

Background paper for the Futures of Education initiative

Learning to become *with* the world: Education for future survival

Common Worlds Research Collective¹

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Abstract

In the face of the multiple existential threats we have brought upon ourselves, this background paper calls for education to be reimagined and reconfigured around the future survival of the planet. To this end, we offer seven visionary declarations of what education could look like in 2050 and beyond. These declarations proceed from three premises. Firstly, human and planetary sustainability is one and the same thing. Secondly, any attempts to achieve sustainable futures that continue to separate humans off from the rest of the world are delusional and futile. And thirdly, education needs to play a pivotal role in radically reconfiguring our place and agency within this interdependent world. This requires a complete paradigm shift: from learning about the world in order to act upon it, to learning to become with the world around us. Our future survival depends on our capacity to make this shift.

Introduction: education for future survival

If our species does not survive the ecological crisis, it will probably be due to our failure to imagine and work out new ways to live with the earth... We will go onwards in a different mode of humanity, or not at all. (Plumwood, 2007: 1)

We live in a critical moment of epochal transition from the Holocene into the Anthropocene (or literally ‘The Age of Man’), in which human forces have fundamentally altered the planet’s geo/biospheric systems, triggering a cascade of ecological crises and threatening the future of life on Earth as we have known it, including that of our own species (Crutzen, 2002; Stefen et al., 2007). As our carbon emissions continue to overheat the planet, we face a climatic trajectory of intensifying floods, droughts, and fires (IPCC 2018). As we continue to clear forests, destroy habitats, and diminish biodiversity, we precipitate mass displacements and extinctions and create the conditions for ongoing, devastating zoonotic pandemics (Grandcolas & Justine, 2020). Without the will to redress the root causes of the Anthropocene, we are now suffering the tragic consequences. Like Plumwood (2007), we believe that first and foremost this is indicative of our failure to imagine alternative ways of living *with* the Earth.

Education is directly implicated in the crises of the Anthropocene and our failure to imagine alternatives. Despite efforts to promote education as key to achieving sustainable lives, schools and higher education systems continue to prioritise workforce supply for economic growth over environmental sustainability. The Cartesian dualisms that structure our curricula and pedagogies are instrumental in perpetuating the delusion that we are somehow separate from the world around us and can act upon it with impunity (Taylor & Pacini-Ketchabaw, 2019). The fact that the world has the highest number of “educated” people in its history and yet is the nearest to ecological breakdown is a stark reminder that ‘more of the same kind of education will only compound our problems’ (Orr, 2011, p. 238; see also Komatsu et al., 2020; Rappleye & Komatsu, 2020; Silova, 2020). In the face of the multiple existential threats we have brought upon ourselves, business as usual is no longer an option. It is time to step up to the challenge and fundamentally reconfigure the role of education and schooling in order to radically reimagine and relearn our place and agency in the world.

To this end, we offer *seven visionary declarations* of what education could look like in 2050 and beyond. These declarations are based on three premises. First, that human and planetary sustainability are one and the same

thing. We are an inseparable part of the ecosystems we have perilously destabilized and which now threaten life on Earth as we have known it. Second, that any attempts to achieve sustainable futures by continuing to separate humans off from the rest of the world are delusional and futile, even if the intentions are well meaning. And third, that education must play a pivotal role in radically reconfiguring the ways we think about our place and agency within this interdependent world, and therefore the ways we act. This requires a complete paradigm shift, from learning about the world in order to act upon it, to *learning to become with the world* around us. Our future survival depends on our capacity to make this shift.

Visionary declarations for education by 2050

- 1. By 2050, we have critically reassessed and reconfigured the relationship between education and humanism. We now retain the best aspect of education's previous humanist mission – to promote justice – but extend it beyond an exclusively human or social framework.**

Education's new remit is to promote *ecological justice* by teaching the arts of living respectfully and responsibly on a damaged planet (Tsing et al., 2017) and learning how to survive well together (Haraway, 2016). Along with this ecological reframing of justice, we have radically reassessed education's humanist knowledge traditions. Now wary of human-centric modes of thinking and acting, we actively resist the premise of human exceptionalism and refuse the perilous proposition of human dominion on Earth.

