International Journal of Early Childhood Environmental Education Copyright © North American Association for Environmental Education ISSN: 2331-0464 (online)



Decolonial Water Stories: Affective Pedagogies with Young Children

Fikile Nxumalo Marleen Villanueva

University of Toronto, Canada

Submitted November 13, 2018; accepted September 12, 2019

ABSTRACT

This article is situated within ongoing efforts in early childhood education to unsettle extractive relations with the more-than-human world and efforts to situate children's learning within current conditions of environmental vulnerability. The authors discuss some pedagogical and curricular interruptions that emerged from foregrounding Indigenous knowledges and non-anthropocentric modes of learning in an inquiry that focused on young children's water relations. We focus in particular on the affective resonances that emerged from kindergarten children's encounters with a creek in Austin, Texas. In conversation with Indigenous feminisms, we discuss these affective encounters in relation to their decolonial potentials. We argue for the mattering of affective pedagogies that nurture non-anthropocentric relations while centering Indigenous land and life.

Keywords: affect, early childhood education, water pedagogies, Indigenous knowledge

Yana yana yo yana yo yo; Yana yana yo yana yo yo; Yana yana yo yo yo; Yana Yana yo yana yo yo; Yana wana yo yana yohui no Eya na ei nei yo way.¹

This article is part of an ongoing effort to unsettle the dominance of cognitive developmental, and individual humanist perspectives in understanding young children's learning, particularly in relation to the natural world. Alongside a paucity of environmental education for young children that is responsive to current times of ecological precarity, several problematic framings of children and nature persist in popular forms of early childhood education in North America. These include reinforcements of colonial human-centric dualistic approaches to 'nature' that maintain or reinforce extractivist relationships to the more-than-human world. For example, nature is commonly framed as a 'pure romantic nature' separate from children and as a resource for children's development, including improving test scores (Cairns, 2017; Taylor, 2017; Taylor & Pacini-Ketchabaw, 2015). These orientations not only reinforce anthropocentrism, settler colonialism² and Indigenous erasure, they also reinforce racist and classist tropes through assumptions of what counts as 'normal' relations with nature (Nxumalo, 2015, 2018; Nxumalo, & Rubin, 2018; Nxumalo & ross, 2019).

Challenging questions emerge from these aforementioned critiques of normative orientations to children and nature. One question, which has been the focus of much of our work with young children and early childhood educators, is what are some pedagogical and curricular shifts that might bring forth anti-

colonial *and* non-anthropocentric modes of learning with the more-than-human world in early childhood environmental education? As we illustrate later in the paper with respect to water pedagogies, anticoloniality in this context refers to practices that resist erasure of Indigenous peoples and knowledges, such as by taking seriously the situated teachings that they offer for relating to the more-than-human world in more reciprocal and less extractive ways. These teachings include learning to relate to the more-than-human world in non-anthropocentric ways; meaning in ways that disrupt the dominant Euro-Western paradigm that views humans as superior to and separate from the more-than-human world, and relatedly that values more-than-human others primarily in relation to what they can do for humans. Affrica Taylor (2019) powerfully describes the inadequacies of anthropocentrism, when she states in response to the discourse of the Anthropocene epoch , as the age of "Man", that:

...the capital A 'Anthropos' (Greek for capital M Man) of the Anthropocene nomenclature as a problematic phallogocentric signifier that risks perpetuating a particularly dangerous form of human-centric conceit....Not only does the resolutely masculinist, Euro-western concept of the Anthropos narcissistically presume to be the universal signifier of humanity, but by reifying the 'reign of 'Man' (Stengers, 2013), it additionally naturalizes and validates 'Man's' dominion on earth (p. 3).

Drawing from these understandings of the anti-colonial and non-anthropocentric, in our practices we aim to stay with the question of what kinds of practices might be enacted that unsettle instrumentalist, colonizing and individualist human-centered ways of learning about the more-than-human world?

Our intent is not to engage with this question to prescribe universalist prescriptive pedagogy and curriculum, but rather to "stay with trouble" (Haraway, 2016) of inhabiting these questions within the everyday, mundane and situated places and spaces of environmental early childhood education. In this focus on the mundane and 'minor' practices (Deleuze & Guattari, 1987) of children and educators, we join others who have argued that the vast scale of the current epoch of environmental damage does not require only similarly large-scale approaches (Haraway, 2015; Danowski & Viviero de Castro, 2018). That it is to say, while it is important to complicate individualist responses to the environmental crisis, and their underlying modes of neoliberal governance, it is also important not to dismiss the ways in which small shifts towards relational practices matter for livability and hope within increasingly unlivable worlds (Taylor & Pacini-Ketchabaw, 2015; Murris, Reynolds & Peers, 2018; Nxumalo, 2018). Donna Haraway (2015) refers to such practices as "partial and robust biological-cultural-political-technological recuperation" (p. 160).

