



**SPECIAL ISSUE ON
CLIMATE JUSTICE EDUCATION**

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(Re)envisioning relations between humans and the more-than-humans`world: A pressing matter for educators



What must be done?

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Editorial

Shirley Walters, Astrid von Kotze, Shauna Butterwick

Ethical adult educators cannot continue to provide the same old curricula as if the very existence of the planet were not in peril: we have a “response-ability” (Sterling and Martin, 2019) to contribute to the struggle for climate justice. One of the many pressing questions we face is how do we unpick the false assumptions about the separation of humans from the more-than-human world – and why does it matter? In this bulletin we open up conversations on these complex issues.

There is general agreement that the climate crises demand that scholars and practitioners work across disciplines and geographical regions, to address many of the intractable problems. It is clear that we educators need a range of new skills, expertise and commitments – all enhanced through processes of learning. Adult educators, and all other educators have extremely important roles to play – both as citizens and in our professional capacities – we all need a more profound understanding of the climate crisis so we can act urgently ‘as if all of our houses are on fire’!

Many adult educators, like us, have been brought up within the Western world view of hierarchical dualisms. As feminists we know from personal experience how hard it is to challenge some of the dualisms even in our own lives where we have to unlearn and relearn deeply embedded worldviews. We enter these difficult conversations with humility, with a willingness to learn from one another, rather than claiming to be right. Building trust amongst co-learners and creating learning spaces to explore new ways of seeing and relating are critically important.

With this broad understanding of the situation, with no financial resources at hand, in 2019 PIMA decided to ‘do something’ to encourage adult educators, scholars and activists to become engaged in the praxis of climate justice education across geographical regions, across the political ‘south’ and ‘north’. And so, a modest ‘Climate Justice and ALE’ webinar series was born. We formed a working group of PIMA members, who are located across geographical regions, and invited other adult education networks to co-host with PIMA. The PIMA Bulletin has been used to disseminate reports of the webinars and a special edition of the bulletin was distributed in time for the COP26 meeting in Glasgow in 2021.

The current bulletin builds on the previous one (PIMA November 2021) which we were delighted to learn has been used as a resource in various university programmes. See https://drive.google.com/file/d/1cWLBy65p3bl300Gqskv64pQE-qyvbkvT/view?usp=share_link

In this bulletin, we recognise the deep shifts taking place which demand of us all to unlearn, relearn, and learn new ways of being and living, with a sense of urgency, using every opportunity for deeply transformative praxis.

Epochal shift

Unpicking the false assumptions that prop up the unsustainable and abusive relationship with social and ecological systems is a pressing task for educators. This very much includes humans' separateness from the more-than-human. How can these belief systems, grown and nurtured over centuries, be transformed?

In a series of short articles, Shirley Walters, Denise Nadeau, and Elizabeth Lange (re)envision relations between humans and the `more-than-humans` world from different vantage points. They recognise that these are complex and wide-ranging issues. Shirley situates the separation within the historical contexts of colonialism, capitalism, patriarchy, and racism. Denise addresses the question of unlearning embodied colonialism by learning to listen with and act with the more-than-human. She provides introductory activities to deepen awareness of our interconnectedness. Elizabeth describes the new stories that carry basic understandings and assumptions about reality which demand deep transformation of all aspects of life. She argues that we are the transitional generations who will experience the long climate emergency but also have opportunities as educators to find ways into the emerging story of Relationality.

Urgency

Across the world in 2022, there have been unprecedented heatwaves, floods, droughts, fires. As extreme weather events have worsened, insecurity has fed the resurgence of armed conflicts and increased depths of poverty, inequality and gender-based-violence.

In response to the extended period of instability and insecurity, `permacrisis` has been chosen as the Collins Dictionary's word of the year. It sums up just how awful 2022 has been for so many people. As reflected in language, understanding the world to be in a permanent state of crisis is becoming `normal`. Shifts in use of language amongst scientists is also reflecting the gravity of the situation – there is a move from discussion of climate change, to climate crisis, to climate emergency, to climate catastrophe.

Shauna Butterwick argues in her article that language is an active creator of meaning with consequences for how people understand and act. She questions what language(s) best capture the complexity of the ecological problems and ways forward. Framing the stories we share and the words we use influences how we think about the climate crisis, how we believe it should be tackled and what we can personally do to help. This is Elin Kelsey's (2020) argument in her book *Hope matters: Why changing the way we think is critical to solving the environmental crisis*.

Everyone/Everywhere

The time for [Climate Justice](#) is NOW! This is the call from the Women's Climate Assembly held in the Niger Delta from 17-20 October 2022. It was the largest women's climate gathering in Africa bringing together well over 100 women activists from 11 countries across West and Central Africa. The ground-breaking event co-hosted by leading women's movements and local community organisations hosted women community leaders and social movement activists from

Guinea Conakry, Mali, Côte d'Ivoire, Cameroon, Senegal, Burkina Faso, Sierra Leone, Liberia, Democratic Republic of the Congo, and Nigeria. These are the women who shoulder the worsening impacts of climate disasters in their daily lives despite having contributed little to the growing climate crisis. This meeting represents the start of a permanent assembly of African women for climate and development justice.

The example of the Women's Climate Assembly is significant for several reasons. It captures the urgency of the situation by women who are on the front lines of the climate disasters, who have contributed least to the crisis. It exemplifies the fact that everyone has a responsibility to act – people are not waiting for governments to lead. It is an example of several meetings held in Africa before the 27th edition of the Conference of the Party (COP) held in Egypt, both to try to influence the outcomes of COP27, and to provide an alternative oppositional voice to the lack of commitment to the pledges undertaken in previous COP meetings.

In this Bulletin there are wonderful, disparate, examples of Everyone/Everywhere. Claudia Diaz addresses the question of why we need to talk to children about climate justice, and how we can get ready to do such work. Astrid von Kotze emphasizes the importance of imagining alternative futures through use of stories, popular theatre, literature, music and craftwork – which provide hopeful impulses. Art is an experimental space for playing, for trying out other options, for linking what has been severed, for constructing what could be. Sarah van Borek's commitment to producing a multimedia PhD thesis, inclusive of audio and visual materials, led to the making of a music video which illustrates how creative production and presentation of doctoral studies can enhance possibilities for climate justice. Darlene Clover highlights innovative climate justice work in museums, institutions often associated with the past. Colette February focuses on intergenerational learning opportunities in an adult education classroom.

Using every opportunity for all of us to engage learning/teaching for climate justice, resonates with the call from the [World Scientists Warning of a Climate Emergency 2022](#). As they say, we need 'all hands-on deck' to act quickly together to take necessary actions to avoid the worst effects of rapid climate change and simultaneously imagine life giving alternatives. We look forward to learning, unlearning and re-learning with you during the coming year. But before we do this, take time to listen to the moving remake of the 1960s protest song, Eve of Destruction, by Anneli Kamfer <https://www.dailymaverick.co.za/eve-of-destruction/>

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Part One: (Re)envisioning relations between humans and the `more-than-humans` world: A pressing matter for educators

Background

On the 18 August 2022, in Vancouver, PIMA's Climate Justice Education Group, under Shauna Butterwick's convenorship, hosted a hybrid conversation on fundamental beliefs that limit possibilities for climate justice. One of these key beliefs is the separation of humans from the `more-than-human` world, an issue animated by Vishwar Satgar (2021), a leading South African climate justice activist and scholar. Vishwar Satgar acknowledged that many climate justice activists are enculturated into the belief that, like the majority of people, they are separate from `more-than-human` life forms. These life forms are seen as `things`, `commodities` at the disposal of humans. He argues that activists need to confront their own `anti-nature dispositions, prejudices and alienation`. His question to educators is: how do we unlearn, relearn, learn that we as a species are deeply interconnected with all other life forms?

In response to Vishwar's challenge, Shirley Walters, Denise Nadeau, and Elizabeth Lange turn his questions over from different vantage points. These are complex and wide-ranging issues which are of critical importance for all educators. We look forward to deepening and widening the discussions through different fora.

Why do so many humans believe we are separate from the `more-than-human` world?

Shirley Walters

Unlearning Embodied Colonialism - Listening with the more-than-human world

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A Transition Imagination toward Relationality

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Why do so many humans believe we are Separate from the 'More-than-human' World?