As the 21st century unfolded, it became increasingly clear that capitalist extraction, production, and consumption so closely associated with human 'progress and development' were not only unsustainable but had fundamentally destabilised Earth's geo-biospheric systems. Faith in education's key role to ensure 'sustainable development' (UNESCO, 2019) waned, and it became impossible to deny that humanist education had been co-opted by a myopic obsession with perpetual economic growth in the guise of human advancement. Humanist-inspired projects to achieve social justice, equality, and sustainability had been hijacked by economic development and productivity agendas.

When the UN's (2015) Sustainable Development Goals (SDGs) failed to be met by 2030, we were forced to admit that its foundational humanist epistemologies were incapable of addressing the cascading ecological crises threatening the future of life on Earth. Even more confronting, we had to acknowledge that by reiterating and perpetuating delusional human-centric and exceptionalist preoccupations, education had become part of the problem, not the solution (Silova et al., 2018; Komatsu et al., 2020). By 2050, we have finally discarded the Cartesian dualisms that structured the unswerving humanist belief that our supreme rationality and the exclusivity of our intentional agency set us apart from, and above, the rest of the living world (Plumwood, 1993). We have also debunked the associated belief that humans can endlessly act upon the rest of the world with impunity – either to exploit its resources or to 'improve' upon it at will. In short, we have undone the Euro-Western human-centric stranglehold on education.

To consolidate a more-than-human notion of justice and meet education's new charter of learning how to survive well together (Haraway, 2016), we have sought out ecologically attuned alternatives that acknowledge the collective agency and interdependence of all earthly beings, entities, and forces. We have taken on board the critiques of humanism's lacunae disseminated by Western scholars in response to the Anthropocene (e.g., Gibson et al., 2015; Haraway, 2016; Latour, 2018; Stengers, 2017), and abandoned the totalising Euro-Western epistemologies that propped up the 'one-world' framework (Law, 2015; Carney et al., 2012) that was driving neoliberal globalisation for much of the late 20th and early 21st centuries.

In looking ‘beyond the Western horizon’ (Silova et al., 2020), we have increasingly engaged with the ‘pluriversal’ frameworks (Escobar, 2018; Kothari et al., 2019; Mignolo, 2011) associated with the ‘epistemologies of the South’ (Santos, 2014, see also Connell 2007) and other non-Western thought traditions that presuppose that there are infinite human and more-than-human worlds within worlds, all of which are animate and radically interdependent. We have also acknowledged that there is much to be learned from Land-based Indigenous relational ontologies, not the least because Indigenous ways of knowing and being in reciprocal relationship with the Land and all its creatures provide an ancient blueprint for sustainable living (Turner, 2010; Rose, 1993, 2011a; LeGrange, 2018, Tallbear 2019).

Through learning and teaching the principles of pluriversality - including the multiplicity of ways of knowing and being, the wisdom of Indigenous ontologies, and the animacy of worlds beyond the human - we have expanded our notion of justice. As a result, the practice of education is now infinitely more inclusive.

2. By 2050, we have fully acknowledged that humans are embedded within ecosystems and that we are ecological, not just social, beings. We have dissolved the boundaries between the ‘natural’ and ‘social’ sciences, and all curricula and pedagogies are now firmly grounded in an ecological consciousness.

It took us a while to break with the delusion that we live and learn in autonomous human societies, which are somehow outside of the ‘natural’ ecological communities that we ‘study.’ It was hard to fully understand ourselves as *ecological insiders*. At first it was more of a halfway or partial recognition. In the early part of the 21st century, some were starting to heed the scientists’ warning that our dangerous levels of carbon emissions were triggering planetary-scaled ecosystems’ collapse that would ultimately threaten us (Ripple et al., 2020). But we still had an enduring faith in human ingenuity to ‘fix’ or at least ‘manage’ these problems – as if we still had a foot outside of these ecosystems. This was evidenced by decade-long debates that pivoted around whether we should prioritise human adaptation to or mitigation of disturbed and degraded environments. The reiteration of notions such as ecosystems ‘servicing’ human well-being (Millennium Ecosystem Assessment Program, 2005) exemplified how emerging understandings that healthy ecologies are essential for sustaining human life initially fell short of conveying that we are inseparable constituents of these same ecologies. It took some time to stop splitting ourselves off and to let go of the double delusion that ecosystems exist to serve and sustain us, and that we can ‘manage’ them to this end.

