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# (A Journey) towards an Affirmative Politics for Environmental Education

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## Abstract

Environmental education (EE) can never be separated from politics and the relationship between the two is complex, has changed over time, and is understood and experienced differently. The field's relationship with politics is both internal (its own politics) and external (political forces outside the field) to it. In this article, I narrate my story of engaging with EE, politics and the relationship between the two. I refer to my story as an autcartophilosophy because it has been significantly influenced by my engagement with philosophy and by my movement in space and over time. My most recent engagement has been with scholars' theorising in the posthuman condition, and I suggest that this present condition requires a different politics, an affirmative politics. I generate seven propositions towards an affirmative politics for EE: making kin, transversal subjectivity, new alliances, dis/identification, embracing slowness, ethical and intellectual stamina; experimental energy.

**Keywords:** Affirmative politics; autcartophilosophy; environmental education; ethics; posthuman condition

## Introduction

Environmental education (EE) like any other field cannot be divorced from politics. Politics imbues social life and EE as a material-social construction would palpably have its own internal politics and be shaped by political forces on multi-scalar levels: global, regional, national and local. I say material-social construction because fields such as EE are not only discursively produced, and not only the outcome of the activities of human communities. Haraway (2015) reminds us that since time immemorial humans have been terraforming the planet in intra-actions with abiotic processes and biotic species. It follows that in all activities humans are involved with/in they do not act alone. Moreover, agency does not reside with humans only but with all of life, as evident in Barad's (2007) notion of "agential realism".

Notwithstanding the afore mentioned, in natureculture<sup>1</sup> assemblages, humans have played a dominant role in altering the planet to the extent that it now is on the threshold of ecological catastrophe. This dominance by humans made scientists Crutzen and Stoemer (2000) posit a new geological epoch, "The Anthropocene", which they initially stated began in the late eighteenth century following the invention of the steam engine. This invention marked the transition to the use of fossil fuels, which are non-renewable, and whose combustion has given rise to different forms of pollution also resulting in the warming of the atmosphere. However, according to Morton (2014), Crutzen rescinded his initial dating of 1784 as the beginning of the Anthropocene

<sup>1</sup>Writing nature and culture together as natureculture is to emphasis the inseparability of the two.

and instead views 1945 as the date that marks the huge data spike in human involvement in Earth systems called “Great Acceleration.” However, the term Anthropocene has been contested. For example, in his book *Capitalism in the Web of Life*, Jason Moore (2015) argued that the term Anthropocene needed to be replaced by Capitalocene. Moore (2015) averred that the rise of Capitalism in the period after 1450 resulted in a shift in human’s relationship with non-human nature that was more significant than the ascendancy of agriculture and later the steam engine. Whichever one of the two “cenes” we wish to use, it is indisputable that humans (not acting alone) have wreaked havoc on the planet leaving it in a precarious state. Present times are thus troubled times, but Haraway (2015) argues that we should stay with the trouble and proposes the concept Chthulucene, to think the past/present/future, which involves making kin not babies. She writes that Chthulucene, “entangles myriad temporalities and spacialities and myriad intra-active entities-in-assemblages — including the more-than-human, other-than-human, inhuman and human-as-humus” (Haraway, 2015, p.60). Making kin with all of life requires an affirmative politics, that I shall argue for later in this article.

In the Western world broad consciousness of destruction of the planet arose as recently as the post-World War period and EE as a field became established in the 1970s, following the publication of the first issue of *Journal of Environmental Education* (JEE), in which EE was formally defined by Bill Stapp and his colleagues at the University of Michigan (Stapp, 1969). Over the past five decades the field has been influenced by international conventions such as the meeting in Tbilisi in 1976 where many nations met and produced the Tbilisi declaration (UNEP, 1977), which defined and captured principles of EE. Since the 1990s international conventions have focused strongly on sustainability, most notably the Rio Earth Summit of 1991 making environmental educationists such as Tilbury (1995) argue that EE should be redirected towards sustainability. Furthermore, the United Nations declared the decade 2005–2014 as the Decade of Education for Sustainable Development (DESD), mandating member countries to implement Education for Sustainable Development (EFSD). More recently, member nations of the United Nations adopted seventeen sustainable development goals (SDGs), one of which is quality education.