Shirley Walters

To partially answer this question, Amitav Ghosh (2021) goes back to the 17th century to Selamon, a village in the Banda archipelago, a tiny cluster of islands in what is today part of Indonesia. He tells the story of brutal colonisation by the Dutch East India Company (VOC) which was hellbent on dominating spice trade routes globally. It is the story in particular of controlling trade in nutmeg and mace and it's told as a parable for a planet in crisis. Through the story he illustrates how understanding colonisation is key to understanding the entrenched belief in the separation of humans from the more-than-human world.

In order to gain a monopoly over the lucrative nutmeg and mace trade, the Dutch East India Company had to 'empty the islands of their inhabitants' through systematic violence. The company officials believed that the land and the people could be sacrificed for their own profitable ends. To be able to do this, the perpetrators had to have theories of 'othering' where the lives and cultures of the people concerned were deemed so inferior that they did not deserve protection. (Klein, 2019, 158) Both the people and the more-than-human life forms, were 'things' which could be destroyed at will. After the destruction, disregarding historical claims or capabilities, settlers and slaves were brought in to create a new economy.

In the eyes of the Dutch colonists, there was no intrinsic connection between the Bandanese and the landscape they inhabited. They could simply be replaced by workers and managers who would transform the islands into nutmeg-producing factories. This was a radically new way of envisioning the Earth, as a vast machine made of inert people and 'things' to be used for profit. But even in Europe, the mechanistic vision of the world had only just begun to take shape, and then too, only among elites that were directly or indirectly involved in the two great European projects of the time: the conquest of the Americas and the trade in enslaved Africans.

As Ghosh (p37) describes, it was the rendering of humans, the majority of whom were not white, into mute resources that enabled the metaphysical leap whereby the Earth and everything in it could be reduced to inertness. In that sense the colonists and predecessors were not only colonists but also philosophers – it was their violence directed at 'natives' and the landscapes they inhabited, that laid the foundations of the mechanistic philosophies that took hold. These included seeds of the ideology of white supremacy.

Colonists ability to extinguish tribes, to take over land, to conquer indiscriminately, was helped through the fact that European doctrines of empire had evolved in that direction with philosophers, polemicists, politicians, like Francis Bacon, arguing that Christian Europeans had 'a God-given right to attach and extinguish peoples who appeared errant or monstrous in their eyes' (Ghosh, p.26). This outlook reflected a metaphysic that was then emerging in Europe, in

which more-than-human life was seen as ‘brute’ and ‘stupid’ and hence deserving of conquest with nothing but profit and material wealth as ends.

The graphic story over control of trade in nutmeg is one of colonisation at work. It is an instance of the history of colonisation that was unfolding at the time on a vastly larger scale in the Americas and elsewhere. It is an example of the way in which plants and botanical matter influence humans’ trajectory – after all, it was the war over nutmeg and mace that created the genocide of the island population.

The story has parallels in the 21st century where in the ‘age of progress’ many believe that human-made goods take precedence over natural products. However, as Ghosh illustrates, this is blatantly not true – one example of this is the crucial dependence on energy that comes from long-buried carbon (coal, oil, and natural gas are fossilised forms of botanical matter). This material dependence humans have on the planet and the products of the Earth illustrates the continuities between today and the 17th century.

The attitude of the Dutch colonists was in stark contrast to the Bandanese who understood the nutmeg to have two hemispheres – one was the object of horticulture and commerce which demanded considerable technical and practical skills, and the other was life giving, which was captured in their songs, stories and rituals. For the Bandanese, the landscapes of their islands were places of dwelling that were enmeshed with human life in ways that were imaginative and material – the land did not exist solely to produce nutmeg and mace. It was not land, but Land, which is in the words of the Indigenous scientist and thinker Max Liboiron, ‘the unique entity that is the combined living spirit of plants, animals, water, humans, histories, and events.’ (Liboiron quoted in Ghosh, p.36)

The subjugation, and repopulating of the Americas, enabled educated, upper-class European men to think of themselves as those who could subdue everything they surveyed even in their own countries. The domain they conceived of as ‘nature’ was an inert repository of resources, which in order to be ‘improved’ needed to be expropriated, no matter whether from Amerindians or from English or Scottish peasants. But those being subjugated did not take kindly to expropriation of common lands through fences and enclosures, nor suppression of their ways of thinking about the Earth. They believed the universe to be a living organism, animated by many kinds of unseen forces.

As Ghosh (p. 38) states, the conjoined processes of violence, physical and intellectual, were all necessary for the emergence of a new economy based on extracting resources from a desacralized, inanimate Earth. These elite orthodoxies were the product of the subjugation of humans, particularly those ‘natives’ who were thought of as ‘brutes and savages’, and women, all of whom were identified as part of ‘nature’, along with trees, animals and landscapes – all there to serve the material interests of elite men.

The basic tenet of what can be called ‘official modernity’ was the idea of ‘nature’ as an inert entity. This metaphysic, fundamental to an ideology of conquest, would eventually become hegemonic in the West, and is now shared by the global elite. To envisage the world in this way was a crucial step toward making an inert ‘nature’ a reality. As Ben Ehrenreich (quoted by

Ghosh, p. 39) observes – ‘only once we imagined the world as dead could we dedicate ourselves to making it so’.

Unpicking false assumptions about the separation of humans from the more-than-human world – why does it matter?

Ecofeminists argue that the planetary crisis is entangled with colonialism, capitalism, racism, and patriarchy. The story of the ‘curse of the nutmeg’ illustrates this graphically.

With the devastation being experienced around the world through floods, fires, droughts, air pollution, it’s obvious that human existence and survival are based on the material conditions of more-than-human life. Yet global economies function as if ‘nature’ is separate from humans and is a limitless commodity that can be used to boost profit. This false belief is mirrored in the global capitalist system’s addiction to endless economic growth at the expense of people and the Planet.

Capitalism thrives on rampant consumerism and waste, whereas what is needed is an attitude of mutual interdependence, conservation, preservation, and appreciation of the finiteness of the planet. The climate crisis is a confrontation between imperialism, capitalism and the planet which means that virtually everything we know has to be unlearned, relearned, learned. It calls for new and imaginative thinking, across all spheres of economic, social, environmental and cultural life, including education. Growth-led economics that maximise profits while offloading the costs to society and ‘nature’, as a whole, must become a thing of the past. Now.

Unpicking the false assumptions that prop up the unsustainable and abusive relationship with social and ecological systems is the most pressing task for educators. This very much includes humans’ separateness from the more-than-human. How can these belief systems, grown and nurtured over centuries, be transformed? ([see Nadeau's article for ideas on this](#)).

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Unlearning Embodied Colonialism – Listening with the more-than-human world

Denise Nadeau

I strain my ears. I hear the swish and churning of the falls, the swirling foam in the water, and I watch the silent Great Blue Heron across the way standing on the rocky shoreline. She is so still, eyes on the water, watching, waiting. How does the heron listen?

I am visiting Camossung, the $l\acute{o}k^w\acute{o}g\acute{o}n$ name for a large rock hidden under the water at what some call the “reversing falls” near the condominium where I live on so-called Vancouver Island. The $l\acute{o}k^w\acute{o}g\acute{o}n$ speaking peoples called this place “the ebbing waters”, “the changing waters”, and sometimes “the first net,” a reference to catching herring at this place where the Gorge waterway narrows. They tell the story of Camossung, a young woman who was changed into a rock by the Transformer because she was too fussy. When the settlers arrived they ignored this story, built a succession of bridges over the falls, and in the 1960’s someone blasted the rocks in the hope of making the narrow passageway more accessible to boats. By then the waters of the Gorge had become polluted with run-off from chemical fertilizers and drainage from the settlements on its shores. So the herring, oysters and coho had all but disappeared.

Amitav Ghosh, in his book *The Nutmeg’s Curse* (2021), speaks about “how the land has stories and how we need to listen to and hear the voice of the more-than-human beings as a morally urgent task in this time of planetary collapse” (p.204). How can we as educators decenter humans so that the land and waters and the spirits that populate the more-than-human world be heard? What will motivate humans to listen? Below, I give examples of how to begin to do this.

