesta educativa al colapso ambiental

Sharon TODD
Maynooth University, Ireland.
Sharon.Todd@mu.ie
<https://orcid.org/0000-0001-8134-9260>

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ABSTRACT

The article examines the interconnectedness of human, non-human, and environmental relations within the posthumanist discourse amid the ecological crisis. It reminisces about an environmental awakening during the 1970s due to the energy crisis, chemical pollution, and the nascent field of environmental studies, setting a backdrop for the exploration of how current education can tackle ecological, environmental, and climate challenges.

It critically engages with posthumanist thought, advocating for a shift from human-centric to more inclusive relationality that encompasses the non-human and

the environment. Drawing on Donna Haraway's notion of "compostist" versus "post-humanist," the article argues for an embodied, entangled relationality responsive to living in a damaged world, critiquing humanist traditions for contributing to ecological crises through prioritizing humans over other life forms.

At its core, the article proposes an "ecology of encounters" as an educational framework, emphasizing the generative potential of encounters extending beyond human interactions to include the more-than-human. It suggests education can cultivate interconnectedness and mutual transformation, challenging assumptions of human separateness and superiority.

The text explores theoretical perspectives like new materialism, actor-network theory, and critical animal studies, advocating for educational practices attuned to complex, dynamic life relations. By likening education to composting, it posits that education can transform, enabling new subjectivities and relationalities for navigating environmental breakdown.

In summary, the article calls for reimagining education in response to the ecological crisis. By adopting a compost relationality recognizing all life forms' interconnectedness, it contends that education is pivotal in fostering relationships and understandings vital for addressing post-climate change era challenges, necessitating a radical reevaluation of the human-nature divide and a commitment to transformative educational practices.

Keywords: posthumanism; environmental crisis; compost relationality; educational transformation; human-nonhuman interconnectedness; ecological awareness; sympoiesis.

RESUMEN

Este artículo analiza la interconexión de las relaciones humanas, no humanas y ambientales dentro del discurso poshumanista en mitad de la crisis ecológica. Rememora el despertar ambiental de los años setenta debido a la crisis energética, la contaminación química y el incipiente campo de los estudios ambientales, creando un telón de fondo para explorar cómo la educación actual puede abordar los retos ecológicos, ambientales y climáticos.

Se compromete de forma crítica con el pensamiento poshumanista al mismo tiempo que aboga por cambiar de una relacionalidad centrada en el ser humano a otra más inclusiva que abarque lo no humano y el medioambiente. Siguiendo la línea de la noción de Donna Haraway de "compostista" frente a "poshumanista", el artículo aboga por una relacionalidad encarnada y enredada que responde a las exigencias de un mundo dañado, criticando las tradiciones humanistas por contribuir a las crisis ecológicas al dar prioridad a los humanos sobre otras formas de vida.

En esencia, el artículo propone una "ecología del encuentro" como marco educativo, y hace hincapié en el potencial generativo del encuentro que se extiende más allá de las interacciones humanas para incluir lo más que humano. Sugiere que la educación puede cultivar la interconexión y la transformación mutua, desafiando los supuestos de separación y superioridad humanas.

El texto analiza perspectivas teóricas como el nuevo materialismo, la teoría del actor-red y los estudios críticos sobre animales y, para ello, defiende prácticas educativas que van en sintonía con las complejas y dinámicas relaciones vitales. Al comparar la educación con el compostaje, plantea que la educación es capaz de transformar, de forma que las nuevas subjetividades y relacionalidades pueden navegar por la ruptura ambiental.

En resumen, el artículo aboga por reimaginar la educación como respuesta a la crisis ecológica. Al adoptar una relacionalidad del compost que reconoce la interconexión de todas las formas de vida, sostiene que la educación es fundamental para fomentar las relaciones y los entendimientos vitales y abordar así los retos de la era poscambio climático, lo que requiere una reevaluación radical de la división humano-naturaleza y un compromiso con las prácticas educativas transformadoras.