Not only has EE been influenced by global politics (including international conventions such as the ones mentioned) but also by environmental politics and the politics of knowledge. With respect to environmental politics, in the early 1980s we saw the beginning of the environmental justice movement (inspired by the civil rights movement of the 1960s in the USA) that was concerned with the inequitable distribution of the burdens of environmental destruction — that people of colour and others on the periphery of society carry a disproportionate burden of environmental problems and risks. Environmental justice is concerned with ensuring that environmental protections and benefits are enjoyed by all peoples/communities irrespective of designation. For more detail on the history of the environmental justice movement, see NRDC (2023).

Moreover, how knowledge is produced in the field has been a contested terrain. In the first two decades, publications in JEE focused largely on positivist-quantitative studies, based of behaviourists approaches to knowledge acquisition. The array of methodologies available to researchers since the hegemony of positivism was challenged at a theoretical level, what Lather (1991) described as the great ferment in the human and social sciences, influenced the way in which knowledge came to be produced in EE. A seminal moment was a symposium held at the annual conference of the North American Association for Environmental Education (NAAEE) where alternative paradigms in/for the field were considered in relation to epistemological, ontological, axiological and methodological assumptions, opening a myriad of possibilities for doing EE research and by so doing potentially enriching knowledge produced in the field. The deliberations of the symposium were published in an edited volume that included positivist research, interpretive research, critical research, narrative inquiry and research that blurred traditional boundaries such as critical phenomenology (for detail, see Mrazek, 1993). Over the past three decades we have seen new journals of the field being established, which resulted a greater

diversity of publications both in terms of genre and methodological approaches and broadened what counted as legitimate knowledge in/of the field.

None of us is isolated from politics, however, growing up in apartheid South Africa, meant that politics was not subtle or hidden, it confronted you daily. Therefore, in the next section of the article I shall narrate my story of engaging in EE vis-à-vis politics. My story will “end” with meeting posthumanism that will lead into the section of the article on affirmative politics. Braidotti (2019) points out that posthumanism is both a historical marker of the present condition (the convergence of posthumanism and post-anthropocentrism) and a theoretical figuration. More detail will be discussed later in the article. I shall argue that in the posthuman condition we need a different politics, which is an affirmative one. But first a brief word on methodology.

### Methodological approach

Telling one’s life’s story is known as autobiography, which has also become a recognised method of performing scholarly work. Autobiography is an arts-based rather than science-based method of doing research and because the self is not isolated but embedded in culture, the term autoethnography has more recently become used. In a recent article I co-authored (Du Preez & Le Grange, 2024) we used the term “autobiophilosophy” to describe the entanglement of autobiography and philosophy, which we deemed apposite when one’s life has been percolated with philosophical musings. As a school learner I loved science and that is why I enrolled for a BSc degree after completing my schooling. I enjoyed studying science but did not find the practical side of science such as laboratory work particularly interesting. I was not sure what it was about science that interested me until years later I read Haraway (2000) where she refers to science as interpretative framework. The proverbial penny dropped, and I realised that it was the way of thinking/reasoning in science — the philosophy of science — that interested me. Philosophy has continued to fascinate me and therefore necessarily is intertwined with my autobiography.

In this article I shall revise this term slightly and refer to “autocartophilosophy” to incorporate a spatial dimension because our lives do not only change in/over time, but we move in space and become attached to places. Barad (2007) argued that time, space and matter are intertwined, which she terms, “spacetime mattering.” Autocartophilosophy also signifies more than embeddedness in culture, but in all of life. Although we are not isolated selves, each one of us has (have had) unique experiences based on the historical time we find ourselves in, the places we inhabit (or inhabits us), our educational encounters and all designations that society may have ascribed to us or that we have interpellated. Therefore, there is place for us to tell our stories, so the “auto” in autocartophilosophy remains relevant.