The continuing disciplinary divide between the social and the natural sciences remained a lingering obstacle to the recognition of our ecological being (Matthews, 1991) and to a fully integrated approach to unfolding ecological catastrophes. Despite the UN’s (2015) insistence that the three pillars of SDGs – economic, cultural and environmental – were all ‘interconnected,’ ‘indivisible’ and ‘balanced,’ they were still differentiated along disciplinary lines. Following the adoption of SDGs in 2015, the goals associated with increasing economic growth and achieving social equity were consistently prioritised over the environmental ones. Notably, as education was predominantly aligned with the social sciences, most educators focused on the human development goals, believing they were critical for redressing social inequities concentrated in the global south and among pockets of Indigenous and other marginalized peoples living in the global north. Environmental goals were primarily addressed through science and technology curricula, promoting techno-fixes and managerial stewardship as the ultimate solution.

But history revealed these to be false divisions and choices. By 2030, it was clear that the historical pattern of exploitation of colonized Lands and peoples by the overdeveloped global north was even more entrenched. Social inequity gaps had widened and environmental goals were far from met. Moreover, those in the global

south who had the smallest ecological footprint and were the least responsible for precipitating the accelerating ecological crises, were tragically the most adversely affected by them. Failure to meet the 2030 SDGs prompted a critical reassessment of the implicit dualisms that continued to thwart the achievement of not just interconnected but inextricably enmeshed human and environmental goals.

With the ultimate, harsh realisation that human fates are inextricably bound up with those of all other beings, elements, and forces on this living Earth, we finally came to accept that living and learning is a facet of ecological being (Taylor, 2020). Having dissolved the disciplinary boundaries between the 'natural' and the 'human' sciences, we now practice education with an overarching ecological consciousness.

3. By 2050, we have stopped using education as a vehicle for promulgating human exceptionalism. We are teaching that agency is relational, collectively distributed, and more-than-human.

Now that we have broken with the anthropocentric preoccupations of modern schooling, we no longer promote human exceptionalism and its baseline Cartesian logics of exclusive human rationality and intentional agency. In hindsight, we can see that it was these delusional logics that justified the hierarchical and exploitative 'man-over-nature' relations that resulted in the Anthropocene. We also recognise that modern education systematically perpetrated human exceptionalism, by positioning teachers and students as the agentic all-knowing subjects and the world 'out there' as the inert matter to be studied and known about. Because educators, like everyone else, were once well schooled in these human exceptionalist logics, it is still hard for us to accept that the world is not simply ours to study and act upon at will (Stengers, 2017). It is hard to escape the self-fulfilling logics of human exceptionalism - to resist the heroic impulse to fix the ecological crises we have caused, by coming up with smarter, bigger, and better 'humans-to-the-rescue' solutions (Taylor, 2019).

It has been helpful to remind ourselves that despite its systematic uptake within mainstream education, human exceptionalism and (neo)liberal individualism has never been universally embraced. It is an anathema to Indigenous and African cosmologies and sacred and ancient Land knowledges (Rose 1992 & 2011a; Styres, 2019; LeGrange, 2012 & 2018; Martin & Mirraoopa, 2003, Tallbear 2015), antithetical to a multiplicity of local knowledge systems and eco-activist movements in the South Americas (Viveiros de Castro, 2004; Escobar, 2018; Mignolo, 2011), and inconsistent with Asian philosophical traditions (Abe, 2014; Zhao, 2009; Sevilla, 2015 ; Komatsu & Rappleye, 2020).

The Cartesian bedrock of human exceptionalism has also had powerful internal critics. Ever since the late 20th century, a swathe of western philosophers and theorists, who came to be associated with the post-humanities, were starting to dispute hierarchies of being, with humans at the apex. They were replacing these hierarchies with flattened ontologies akin to 'assemblages', or 'networks', of multiple human and non-human actors with distributed agency (Deleuze & Guattari, 1987; Latour ,1993, 2004 & 2005). They took on the nature/culture 'Great Divide' (Latour, 1993) and blurred the categorical boundaries between humans, animals, and machines, giving us the hybrid notion of 'cyborgs' and 'naturecultures' (Haraway, 1985 & 1988). They exposed how the structuring dualisms that assert Man's 'mastery of nature' amount to no more than a disavowed dependency upon a subordinated other, whose agency is denied (Merchant, 1996; Plumwood, 1993 & 2002). They stressed the symbiogenesis of all life (Haraway, 2008a & 2008b) and the lively and agentic interactions between all kinds of matter (Bennett 2010; Barad 2007 & 2008; Alaimo & Hekman 2009). In short, they argued that agency is not something that is 'held' and 'exercised' exclusively by humans but emerges as an effect of constellating human and nonhuman relations and forces.