These are challenging practices to enact in early childhood education. How might pedagogical and curricular practices materialize partial recuperation that enacts hope and helps create more livable human and more-than-human worlds? An added challenge is how to do this while also unsettling individualist, human-centered ways of knowing? We discuss these normative responses in the next section. As mentioned previously, there are no prescriptive 'solutions' or answers to these pedagogical challenges. Nonetheless, one orientation that we have found useful is to adapt a transdisciplinary approach that learns from perspectives such as feminist environmental humanities, Indigenous knowledges and Black feminist geographies (Nxumalo & Rotas, 2018; Nxumalo & Cedillo, 2017; Nxumalo & Villanueva, forthcoming). These perspectives have been particularly compelling in arguing for the necessity of less human-centric, more relational ways of noticing and responding to the more-than-human world in current times of unprecedented environmental damage, while insisting on attention to human inequalities within particular places and spaces (Collard, Dempsey & Sundberg, 2015; Haraway, 2016; McKittrick, 2011; Tuck, Guess, & Sultan, 2014). For instance, we are interested in picking up on Anna Tsing and colleagues'

suggestion (2017) that "to survive, we need to learn new forms of curiosity. Curiosity is an attunement to multispecies entanglement [and] complexity..." (p. G11). In this article, our interest is in considering the potential of relational affect as one such mode of curiosity towards more-than-human complexity that might bring forth new worldings that disrupt anthropocentric (human-centred), colonial and universalizing relations to the more-than-human world. Intentionally troubling dominant romanticized couplings of children and nature, we are particularly inspired by the different affective possibilities that might be activated when young children are positioned within their situated inheritances of settler colonial and anthropogenically damaged worlds (Nxumalo, 2015; Taylor, 2017). Pedagogical attunement to these inheritances does not erase the risk of individualist and cognitive developmental teaching and learning approaches. However, our premise is that working within children's asymmetrical geographies to bring attention to human/more-than-human relationalities, including the affects therein, is a significant movement away from normative approaches.

In what follows, we begin by introducing the focus on water pedagogies and provide an overview of the research project from which this article is drawn. We then articulate why and how we draw on relational affect in making meaning of the children's encounters. We make connections between relational affect and the non-anthropocentric and anti-colonial modes of attunement that we are suggesting are an important response to children learning to learn within environmentally damaged and settler colonial worlds. We then present examples of affective attunements that emerged from (re)storying place through Indigenous song and story-telling at a creek in Austin, Texas. Guided by Indigenous feminisms, we interpret these affective encounters in relation to their decolonial resonances.

Why Water Pedagogies?

In North American early childhood classrooms, water is ubiquitous as a foundational exploration, play and learning material. In these settings water pedagogies remain tethered to human-centered perspectives centered on Western scientific modes of learning about water and on individualist pedagogies that construct water as simply a human resource. Individualism is supported by a dominant focus in early childhood education more broadly, on the individual developing child. For water, this means that teaching and learning centers water as an instrument for the individual child's physical/sensory, socio-emotional, and cognitive development (Gross, 2012; Havu-Nuutinen, 2005). One example is the water table, a common part of North American early childhood classrooms. In these classrooms, the water table is typically set up for activities such as sink or float experiments that are intended to foster the child's development such as fine motor skill and sensory development, and cognitive knowledge (Pacini-Ketchabaw & Clarke, 2016). These pedagogical approaches focus on what water can do for children's learning and development. These are narrow and colonial ways of 'knowing' water; they do not make space for reciprocal and ecological understandings of water. These pedagogies are also marked by a disconnect from the fact that water, amidst several other climate-change related effects, is central to current and future environmental precarities brought by rampant extractivist global capitalism (Intergovernmental Panel on Climate Change, 2018).

We see the pedagogical approaches described above as insufficient for cultivating the kinds of shifts that we think are needed for children inheriting ecologically damaged worlds such as those related to water vulnerabilities. In other words, such pedagogies reinscribe extractivist and instrumentalist ways of knowing water rather than reimagining the kinds of pedagogies that can unsettle normative water relations and that situate children within the actual real world watery precarities in which they are living. Our particular interest is in investigating possibilities for 'otherwise' curriculum and pedagogy that can shift children's curiosities towards more-than-human relationality as well as anti-colonial ways of knowing

and becoming with the watery worlds that they co-inhabit. Feminist environmental humanities scholars and multiply situated Indigenous knowledges have already pointed to the need for attending to water in ways that are less human-centred and that consider the ways in which are always already in relationship with water, including through uneven inheritances of anthropogenic impacts on water (Neimanis, 2017; Yazzie & Baldy, 2018). These shifts feel particularly urgent in our current context of Texas, which is already facing the impacts of climate change, such as through both severe prolonged drought and extreme flooding events (PlanetTexas2050, 2018). As we write this, the city is in the midst of a boil water advisory due to impacts of flooding on silt levels in the water supply.

Why Affect?