### An autocartophilosophy<sup>2</sup>

I lived through three decades of legal apartheid, which meant that politics has had a profound influence on my life. Growing up as a child in the 1960s and 1970s brought about an awareness that South Africans were treated differently based on apartheid racial categories: your racial designation determined where you could live, who you could associate with, what places you could visit, whether you had the franchise or not, and so forth. Due to apartheid restrictions and the fact that I grew up in an urban environment, meant that I did not have significant childhood experiences in “natural” environments that Significant Life Experiences (SLE) scholars such as Chawla (2001) and Tanner (1980) claim are likely to result in one becoming involved in EE as an adult. I wrote in my PhD thesis:

<sup>2</sup>My autocartophilosophy narrates some of my engagement (with others) in relation to politics and environment and politics and environmental education. It therefore does not provide a comprehensive account of work done in the field of environmental education vis-à-vis politics.

I am not involved with/in environmental education because of significant childhood experiences in “outdoors and more or less natural” environments (Tanner, 1998: 366). I have lived in an urban environment all my life. Except for a three-week school vacation in a rural area and the few drives our family took into the “country[side]” during my childhood, I spent very little time in “natural” environments. Further, as a black<sup>3</sup> South African, for most of my life I was denied access to many pristine environments; beaches were segregated, and many nature reserves and hiking trails were reserved for those who were classified “white” under apartheid. I grew up associating natural environments and conservation issues with the world of “white” South Africans. I certainly did not regard South Africa’s beautiful natural environment and its resources as the heritage of all South Africans (Le Grange, 2001, p. 4).

My political education started when I was in high school, during a time of protracted school boycotts and continued during my undergraduate studies at university. During boycott times at the school I attended, the Student Representative Council (SRC) organised awareness programmes during school hours; we learned freedom songs, learned to debate political issues of the day, learned that as students we have agency to bring about change (for more detail, see Le Grange, 2001). I also studied at one of the most radical universities in South Africa, where class boycotts, protest marches and mass meetings were the order of the day. My political awareness deepened during my university years in the early to middle 1980s.

In parallel to my political awareness, my ecological awareness about the negative impact humans were having on the biophysical environment developed. This occurred through both studying biology and geography at high school and during first-degree studies in biological and environmental sciences. In my third year of study at university a strong emphasis was placed on ecology in both Geography and Botany courses which included many field trips aimed for us observe how human activity was encroaching on biophysical ecosystems and the importance of valuing South Africa’s indigenous flora and fauna bearing in mind that one of the world’s six floral kingdoms (The Cape Floristic region) is located within South Africa. However, during my school and undergraduate years I made no meaningful connections between my growing political and ecological awarenesses. Nevertheless, the seeds were sown for me to later integrate the two.

In the early 1990s I joined the Environmental Education Association of South Africa (EEASA), read its journal, newsletter and met colleagues working in the field. Through this development, and broader engagement with literature of the field I came to understand that environmental problems involve the erosion of the biophysical, but always with interacting political, economic and social dimensions (see Ekins, 1992, Janse van Rensburg, 1994). I also came to understand that environmental problems are inevitably also environmental issues and environmental risks. The former relates to contestation about the nature of and solutions to environmental problems because of competing interests in society that are economic and political (the two often intertwined). The latter relates to the dangers, often health risks associated with environmental problems and that the burden of such risks is unevenly distributed in society. An awareness of the political dimension of environmental problems increased my coefficient of transversality<sup>4</sup> in that I could invigorate lines of connection between environmental problems in South Africa and living conditions of different groups in South African society because of apartheid policies/politics. For

<sup>3</sup>I use the term “black” in the manner consistent with the Black Consciousness usage of the word, that is, as including *Africans, Indians* and *Coloureds* (Apartheid categorisations). “Black” in this context developed as an oppositional discourse which both refused to accept the apartheid categorisations and indicated the common oppression of *Africans, Indians* and *Coloureds*. I did my schooling in the decade of the 1970s, a period in South African history when discourses of Black Consciousness were taken up by many students. Even though the apartheid categorisations are seemingly being accepted by many in post-apartheid South Africa I am unable to do so.