My work in the last twenty years in so-called Canada has been education around decolonization. I have a background in popular education but more recently have incorporated my training in somatic education and Indigenous pedagogies. With my Anishinaabe-Cree colleague, Alannah Young, we have named our methodology, “All Our Relations Pedagogy” (Nadeau & Young, 2018, p.55).

Use of language is critical. Rather than the word “nature,” I prefer the term more-than-human world, used by David Abrams (p.1997) in *The Spell of the Sensuous*. Kim TallBear (SissetonWahpeton Oyate) writes, “Like our methodological choices, language choices are ethical choices and are key in this project of constituting more democratic relations and worlds” (TallBear, 2011).

Following on from Walters above, settler colonialism defines as brutish not only humans of non-European descent but also all the living beings of the land. These are treated as mute. The work of decolonization involves not only unlearning and deconstructing racism and white supremacy but also the mechanistic worldview of European imperialism and capitalism that shapes how many humans experience the more-than-human world and even their own bodies. The Western scientific worldview constructed the body as a distinct object with fixed boundaries. If humans

can rediscover the experience of the body as fluid, this will not only support relationships with the more-than-human world, but also shift our understanding of human autonomy (Nadeau, 2020, p.180; Apffel-Marglin, 2011, p.134). The body exists not alone but is a body within a collective of kin that includes and is interdependent with the more-than-human world.

I have been involved in educating about protecting water for over a decade. With my colleague Alannah Young, we have worked to illuminate how the more-than-human world is neither property, resources nor objects, but is composed of kin-relatives with whom we have reciprocal relations and to whom we have responsibilities. I illustrate with some of the activities that we have used.

Activity 1

Paying multi-dimensional attention: Because it is our very relatedness to all beings and the life around us that colonialism denies, we invite (on Zoom) participants to pay attention to all that gives life in their immediate surroundings, we then layer this with adding awareness of the four directions, the sky and earth below, ancestors and those to come.

Activity 2

A sensory examination of the experience of drinking a glass of water: We first ask people how they usually drink a glass of water- their habitual pattern. We then invite them to consider slowing down the process of drinking by first reflecting on where the water in their glass comes from and where it is going over a period of time. Then we slowly drink the water, paying attention to where and how the water touches our internal organs. We then share how water is part of a closed system. The water we drink may have been in the bodies of our ancestors or the dinosaurs. We add a teaching on the habitual psycho-social behaviour of grasping, a movement pattern that involves never yielding or receiving, always grasping for more, part of colonial behaviour. (Nadeau, 2020, p.178).

Activity 3

A movement activity that involves exploring the motion of the fluid systems in the body, to embody just how our bodies are 70% water: Identified in the somatic discipline Body-Mind Centering®, these systems are the venous, arterial, lymph, cellular, cerebral-spinal, interstitial and transitional, and synovial fluids. (<https://www.bodymindcentering.com/course/fluid-system/>)

Activity 4

A series of visits to a specific place and water body, like my visit above to Camossung. Participants are invited to use all their senses, as well as an awareness of the four directions, the sky above, the ground below, the ancestors and those to come, to listen and watch as they engage with the place. The task is to just be with and listen to and with a more-than-human being. After the visits they return to first draw and then move or dance their water body and then ask what message that being has for them. We follow this with asking them to consider how they can care

for and nurture their body of water, and what are the actions or responsibilities that come from their relationship with these kin.

I conclude with a challenge articulated by Heidi Stark (Ojibwe) and Gina Starblanket (Cree). They note there is a growing awareness amongst feminist and Indigenous scholars of interconnectedness between humans and the more-than-human world, but this, in and of itself, is not necessarily transformative (Starblanket & Star, 2018, p.177). They point out that there is "*..an important difference between understanding our place in the world as situated within relations of interdependence with all of creation and living in a way that carries out our responsibilities with these relationships*" (Starblanket & Star, 2018, p.177).

It is actions, not just beliefs, that will transform the separateness of humans from the more-than-human world. If we do not treat our relatives as kin with whom we have reciprocal relations, and have a felt sense of our accountability to that relationship, awareness alone is futile.

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A Transition Imagination toward Relationality

Elizabeth A. Lange

In Charlene Spretnak's seminal 2011 book *Relational Reality*, she calls for a comprehensive transformation, not only for climate justice but for human survival. For her, this means:

“a transformation of a grand scale, as many of the most basic assumptions of the centuries-old modern worldview are being radically corrected, expanded, or replaced entirely. In many respects, it feels as if the blinders are coming off that had conditioned modern societies to overlook...or aggressively replace...the profound significance of the relational dimension of life and living” (p. 6, 7).

Stories carry our basic understandings and assumptions about reality. Many of our old stories, particularly of mechanism and separation, are now changing. The science story of the cosmos where we could only see individual stars and galaxies floating alone in black space, a lifeless clockwork universe, is giving away to new images from the Hubble and now James Webb telescopes which show the filaments or energy pathways that connect all galaxies and stars. These energy fields are like superfine nets where the lines and knots are floating and moving, impacting each other constantly. This has been generating a **new cosmological story**, which we can call “Relationality” (see Lange et al., 2021). In this story, the universe is an unbroken wholeness in flowing movement that replaces what we have previously thought of space and time. As systems scientist and philosopher, Ervin Laszlo, says, “The world according to cutting edge science, is not an ensemble of bits and pieces of matter” in empty space but what he calls a “plenum, space filled with vibrations and forces of various kinds, some known, such as electromagnetic, gravitational, and nuclear fields, and others yet to be defined” (2017, p. 13). This has had a variety of scientific names such as the grand unified field, the zeropoint field, the universal quantum field, or the implicate order. Matter takes form from certain clusters of vibrations and then sinks back into the energy field. Matter is how these vibrations appear and are expressed.

This has been leading to a **new ontological story** that moves away from the reductionism and atomism of conventional science and social science toward an alive cosmology of holism and a participatory ontology. If we think of the universe as a highly sensitive spider's web, just as a spider feels any little movement of the web, so these energy fields are constantly transmitting information. As many spiritual traditions have intuited, and scientists such as Einstein and then Max Planck asserted, “we must assume the existence of a conscious and intelligent mind” as that “intelligence is the matrix of all matter” (Laszlo, 2017, p. 13). This intelligence “in-forms” all matter and processes. Through such an ontology, we are not separate and isolated beings, but “nested-I's” (Bollier & Helfrich, 2019) or beings living within “communal individuality” where we are individuals-in-relations—fundamentally embedded in social and natural relations, always participating (Gould, 1978).

This relates to the new story of the Earth, as living systems theory has been explicating (Capra & Luisi, 2014). All Earth's systems work together as they self-organize and self-regulate to

maintain the optimal conditions for life. Our task as humans, then, is to work in harmony within these systems, not violating the ecological ceilings or violating the safe and just social foundations for the human family, as illustrated in Kate Raworth's "doughnut economics" (2018). We have not been cooperating within these natural system dynamics and we are now facing an array of consequences that may imperil not only the ecosphere but the ethnosphere. Thus, for me, a simple definition of Transformative Sustainability Education is "learning to live, work, and be in this lifegiving way" (Lange, 2023). This requires we transform most of these operating assumptions that currently drive modern Western societies.

Another new and related story is the new story of consciousness. As philosopher Christian de Quincey (2005) asserts, consciousness goes all the way down, to all levels of reality. Consciousness is a primary reality. It is not just humans which "have" consciousness and cognition. As Chilean biologist Francisco Maturana has said, the process of cognition is the process of life and is a property of all living systems, keeping all beings and systems alive. The world is no longer a world of biological machines (animals) with no consciousness or feelings. Thus, there is a profound participatory aspect to consciousness. As quantum theologian Diarmuid O'Murchu (2004) describes it, through interacting, giving, and receiving with all other life forms, a resonance emerges where the individual parts lose an independent identity. They become a "quantum self."

The implication is connoting a new story of morality and ethics. As many Indigenous scholars, such as Potawatomi Robin Wall Kimmerer (2013), describe, this leads us away from individualism and "personal" moral convictions toward a collective and kinship way of being. We are already always in relation. With this new perception, we can respond respectfully to other life forms and open our perceptual channels to our deep belonging in the cosmos. Further, Indigenous languages use grammar that conveys kinship (subject–subject relations) and animacy (living entities as constantly in motion), challenging the English language. English language structure can be transformed toward verb-based language to allow for kinship thinking, away from "it" or object thinking. Kimmerer (2013) says, as all beings and elements are alive, it is disrespectful to call them "it" just as you would not call any member of your family an "it." This implies a respect way of living that embraces an ethical relation with beings far beyond human beings.