Palabras clave: poshumanismo; crisis ambiental; relacionalidad del compost; transformación educativa; interconexión humano-no humano; conciencia ecológica; simpoiesis.

we are all compost, not posthuman.
(Donna Haraway 2016, p. 101)

1. A REFLECTION BY WAY OF INTRODUCTION

As I write this, news has just broken that we have reached a tipping point in the Atlantic Ocean which will have devastating consequences for how human and more than human others live in Europe as the mediating influence of the Gulf Stream dissipates. Some scientists are predicting that due to the speed of change, adaptation to these new conditions will not be fully possible for us and other species. As in many other places all over the planet where land has disappeared into the sea, where soil has eroded, where bio-diversity has been lost and where human and more than human life has perished, this question of adaptation ushers in a set of concerns that get to the heart of what we are facing in the present flow of environmental collapse. No longer in an anticipatory state of what the future may bring, as if we are in a “before” time prior to the real effects of climate change that are coming, we are instead *in the present* part of a new environmental regime where life in what Bruno Latour (2018) refers to as the Critical Zone is irreparably different than it was in my childhood 50 years ago. As some have declared we are in fact living in a post climate change era (Vance, 2022). There is no question that we are now inhabitants of a different planet, even if some of us pretend not to be.

In the 70s, growing up in Montréal in the midst of the energy crisis, the ecological devastation wrought by chemicals and pesticides, and the heavily polluted air and water that existed for many of us around the globe, secondary schools offered

the first environment studies courses. This was truly revolutionary at the time. I remember reading Rachel Carson's *Silent Spring* at the age of 14, participating in street and school yard clean ups, coming to terms with how big corporations were poisoning air and water, and waking up to the practice of recycling. At the time, those experiences shifted the borders of how I understood myself in relation to my immediate environment but it was an understanding that ebbed and flowed throughout my life, sometimes becoming central, at others easily sliding into the background of career, family, and other interests.

I raise this here for two contrasting reasons. On the one hand, there was clearly a transformative moment that moved me to think about myself differently. Even as a inward-looking teenager I experienced the power that ideas, practices, and books can have on who I thought could be and the concerns I developed. To this day I remain committed to a conception of education that is not about "schooling" (Säfström, 2023) but is about being able to lead and live a life well with others. On the other hand, and especially in light of other experiences in my life, I remained tethered to a view of myself which was related *to* the natural world but was definitely not *of* it. As part of a white settler and urban working class upbringing in Canada, that preposition "to" signalled the limits of understanding, both of self and of world. Looking back, this made it easier for me to slip into conventional and familiar (and dominant) ways of being and living that left unchallenged cultural assumptions about what relations are and which ones count as important. Thus, while we can say that education did indeed transpire, we could as well say that it did little to challenge dominant modes of relationality which continued to position "me" (the subject) as an individual connected to but also separate from so-called "nature" – and the creatures, plants, land, air and water that are couched in that one word¹. Thus my question here in this paper is how might an educational response to current life in times of profound ecological, environmental and climate breakdown take seriously a redrawing of those boundaries of subject and "nature" and begin to conceive of – and indeed imagine – relationality itself differently?

2. A POSTHUMAN OR COMPOST RESPONSE

It is with this question in mind that I turn to some thinkers who, while they may be loosely gathered under the umbrella term posthuman, do not necessarily always sit easily within it. Indeed, the category of the "posthuman" takes in a wide array of (sometimes incompatible) commitments: from an emphasis on the technology that troubles the border of what is human (AI, distributive cognition, cyborgs)

¹ Bruno Latour (2017) claims that the very term "nature" (particularly in relation to what is human or cultural) indeed indicates how deeply we as humans are separated from it.