By the early 21st century, a deepening understanding of agency as collective, more-than-human, and relational made inroads into the academic research in the field of education (Bowers, 1995; Snaza & Weaver, 2015; Taylor & Hughes, 2016; Ringrose et al., 2018; LeGrange, 2018; Mitchell, 2018; Tuhiwai Smith et al., 2019; Waghid & Smeyers, 2012; Waghid 2014; Zhao, 2018; Takayama, 2020). However, these more-than-human reconceptualisations of agency were much slower to gain traction in education policy and the everyday practice of schooling. It was not until the effects of the Anthropocene really started to bite in the mid-2020s that we had to acknowledge that we needed to tap into the Earth's transformative powers because we could not do it alone. To this end, we began the enormous task of radically reconfiguring our curricula and pedagogies in accordance with more-than-human, collective, and relational notions of agency. Instead of relying on human ingenuity and technology as the ultimate 'fix' for environmental problems, we are now learning how to take our place as one of many actors, makers and shapers of life on Earth.

4. By 2050, we have discarded education's human development/al frameworks. Instead of championing individualism, we now foster collective dispositions and convivial, reparative human and more-than-human relations.

With the benefit of hindsight, we can now see that the human development/al frameworks that dominated education throughout the 20th and early 21st centuries were part of the much bigger imperialist project to 'modernise the world' in line with teleological Western notions of progress and development. We can clearly see that normative Western notions of 'advancement' were used as universalised standards against which the deficit notion of 'developing' individuals/cultures/nations was measured (Kothari et al., 2018).

Within education, development/al logics were originally fostered through the late 19th and early 20th century child-study movement that called for widespread scientific observation of children. Developmental psychology became the dominant discourse and produced a universalized understanding of 'the child' and a normative set of child development stages. Within this totalising discourse, 'the individual child' was seen as moving through these stages, separate and abstracted from the world.

By the late 20th century, child-centred learning had become a revered concept of developmentalism, and it persisted well into the early 21st century. Early years and primary curricula began with the needs and interests of the child and responded to her/his unique characteristics. Pedagogies reinforced and supported the individual child learner in becoming autonomous, self-regulating, rational, and agentic. As an ideology, child- or learner-centred pedagogy was seductive, because it drew upon seemingly 'progressive' Western values, such as democracy and individual freedom (Cannella, 1997; Komatsu et al., forthcoming 2021). For decades, it was routinely promoted by international development agencies as a universal 'best practice,' which displaced and sometimes eliminated alternative education practices in various contexts.

As the effects of the Anthropocene started to hit home in the 2020s, it became obvious that education was not preparing young learners for the precarious ecological futures they face, and that something radically different to the outdated individualistic 20th century human developmental frameworks was needed. ESD had also been discredited by this stage, as it was obvious that all 'development' agendas had been thoroughly appropriated by carboniferous capitalist economic interests and concerns.

It was students themselves who pointed this out. From 2018 onwards, a growing school student movement brought millions across the world to the streets, proclaiming unending economic growth and development as an ecological catastrophe, and demanding governments and national leaders take urgent action on climate change. They could see that education had to fundamentally change in order to be part of the solution, not

part of the problem. They called for a radically different kind of education for their future survival. Educators started listening and mobilized in support (Calling Educators to Action on Climate Crisis, 2020).

At the students' insistence, we have now permanently delinked education from the twin logics of infinite economic growth and human development and re-sutured it to the logics of ecological survival. In recognition that human and more-than-human fates and futures are indistinguishable in the Anthropocene (Taylor & Pacini-Ketchabaw 2018), we have reconfigured education around the principles of interdependence and interconnectedness that make everyone and everything a part of the Earth's ecological community.

The individualistic culture of the self is now a thing of the past. Collective dispositions are the order of the day (Taylor, 2013). Our educational practices are now characterised by an openness to the 'Other' – whether other humans, species, Land, ancestors, or cyborgs and machines. These open relations constitute a convivial and reparative stance that '... welcomes surprise, entertains hope, makes connections, tolerates coexistence, and offers care for the new' (Gibson-Graham, 2006, p. 8).