In the new story of epistemology, as feminist physicist Karen Barad (2007) suggests, learning is responding to the intelligibility of the world, participating in this larger consciousness however it manifests. Healing the natureculture split and bodymind schism will require different forms of knowing and relating. Thus, learning is no longer just about logic and empiricism. We have access to many other ways of knowing as well, discounted for centuries. As de Quincey (2005) details, we can access the philosopher's gift of rationality, the scientist's gift of the senses, the shaman's gift of participatory engagement, and the mystic's gift of communion. Integrating these ways of knowing and levels of consciousness brings much fuller forms of learning. In this way, we also begin to respect Indigenous and Southern epistemologies for the richness they bring to the human learning endeavour, as part of decolonization.

In sum, in this time of epochal shift as Jeremy Lent (2017) calls it, is a time for profound rethinking of all elements of Western civilization, for they have backed us into a tight corner. We

are the transitional generations who will experience the long climate emergency but also have the opportunity, especially as educators, to find pathways into this emerging story of Relationality. Arturo Escobar (2017) calls for a “transition imagination” that enables us to engage these new cosmo-onto-axi-epistemologies. A transition imagination can enable us to move towards this new kind of human flourishing, which he calls Buen Vivir or well-being, unique to and respectful of every place we find ourselves on this good Earth.

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Part Two: What must be done?

Messages are loud and clear in both the popular media and scientific papers, we need ‘all hands-on deck’ to act quickly together to take necessary actions to avoid the worst effects of rapid climate change and simultaneously imagine life giving alternatives. As Erin Kelsey (2020) demonstrates, there are many ‘bright spots’ where people are working towards inspiring, hopeful alternatives. The following thoughtful contributions are examples of these.

Language Matters
Shauna Butterwick

Conversations with Children about Climate Justice
Claudia Diaz-Diaz

Climate Justice Imaginings
Astrid von Kotze

We’re Drinking the Tears of Our Ancestors: Reflections on a Music Video as Decolonising PhD Practice Towards Water Justice
Sarah Van Borek

Museums and Climate (In)justice
Darlene E. Clover

Intergenerational Learning in the Classroom
Colette February

Language Matters

Shauna Butterwick

Paying attention to the language we use is crucial; it is an active creator of meaning with consequences for how people understand and take action. We must be “careful and precise about language .. [and] encourage the beloved community and the conversations that inculcate hope and visions”. (Solnit, 2020, p. 4). Language as a conveyer and creator of meaning has been the subject of many philosophers ancient and current. More recently, sociolinguists, among others, have attended to language and how “investigations of climate change communication cannot avoid attending to the role of language” (Nerlich et al., 2010, p. 103).

For many decades, language has been a central focus of ecological feminists. For them, the earth is sacred. The language of science, on the other hand, is a “logic of domination that treats both women and nature as ‘object,’” (Glazebrook, 2017, p. 432) Science reflects a “reductionist ecology” where nature is passive, inert, and manipulable; “its organic processes and regularities and regenerative capacities are destroyed” (Shiva, 1988, p. 24). De Oliveira (2021) continues with this critical engagement, drawing attention to how modernity has shaped our habits, behaviors, and belief systems.

Over the last two years, in our PIMA webinars and bulletins, the need for a deep transformation and understanding of our relationship as humans with the “more than human” world has emerged. Shirley Walters, Denise Nadeau and Beth Lange, among others, have written about that transformation, including articles in this special issue. My PIMA engagement has raised for me many questions with few answers. A key question is “what language(s) best capture the complexity of the problem and a way forward?” Does the term ‘climate justice’ fully capture the nature of the problem and lead to enablism, particularly within marginalized communities? What language honours the specificities of local contexts and makes links between these local realities and broader climate change?

On the one hand, climate justice is a powerful concept, capturing human behaviors’ impact on the climate. It has political currency; funding is available for climate justice projects. It enables links between the Global North and Global South and helps build relations of solidarity between the working classes, Indigenous peoples and women, aligning with those who have made the least impact yet suffer the most. On the other hand, does ‘*climate justice*’ exclude and water down the reality of poisoned water and air? Does the focus on *climate*, exclude or eclipse the earth? For some, ecological justice is a more relational and solution-oriented approach found in ecofeminist and Indigenous approaches bringing attention to our relations to the land. Is *earth justice* more inclusive and meaningful; does it exclude humans and more-than-humans? *Environmental justice* has been criticized for its whiteness and links to a dominant separatist paradigm, separating ‘nature’ from humans and privileging humans over the environment.

The anthropocene is yet another powerful concept describing the current era where humanity is the driving force of earth’s destruction (and its survival). Eremocene expands awareness to what has been called the ‘age of loneliness’ and the need for an expansive empathy for the planet and humans indivisible place in the web of life. Earth, land, river, forest and mountain rights is a

language being used by a growing number of countries, with Ecuador as the first nation recognizing the rights of nature in its constitution. Some legal battles for earth rights are winning against the ‘rights’ of extractive industries. Alongside the movement to grant these rights, is the push to have ecocide recognized by the international criminal court (see “Beware the Age of Loneliness,” *The Economist*, November 18, 2013).

Fiction, nonfiction and stories offer other forms of language, broadening our horizons and understandings of the current climate, human, and earth crisis, showing us how things can be, and in some ways are, otherwise. As Amitav Ghosh (2021, p. 201) notes “an essential step toward the silencing of nonhuman voices was to imagine that only humans are capable of telling stories.” Figueres and Rivett-Carnac (2021) who led negotiations with the UN during the historic 2015 Paris Agreement, have mapped out multiple and specific ways we can support a regenerative world. The publication of climate and ecological based narratives, particularly speculative fiction, is exploding, offering alternative visions that are relational, depicting human and more than-human-relationships.

Indigenous and Eastern schools of thought are particularly important. Indigenous biologist Robin Wall Kimmerer (2013) tells many stories of her Potawatoni culture and how humans and more-than-humans co-exist. She describes how the Honorable Harvest can meet all our human and more than human needs (p. 183): “Regard those non-human persons as kinfolk [and] know the ways of the ones who take care of you, so that you may take care of them;” “Never take more than half, leave some for others;” “Give thanks for what you have been given;” “Sustain the ones who sustain you and the earth will last forever.” For Buddhist Tich Nhat Hanh (2021), how we treat each other is how we treat the ‘non-human’ world, “We inherit the results of [our] actions of body, speech and mind. [Our] actions are [our] continuation” (p. 46).

Humour is another source of language contributing to movements for earth and climate justice given its powerful pedagogic possibilities (Maestrini, 2022). For example, at the University of Colorado, a group of environmental majors created a stand-up comedy sketch, offering a significant ‘way of knowing’ which met audience members where they were at in relation to climate change (Boykoff & Osner, 2019). Their research concluded that humour is a “culturally-resonant vehicle for effective climate change communications, as everyday forms of resistance and tools of social movements, while providing some levity along the way” (Boykoff & Osner, 2019, p. 254).

Photographs, images, cartoons, poetry, and the various forms of creative expression are other formats and sites of climate justice language. In the image below, Brenna Quinlan provides a graphic map of the individual and collective/community efforts to bring about change, cautioning against waiting for governments to take action (see Figure 1 - permission granted).

Figure 1

From What Is To What If



Note: Copyright Brenna Quinlan <https://www.brennaquinlan.com/> Permission granted.

An example of graffiti, a form of public art, is depicted in this image ‘Long Live the Lock Down’ (figure 2) created by the graffiti artist Rebel Bear (https://en.wikipedia.org/wiki/The_Rebel_Bear). The image subverts modernist notions of humans dominating nature. In the image, animals are the protesters, speaking to the positive outcomes of the pandemic lockdown.