In turning towards the generative and interruptive potentials of affect in doing water pedagogies differently, we draw inspiration from early childhood scholars who have shown how affect has potential as a mode of decentering human-centered modes of learning. This might at first seem to be contradictory, if affect is considered simply as human sense-making. However, affect understood as inherently relational, brings forth a myriad of possibilities with regards to the who, what, and where of being affected and affecting others. For instance, Hickey-Moody (2018) describes affect as the changes in capacity to act that emerge when bodies encounter "contexts, including policies, institutions, beliefs (para. 9)." Similarly, the relational potentials of affect are captured by Siegworth and Gregg (2010) as forces that circulate between human and more-than-human bodies, whereby:

affect is found in those intensities that pass body to body (human, non-human, part-body and otherwise), in those resonances that circulate about, between and sometimes stick to bodies and worlds, and in the very passages or variations between these intensities and resonances themselves. (p.1)

Understood in these ways then, affect is inherently shared or social; where this sociality is not limited to human bodies (Ahmed, 2014). Brought to our context of early childhood education, the work of Pacini-Ketchabaw, Taylor and Blaise (2016) on young children's relations with animals is particularly helpful in conceptualizing affective pedagogies. They discuss how part of decentering the human involves children 'learning to be affected' in multiple ways by multispecies encounters. They describe certain practices that might increase the propensity to learn to be affected. For instance, in nurturing multisensory awareness they pay close attention to what is activated differently by: visceral child-animal encounters that include smell, slow walking, and stillness. In troubling romanticized children's multispecies relations, they also attend to awkward encounters and their accompanying mixed affects. Importantly in this work they follow multispecies relations rather than simply following the child. This is an important shift away from the child-centered approach to pedagogy that remains foundational to early childhood education and its developmental logics (Nxumalo, Delgado, & Nelson, 2018). The authors demonstrate the ways in which affect can be profoundly pedagogical. At the same time, the authors are careful to underline that an important part of this work is the recognition that learning to be affected by entanglements with the more-than-human world, including human/more-than-human mutual vulnerabilities, does not presume an ability to control or predict what it is that will affect us.

Tonya Rooney's (2018) work is also insightful in making visible the impacts of affective pedagogies on children's ecological relations. Through everyday walking experiences with children, she makes visible the ways in which the affects of weather impact children's place relations. Like Pacini-Ketchabaw and colleagues (2016), for Rooney, working with affect pedagogically includes slowing down and attending to multisensory affects. In this slowing down to attend to the affects of weather on children, Rooney also

highlights the impacts of multisensory embodied connections that encourage children to attune to the weather with "smell, sound, touch, taste and other modes of relating or being affected that are more difficult to name" (p. 7). These practices of learning to be affected by the weather are also pedagogical; as Rooney explains, children, through these everyday slow-walking practices are learning with the weather, rather than about the weather. Rooney eloquently describes the affective registers that emerge as children attune their bodies to the weather as:

elemental affect that may at times be puzzling or barely imperceptible, [but] nonetheless is part of the children's bodily connection to and relationship with the world around them; a mode of 'becoming with' the world that also seems to be open to times and scales in the lives of other creatures. (p. 8)

Taken together, this important work from early childhood scholars highlights how affect can be a part of pedagogies that attend to the lively capacities of more-than-human others. These affective pedagogies decentre the human developing child; attend to children's multispecies relations; nurture multisensorial engagements with the more-than-human world; and subvert linear pre-determined modes of learning. Alongside the insights offered by the aforementioned modes of understanding and foregrounding affect, we are interested in building on this work to consider how engagements with affect might also connect to early childhood pedagogies that subvert colonial ways of being with and learning with the more-than-human world. Therefore, in bringing forward examples from our research with young children's water relations, we will also bring these insights on affect into conversation with Indigenous feminist scholarship to tether affective pedagogies and curriculum-making to our anti-colonial concerns.

Situating Educator-Child-Creek Encounters

Over the course of a year, we spent time with a group of kindergarten and preschool children and educators at a waste-filled creek (Figure 1) that borders a suburban Austin independent school (Saint-Orens & Nxumalo, 2018). Fikile is the principal researcher in the project and worked alongside teachers and educators as a pedagogista. She is a citizen of eSwatini and Canada (Nxumalo, Delgado, & Nelson, 2018; Vintimilla, 2018). Marleen is Pame; an enrolled member of Mexica Kalpulli Tlatlpapaloti. She is also a member of the Miakan/Garza Coahuiltecan Band of Texas. Marleen also worked closely with the educators and children as a pedagogista. Our pedagogista roles draw inspiration from their origin in the preschools of Reggio Emilia, where "the pedagogista is someone who works collaboratively with all the protagonists within an educational endeavour to promote critical and dialogical encounters that consider the specificity of the pedagogical project as well as its relations with the broader philosophical vision and commitments of the early learning setting" (Nxumalo, Delgado, & Nelson, 2018, p. 434). In this role, we (Fikile and Marleen) spent time once a week at the creek with the educators and children working together on planned and emergent pedagogical encounters. In between visits, we worked with the teachers on collaborative pedagogical documentation using a shared Google doc.