<sup>4</sup>Coefficient of transversality’ is a term used by Felix Guattari (2001). It concerns the power one has, to think and see transversally. Guattari used the figuration of a horse with blinkers. As you incrementally remove the blinkers of the horse, you increase its coefficient of transversality.

example, I reported in my doctoral thesis that in the 1990s a region in South Africa had the highest incidences of respiratory related conditions among children (that also resulted in deaths) in the world because of poor living conditions of black families having to use wood and coal as sources of energy in their homes and living closest to industries and mines causing air pollution — a double blow suffered by such communities (Le Grange, 2001). My insights into environmental justice matters were also enhanced by benefitting from the work of the Environmental Justice Networking Forum (EJNF), which was established in South Africa in 1993 (Cock, 2004). Furthermore, my understanding of non-human nature and associated human relationships was deepened at the time through reading philosophy, both environmental philosophy (environmental ethics) (for example, Callicot, 1989; Holmes, 1994; Lovelock, 1979; Naess, 1989; Regan, 1983; Singer, 1975) and political philosophy, particularly theories of justice (for example, Barry, 1989; Rawls, 1971, 2001; Scanlon, 1976). In other words, I read philosophies that underpin what Fien (1993) referred to as “people to nature” relationships and “people to people” relationships.

In the middle 1990s, I left my job as schoolteacher on the Cape Flats<sup>5</sup> to pursue academic work and PhD studies at Stellenbosch University, which is in the town of Stellenbosch, approximately 50 km from central Cape Town. At Stellenbosch University I was introduced to a wider array of literature on EE, which was not available from the university library but found in the office of my colleague Danie Schreuder, who had worked in the field for some time and was part of an international network of scholars contributing to a young and growing field. The literature included a series of books/monographs published by Deakin University Press, some of which I also gained access to upon visiting Deakin University in the late 1990s. Through engagement with this literature, I was introduced to the three approaches to EE first introduced by Lucas (1972): education *about*, *in* and *for* the environment. These approaches were expanded and enriched philosophically by scholars of the field. According to Fien (1993), education *about* the environment emphasises knowledge about natural systems and processes; education *in* the environment emphasises learners’ experience in the environment as a means of developing their competencies and values clarification capacities; and education *for* the environment has an overtly critical agenda of values education, social change and transformation through action-based exploration and involvement in resolving environmental problems. The latter approach which has an overtly political approach to education became known as socially critical education *for* the environment.

Furthermore, the three approaches became aligned with paradigms guiding (environmental) education research (see Robottom & Hart, 1993). In their discussion on “paradigms and the ideology of EE research” the authors identified what they deemed to be the major contending paradigms in EE research: the positivist story of EE; the liberal/interpretivist story of EE (Robottom & Hart, 1993, p.18). Socially critical education for the environment and participatory action research had great appeal among South African EE researchers and was a strong focus of the research in SA in the 1990s (Le Grange, 2009), palpably because it resonated with the democratic impulse of the anti-apartheid struggle for justice and the need for social transformation in post-apartheid South Africa (SA). Socially critical education for the environment and action-oriented research inspired me personally and saw me returning to work with teachers on the Cape Flats during my PhD studies at Stellenbosch University. Moreover, in 2012, I was part of a study that focused on challenges and opportunities for achieving a more sustainable Stellenbosch by 2030. I collaborated with two colleagues on appraising the education challenges and opportunities for Stellenbosch. Given that the town’s spatial morphology still reflected that of apartheid and the gross education inequalities existed, we argued that the approach, socially critical education for the environment was apposite. We wrote:

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<sup>5</sup>The Cape Flats is an expansive, low-lying area situated southeast of the central business district of Cape Town and it is where the poorest communities of Cape Town are located.

... if education in Stellenbosch does not undergo radical transformation, then education institutions will continue to contribute to the currently unsustainable trajectory of the town. The path to a sustainable Stellenbosch is a socially critical one ... (Le Grange, Reddy, & Beets, 2012)

What I learned from engaging with the different approaches to EE is that although these approaches may be ideological loaded terms they are not mutually exclusive, and the approaches could be pragmatically drawn on to address contextually relevant environmental problems that manifest locally.