There are many very popular photographs found on the web depicting the enormous value of a single tree with a whole village sitting in the shade. A simple yet powerful imaginal language of how trees care for us and are essential to human survival (See <https://www.facebook.com/earthlymission/photos/a.553751304746776/1896615890460304/?type=3>)

In summary, the topic of language is vast and requires sustained examination. The language we use is active and has consequences. What we say and write in the movement for climate/earth justice matters; it can be inclusive and exclusive, engendering action and withdrawal. I conclude with a poem by Adrienne Rich (1978, p. 67), feminist poet and essayist, which helps me to embrace my ongoing pendulation between despair and hope:

My heart is moved by all I cannot save:
So much has been destroyed.
I have to cast my lot with those who,
age after age, perversely,
with no extraordinary power,
reconstitute the world.

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learning, communicating, and arts-based approaches and using language that's hopeful and precise about the climate crisis problem and directing attention to the solutions.

Conversations with Children about Climate Justice

Claudia Diaz-Diaz

Connecting the dots: Why do we need to talk to children about climate justice, and how can we get ready to do such work?

A few months ago, I came across this question by Ugandan academic and human right activist Sylvia Tamale: “Who will connect the ideological dots of racism, colonization, capitalism, sexism and heterosexism in ways our children understand?” (Tamale, 2020, p. 9). This question has been circulating on social media forums and attracted the attention of academics, educators, and parents who wonder how they can talk to their children about the world's injustices. It seems that many of these social media commentators devote their lives to working against social injustices, and yet they feel stunned by the idea of having these conversations with children. For us – adult educators, teachers, and scholars concerned about the climate crisis - Tamale’s question pushes us to consider whether it will be us who will connect the dots when it comes to talking about climate justice.

Adults may feel insecure about engaging children in these conversations for different reasons. You may be aware that climate change results from long-standing injustice: the ones who contribute the most are often the least affected, while the ones who contribute the least suffer the more pervasive consequences. However, you may believe childhood is too precious, and that unpacking climate injustice with children will pervade their innocence.

It may also be the case that since children and youth are experiencing daunting levels of climate anxiety, you may not be convinced that loading them with more bad news is the best idea. If they are going to deal with a precarious ecological future (Nxumalo et al., 2022), we need to make sure to keep their hopes as much as possible.

Perhaps, you are open to connecting those dots but in a more so-called age-appropriate way. You may also wonder whether connecting the dots of racism and, of all that, is too adult-centric. Even if you are convinced that children need to know more about our past wrongs, it is too overwhelming to figure out how to do the work with children now.

I’m writing this piece from my home, where I’ve been living for more than a decade with my daughter and partner in the ancestral and unceded lands of the Musqueam people. As an uninvited visitor to these lands and as a mother, educator and academic, I’ve been grappling with these questions for a long time. My research has focused on early childhood education and how young children’s relationships with place offer opportunities to engage in anti-racist and anti-colonial pedagogies that reconfigure human relationships, especially those with the more-than-human world. At the center of this work is the desire to transform education by revisiting the purpose of children’s education and learning, who is part of their education, and what pedagogies we need to engage with in current times.

Dr. Affrica Taylor shared her thoughts on these questions in an interview featured in my book *Posthumanist and new materialist methodologies: Research after the child* (Diaz-Diaz & Semeneć, 2020). By the time of the interview, Taylor was an adjunct associate professor at the University of Canberra, an environmental and feminist scholar, and a member of the [Common Worlds Collective](#).

We talked about her research on child-animal relations in early childhood settings in Australia and the need to approach difficult conversations with young children as a necessary pedagogical practice. In her interview, Taylor shared a compelling event that shows us what happens when adults engage with children in climate justice conversations. In one of their daily walks, children found a huge decomposing dead kangaroo body.

They had spent most of a year getting to know kangaroos and imagining what it would be like living in a kangaroo's body, so the encounter had a big impact on them. This event challenged children's educators to figure out a way to connect the dots – as Sylvia Tamale challenges us – with children about the life of kangaroos in a settler colonial society. Taylor acknowledged that engaging in such conversations was “tricky because you don't necessarily want to drag all sorts of past settler atrocities into conversation with the children, make them feel guilty, and ruin their walk with the kangaroos” (Diaz-Diaz & Semeneć, 2020, p. 215).

The children kept asking questions about the animals and wanted to return to that place to make sense of the event. As the educators followed the children's inquiries, broader and deeper conversations emerged. Children shared their experiences of seeing other dead kangaroos due to car accidents leading to talk about their deaths at the hands of humans. They inquired why these animals came to live next to where their childcare was located and their migration patterns between the city and the countryside.

Taylor's narration offers insights into what it means to connect the dots with children regarding climate justice and human-induced animal extinction. Humans –read white, male, middle-class, western humans – have played a major part in the unstoppable climate crisis founded on the grounds of social hierarchies, unsustainable consumption, and capitalist relationships that have depleted the planet. Without connecting the dots, it is impossible to imagine another future.

Connecting the dots is not in any way comfortable, prescriptive, or replicable. As Taylor reminds us, “it is much easier to discuss the historical detailed and trajectories of fraught settler-kangaroo relations in written articles than it is in a conversation with children” (Diaz-Diaz & Semeneć, 2020, p. 215). But often, educators have only two choices either ignore or embrace those conversations. Taylor's story offers an approach situated in a broader pedagogy that is relational rather than content-driven. Those relationships extend from children and their educators to the relationships between the children and the more-than-human world. When relational pedagogies are used every day, educators and children are led to connect the dots of climate injustice in ways that invite not only intellectual but also affective engagement.

Relational pedagogies also help adults accept that connecting the dots through difficult conversations is part of children's everyday lives. As the incident of the dead kangaroo body illustrates, climate events are happening all around us. Children and adults cannot escape from

fires, climate-induced migration, and children's health, physical and mental problems due to climate change. If we accept children's questions, we have better chances to embrace their responses with care and responsibility.

Taylor's example demonstrates that educators of all sorts are already connecting the dots alongside children, but their work needs to be known because it seems we know little about how to start. The other 18 interviews in the book offer additional examples of how educators and children encounter a world in times of ecological precarity that amazes and unsettles us. Their experiences may give others – like you – a push to engage children with pedagogies without sugar-coating the current environmental crisis. As Taylor's interview illustrates, downplaying the socio-historical and political causes of the current climate crisis not only does a disservice to children but also may not be an option. As we share the challenges of connecting the dots with children, we may learn a different way to live with others.

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Climate Justice Imaginings

Astrid von Kotze

Oceans as Life-giving Force: Theatre and Crafting for Climate Justice Education

Let's set our sights beyond the abominations of today to divine another possible world.
(Galeano, 2002, p.18)

Lalela Ulwandle (**Listen to the ocean**)

'All these words they keep using to try and confuse us, GDP, economy.... They speak about value, but whose value are they talking about? How can you put value on something that sustains life?' The woman shakes her head sadly: 'The sea is telling us to slow down...', she says, and we listen to the waves for a while longer – until the young man gets up: 'They claim that the mining will enrich us all, the poorest of the poor', but how will the fishers benefit from this?

For the next hour, the three people on stage tell us their stories, rooted in different cultures and backgrounds: The scientist's life work was studying the survival strategies of small creatures in the sea, marveling at their being, admiring their beauty, but also engaging in protests against drilling and prospecting in the sea. The son of a fisher tells about his father and his ancestors making a living from the sea, and how things have changed: 'What was once the Bay of Plenty, is now the Bay of Empty'. In those days, they listened to the sea, they fished with care and appreciation. The third, the granddaughter of a healer who communicated with the spirit-world under the water and used the messages to heal others who came to her with hurt and disease, connects us with African wisdom. As each throws a light on the stories of the others, they join the dots with thought and love, empathy and connection that characterizes a closeness to Nature that is nurturing. The audience is pulled along through the story and the theatre – they hold their breath and shake their heads in rhythm with the narratives. For the storytellers, the meaning of life has derived from the ocean and they communicate this to us, the audience, to create a deeply moving experience, both in process and message.

'Lalela Ulwandle' is a performance by members of [Empatheatre](#). It has toured South Africa for the last 4 years, warning of the dangers and injustices connected to mining coastlines and disturbing the sea through exploitative practices. Empatheatre, is a group of artists, academic researchers and responsive citizens who created a theatre-making methodology 'through friendship and solidarity', aimed at promoting social justice. Under the banner of the Coastal Justice Network, they researched historical and contemporary experiences of dispossession and exclusion of coastal communities from their customary territories, and from ocean governance. As the profound local ecological knowledge of traditional coastal groups continues to be marginalised or ignored by top-down efforts at marine conservation, we all need to be reminded of our ocean heritage.