Figure 1: Creek-Waste Encounters

Pedagogical documentation, also inspired by the preschools of Reggio Emilia, is a process for making children's learning visible that can include video, images, written records and artifacts of children's work (Nxumalo, Gargliadi & Ryung, in press). Importantly, it is not simply a record of what happened; documentation also includes educators' critical reflections and subjective interpretations of the pedagogical encounters. In this project we also used pedagogical documentation as a communication and planning tool that helped us prepare pedagogical provocations building on the previous weeks' encounters. Pedagogical documentation also served as a research method, serving as the primary way of collecting data from the project, and alongside our field notes helping us to closely attend to, critically reflect on, and revisit what emerged in our encounters (Hodgins, 2012; Nxumalo, 2019). Following Hodgins (2012), pedagogical documentation is a postmodern research methodology; a mode of materializing the ethics and politics of our childhood research, as we discuss later in the paper in relation to anti-colonial affective pedagogies. Here, we also want to note that we do not claim that we present here is a neutral and complete account of what happened. Embracing its postmodern orientations, pedagogical documentation is always "selective, partial, contextual, and situated" (Murris, Reynolds & Peers, 2018, p. 18). It is not a "means to a single neutral picture of what children can do" (Hodgins, 2012, p. 7). Put another way, pedagogical documentation is part of an "agential cut," created in intra-action between researchers, educators, children, encounters, matter and discourses (Barad, 2007). Here the research is always entangled in and implicated in what is produced rather than objectively observing at a distance.

The broader purpose of this ongoing project, which is part of a larger international project, is to develop pedagogies that are responsive to children's complex relations with their local environments, particularly with regards to possibilities for responding to climate change (Climate Action Childhood Network, 2018). In our particular location in Austin, Texas we are interested in pedagogical and curricular attunements to

children's relations with water that emerge from embodied encounters with this watery place that children co-inhabit with human and more-than-human others. In these encounters, we attempt to inquire with water, rather than on water as a passive object. One of the ways in which we do this is to seek ways to think with water in ways that move away from singular already-known answers (Pacini-Ketchabaw & Clark, 2016). Deborah Bird Rose (2016) captures this ethos of our inquiry of staying with challenging questions when she asks: "If water is living, can it also die? Is water caught up in precarity, is it vulnerable? Is water, like life, variable and diverse; in this time of ecological loss, is it threatened" (para 2).

An important part of our processes of relating to this creek is through repeated encounters over time; therefore, we spend time once a week at the creek with the children and educators over the course of the school year. While we are always open to what might beckon to children on a particular day, our pedagogical strategies are also often intentional as we want to complicate child-centered practices and accompanying practices of "following the child"; practices that remain prevalent in early childhood education (Nxumalo, Delgado, & Nelson, 2018). As we discuss further below, this intentionality is seen in the stories, songs, things, and more-than-human others that we bring to children's collective attention. Our intentions have enacted multiple unexpected effects and affects (Saint-Orens & Nxumalo, 2018; Nxumalo & Villanueva, forthcoming). Perhaps then intentionality is not an adequate word to describe the ways in which we are working with our desired shifts in children's relations, and environmental subjectivities. This is to say that we are interested in foregrounding curricular and pedagogical approaches that might orient towards learning with the more-than-human world in ways that include foregrounding marginalized ontologies and epistemologies. At the same time, we also want to unsettle progressive, linear and prescriptive approaches to teaching and learning. This means we work with what is already there, what emerges, and what might be otherwise un-noticed, for instance due to settler colonial modes of knowing a place (Nxumalo, 2015). This also means that our primary interest is not in mapping academic learning outcomes as they are understood within current narrow formations of what counts as learning for young children in standardized documents. Instead we are interested in what emerges in the entanglements of children-creek-educators and more, in this particular place.

For the remainder of the paper, we present three of the orientations that have emerged in this work that we see as generating affirmative shifts in children's water relations: decentering the developing child, activating decolonial cartographies, and refiguring Indigenous presences. We intentionally use the word *orientation* firstly to underline that we want to engage with the politics that underpins relational affect. This means explicitly recognizing that the ways in which human and more-than-human bodies affectively become oriented to each other as well as to other things, ideas, and social formations, has consequence. These orientations can shift and change direction. They can also become sedimented, organized, and performative repetitions (Ahmed, 2006; Collard & Dempsey, 2017). In both cases, orientations have world-making effects on what kinds of life and modes of living are valued as mattering (Collard & Dempsey, 2017).

Relational Affect and Water Song Drawing: Decentering the Developing Child

An important part of how we have engaged with the children with the creek and the surrounding area has been through drawing. Children regularly bring journals with them to the creek, which they call their 'water journals'. Drawing has been a way for us to slow down together, and to carefully attune to the surroundings in multisensory ways. Drawing has also been a mode for the children to collectively and individually reflect on the pedagogical provocations that we (researchers and teachers) have brought to them. One particular day that continued to echo through children's and educators' rememberings, long

after it had passed, was a day when Marleen decided to teach the children a Coahuiltecan song for the water *Naham Kam Ajehuac Yana*. Drawing from our field notes, we describe the moment below:

The children gather on a grass mat alongside the creek. Marleen stories the song for the children; sharing the meanings that she sees as important for these children to learn. Her words embody:

care, gratitude and reverance for water
the liveliness of water
water as human relation
water as affected by positive and negative human actions...
Coahuiltecan Yana Wana lands – water of the spirit/spirit of the water

The children and Marleen stand to face the creek. Marleen leads the children in asking the creek for permission to share the song. Their singing is accompanied by rattles that Marleen has brought, which the children take turns shaking. The song they sing is profoundly pedagogical. It teaches continual respect, love, remembrance and responsibility for the waters of Central Texas. It teaches relational ontologies of water that include: the capacities of water for emotional and physical healing; inseparability of water from human bodies; and the many places through which waters come together, including the rains and rivers (Villanueva, 2018). As we discuss further later in the article, this song is also a place story – that (re) maps and situates the waters of this place as Indigenous lands.



Figure 2: Water Song Drawings

Here we want to attend to the affective relationalities that emerged from children's drawings; created after the water-singing encounter. The attachment of smiles and happiness to the water, which were in many of the children's drawings (as illustrated in Figure 2), might be read as anthropomorphizing the water and reproducing romanticized child-water relations. However, an alternative perspective suggests that multiple materialities and discourses assemble to influence the marks that emerge on the paper. In

other words, the drawings are never a 'pure' and unmediated representation(s) of what children see and hear; they are also much more than the physical images on the paper (Kind, 2010). As Sylvia Kind (2010) explains, "concept[s]...marks, gestures, colours, textures" and more come together in creative acts to actualize particular ideas through a process that is "dynamic, creative, productive, or generative as the art takes shape through movement, rhythm, intuition, reflection, constant judgments and considerations" (p. 115). Sylvia Kind's work helps us to resist a literal interpretation of the children's artwork that would simply inscribe human-like emotions to the water. That is to say, even as children use emotions to describe their artworks (for instance referring to the water as "happy"), these drawings can be seen as collective affective relationalities towards water that shape and are shaped by:

... what children and teachers say (for example "I'm the water spirit"; "This is the water happy"), the creek, the waste scattered within and alongside the creek, Marleen's words about the song, the song, the singing, children's memories of other water stories we have told and more...

The art making is just one part of the affects, objects, human and more-than-human bodies, and discourses that come together to change how children act, feel and do. Within this assemblage art participates in changing what human and more-than-human bodies can do (Hickey-Moody, 2018). While the moments we have described here are small and minor events, we take them seriously as processes of children's inquiries that are more than the representations drawn on the pages. Just as the affective relationalities that emerge from these moments are more than what children say and do, the learning that happens in these inquiries also cannot be adequately captured by individual developmental descriptors of each individual child's art: children's bodies, the pencils, crayons, the paper, the creek, the song – which children hum while they draw, and the other 'things, events, sounds, memories' are all active participants in this more-than-human place learning encounter (Kind, 2010; Nxumalo & Rubin, 2018). In addition to their potential for activating more reparative, less destructive relations with more-thanhuman worlds, these pedagogical encounters unsettle EuroWestern understandings of the individual autonomous child who is separate from the natural world; a world that they need to be "returned" to experience academic, socio-emotional and physical developmental benefits (Taylor, 2017). We wonder what new kinds of collective relational subjectivities emerge from these affective pedagogies as children collectively create in emplaced material-discursive relationship with each other, the water song, and the creek.

As our readings of these moments suggest, we are not concerned with the slippages between emotion and affect, particularly in our focus on relationality. We resonate with Sara Ahmed (2010) when she writes:

While you can separate an affective response from an emotion that is attributed as such (the bodily sensations from the feeling of being afraid), this does not mean that in practice, or in everyday life, they are separate. In fact, they are contiguous; they slide into each other; they stick, and cohere, even when they are separated. (p. 231)

We see noticing emotional responses as a part of paying attention to the ways in which affect is always distributed unequally: not all bodies are affected in the same way. This means that a turn to affective pedagogies also includes an analysis of power relations that shape the ways in which affects and their accompanying processes are always asymmetrically distributed within particular places and spaces. We want to avoid colonizing understandings of who and what is affected, and who and what is deemed more easily as an 'affectable other' (Ferreira Da Silva, 2007; Rowe & Tuck, 2017). Put another way, while we

focus on the positive relational aspects of our pedagogies, we understand relational emotions as involving both "(re)actions or relations of 'towardness' or 'awayness'" (Ahmed, 2014, p. 8). Brought to the encounters we have described, an attunement to the circulation of emotions and their entanglements with power relations helps us to notice that for Marleen, bringing forward Indigenous knowledges as an Indigenous person in this particular place is a complex moment – filled with emotion for its decolonial resonances and for the risks and vulnerabilities it brings as an "otherwise" way of being with this colonized place.