(Dixon and Cassidy, 1998) to the field of critical animal studies that disturbs human supremacy (MacCormack, 2014), from Actor Network Theory (Latour, 2007) that challenges an idea of agency as being solely human to new materialism (Coole and Frost, 2010) and object oriented ontology (Harman, 2018) that focuses on the power of things. In turning to thinkers that seek to displace the human as the centre from which all forms of relationality emerge, my own position remains cautious about what the label offers and what it leaves out. I find myself at times resisting this label of the posthuman even as I work within it, particularly since as a term it has been both critiqued for its elision of Black (Jackson, 2015) and Indigenous (Todd, 2016) forms of relationality and traditions of thought. Moreover, in doing so, it potentially reinscribes what Jackson (2015) refers to as the very “Eurocentric transcendentalism” (p. 215) it seeks to disrupt, particularly when it refuses to engage critically in the very messy, violent, and all too human forms of modernity/coloniality (Machado de Oliveira, 2021), as if they can be made to disappear through some conceptual sleight of hand. Rather, the sensibility I draw on here is more informed by the playfulness reflected in Donna Haraway’s move to talk about herself as a “compostist” (2016, p. 4) rather than a posthumanist. Instead of seeking to move “beyond” the human, which is suggested by the “post”, compost allows a different kind of directionality: the gesture of “beyond” is replaced by the move “toward” the sensible and tangible aspects of being a creature right here and now on Earth. Moreover, compost indicates a transformation of elements as they come into contact with one another – including both human and nonhuman others. Just as the pile of organic waste becomes fertiliser, compost suggests a view that all living creatures are co-created with other creatures in acts of mutual transformation. Composting is a fertile, rejuvenating process, and is fruitful for thinking about the kind of ideas that can help inform an *educational* response to the current environment breakdown, as I explore further below. Thus the position I take here is more concerned with challenging ideas of human exceptionality, anthropocentrism, coloniality and extractive sensibilities – all of which are based on assumptions of human separateness and a denial of our interconnection in the present – and less concerned with mobilising ideas around abstract techno-human futures, or ideas that leave unchallenged the differential ways environmental breakdown affects humans, particularly indigenous communities and those from the Global South (as though those – and other – humans don’t matter anymore in some imagined “posthuman” era). Thus, this paper is inspired as much by the critiques of the limitations of posthuman thought as it is by the decentring of anthropocentric and humanist arrogance.

My task is to think along with ideas that can inform a specifically educational agenda that is concerned with living in the present and the acute challenges that brings to our sense of relationality. In particular, in focusing on the concrete bodily aspects of relationality my aim is to offer a view of education that sees it as a generative process of creation, rather than as a vehicle of transmission.

Expanding upon previous work on educational encounters (Todd, 2023), this paper outlines the importance of thinking of this relationality as not something that occurs between two existing entities, but is something that enables the emergence of those entities themselves – both living and non-living existents which each of us encounters and becomes entangled with. A process that Lynn Margulis (1998) and Haraway (2017) after her calls “sympoiesis”. For me, this speaks of the specifically bodily dimensions of subject formation at the same time as it also speaks to the cosmological aspects of seeing one’s own subjectivity (as human, as animal, as a consortium of bacteria and microbes) as part of a web of relationality. In order to explore this more explicitly this paper focuses on developing the idea of “ecology of encounters” and suggests how this ecology can be seen to be specifically educational.

3. EDUCATIONAL ENCOUNTERS AND THE PROBLEM OF RELATIONALITY

There is no shortage of scholarship about the relational aspects of education, some seeing these as basic communicative relations between teachers and students (Bingham and Sidorkin, 2004)) others as interpersonal (Noddings, 2013); while still others, drawing on Deleuze, Barad, and new materialist frameworks (Semetsky and Masny, 2013) put mutual agency and the intra-active dimensions of educational life to the fore of their work. What the wide variety of these works reveal is that there is no settlement about what constitutes “relation” to say nothing of what constitutes an educational one within the field of education itself.

What this unsettlement has opened up, in my view, is a space for interrogating the multidimensional nature of relations – that they are not simply functions of two entities meeting – even if that meeting results in something changing for one or both of those entities, such as we might find in what I loosely refer to here as “intersubjective” views of education that are rooted in humanist conceptions of relationality. I am thinking here of relational views of the ethics of care (Noddings 2013), the idea of *bildung* (Horlacher, 2015), and liberal conceptions of education (Alexander, 2015). Such views are based on an understanding that “I” come to the encounter with another as a “subject” even if that encounter is to ultimately lead to some form of inter/change between us. For instance a teacher meets a student in an encounter that mutually recognises each one’s subjecthood and the kind of relations that open up between them are thought to be communicative, interpersonal, and/or interactive. On the face of it, this view is based on making education a more humane, connected and social enterprise. Importantly, such a view has been key in countering the all too prevalent forms of “strong instrumentalism” (Todd, 2022) in education that merely see the objective of teaching as fulfilling predefined curricular goals which are often narrowly depicted in terms of skills and cognitive outcomes. Thus there is something many of us resonate with in this human-centred

relationality in its attempt to redress an oft-perceived *inhumanity* that takes place within many systems of education.