5. By 2050, we have recognized that we live and learn in a world. Our pedagogies no longer position the world 'out-there' as the object we are learning about. Learning to become with the world is a situated practice and a more-than-human pedagogical collaboration.

The new charter of teaching and learning the arts of living responsibly and respectfully on a damaged Earth has required us to challenge education's most fundamental binary – the 'subject/object' divide. Throughout the 20th century and into the early 21st century, this subject/object divide remained unchallenged. It was taken for granted that the business of education was to teach its (rational) human subjects about the world (out there). The world had always been the object of study, and humans had always been the knowing subjects, learning about this exteriorised world. In the new charter, it is simply not possible for educators to continue to draw upon and reproduce this subject/object divide. We now proceed with an ecological consciousness that firmly repositions all humans as ecological insiders, always already embedded within ecosystems.

Some of the earliest pedagogical initiatives to move beyond the established practice of learning *about* the world, from a distance, came from the field of early childhood education. Educators from the Common Worlds Research Collective (2020) took advantage of the fact that preschool-aged children, who are not yet fully enculturated into the subject/object divides of modern Western education and its humanist premises, are less likely to separate themselves off from the rest of the world. By focusing on the unfolding pedagogical relations between young children and more-than-human others in their common worlds, these educators started to experiment with possibilities for collaborative and collective more-than-human learning *with* the world (Taylor & Pacini-Ketchabaw, 2018; Pacini-Ketchabaw et al., 2016; Blaise et al., 2017; Taylor, 2019).

Subsequently, educators in a wide range of sectors (comparative education, artificial intelligence, higher education, and others) also grappled with the task of reframing learning beyond the subject/object divide. By focusing on worldly relations and encounters as inherently pedagogical, acknowledging that it is not only humans that teach and learn, and by mobilising human curiosity to learn from what is already going on in the world, we have finally managed to make the shift from only ever learning *about* the world to learning *with* it.

This also means we have adopted 'situated' pedagogical practices, which refuse 'the promise of transcendence' (Haraway, 1988) that is embedded in only ever learning *about*. Through our situated pedagogies we insist on 'staying with the trouble' (Haraway, 2018) of learning *with* our real damaged Earth and all of our cohabitants. We now speak from and think with partial worldly perspectives, embodied visions, and with an awareness of

the non-innocence of our positions (Haraway, 1988). Learning *with* the world is allowing us to live well with(in) the contradictions and dangers we face, and to respond to our troubling and violent inheritances, such as anthropogenic mass displacements and extinctions of many kinds. Educators and students alike are now aware that we all act from somewhere. We know we are accountable to those who are with us and to the places we cohabit.

Perhaps most importantly, we have not lost hope. The proposition of situated pedagogies has become an insistence on learning to make ‘a better account of the world’ (Haraway, 1988). We have come a long way from the ‘one-world’ world view (Law 2015) that presumptuously advanced a universalised Western notion of ‘education for all’, towards response(ably) promoting situated learning as a means to co-construct worlds that are more liveable for all. We are enthusiastically undertaking the collective task of learning *with* those in our common worlds, as a mode of remaking these worlds together.

6. By 2050, we have re-tasked education with a cosmopolitical remit. This has moved it far beyond the universalist and anthropocentric claims of humanist, humanitarian, and human rights perspectives.

Educators now fully embrace the principles of *cosmopolitics* and acknowledge *pluriversity*, or the co-existence of many different worlds. We no longer adhere to the widely accepted humanist ‘UNESCO lingua franca’, dating back to the establishment of the United Nations in 1945, but also including its most recent iteration of the ‘new humanism’. This humanitarian charter not only failed to achieve world peace, but also revealed that the ‘humanistic definition of an emancipated human’ was simply insufficient to define all inhabitants of the planet (Latour, 2004, p. 457). Instead of speaking of a single world revealed through many perspectives, *cosmopolitical* educational approaches acknowledge both the multiplicity of interconnected worlds and our entanglements in multispecies ecologies that include different knowledges, practices, and technologies. In the term cosmopolitical, *cosmos* ‘refers to the unknown constituted by these multiple, divergent worlds, and to the articulations of which they could eventually be capable, as opposed to the temptation of a peace intended to be final, ecumenical’ (Stengers, 2005, p. 995).