Relational Affect and a Water Song: Activating Decolonial Cartographies

We have recently written about Marleen's teaching and sharing of a Coahuiltecan song for the water, Naham Kam Ajehuac Yana³ (We will remember the sacred springs) and her teaching of children to ask the creek for permission to sing this song. In this writing, we have thought through how these pedagogies are enactments of Indigenous feminist praxis that have decolonial effects (Nxumalo & Villanueva, forthcoming). Here we want to extend this work to think specifically with the embodied reverberations of these pedagogical encounters, which were experienced as affecting moments by us, and by the children and educators. In this reading of these moments, we turn again to Indigenous feminist theories. In particular, we want to consider how the sonic embodied movements that were a part of this singing can be thought of relational affective gestures. These gestures activate decolonial cartographies or countermappings of this particular place that are an antidote to the "cartographies of dispossession" that are always a part of settler colonialism (Morrill, Tuck, & Super Futures Haunt Qollective, 2016, p. 4).

Cree scholar Karyn Recollet (2015) helps bring forth an understanding of the mattering of the physical, embodied, sonic and affective movements of Indigenous relational knowledges within urban spaces such as this Austin creek. Karyn Recollet (2015) works with the example of Indigenous peoples dancing with non-Indigenous allies in flash mob round dances in urban Toronto spaces during a period of Indigenous resistance called Idle No more. She discusses the affect produced during these moments as having pedagogical and decolonial resonances; where "circuitous motion enacts a radical pedagogy of love through the singing of love songs, which effectively embed between spaces for the wedging in of dancers, thoughts, reconceptualizations, and renegotiations of space" (p. 136). Perhaps then, Marleen-childrensong-rattles-creek-trees-educators' and more could also be seen as collectively activating a radical pedagogy that enacts decolonial counter mappings. These embodied and affective counter mappings are "geographies of resistance" (p. 135) that challenge the erasure of this urban creek space as Indigenous lands.

Decolonial affects are made possible through the presence of Marleen as member of a Coahuiltecan community with deep relations to this place, including through teachings from Coahuiltecan elders. They are also made possible by the relational affects activated through the assemblage of human and morethan-human movements, gestures and sounds that circulate in this space during and after the singing. These moments, while they seem minor and insignificant within the ongoing violence of settler colonial erasure, matter for children learning to unsettle human-centered ways of knowing and learning to enact reciprocal relations. These unsettling movements can perhaps be thought of as a mode of relationality that is "based in reciprocity and obligation with the land and other-than-humans" (Simmons, 2017, para. 3). We also take seriously the caution issued by Aimee Carrillo Rowe and Eve Tuck (2017) to be wary of the ways in which turns to affect, alongside other turns towards the "more-than-human," can reinscribe universalisms that assume a subject devoid of geographic specificity and location, including complicit situatedness within settler colonial geographies. These scholars remind us to keep questions of

emplacement, land and settler colonial dispossession close in our engagements with affective pedagogies. Here land is understood to encompass all territories, including "land, water, air, and subterranean earth" (Tuck, McKenzie & McCoy, 2014, p. 8). In these encounters, affective pedagogies are always already geographic; they are situated within a particular place — a place where affective intensities always involve human, material and more-than-human bodies *and* a place where human differentials including Indigeneity and its erasures matter.

Relational Affect and a Creation Story: Refiguring Presences

An important part of our collective slowing-down at the creek has been to read and discuss stories of water and water relations with the children. The stories that we bring to children are a part of our decolonizing praxis; a mode of what Nishnaabeg scholar Leeanne Simpson's (2011) calls "storied presencing" (p. 96), or what has also been referred to by Fikile as *refiguring presences* (Nxumalo, 2015, 2019). Refiguring presences in settler colonial early childhood education places and spaces means that some of the stories that we share with children are situated stories that are intended to foreground Indigenous presences and relations in this particular place. We also foreground Indigenous stories from multiple dispersed places to bring forward ways of knowing and becoming with water that disrupt the centrality of developmental, and Western scientific epistemologies and ontologies (Nxumalo & Villanueva, forthcoming). Both of these storying practices are responses to the absenting of Indigenous peoples, relations, knowledges and land in place-based encounters in early childhood education within settler colonial contexts (Nxumalo, 2018, 2019). Put another way, refiguring presences is a practice of grappling with what it might look like pedagogically to affirm Indigenous life, land and relations. Intrinsic to this pedagogical orientation is to affirm the co-constitutive entanglement of human and more-than-human life rather than perpetuate colonial nature/culture and human/more-than-human bifurcations.

In refiguring Indigenous presences through place stories that disrupt the material and discursive ways in which settler colonialism works to disappear or marginalize Indigenous presence, we are embracing, rather than turning away from the political nature of curriculum-making (Nxumalo, Delgado & Nelson, 2018; Tuck & Yang, 2012). Story-telling might be seen as a relatively benign everyday early childhood literacy practice. However, the stories we choose to tell are framed by a consideration of place as storied within unevenly distributed power relations that shape what stories matter and what stories are told (Nxumalo, 2019). In this conceptualization, humans, more-than-human things, plants, as well as practices and multiple knowledges, are all participants in the storying of places. However, within the striations of settler colonialism and its anthropocentric assumptions, certain stories are disappeared altogether or dismissed as mythical, rather than as a specific expression of "Place-Thought...the non-distinctive space where place and thought were never separated because they never could or can be separated" (Watts, 2013, p. 22). Given these understandings, there are multiple entry points towards considering what practices of (re)storying place might look like. For instance, our previous discussions of pedagogical encounters with water through drawing and Indigenous water songs in this article can also be seen as acts of (re)storying place in decolonizing ways. Here we want to focus on the impacts of materializing a place story focused on the Coahuiltecan people of Central Texas that was shared with the children. We discuss this pedagogical encounter as an illustrative example of how the mobilization of relational affects can be part of a decolonizing pedagogical practice of refiguring presences.