Through ongoing engagement with literature, I came to understand the approach, education *for* the environment, as a contested terrain in the field. This draws attention to the internal politics of the field, and more broadly to the politics of knowledge (production)<sup>6</sup>. Quite early on Gough (1987) was suspicious of the term, arguing that the slogan “education for the environment” was both patronising and anthropocentric. Concerning the latter he wrote, “who are we to say what is ‘good for’ the environment and which environment is ‘*the* environment’, anyway?” (p.50, italics in the original). Gough (1987) argued for learning with environments which implied a reciprocal and anti-Newtonian approach to EE. I would suggest that Gough’s ideas might be viewed as an early posthuman take on EE that suggested intra-relationality<sup>7</sup> rather than separate-external entities acting upon each other. Gough (1987) also questioned the privileging of epistemology in the field, and I infer that he would have gone along with Barad’s (2007) neologism, “ethico-onto-epistemology”, which came years later. Those who favoured the approach education *for* the environment/education *for* sustainability argued that we do not have a choice but to follow this approach because of a rapidly deteriorating planet and growing inequality in the world — they argued that it is our moral obligation to educate for sustainability (see Fien, 1993; Huckle, 1999). Authors who advocated for this approach were philosophically inspired by Critical Theory and neo-Marxist thought<sup>8</sup>. However, those arguing from liberal orientation to education pointed out that educating for anything external to education is instrumentalist and anti-educational. (for detail see Jickling & Spork, 1998; Jickling, 1997)

Since the popularisation of sustainability in the 1980s and 1990s, we witnessed education *for* sustainability or education for sustainability development become the dominant approach advocated by national governments and supranational organisations such as the United Nations (UN) and UNESCO. In fact, the UN declared the years 2005 to 2014 as the Decade of Education for Sustainable Development (DESD), requiring member nations to promote and implement this approach to education. Education for the environment, a grassroots approach aimed at addressing local environmental problems became hijacked by the UN and made part of a global discourse and a universal approach that member nations of the UN were expected to promote and implement. I have written about the problematic instrumentalism of this approach and the multiple difficulties with term sustainable development (Le Grange, 2016, 2017).

As my interest in philosophy grew, I attended philosophy of education conferences and met many colleagues working in the discipline. On his visit to Stellenbosch University, philosopher of education Nicholas Burbules introduced me to Nancy Fraser’s work on needs, which was the trigger for my work on the politics of needs and sustainability education published in the *International Handbook of Research on Environmental Education* (Le Grange, 2013b). In this work I focused on the popular definition of sustainability, “development which meets the needs of

<sup>6</sup>There is no space for me to discuss the political history of environmental education and the politics of school knowledge. See Greenhall (1987) for an account of the political history of environmental education in Australia and for the history of environmental education in South Africa, see Irwin and Lotz-Sisitka (2014). For the politics of the school curriculum in South Africa vis-à-vis environmental education, see Chisholm (2005) and Le Grange (2013a).

<sup>7</sup>This was before Barad (2007) coined the term ‘intra-action’.

<sup>8</sup>See John Huckle’s biography for detail on the political and philosophical influences on his work and his early concerns about the politics of school knowledge (<https://john.huckle.org.uk/biography/>) (Accessed on 03 September 2024).

the present without compromising the ability of future generations to meet their own needs” (WCED, 1987). I argued that the focus on needs in this popular definition might be understood in the context of the emergence of needs discourses in late capitalist societies, a shift from the marginalisation of needs, and viewing it as antithetical to politics. However, Fraser (1993) raises a critical question as to whether the emergence of needs is an extension of the political sphere or the colonisation of that sphere by new modes of power and social control? Foucault (1977, p.26) reminded us that “need is also a political instrument, meticulously prepared, calculated and used.” Fraser’s (1993) inquiry focused on needs discourses rather than need as the distribution of satisfactions. She mapped three kinds of needs discourses in late capitalist societies: oppositional discourses; reprivatisation discourses; and expert needs discourses. What I did was to map these discourses in relation to sustainability: oppositional discourses evident in a rhizome of anti-globalisation protests by social movements of all kinds; reprivatisation discourses as neoliberal politics gains ascendancy and certain needs enclaved as private matters; expert discourses are evident in the burgeoning of academic publications on sustainability (education), new journals produced, etc. (Le Grange, 2013b). Concerning the politics of need vis-à-vis sustainability education I wrote:

So we can’t simply invoke sustainable development in education programs without opening up its complexity and its political dimension to students. The complexity of the construct “need” (“needs”), including its production in different political discourses, as well as the anthropocentric nature of the term “sustainable development” raises questions for consideration within the field of environmental education (Le Grange, 2013b, p.130).

Following on from my work in EE that had more critical (as in Critical Theory) and neo-marxist leanings I started reading what is referred in the Anglo-Saxon world as French poststructuralism. Less attracted to linguistic poststructuralism, I found the collaborative work of Gilles Deleuze and Felix Guattari particularly appealing because their view of philosophy makes it a transformative practice and therefore political. Deleuze & Guattari (1994, p.5) point out that the philosopher is the concept’s friend. By this they mean that philosophy is not only an activity that consists in “forming, inventing and fabricating concepts” but more rigorously, it is the discipline of creating concepts. For them, philosophy is also about putting concepts to work in new ways (Stagoll, 2005). Deleuze argues that western philosophy has tended to merely use concepts as abstractions for categorising phenomena — to express the essence of phenomena (Stagoll, 2005). For Deleuze and Guattari, a concept is not a label for naming things (objects or phenomena in the world). Rather, they are creations that bear testimony to the positive power of thinking as an event of life (Colebrook, 2002). In other words, philosophers create concepts to transform life — concepts do not represent life. Holland (2005) points out that for Deleuze the activity of concept creation is forced upon the philosopher rather than initiated by him/her. In other words, thought is not provoked by philosophical problems but by problems forced upon the philosopher by its real-world context. They wrote: ‘Philosophy does not consist of knowing and is not inspired by truth. Rather it is categories like Interesting, Remarkable, or Important that determine success or failure’ (Deleuze & Guattari, 1994, p.84). Inspired by Deleuzo-Guattarian concept creation I “recreated” the African value ubuntu<sup>9</sup> to become an environmental ethic (Le Grange, 2012) and also attuned to posthuman sensibilities (Le Grange, 2018) and also reimagined sustainability and sustainability education (see Le Grange, 2011, 2016, 2017).

More recently, I have engaged with literature on posthumanism and the range of theorising in/ of the posthuman condition in fields such as new materialism, speculative realism, object-oriented ontologies, non-representational theory and so forth. Posthuman theorising has received mixed

<sup>9</sup>Ubuntu means humanness and derives from an African aphorism, which loosely translates, ‘I am human because of others.’ In other words, my humanity is bound up with that of other humans.

responses from the EE with some asking what is new about it (see Rodrigues et al., 2020). I argue that the posthuman condition invites new theorising and a different politics that should receive attention in the field of EE. It is with this in mind that I turn to a discussion on an affirmative politics for EE.

### Towards an affirmative politics for environmental education

Braidotti (2019) points out the posthuman condition is a convergence of posthumanism and post-anthropocentrism. For her the former is concerned with critiquing the ideal of ‘human’ produced by Enlightenment Humanism, as ‘Man’ the measure of all things. The latter is concerned with challenging human exceptionalism in the interest of fostering species equity. Moreover, Braidotti (2019) argues that the posthuman is not only a historical marker for the present condition but a theoretical figuration — a navigational apparatus to canvass the material and discursive expressions of modifications associated with developments of advanced technologies and climate change. She argues that we<sup>10</sup> are currently positioned between the Fourth Industrial Revolution, which involves the convergence of a range of technologies, and the Sixth Extinction – “between the algorithmic devil and the acidified deep blue sea” (Braidotti, 2019, p.2). And there already is talk about Industry 5.0, an era in which artificial intelligence works alongside people to achieve the sustainable development goals (Adel, 2022).