While recognising that this view holds some power in the face of students feeling distanced or alienated from school life, where care, kindness, and openness do indeed go a long way in making life more liveable and joyful, I wish to bring some critical questions to bear on this human-centred view of relationality as being the only way of thinking relationality itself, primarily because it emerges out of a humanistic tradition that carries with it commitments that we in education should be wary of in this time of crisis, particularly regarding what kind of relationality and encounters it both limits and makes possible.

First is the critique that humanist commitments have emerged from a broad tradition of modernist thought that has largely promoted a unitary subject – that is one who is self-contained, whose borders of humanness are firmly set not only in and against other human beings but in and against other life forms (Braidotti, 2019). A human subject on this view is one whose mode of relationality is primarily deemed by the preposition “to” since the subject is conceived as an entity that comes prior to the actual encounter it has with others. On this account, each subject is a distinct and separate unit and while each might engage in relation, it is more one of transaction across the borders of one’s body than it is immersion in an experience co-generated by the relation itself. As Val Plumwood (1993) notes, this sense of unity of an ego that is simply located within a bodily container is firmly established within western thought, creating modes of separating mind and body that map onto culture/nature and human/nature distinctions. As she notes, this way of conceiving the subject through its separateness has been at the root of the current ecological crisis in the first place.

Secondly, the humanist subject is one based on exceptionalism where even in an intersubjective view, key elements of our relational environment are disregarded as either unimportant or at the very least not as significant to our sense of ourselves *as* human. Thus an *intersubjective* view limits itself to precisely that – the subjective – with “subjecthood” granted solely to (some) human beings (and not to trees, plants, rocks, animals and birds as in indigenous and animist knowledge systems). Here, the value of encounters resides solely within the sphere of the human. For instance love, care, respect and compassion are deemed worthy to the extent to which they frame relations *among* other human beings and are not part of a wider environmental context. Moreover, there is a distancing of the human from nature in this state of exceptionalism. This is not to say that there are no aspects to the human species that might be distinct from others, but it is the way this distinctness plays into a heightened sense of value and worth at the expense of other forms of life that is at stake.

Third, is the way the humanist subject has enacted forms of exclusion in its naming of certain characteristics deemed to be “natural” for humans. In this, it is

not only tied to the above mentioned exceptionalist stance vis à vis more than human others, but has also been central in the formation of practices of exclusion in the name of modernity/coloniality and the implicit ways this has figured to gender, racialise and colonise human others based on perceived deviations from its ideal of rational, Eurocentric, civilised “man”. As Machado de Oliveira (2021) writes:

These colonial frames are inevitably grounded on exceptionalism (seeing certain groups as exceptional or extraordinary to elevate their worth), exaltedness (seeking the validation of this group’s greatness and contributions to progress in order to justify their merit and authority), and emancipation (the expansion of modern/ colonial entitlements as a form of reward or goal of struggle). (p. 164)

From this point of view, encounters between subjects are seen to be more or less “appropriate”, more or less in line with conventional, dominant and accepted modes of being. Intersubjective relations are therefore caught up within given social and political landscapes that are culturally scripted and coded but which are nonetheless seen to be “incidental” to the relation itself. In this sense, there is often an apolitical understanding of these relations due to the qualities of subjecthood being decontextualised. For instance, we have seen through residential school systems for indigenous peoples in countries such as Canada, US, Australia (and lesser known ones in Sweden, Denmark and Norway) the extreme consequences of this way of thinking. Thus the appeal to “humanity” or even to “intersubjectivity” within a humanist frame is also bound to real-life practices of violent exclusion in its name.

My aim in discussing these critiques here is to expose how our seemingly innocent desire to become more “human” through promoting intersubjective relations in education carries with it a way of thinking and being that is difficult to defend, particularly if education is to offer a meaningful response to the planetary situation we are facing. Importantly, Rosi Braidotti’s call that posthumanism should not be concerned with erasing the human, but finding new modes of becoming that allow us to relate to each other differently resonates particularly well here. Braidotti (2019) argues in her critique of humanism that the point is not to do away with the subject altogether but to consider what it might mean to reconsider the subject “within an eco-philosophy of multiple belongings, as a relational subject constituted in and by multiplicity, that is to say a subject that works across differences and is also internally differentiated, but still grounded and accountable” (p. 49). Thus the subject is a composite of these complex relations which resist co-option into predefined, universalistic frames of the human. For her, the subject is “materialist and vitalist, embodied and embedded, firmly located somewhere” (p. 51). Yet, it is a locatedness that can recognize itself as