Drawing on the principles of cosmopolitics enabled us to adopt a much broader definition of what it means ‘to belong’ – one that embraces everyone and everything both living and nonliving – and therefore encompasses more-than-human worlds. It gave us the opportunity to learn and practice ‘articulations’ among multiple, divergent worlds. This not only interrupted the principle of universality, but enabled us to get on with the task of collectively assembling common worlds through networks of human and more-than-human actors (Latour, 2005). Noticing, learning with, and paying care(ful) attention became key for cosmopolitical modes of education, because common worlds do not pre-exist their articulations but need to be ‘slowly composed’ in the presence of others, both human and more than human (Latour, 2004, p. 457). We now see the practice of cosmopolitical education as integral to the processes of ‘becoming worldly,’ ‘worlding with,’ or ‘becoming with’ (Haraway, 2003, 2004 & 2008b).

Even though our new kind of education is deeply relational, it does not rely on an innocent notion of relationality. Instead, it attends the ethics and politics of living with radically uneven and incommensurable difference, recognizing our allies in ‘transgressed boundaries’ and ‘potent and taboo fusions’ across gender, race, class, species, machines, and matter (Haraway, 1985, p. 52). Such learning requires a type of transversal thinking that takes ‘issue with human exceptionalism while being accountable for the role we play in the differential constitution and differential positioning of the human among other creatures’ (Barad, 2007, p. 136). As we learned from (and with) our fusions with animals, matter, and machines over several decades, we simultaneously unlearned how ‘to be Man, the embodiment of Western logos’ (Haraway, 1985, p. 52). This

transformed the education space to become a critical part of ‘a pluriverse in the making’ (Stengers, 2011, p. 61), where everyone and everything can now contribute to the process of articulating or making the pluriverse.

By 2050, the practice of *cosmopolitics* has permeated education, culture, and politics to such an extent that United Nations members are no longer satisfied to be ‘just humans ... as the only acceptable member of the Club’ (Latour, 2004, p. 257). In a General Assembly that took place on September 20, 2050, several sessions were dedicated to a thorough review of the limitations of UN’s logics of human-centeredness and the urgency of philosophical and organizational changes necessary to overcome the UN’s parochial allegiance to cosmopolitanism. Following intense deliberations, it was unanimously decided to replace ‘Nations’ with the ‘Naturescultures’ in the name of the UN, signaling a full embrace of the principles of *cosmopolitics* as a practice – and an art – of living and dying as well as is possible together on a damaged planet.

7. By 2050, the goal of education for future survival has led us to prioritise an ethics of collective recuperation on this damaged Earth.

We have now completely reimagined and reconfigured education around the future survival of our planet. We have resituated the practice of education in common worlds because we no longer differentiate between the social and the environmental, and no longer frame pedagogy as an exclusively human activity. Motivated by a commitment to seeking intergenerational and multispecies justice on this damaged Earth (Taylor & Pacini-Ketchabaw 2018), we have shifted the goal of education from a humanitarian charter to one of ecological justice. Consistent with all of these shifts, we have adopted a completely new mode of ethics that is collective, more-than-human and recuperative. Our new visions and ethics render the old notions of education for sustainable development (ESD) completely redundant.

By the early 2020s, it was widely acknowledged that ESD strategies had failed. The collapse of the Paris Agreement on carbon emission reductions, persistent student-led global uprisings for climate action, and the ICS official declaration of the Anthropocene (Subramanian, 2019) made it untenable to keep denying the obvious - that any form of carboniferous economic development thwarts the attainment of environmental sustainability targets. We could see that even education programs that promoted sustainability without coupling it with development still rehearsed the nature/culture divide. Those based around the principle of environmental stewardship still separated humans off from the environment as its ‘caretakers’ and ‘protectors’ (Taylor, 2017). Similarly, it was clear that the presumption that we could ultimately ‘save’ the planet through educating a green generation and using human ingenuity to find technological solutions was also based on the delusion of human exceptionalism. Such programs and visions did not meet the key challenge of the times – to attain and sustain a firmly grounded ecological imagination, one in which we reposition ourselves fully within the environment, and stay there (Gibson et al., 2015).