Story-telling gets people together as performers and audience to co-construct the stories. Communicating with clarity and feeling, and listening actively with heart, mind and body, a

connection is made. The performance distilled the message of how the life and wellbeing of the sea is central to our own wellbeing. It had begun with a moment's silence in memory of a woman from the local community who had been taken by a shark in the sea just 3 days before – making the comment, 'the ocean gives – and it takes', particularly poignant.

Some members of Emphatheatre were also involved in an exhibition of a huge crocheted coral reef that took 12 years to create, and was made lovingly by hundreds of citizens across South Africa (see figures 1, 2 and 3 below). It is one of many exhibitions across the world, and 'holds a powerful symbolism and figuration of solidarity in times of climate change.' In front of it, on the floor, sat some women busy crocheting further pieces to add, reminding us that while real reefs are under threat of dying from bleaching, there are some humans who are countering the threat by demonstrating symbolic support to help reefs to grow. It was the most moving piece of art and craft I have seen for a long while – enhanced by the atmosphere in the room: buzzing with mainly young people, there was laughter, agitated conversations, warm embraces and greetings. It was as if the ocean reef had us all under a spell of vibrant life.

Figures 1, 2 and 3

Pictures of the Emphatheatre Crocheted Coral Reef



Note: Crocheted coral reef created by citizens of South Africa. Pictures by author.

A book invited visitors to jot down their first memory of encountering an ocean. We were invited to draw pictures with crayons, and as people drew and talked to each other they made the sea come alive.

Here was an example of expressing active optimism to counter the doomsday messages of 'it's too late to save the planet'. It was a most hopeful occasion of love and care, of sharing enthusiasm and being alive. What is extraordinary, is how the stories of hardship and heartsore, of destruction and dying still spell hope for the future.

Building Hope

We look to writers, performers and artists for hopeful impulses. It was Ngugi waThiong'o who claimed that 'writers belong to the prophetic tradition' – they speak truth to power and make the invisible, visible. Musicians can keep the spirit and memory of humanity alive and help us re-believe that a reunion with Nature is possible. Artists can rekindle desire, produce the yearning that gives us fuel to work harder together towards that other, better. Literature that engages our imagination towards the not-yet. Creative productions like the 'Lalela Ulwandle' are meeting places between the enduring ocean and brutal human actions and help make sense of invisible bridges that need to be reconstructed. They can re-ignite our collective ability to work together for life-affirming changes. Art is an experimental space for playing, for trying out other options, for linking what has been severed, for constructing what could be.

In *Principle of Hope*, Bloch (1976) suggests that the work towards utopia requires optimism – not as a deterministic 'automatic belief in progress' or as 'cheap credulity' in wishful promises, but as 'militant optimism'. It arises from the knowledge of the causes and mechanisms of oppressive forces, the understanding that people working together can change events. It is the optimism fuelled by positive energies, such as those of story-tellers, driven by the belief that counter-hegemonic action is required of us as moral work.

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A short-illustrated film with the central story of *Lalela Ulwandle* can be viewed here: https://www.youtube.com/watch?v=p_W3QBz9cPY

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Astrid von Kotze is a retired Professor of Community Development and Adult Education. Living in Cape Town, South Africa, she continues to work in popular education and theatre practice.

We're Drinking the Tears of Our Ancestors: Reflections on a music video as decolonising PhD practice towards water justice

Sarah Van Borek

Figure 1

Featured vocal by Zane Mbizo in 'Please Don't Blow It' (2021) music video



Note: Van Borek's adaptation of the original song by Mapumba Cilombo; location at Theewatersloof Dam

“We’re drinking the tears of our ancestors” (Van Borek, 2019). These are the words of Gregory Coyes, a filmmaker of Métis/Cree and European descent, who is based on the traditional territories of the x^wməθk^wəyəm (Musqueam), Sḵw̓x̓wú7mesh Úxwumixw (Squamish Nation) and səlilwətaʔl (Tsleil-Waututh) currently known as Vancouver, Canada. These words emerged from Gregory as we were sharing a conversation reflecting on a university course I had co-developed and implemented at higher education institutions in Vancouver (2018 and 2019) and Cape Town, South Africa (2019), as part of my [PhD in Environmental Education](#) at Rhodes University. The course was intended to become a form of reconciliation practice between diverse peoples and ecosystems, with a focus on water justice.

Gregory and I had met in 2018 when I first piloted the curriculum at the Emily Carr University of Art + Design in Vancouver. Gregory had coined the term and developed the concept of the ‘Slow Media Community’, which he described as a community of filmmakers with a practice that centres on an “Indigenous sense of cinematic time and space” (Van Borek, 2019, p. 32). With this countercultural practice valuing sustainability called ‘Slow Media’ (Rauch, 2018, p. 5), contrary to traditional filmmaking practice which captures short, controlled clips and strings them together in editing, the camera remains fixed in a select location to become witness to the unfolding movements of the environment within the camera’s frame.

Through the course, students applied this slow media approach, and another audio-based approach to enhancing sensory perceptions and aesthetic appreciation of the natural environment called soundscape recording, to develop relationships with local water bodies. Alongside this process, students met with local ‘Knowledge Keepers’ (people outside the university with non-traditional/academic backgrounds, who had existing relationships with the water bodies) to learn about their lived experiences of and perspectives on the water bodies. The process contributed to students’ de/re/constructing water narratives towards more water sensitive futures in the videos they produced through the course. These videos were shared with diverse publics in dedicated engagement events.

It became apparent early on in my study that various aspects of traditional, formal university education were contributing to a growing global water crisis. The legacies of colonialism were evident, for example, in institutions biasing cognitive knowledge and academic reading and writing over affective knowledge and multimodal forms such as video, sound, and storytelling. Essentially, the untapped knowledge and lived experience of many knowers from different backgrounds and perspectives were being left out of solution-making practices. The importance of emotions to behaviour change were being underestimated. Market-driven priorities of institutions were exacerbating narratives of water as a commodity for human consumption. Not only did this mean that I felt the need to start considering how my water curriculum could contribute to decolonising higher education, but it also meant that I questioned, every step of the way, what it meant for me to be doing this work as a PhD student within a higher education institution with its own legacies of ongoing settler-colonialism.

It became clear that a traditional thesis consisting of academic writing would not adequately, nor ethically in my view, do justice in representing the wide range of knowledges I wanted to share with a much wider public than my PhD examiners or fellow academics. It was in making a commitment to producing a multimedia PhD thesis, inclusive of audio and visual materials with which I could attempt to be emotionally impactful while simultaneously emphasizing the importance of affective knowledge, that the concept for a music video first emerged.