such without presuming this to be determining the possibilities of becoming. For example, unlike Masschelein and Simons (2013) who embrace the idea that students “suspend” their social positionings, family experiences, and forms of racial, gendered, and ethnic belonging in order to *be* students, free from social forms of determinism, Braidotti’s view would suggest an education that is firmly rooted in place and time, without that place or time overdetermining a student’s capacities, interests, meanings, or decisions. An education that is not “of place” or that does not take the emplacement of students (and teachers) into account makes little sense on this view.² As subjects “constituted in and by multiplicity” both student and teachers do not so much *enter* encounters with each other or other elements in their environment as they *emerge* through them. That is, the relation itself is a co-generative space as opposed to being a transactional vector between two. In this light we might say that teachers and students only become teachers and students through the encounters set up within schools and classrooms. This emergence, as I explore below, means that the kind of encounters important for education in this time of crisis are ones that set the conditions for new forms of becoming to emerge – ones that can break with the very aspects of human-centredness and exceptionalism that have led us to this point in the first place.

4. EDUCATIONAL ENCOUNTERS AS *SYMPOIESIS* AND COMPOST

Taking this view of relationality further into education means exploring two interrelated questions: If our subjectivity is one that emerges out of relation, what do encounters then consist of? And what is particularly educational about them?

Encounters are often seen to be sites of meeting difference (Wilson, 2017) – another human being, an object such as a book or a work of art. But if those encounters are going to be something that allow for the emergence of subjectivity beyond humanist forms of the unitary, exceptionalist and exclusionary subject, as discussed above, then there needs to be some porosity, openness, and fluidity in that encounter. In other words, encounters are not stable points of contact, but are flows of “intensity” (Massumi, 2015) that go back, forth and around at least two bodies. As Brian Massumi suggests: “The subject...emerges from a field of conditions which are not that subject yet, which is just coming into into itself... Before the subject there is an in-mixing, a field of budding relation too crowded and heterogeneous to call intersubjective” (p. 52). There is both a spatial and temporal anticipation to the subject in its emergence through encounters, which the ideas of “sympoiesis” and “compost” speak to directly – ideas that are especially pertinent for how we live life with other planetary beings.

² See my extended critique suspension in Todd (2023, pp. 34-42).

Haraway (2017) proposes that “staying with trouble” is a way of facing our interrelations with other species and forms of life in the present. That is, it is not a flight from the inextricability of our connection to other species and earthly necessities such as water and air, particularly in this time of crisis, but a dwelling in the midst of the complexity of those relations. For Haraway, “making kin” with other living beings is a form of corporeal relationality that allows us to be moved, changed and enmeshed in ways that are not about achieving some “ideal” (of love, care, or compassion) toward others, but about getting down into the compost heap, which is messy and smelly as well as being transformative. She writes,

staying with the trouble requires making oddkin; that is, we require each other in unexpected collaborations and combinations, in hot compost piles. We become-with each other or not at all. That kind of material semiotics is always situated, someplace and not noplacé, entangled and worldly. (Haraway 2016, p. 4)

This compost view of relations suggests that there is a basic materiality to our existence of becoming-with, an enactment of transformation rooted in bodies and place. And yet, as Zalloua (2021) points out, this radical insistence on immanence as a counter to the transcendent subject of humanism, risks laying claim to a posthuman ontology that shares with humanism an insistence the certainty of (a posthuman) subjectivity itself. Instead, he notes, “while being is indeed all there is... being itself in never simply one; its future is undetermined” (p. 19).

This resonates, to my mind, with Haraway’s persistence with the figure of a compost pile, since what happens in it is not only immanent, but simultaneously transcends its components into creating new forms of life. As I read Haraway the aim is not to postulate a posthuman subject (indeed this would be antithetical to her project), but to imagine the terms on which new becomings for subjects are possible. Thus compost relations do not lead toward fulfilling some ideal of what humans ought to become, such as we often find in humanist appeals to education, but toward unpredictable and plural manifestations of becoming-with human and more than human others.