As misty rain fell one morning, we gathered on the grass mat next to the creek and Marleen told the creation story of the Indigenous Coahuiltecan people of central Texas, using visuals that she drawn (Figure 3).



Figure 3: Sharing the Coahuiltecan Creation Story

The story tells of Coahuiltecan peoples beginning in the underworld as spirits. A deer appears and the spirits begin to follow the deer. A water bird dives into the spring, pulls the deer out of the springs and the spirits hold onto the deer's leg. On emerging from the springs, the spirits take on a human form. These sacred springs in this story are named Yana wana⁴.

We call the Sacred Springs in San Marcos, which are an entity in our viewpoint, Ajehuac Yana. In Coahuiltecan, ajehuac means springs, and Yana means sacred or spirit; that which is sacred like a spirit. The San Antonio Coahuiltecan communities call the San Antonio River entity Yana Wana – wana meaning water – Sacred/Spirit Water.

(Maria Rocha, Coahuiltecan elder)

Marleen explains to the children that this story is not only a creation story, it is a teaching of gratitude for the sacred springs and of an ethics of respect and protection towards these waters for current and future generations. This story "reflect[s] important relationships between the human and non-human...[and] have been formed by and participate with the creative forces of the universe" (Cajete, 2000, p. 35). Coahuiltecan elder Maria Rocha explains that the creation story shows children their interconnectedness with the earth, including water and animals (personal communication, June 22, 2017). Yana wana is also the name for one of the sacred springs which the creation story refers to; Blue Hole headwaters of the San Antonio River. Other sacred spring sites, which are integral to the knowledge systems of the Indigenous peoples of Central Texas, are tza wan pupako - Barton Springs in Austin; ajehuac yana - Spring Lake in San Marcos; and saxōp wan pupako - Comal Springs in New Braunfels (Indigenous Cultures Institute, 2018). We name these places here because for most people in Central Texas these are popular recreation sites. For Coahuiltecan peoples, they are sacred places of ceremony; they are relatives (Garza, 2018).

Angie Morrill, Eve Tuck and the Super Futures Haunt Qollective (2016) compellingly underline the necessity of practices such as the telling of this creation story in countering material, embodied and discursive dispossession. They say:

In the sense of "being made" dispossessed: dispossession once referred only to land theft, but now attends to how human lives and bodies matter and don't matter—through settler colonialism, chattel slavery, apartheid, making extra legal, immoral, alienated...The opposite, the endgame of opposing our dispossession is not possession—not haunting, though I'll do it if I have to; it is mattering (p.5). [emphasis added]

Practices of refiguring presences, such the telling of the creation story, are orienting devices (Ahmed, 2014) that attempt to shift perceptions of who and what *matters* within settler colonial places and spaces. What we are suggesting here is that shifting perceptions of mattering and undoing practices of 'forgetting to remember' requires changes in capacities to be affected. In other words, refiguring presences through the pedagogical presencing of human and more-than-human Indigenous life and water relations in Marleen's telling of the Coahuiltecan creation story necessarily mobilizes relational affect in this particular place. From this perspective, the decolonizing orientations of sharing this creation story include the activation of affective relational responses and responsibilities towards water, water-as-life and lively, and water-animal-human relations. For example, we saw glimpses of the liveliness of water as children made connections with popular culture that also gestured to the liveliness of water in their aesthetic expressions. For instance, we saw this as one child told and drew a story of water helping the Disney character Moana who has fallen into the ocean. Another child drew a person evacuating from a tsunami by singing to the water.

Certainly, it is difficult to pinpoint exactly what the sharing of this story enacts in children's relational affective meaning making. While we make connections to relational affect in children's body language, joyful expressions, and some of their art-making, we do not claim to know exactly what children think and how this story affects each child. This is not our primary interest. Our interest is in arguing that it matters for decolonizing place and place relations in early childhood education to enact affective pedagogies of refiguring presences. Refiguring presences require early childhood teachers to recognize that "sentiments can be mobilized in ways that challenge and extend the settler state" (Rowe & Tuck, 2017, p. 5). In early childhood education, sentiments that extend the settler state include impacts of child-as-steward discourses that mobilize children to relate to nature as something separate from them – as pure, pristine, empty landscapes awaiting their scientific learning, exploration and "discoveries". These sentiments reinforce places as devoid of Indigenous histories, relations, cultures, and knowledge (Nxumalo & ross, 2019; Taylor, 2017). Such colonizing sentiments also enroll children into settler colonial nation-building; nurturing children's love and connection to 'wild' and 'empty' nature. Colonizing sentiments related to children and nature also circulate more broadly in society. This includes the intensely racialized sentiments that construct predominantly white settler children as innocent children who need to be returned to 'pure' nature (Nxumalo & ross, 2019; Taylor, 2017). Pedagogies of refiguring presences, such as the telling of the creation story, while offering potential disruptions of colonial education, are not immune from the risk of extending the settler state. There remains a risk of metaphorizing decolonization, and simplistic take-up of complex Indigenous knowledges. There is also a risk of appropriation, if non-Indigenous children and educators superficially consume and enact the place stories that we bring to them. However, amidst the risks of mobilizing feelings that extend the settler state, in the encounters described herein, we see possibilities for affective orientations that challenge the settler state. These (re)orientations are