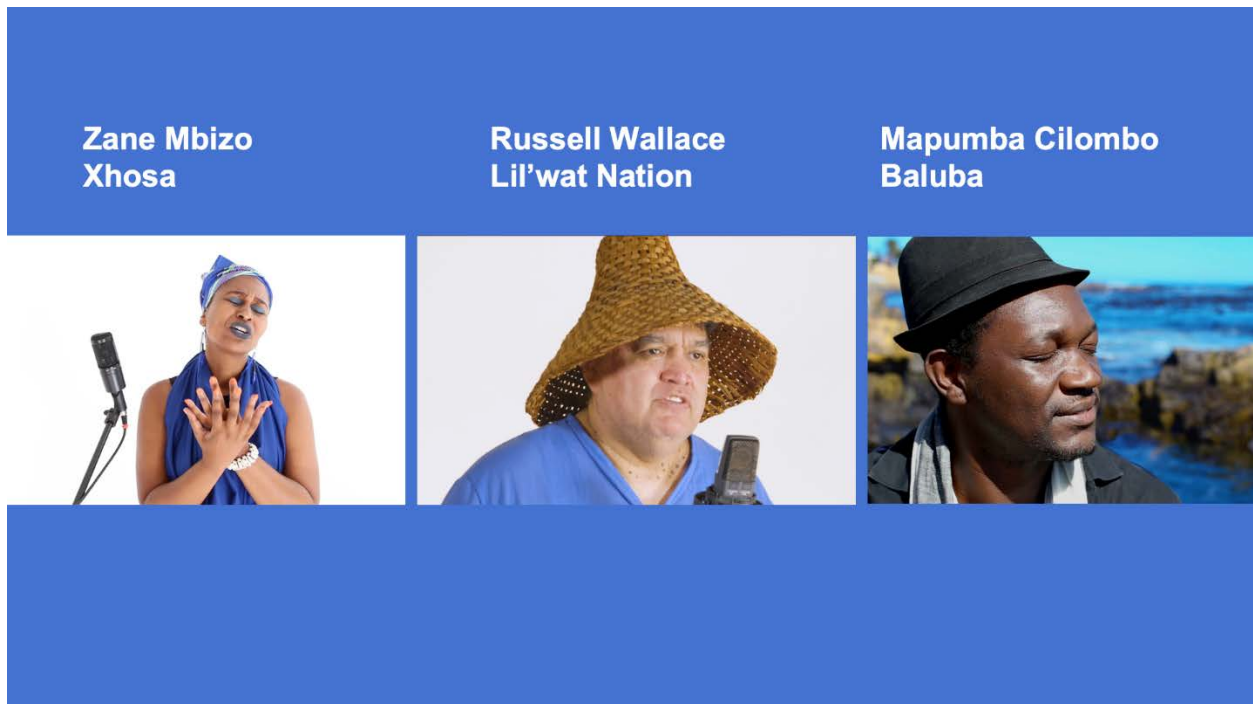
“We’re drinking the tears of our ancestors” is a song lyric that evolved out of a Zoom conversation I shared with Gregory Coyes from my home base in Cape Town, midway into the first year of the global Covid-19 pandemic. Gregory was one of approximately 25 people from either South Africa, Canada, or Australia, I had selected from the 200+ people who had been part of my PhD process in some way, shape or form, and who I had invited to be part of this music video making process. The invitation included an opportunity to review my initial findings through one or both of 2 options: (1) reading 4 short papers I had written as part of my PhD-by-

publication: or (2) watching four 1-minute videos I had produced, summarising these papers, that included photos, music, and rhyming prose.

After engaging with these materials, the invitation was to discuss whatever might have come up for the person through a Zoom call. With their permission, the Zoom call was recorded and later edited into a podcast, as part of a series called [Climate for Changing Lenses](#), made available to the public for free. During the Zoom call, Gregory and others were invited to contribute a statement that I could use as a song lyric. They could volunteer one or grant me permission to suggest one. With their permission, the visual of them sharing the statement would become part of the music video. I worked with the various statements/voices to construct an overall song narrative, and workshopped this together with Mapumba Cilombo, a Cape Town-based musician/composer with Baluba roots from the Democratic Republic of Congo. Cilombo gave me permission to adapt his original song, [Please Don't Blow It](#) (2019), by retaining the chorus and building all the verses from these new recordings. Cilombo composed melodies for each of the statements and then two vocalists were recorded to sing these lines. The vocalists were Zane Mbizo, a South African of Xhosa ancestry, and Russell Wallace, a traditional singer from the Lil'wat Nation (see figure 2)

Figure 2

Featured Vocalists and their Ancestry on the 'Please Don't Blow It' music video



Note: Van Borek, 2021

In my PhD-as-music video *Please Don't Blow It* (2021), the chorus “We’ve got an opportunity to learn much more than we ever, ever, ever, ever have before... Please don’t blow it” is juxtaposed with the visual of a cinemagraph featuring Cilombo, frozen in motion, set against the dramatic movements of a lively Atlantic Ocean. A [cinemagraph](#) is a kind of hybrid video/photo where most elements in the image appear as a static photograph with only a certain element strategically selected to be in motion (King, n.d.). I used a cinemagraph in this way in the chorus to emphasise water as a living being, capable of sharing knowledge in the form of stories it communicates (Neimanis, 2017).

Figure 3

Mapumba Cilombo at the Atlantic Seaboard, Cape Town, South Africa



Note: Van Borek, 2021

What kind of water futures can we imagine when this becomes the way we see and understand water in our world? How might education and learning be part of a global water knowledge commons instead of water crisis? How does it shift our relationship(s) with water when the water we drink is no longer simply water from a tap (and potentially unknown original source), or commercial water bottle, but the “tears of our ancestors”? Is it possible that these multimodalities may allow us to see ourselves as more interconnected with our waterscapes?

A follow up interview with a student, Fatima Holliday, approximately one year following the course, suggests that this was indeed the case for her. Her voice and image powerfully frame the *Please Don't Blow It* (2021) music video with the opening line “We are looking at nature from different angles...” and, later, a statement so gripping I felt it important that it be repeated: “trying to reconcile with every bit of myself.”

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Sarah Van Borek is a media artist, educator, and researcher focused on water and wellbeing through a decolonial lens. Currently a Cape Town-based postdoctoral fellow with the University of Toronto, she works across Sub-Saharan Africa and specializes in knowledge translation.

Museums and Climate (In)justice

Darlene E. Clover

My research over the past two decades has brought me to museums sites that UNESCO (1997) proclaims to be “first of all, learning places” (p.4). Museums offer a plethora of education and learning opportunities for thousands of people who visit them yearly. Through the narrative and visual power of exhibits, artworks and exhibitions, museums “stimulate the imagination and creativity of their viewers” (UNESCO, 1997, p. 6), and shape, construct and mobilize knowledge and consciousness about history, science, discovery, art, war and the natural world.

Despite their extraordinary storytelling capacities, their powerful visual-narratives of our socio-natural world, museums were “rarely, if ever, discussed” as spaces that could make a difference to how we understand and respond to the climate crisis, which lead Canadian museum scholar Janes (2009) to argue that their “irrelevance is a matter of record” (p. 26). Museums have been seen as irrelevant because they have operated solely as hierarchies of elitism, power, and privilege and pretended to be neutral and impartial about the world when they are anything but. However, my research shows a more complicated story. Museums have been challenged over the past decade to use their powerful intellectual, pedagogical, storytelling, visualising, and civic engagement potential to address inequalities, injustices and ever more so, environmental challenges (Janes & Sandell, 2019). In this short article, I draw attention to three different types of these activities of which I was a part.

Nonformal-informal Courses

Museums are educating the public about the climate crisis is by partnering with universities to offer courses which are both for and not for credit. The course I took part in was hosted by Tate Modern in collaboration with Goldsmiths University, London. This five-week course entitled *Art and Slow Violence* drew directly from Nixon’s (2011) *Slow violence and the environmentalism of the poor* and his belief that we lack the critical perception required to see the insidiousness of the ‘unseen’ aftereffects of war and its slow yet persistent violent impacts on the poor, women and the environmental. The course focused specifically on the exhibition *Conflict, Time, Photography*. We were welcomed to peruse a series of photographs of dry, arid or ravished landscapes vacant of human activity and life to illustrate this ‘absent presence’ and to encourage dialogue about what it is that structures our ability to ignore or forget. Employing the use of other artworks and their storytelling and visualizing power, we were engaged in conversations about, for example, the ‘commons’ verses the ‘enclosures’. We discussed the right to access land and the health and abundance of nature versus private ownership and how this alienated people from food and livelihoods and enabled vast wealth (off ‘natural resources’) to be accumulated by a few in the interests of a few. By placing the power of aesthetics, objects and the collections in the service of climate change, the museum provided us with a visually imaginative and very thought-provoking space.

The Language of Change

Ferguson et al. (1995) remind us of the power of language as a primary tool in museums “for creating meaning and mediating messages” (p.106). An excellent example of language change in the service of climate change comes from the Royal Ontario Museum (ROM) in Toronto. Turning on its head Rainbow and Lincoln’s (2003) assertion that “to know what is being lost...it is necessary to know what is here in the first place” (p. 11), the ROM now has very different explanatory texts in its gallery on Biodiversity. Titles and panels that a year ago were extremely neutral descriptors of the context and contents of the dioramas and displays, have taken on a very difficult, more activist tone. The entry title of this gallery that meets you upon entrance now includes as its heading: Life in Crisis. The texts use capital letters to make words and ideas visible and to make clear explanations of humanity’s complicity in climate change and the impact. For example: “HUMANS are causing both the extinction of individual species and the destruction of whole ecosystems.” Not long ago, purposeful statements such as this, and there are many more throughout the gallery, would have been viewed as totally inappropriately political and antithetical to fundamental professional values of impartiality. While this practice is quite didactic, it represents a critical shift for the ROM towards the politics of climate change and more importantly, that it has taken a side as an intellectual institution.