Indeed, the scaffolding for her understanding of composting draws directly on her engagement with Lynn Margulis’s (1998) work on symbiogenesis, which revolutionised the way evolution has been conceived, from species-directed adaptability to collaboration between a range of living beings coming together to form new entities. Haraway (2017) writes, “every living thing has emerged and persevered (or not) bathed and swaddled in bacteria and archaea. Truly nothing is sterile; and that reality is a terrific danger, basic fact of life, and critter-making opportunity” (loc 3512). This process of sympoiesis, as its name implies, is a generative way to think about our entanglement with other species in “diverse intra-active relatings”

(loc 3439). What this means on Haraway's terms is profound for thinking about subjectivity since who we are in this biological sense is neither unitary nor individual, but consists in an assemblage of living creatures that come together to form "me" – a "me" that is continually undergoing transformation as "I" encounter others in living life. Human bodies are not indivisible but are composed/composted out of myriad organisms, creating entities that can properly be referred to as "holobionts" (or "entire beings"). Such fusing together involves viewing the world and humans within it not as stable entities; instead, "sympoiesis is a word proper to complex, dynamic, responsive, situated, historical systems" (loc 3432). In this sense, a singular human body is in effect a dynamic consortium as opposed to being an individual, in its common sense meaning.³ Not simply relational in the intersubjective sense, the view of relationality here is intimate, constitutive and creative, and always rooted in specific times and places.

But is it so easy to move from this biological view of encounters and relationality to subjectivity and education? I think there is something here to be cautious about in not falling into yet another determinism where the subject is merely a "product" of its biology, something which feminists have understood all too well. I see what Haraway (and others) offer is less a deterministic view, however, and more a heuristic one as a way of loosening the brutal hold of the rationale, self-determined subject that has pitted itself in and against "nature" and for which our systems of education have much to answer for. It brings life (or *Zoe* in Braidotti's [2019] sense of the life force that is beyond *Bios*), into the picture as an ongoing generative force that propels the continual forging of new entities. It is thus not only a biological subject that Haraway is concerned with, but the forms of becoming-with that can re-refuse our ties with the "critters" that constitute our very "human" life. There is, as I see it, something of the political at play here, both in the sense that our relations occur in places and times that are historical and specific and in the sense that we can mobilise the figure of the compost to create new entities that are not seen merely to be in relation *to* the environment, but are profoundly *of* the environment itself.

I suggest there is specific politics of composting to consider here, since our encounters with others are always embodied and situated, "entangled and worldly" to use Haraway's phrasing, and as such are embedded not only in contexts conducive to flourishing but in contexts of modernity/coloniality, where traces of the human exceptionalist, exclusionary and unitary subject are also present. The compost pile is never built on entirely new waste, but always on what is already

³ Gilbert et al's (2012) paper on the biological significance of symbiosis is subtitled 'We Have Never Been Individuals'.

there, mixed with the soil, microbes, insects that come to make fertile ground, just as the legacies of racism, sexism and colonialism are part of our current relations in the present.

Composting, as Machado de Oliveira (2021) argues, is therefore a necessary part of an educational gesture that takes seriously the politics of relationality needed for “hospicing modernity”. She writes: “Generative disenchantment and disillusionment with modernity’s modes of relationship are indispensable aspects of hospicing modernity, processing its teachings, and composting its waste. This creates new, fertile soil for other possibilities of existence to emerge” (p. 37). For Machado de Oliveira, “decluttering” beliefs and values that serve a master who has never been viable (e.g., desires of consumption, supremacy, and efficiency projected onto the natural world as well as colonised others) involves seeing ourselves as part of the loss of modernity, existentially speaking. The “world as we know it” (and not the world per se) is coming to an end. To live well in such times means engaging in practices through which we can face the “older violence” of separation from the natural world while leaving room for us to imagine and become in ways that gesture toward more responsible futures. But this can only happen in the present by engaging in what she refers to as “depth education” – an education that seeks to uncover the ways each of us as a subject is both formed by and can transform in turn the stories, affects, values, and logics of modernity. Depth education, she writes,

is an orientation toward activating capacities and dispositions that can enable us to hold space for difficult and painful things, and to sense, relate, and imagine otherwise as we face the end of modernity or the world as we know it. (p. 43)

Hence Machado de Oliveira sees that sensory and imaginary processes (beyond cognition and intellectual work) are necessary to creating an educational response up to the task of facing environmental breakdown and all the social, political, ethical and existential realities that it brings into relief. Depth education

entails a political practice of composting and decluttering that can help us to disinvest from harm, interrupt modern addictions, and transition out of the violence and unsustainability of a dying modernity.... We need to start from the assumption that no one has the answers to our current predicament, that we cannot not be together, and that each one of us is insufficient and indispensable to what needs to be done. (p. 185)

In this work, the existential and the planetary are interconnected through the embodied subject, one that has the capacity to bear its own and collective implication in harm, and understanding that a part of how we have learned to see the human and more than human world needs to become part of the compost out of

which something new can emerge – without knowing what will emerge in any final endpoint.