Affirming the more/other-than-human world is a comfortable proposition for environmental educators/educationists. It is at the heart of what the fields is about — it is what we stand for and do. However, affirming advanced technology might be less comfortable, particularly because advanced technology has become the handmaiden to capitalism. The upshot of this has been the morphing of capitalism at an accelerated pace into what Srnicek (2017) terms, “platform capitalism”<sup>11</sup>. Furthermore, advanced technologies are also displacing and/or killing (epistemicide) indigenous knowledges of the global south. And the acceleration of advanced technologies might exacerbate existing inequalities in the world, which already is at unprecedented levels. Nevertheless, we can’t turn back the clock and wish for a time when the world was smaller, less densely populated and technologically “less” sophisticated. In the posthuman condition we must navigate two parallel accelerations: environmental destruction; and capitalism with its attendant advanced technologies. Doing so will not be easy and will require a different politics. Braidotti (2019) avers that political is, “the communal process of composing transversal subjects committed to the actualisation of the virtual” (p.164), driven by the ethics of affirmation. And the latter is not a set of rules, policies, norms, guidelines, etc., but a force that contributes to enhancing life, to affirming becoming. I agree with Braidotti (2019) that in the posthuman condition despair is not a project, affirmation is. Against this background I state the following propositions towards an affirmative politics for EE.

### Making kin

Donna Haraway (2016) suggests that we must stay with the trouble and make kin in the Chthulucene<sup>12</sup>. By this she means that humans should cultivate enduring relationships with other species — that we should make kin with all refugees both human and non-human. In the posthuman condition environmental educators/researchers should additionally make kin with advanced technologies including AI-powered tools so that the term kin is expanded, and kinship

<sup>10</sup>‘We’ does not refer to humans only but to all of life.

<sup>11</sup>Srnicek (2017) identifies five types of platform-based businesses: advertising platforms (e.g. Google and Facebook), cloud platforms (e.g. Salesforce), industrial platforms (e.g. GE and Siemens), product platforms (e.g. Rolly Royce and Spotify) and lean platforms (e.g. Uber and Airbnb).

<sup>12</sup>Chthulucene is the term that Donna Haraway (2016) prefers to Anthropocene, which she argues more aptly describes the epoch we are living where humans are inextricably tied up with other species.



networks reimagined. The upshot would be what Braidotti (2019, p.169) terms, ‘zoe<sup>13</sup>/geo/techno relations’ that affirm rather than negates life. The negative effects of technology should be resisted but technology can be decoupled from capitalism and become part of assemblages that produce positive affects/effects. (Srnicek & Williams, 2013).

### **Transversal subjectivity**

EE researchers should recognise that they are not only embodied and embedded but also extended selves who in the posthuman condition should increase their coefficient of transversality to invigorate lines of connection with human, non-human and inhuman components to form assemblages that are affirming. This requires a sensibility that the self is embedded in messy networks that do not only include humans and other species but zoe/geo/techno relations. Such relations make possible new alliances, which is the next proposition.

### **New alliances**

The field of EE should form new alliances with disciplines that it has not engaged with before to invigorate new transdisciplinary trajectories. New alliances with, for example, decolonial scholars could be productive because the effects of coloniality<sup>14</sup> are not only epistemicide, linguicide and culturecide but also ecocide (Le Grange, 2023). New alliances should also be formed with anti-globalisation movements and new social movements to form what Parr (2009) has termed a sustainability culture that counteracts the hijacking of sustainability by governments, the military and the corporate world. The force of such alliances is the positive power of *potentia* that connects and affirms life. But in the posthuman condition, alliances are not only invigorated with humans but also with non-human (organic and inorganic) components. As Braidotti (2019, p. 164) writes:

... transversal alliance today involves non-human agents, technologically mediated elements, Earth-others (land, water, plants, animals) and non-human inorganic agents (plastic buckets, wires, software, algorithms, etc.). A posthuman ethical praxis involves the formation of a new alliance, a new people.