Encouraging Activism

As noted, museums tend toward ‘neutrality’ however, I have come across some excellent examples where they are throwing off the shackles of impartiality by engaging in activism. An example of this comes from the Haida Gwaii Museum in British Columbia which created a powerful activist exhibition entitled Thanks but no Tanks. To create the exhibition, they called for representations by native and non-native artists to produce a radical display of opposition to the proposed oil pipeline and increased numbers of oil tankers on the Pacific coast of British Columbia (Leichner, 2013). This defiant practice of representational cultural activism that entered fully into the crisis was filled with hard-hitting and satirical works, a multi-media mixture of photography, cartoons, paintings, and poetry that juxtaposed government conceived economic opportunities with the real socio-ecological threats (everything from spills to drugs) the pipeline presents. The exhibition also included a collision of oppositional statements by Native elders on one side and pipeline proponents on the other. The museum used the exhibition as a platform to animate community discussions, which could be heated, and to develop popular theatre activities that continue to generate considerations about our use of oil (Bell et al., 2017).

Final thoughts

Not all museums are responding to the climate crisis or other forms of injustice and oppression. Within that world, there is still much to be done. However, as someone who has been around these institutions for nearly three decades these types of activities show they are throwing off the shackles of neutrality with courage and tenacity. These giants have awoken with an imperative to be relevant and contribute to what may very well be humanity’s most major challenge.

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Darlene E. Clover is Professor of Adult Education and Leadership Studies at the University of Victoria, Canada. Her research focuses on the challenges of museums but more importantly, their potential to respond critically and creatively to a troubled world.

Intergenerational Learning in the Classroom

Colette February

The Mail & Guardian opinion piece by Tatenda Muponde and Khumo Lesele (2022), both attorneys at the Centre for Environmental Rights, makes it clear that it is South Africa's youth who will need to be most responsive to the climate emergencies of our time. South Africa reportedly experiences "floods, droughts and heat waves but also crop failure, food insecurity, water stress and various forms of economic collapse and social conflict," (Muponde & Lesele, 2022). However, the article correctly points out that the climate crisis is a problem for us all, and presents a crucial moment for intergenerational thinking and action towards climate solutions that can work for us all.

Figure 1

Photo Collage on Ancestral Climate Care



Note: Photos from author's paternal family ~ 1960's

The photograph above (figure 1), displays my father's generation of aunts and other relatives, is a reminder that I know very little about them, and what their thoughts may have specifically been about the place where they are standing: Was there an abundance of trees at another time? Was the water clearer? Did they care about the environment more than I imagined they would? Was the visit a disappointment more than an enjoyable outing in the country somewhere? Realising that I do not know anything at all about the ways in which my ancestors related to and cared for their environment, I wondered whether there could be ways of linking how one generation could connect with another particularly within the context of climate emergency.

As a university-based adult education lecturer, I have taken on the challenge of intergenerational learning in the classroom. I am placing the climate emergency as a focal point of my teaching/learning. In the process I am revisiting what student centredness really means in terms of curricular innovation and assessment, remembering that it is both the students and me who are learning. I begin by asking students to provide their own accounts (voice notes, brief stories) of the climate challenges they are currently experiencing and these then form part of their course readings. They are also invited to find out as much possible about climate care from their own parents and grandparents, with the view to exploring how various climate care learnings and unlearnings may play a part in addressing current climate emergencies. As part of assessment practices, students are invited to use their own stories to find solutions to the problems they themselves have presented. We look for common concerns which we explore together, for example, the recently promulgated Climate Change Bill. We discuss ways to improve it and when calls for public participation are made, we act. (See Nadeau's article in this Bulletin for more related educational activities).

The climate emergency is all of our problem – we need to think and act together across generations NOW, whoever and wherever we are!

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Colette February is a lecturer in Adult Learning and Education at the University of the Western Cape, South Africa. She is local coordinator of the Master's in Adult Learning and Global Change Programme, a collaboration with the Universities of British Columbia and Linköping.

PIMA Business

New Year's Greeting

GREETINGS AND BEST WISHES for a new year in which we are able to contribute to socio-ecological justice for the majority. This can best be done through collaboration with other networks and social movements of educators/activists. We describe this in a recently published article by members of PIMA's Climate Justice Education Group, entitled "Towards an emergent curriculum for climate justice adult educators/activists" in Australian Journal of Adult Learning, Volume 62, Number 3, November 2022. Here we reflect back on the three years of climate justice education undertaken together with other networks i.e., Canadian Association for Studies in Adult Education (CASAE), Adult Learning Australia (ALA), UK-based SCUTREA, and the African adult education network, MOJA. In the article we say,

"We have prioritised collaboration as an intellectual and political approach which counters individuality and separation and builds alliances. The many case studies and voices we brought into webinars demonstrate how people together can challenge the status quo and construct alternatives. Collaborative organising and writing challenge hegemonic modes of knowledge production.... Working together cooperatively in the spirit of the 'solidarity economy' allows us to practice and rehearse the common future we are working towards."

As another example of collaboration, ALA is giving access to our article and the whole journal for free. You can go to: <https://ajal.net.au/latest-issue/> - there you are still required to go through the purchase process (no financial details are required) and register with your name and email address at no cost. Please note, it may take 30-60 seconds for the system to generate the download file. **Thank you, ALA!**

We are looking forward to working together with you towards these ends in 2023!

Call for Technical Assistance

This is the first PIMA Bulletin in its new web-based format. We are grateful to PIMA member, Leslie Cordie, for her assistance in helping the transition. We are looking for ongoing technical support to help with the back-end of uploading the bulletin. If you have some knowledge and capacity, please contact PIMA Secretary, Dorothy Lucardie Dorothy.lucardie@bigpond.com.au with an expression of interest. We will appreciate your offer of support very much.

Speaking of the Bulletin, if you have ideas for an article or bulletin special issue, please be in touch either with me at ferris@iafrica.com or Dorothy.

Confintea VII Follow-up

Heribert Hinzen, PIMA's deputy president, is in touch with follow-up activities to the 7th World Conference on Adult Learning and Education (CONFINTEA VII) which took place in Morocco, June 2022. For example, PIMA members participated in a follow-up seminar organised by ICAE together with CR&DALL in December where hybrid participation in Glasgow as well as online was possible (see <http://cradall.org/content/crdall-seminar-7-december-2022-1030-gmt-confintea-vii-staying-alive-alert-awake-and>). ICAE and PIMA colleagues also participated in an international conference which was held on-line to deepen the understanding on new

developments in adult learning and education (ALE) and thus preparing for future ALE advocacy on community, national and global levels (see <https://www.dvv-international.org.ua/news/detail/reflections-on-confintea-vii-results-and-the-marrakech-framework-for-action-the-online-workshop-of-eastern-neighbours>).

Welcome to New Member

WELCOME TO NEW PIMA MEMBER: Carolyn Anonuevo is from the Philippines where she headed the Center for Women’s Resources, before being recruited to UNESCO Institute for Education in Hamburg, Germany in 1993. She went on to be Deputy director of what became UNESCO Institute for Lifelong Learning (UIL). One of the highlights of her work at UIL was to lead the conceptualization of the first Global Report on Adult Learning and Education (GRALE). In 2015, she joined the UNESCO Regional Office for Southern Africa, to head the Education Unit of the Regional Office based in Zimbabwe. Covering 9 countries in the region, her work involved providing technical assistance to government education program and coordinating programs on TVET, teachers’ education, education for sustainable development (ESD), higher education and ICT and education. She retired in 2022, and says, “My 40 years of education work, traversed early childhood through adult education with a wide range of themes (women, TVET, ESD, citizenship). While committed to education work, I would like to focus on women, migrants, ESD, work with older persons and also ‘futures of work’.”

Looking forward to working together to secure a just, liveable and democratic future.

Best wishes for 2023!

Shirley Walters
PIMA President