Taking Haraway and Machado de Oliveira's emphasis on compost as a relational way of framing subjectivity highlights the creative power of life and the unlearning (or compost breakdown) that needs to happen in order for new forms of subjectivity to emerge. The urgency with which they both write, as well as the inventive turns of phrase and neologisms that pepper their work, perform what it is they set out to do - to create language and images, metaphors and figures to become-with in ways that are life sustaining for all on the planet.

5. ECOLOGY OF ENCOUNTERS AS EDUCATION

In conclusion, I wish to highlight how compost relationality enables us to conceive more fully the complexity of relations, beyond the interhuman/intersubjective ones that so dominate education. I wish to return to the story I began this paper with: that changes to the European climate are happening so quickly that animal and plant life will have difficulties to adapt. However, the story is not really one of "adaptation" in the evolutionary sense but more about our capacity to dynamically face the situation for what it is – a call to find new ways of existing that avoid the extreme harms caused by the separation of humans from the "natural" environment. It seems quite clear to me that any educational response to this situation (and respond is what it can do – it cannot solve it) needs to enact practices that offer something quite different than the usual humanist ones in terms of relationality. Indigenous scholar Carl Mika (2017) offers, I think, an important insight in seeing the educational in the very movement of co-creation, of composting: "that things in the world constitute other things is a form of education deserving to be thought in its own right" (p. 6). Education here *is* the transformative encounter of co-constitution, of becoming-with.

Viewing the process of composting as a figure not only of relationality but also of education allows us to imagine our schools, classrooms and other educational settings in ways that take seriously the kinds of encounters teachers curate for students. Open-ended and fluid, educational encounters are on this view committed to providing alternatives to the merely rational, cognitive skills and development that currently prevails. Compost relationality supports opportunities for students and teachers alike to recognise and work with their own complicity and implication in systems that have been destructive to themselves and other forms of life on this planet while also creating conditions for something new to be thought, imagined and lived.

Importantly, an ecology of encounters acknowledges that no one is the "product" of any singular encounter or that a certain type of relation will

determine a specific outcome. So even in calls to rehumanise education, one type of relation (e.g., care, love, compassion) will never be enough to alter what is fundamentally estranging humans (adults, youth and children) from the larger environment of which they are a part. The multiple belongings and web of relationality through which (human) beings are constituted means that we are each affected by modernity/coloniality in (albeit different) ways that have racialised, sexualised, and colonised people, land and more than human life. Thus the view of encounters in education needs to be expansive, understanding that complexity is not the enemy of education but its very condition. That is, to see that education's purpose is to enable forms of becoming a subject, means seeing how that becoming is entangled with a multiplicity of elements which can never be addressed through a singular appeal to affect or intellect. Instead, the web of relations through which our encounters with a host of others happen is something to be taken seriously as a proliferating movement of possibilities – where change in one relation can produce change in another. As Tyson Yunkaporta (2019) observes, creatures do not live in a “closed system” where each element is assigned fixed value within a hierarchy but an “open system” that is itself living, changing, moving and adapting where multiple patterns of relationality are possible between diverse elements, and where change in one element brings about change in others.

Thus an ecology of encounters, building on ideas of sympoiesis and composting relations, opens up what education in this time of post climate change living can look like. The question whether and to what extent this can be brought into large scale system change time will only tell. But if there ever were a time to act – to compost – it is now. I end with a short offering by Machado de Oliveira (2021):

The saying goes that in a flood situation, it is only when the water reaches people's hips that it becomes possible for them to swim. Before that, with the water at our ankles or knees, it is only possible to walk or to wade. In other words, we might only be able to learn to swim—that is, to exist differently—once we have no other choice. (p. 38)

REFERENCES

- Alexander, H. A. (2015). *Reimagining liberal education: affiliation and inquiry in democratic schooling*. Bloomsbury Academic.
- Bingham, C., & Sidorkin, A. (2004). *No education without relation*. Peter Lang Publishers.
- Braidotti, R. (2019). *Posthuman knowledge*. Kindle edition.
- Coole, D., & Frost, S. (2010). *New materialism: Ontology, agency, and politics*. Duke University Press. <https://doi.org/10.2307/j.ctv11cw2wk>