By letting go of the grandiose fantasies of humans saving the environment, we have now been able to focus on the much more modest goal of collaboratively attending to the mutual flourishing of all – human and more than human – and on recuperating our damaged common worlds together, even if only partial recuperation is possible. We have finally learnt the lesson that to achieve ecological justice we must attend to our relations with others, in all their specificities (Rose 2011b; van Dooren, 2019). By recognising the value of our relations with Earth others in the quest for ecological justice, we are now taking an ethical stance that deviates radically from the assumed moral high ground of human mastery and control. This ethical stance has had a profound influence on the UN. Embracing its new name and cosmopolitical principles, it now attends to the ongoing-ness of worldly relations and grapples with the question: What kinds of worlds might we recuperate together in the midst of destruction? It has become clear that the answer to this question can only be enacted through the

process of commoning: of humans becoming *with* Earth others, as we all *recompose worlds together* (Haraway, 2016).

Conclusion: learning to become *with* the world

In our visionary declarations we have speculated that by 2050 education will be radically reconfigured around *survival* in the Anthropocene. We have focused upon future survival because we contend that the unravelling of anthropogenic ecological catastrophes is rapidly debunking blind-faith in the grand narrative of human progress and development, and will make it increasingly untenable for education to maintain this dangerous fiction in any guise. This includes the guise of education for sustainable development, in which humans learn to better manage the environment as a precious resource for economic growth and prosperity. It also includes the guise of education fostering human ingenuity to develop new techno-fixes in order to solve the environmental catastrophes we have created and now save the planet.

As we understand it, the Anthropocene not only portends threats to the survival of humanity, but it also confirms the inextricable enmeshment of human and natural histories, fates, and futures. For both of these reasons, we take Anthropocene as an urgent wake-up call (Gibson et al., 2015). It calls us to expose education's foundational human progress and development discourses as dangerous mastery mythologies based upon the delusion of human hyper-separation and exceptionalism (Plumwood, 1993). The Anthropocene's call to educators is the same as that of the students' pleas for urgent climate action. If they are to have a future, business as usual is no longer an option.

This is why our speculative visions for future survival declare the need for a fundamental break with humanist education (new or not). This is why we call for an inter-related series of shifts: from promoting humanism to exercising an ecological consciousness; from working for social justice to working for ecological justice; from understanding humans as social beings to understanding humans as ecological beings; from upholding exclusive human agency to recognizing agentic more-than-human relations; from encouraging individual development to fostering collective dispositions; from understanding teaching and learning as an exclusively human activity to approaching worldly relations as inherently pedagogical; from teaching students (as subjects) *about* the world (as object) to learning *with* others in our common worlds; from assuming universal positions and standards to considering pluriversal perspectives; from promoting human cosmopolitanism to understanding more-than-human *cosmopolitics*; from fostering human environmental stewardship to participating in more-than-human collective recuperative ethics; from learning how to better manage, control or save the world to *learning how to become with the world*.

We are convinced that the most profound challenge to making these shifts is extracting education from the Cartesian divides that structure its established humanist knowledge traditions and pedagogies. These divides – for example, mind/body, nature/culture, subject/object – ensure that we only ever learn *about* the world from a safe and privileged transcendent distance. They reinforce that an exteriorised world is 'out there', separate from us and passively waiting to be 'discovered' and 'managed' by us. In other words, the divides disassociate us from our sense of ecological being and belonging – they block the ecological consciousness that we need to go on.

If we are to go on, we concur that it is time for humanity to relinquish lofty self-delusions and come back 'down to Earth' (Latour, 2018). It is time to resituate ourselves as terrestrial beings firmly and fully on the grounds of

our cosmopolitical common worlds, with the full ecological consciousness that we are one of many of this Earth's interdependent beings, entities, and forces. It is only on these more-than-human common grounds that we can open up to what education might mean beyond the human-centric conceits and myopia that got us into this mess in the first place. It is only on these common grounds, together with all of the Earth-bound, that we can learn the collaborative, collective, mutually recuperative lessons we urgently need for future survival on this planet. We cannot do it alone. It is time for **learning to become *with the world*** in which we are already inextricably entangled and embedded and to which we will be always mortally indebted.

Notes

1 The Common Worlds Research Collective, commonworlds.net, is an interdisciplinary network of researchers concerned with our relations with the more-than-human world. On behalf of the Collective, this discussion of the future of education has been cofabulated by: Affrica Taylor, University of Canberra, Australia; Iveta Silova, Arizona State University, USA; Veronica Pacini-Ketchabaw, Western University, Canada; Mindy Blaise, Edith Cowan University, Australia.

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