### **Dis/identification**

As critical posthuman thinkers, EE researchers dis-identify with dominant western theories, thinkers, and those who are powerful. Instead, they position themselves to those marginalised, the human and non-human refugees that Haraway (2016) says we must make kin with. Le Grange (2019) writes about the becoming-imperceptible of (environmental) education — the death of (environmental) education. By death he means jettisoning the alibis of utilitarianism and instrumentalism — the perpetual desire to know what comes next, what must be taught/learned next that characterise formal education in western(ised) societies. Ethical EE involves the ability to respond to what is immanently present.

### **Embracing slowness**

As we navigate the effects of accelerations in the posthuman condition EE researchers should embrace slowness in all dimensions of their lives, which importantly includes embracing slow scholarship. Braidotti (2019) points out that slowness involves decelerating the crazy speeds of cognitive capitalism in garnering joyful/affirmative relations through praxes that involve

<sup>13</sup>Zoe refers to the decentering of Anthropos; the placing of the human on an immanent plane with all of life.

<sup>14</sup>Coloniality is the legacy of colonialism, it depicts what has remained after the removal of colonial administrative rule.

reworking the negative affects/effects of present-day accelerations. Ulmer (2017) points out that slow scholarship does not mean being unproductive but being differently productive. For her, writing slow ontology is about learning to write differently and she describes experimenting with different modes of writing: writing *on* nature, writing *with* nature, writing *through* nature and writing *in* nature. We could replace Ulmer's "nature" with "environments" so that it also includes assemblages with advanced technologies — *zoe/geo/techno* relations.

### **Ethical and intellectual stamina**

Braidotti (2019) points out that in the present condition we are living in/through both democracy and theoretical fatigue are evident. Concerning the former we are seeing the erosion of democratic processes and systems resulting in the rise of populist leaders, citizens becoming less involved in civil society movements and many young people not voting in national and local elections. Decades ago, Guattari (2001) wrote that the domestication of self was due to the technological arm of world integrated capitalism, the mass media. Today, we can add that social media is a powerful force that is resulting in the domestication of self. Theory fatigue relates to anti-intellectualism in society broadly but also in the neoliberal university with its creeping managerialism and performativity regimes. The way out of the democracy/theory malaise is through garnering ethical and intellectual stamina. It is in new alliances that are affirmative that EE researchers can develop ethical and intellectual stamina.

### **Experimental energy**

In an indeterminate and complex world in which multiple accelerations need to be navigated EE researchers' mode of engagement should be experimentation. As Ansell-Pearson (2016, p. 28) so cogently puts it:

We do not know what affects we are capable of in advance, and this suggests that there is an empirical education in life, involving a 'long affair of experimentation, a lasting prudence' and a wisdom that implies constructing a plane of immanence. In terms of our becoming-ethical we can say that we do not know what a body can do: it is a mode of practical living and experimenting, as well as, of course, a furthering the active life, the life of affirmativity, for example, cultivating the active affects of generosity and joyfulness, as opposed to the passive and sad affects of hatred, fear and cruelty.

A life of experimentation is dependent on harnessing experimental energy, and it is in *zoe/geo/techno* relations, new alliances and new praxes, which are affirmative, that EE researchers can muster experimental energy.

### **Parting thought**

Each of us has a different story to tell of our engagement with politics, EE and how we see the relationship between the two. Our stories are of course never that of isolated selves because the self is always embodied and embedded whether constructed so or not. I have shared by story of my engagement with the field vis-à-vis politics and the philosophical insights that shaped my thinking at different moments of engagement with both EE and politics. My most recent philosophical engagement has been with theorising practices that are occurring in the posthuman condition.

The posthuman condition invites new understandings, sensibilities and a different politics, which presents new challenges for the field of EE. The seven propositions stated towards an affirmative ethics for EE are intended to open further discussion on what our response-ability (our

ability to respond) is in navigating the challenges of the posthuman condition — how we might stay with the trouble by affirming life and/in becoming ethical EE researchers.

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