- Dixon, J. B., & Cassidy, E. (1998). *Virtual futures; Cyberotics, technology and posthuman pragmatism*. Routledge.
- Gilbert, S. F., Sapp, J., & Tauber, A. I. (2012). A symbiotic view of life: We have never been individuals. *The Quarterly Review of Biology*, 87(4), 325-341. <https://doi.org/10.1086/668166>
- Haraway, D. (2016). *Staying with the trouble: Making kin in the chthulucene*. Duke University Press. <https://doi.org/10.2307/j.ctv11cw25q>
- Haraway, D. (2017). Symbiogenesis, sympoiesis, and art science activisms for staying with the trouble. In A. Lowenhaupt Tsing, N. Bubandt, E. Gan & H. A. Swanson (Eds.), *Arts of living on a damaged planet: Ghosts and monsters of the Anthropocene* (loc 3418-3859). Kindle edition.
- Harman, G. (2018). *Object-oriented ontology: A new theory of everything*. Pelican. <https://doi.org/10.1093/acrefore/9780190201098.013.997>
- Horlacher, R. (2015). *The Educated Subject and the German Concept of Bildung: A Comparative Cultural History*. Routledge. <https://doi.org/10.4324/9781315814667>
- Jackson, Z. I. (2015). Outer worlds: The persistence of race in movement “beyond the human.” *GLQ: A Journal of Lesbian and Gay Studies*, 21(2-3), 2015-2018.
- Latour, B. (2007). *Reassembling the social: An introduction to Actor Network Theory*. Oxford University Press.
- Latour, B. (2017). *Facing Gaia: Eight Lectures on the New Climatic Regime*. Polity Press.
- Latour, B. (2018). *Down to Earth: Politics in the new climatic regime*. Polity.
- MacCormack, P. (Ed.). (2014). *The animal catalyst: Towards abuman theory*. Bloomsbury.
- Machado de Oliveira, V. (2021). *Hospicing modernity: Facing humanity's wrongs and the implications for social activism*. North Atlantic Books.
- Margulis, L. (1998). *Symbiotic planet*. Basic Books.
- Masschelein, J., & Simons, M. (2013). *In defence of the school. A public issue*. E-ducation, Culture & Society Publishers.
- Massumi, B. (2015). *Politics of Affect*. Polity.
- Mika, C. (2017). *Indigenous education and the metaphysics of presence: A worlded philosophy*. Routledge. Kindle edition. <https://doi.org/10.4324/9781315727547>
- Noddings, N. (2013). *Caring: A relational approach to ethics and moral education*. 2nd Edition. University of California Press.
- Plumwood, V. (1993). *Feminism and the mastery of nature*. Routledge.
- Säfström, C. A. (2023). *Education for everyday life: A Sophistical practice of teaching*. Springer. <https://doi.org/10.1007/978-981-99-4109-4>
- Semetsky, I., & Masny, D. (Eds.) (2013). *Deleuze and Education*. University of Edinburgh Press. <https://doi.org/10.1515/9780748669455>
- Todd, S. (2022). Reframing Education Beyond the Bounds of Strong Instrumentalism: Educational Practices, Sensory Experience, and Relational Aesthetics. *Educational Theory*, 72(3), 333-347. <https://doi.org/10.1111/edth.12534>
- Todd, S. (2023). *The touch of the present: Educational encounters, aesthetics and the politics of the senses*. SUNY Press. <https://doi.org/10.1515/9781438492193>

- Todd, Z. (2016). Relationships. Society for Cultural Anthropology. <https://culanth.org/fieldsights/relationships>
- Vance, G. (2022) *Nomads: How climate migration will reshape our world*. Flatiron Press.
- Wilson, H. F. (2017). On Geography and Encounter: Bodies, Borders, and Difference. *Progress in Human Geography*, 4(4), 451-471. <https://doi.org/10.1177/0309132516645958>
- Yunkaporta, T. (2019). *Sand Talk: How Indigenous thinking can save the world*. Text Publishing.
- Zalloua, Z. A. (2021). *Being posthuman: Ontologies of the future*. Bloomsbury. <https://doi.org/10.5040/9781350151123>