put into motion through Marleen's emplaced story-telling that presences Indigenous Texas land, life and water relations.

Refiguring presences then is difficult, risky yet necessary work within persistent conditions of settler colonialism that normalize Indigenous erasure. Our modest suggestion here is that these pedagogies are necessary political orientations for opening up more relational ways of becoming with the world. Such political mobilizations, however small and minor, feel particularly urgent as children's inheritances of environmental precarity (and its entanglements with settler colonialism) underline the need for a radical shift away from the colonizing and human-centered practices that fueled extractive relations with the environment.

Towards Decolonial Early Childhood Water Pedagogies

In this article, we have storied some of the ways in which activating relational affect between children, place stories, sacred songs, water's liveliness, drawings...and more, can work in ways that challenge settler colonial ways of relating to the more-than-human world. While we do not offer these imperfect, emergent and ongoing practices as a recipe to be followed, we see them as providing insight into how these embodied practices might be an activating force for relational affects that have decolonial resonances and that unsettle anthropocentrism. Alongside the generative potentiality of these small moments in our practices, we have also inhabited the tensions and risks that also circulate within affective pedagogies that are always haunted by settler colonial dispossession. We nonetheless remain hopeful about what a turn to mobilizing relational affect with young children might do towards decolonizing childhood education that is concerned with issues of the environment.

Notes

- 1. This Coahuiltecan ceremonial song, published by the Indigenous Cultures Institute in San Marcos, Texas as part of Miakan-Garza Band elders Maria Rocha and Dr. Mario Garza efforts to revise the Coahuiltecan language: translates to *Water is life, it is everything, everything, everything. Water Spirit forms living things. With all that there is.* Retrieved from: https://www.indigenouscultures.org/coahuiltecan-language
- 2. Aimee Carrillo Rowe and Eve Tuck (2017) define settler coloniam as: "The specific formation of colonialism in which people come to a land inhabited by (Indigenous) people and declare that land to be their new home. Settler colonialism is about the pursuit of land, not just labor or resources. Settler colonialism is a persistent societal structure, not just an historical event or origin story for a nationstate. Settler colonialism has meant genocide of Indigenous peoples, the reconfiguring of Indigenous land into settler property. In the United States and other slave estates, it has also meant the theft of people from their homelands (in Africa) to become property of settlers to labor on stolen land" (p. 4).
- 3. Na Ham Kam means We will remember. Ajehuac Yana refers to the sacred springs; Ajehuac means springs, Yana means spirit, that which is sacred
- 4. This version of the creation story is a very simplified version that was tailored for the purposes of telling the story to the children that day. This story has many more details, including several important more-than-human beings that have important roles and bring important teachings.

References

- Ahmed, S. (2006). *Queer phenomenology: Orientations, objects, others*. Durham, NC: Duke University Press.
- Ahmed, S. (2010). Orientations matter. In D. Coole & S. Frost (Eds.), *New materialisms: Ontology, agency, and politics* (pp. 234–257). Durham, NC: Duke University Press.
- Ahmed, S. (2014). The cultural politics of emotion. (2nd edition). Edinburgh: Edinburgh Univ. Press.
- Cairns, K. (2017). Connecting to food: Cultivating children in the school garden. *Children's Geographies*, 15(3), 304-318.
- Cajete, G. (2000). Native science: Natural laws of interdependence. Santa Fe: Clear Light Publishers.
- Climate Action Childhood Network. (2018). *Climate action childhood network*. Retrieved from http://www.climateactionchildhood.net
- Collard, R-C., & Dempsey, J. (2017). Capitalist natures in five orientations. *Capitalism Nature Socialism*, 28(1), 78-97.
- Collard, R.-C., Dempsey, J., & Sundberg, J. (2015). A manifesto for abundant futures. *Annals of the Association of American Geographers*, 105(2), 322–330.
- Danowski, D., & Viviero de Castro, E. (2018). The ends of the world. Cambridge: Polity Press.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia.* trans. B. Massumi. London: Athlone Press.
- Ferreira da Silva, D. (2007). Toward a global idea of race. Minneapolis: University of Minnesota Press.
- Garza, M. (2018, November). Native American Graves Protection and Repatriation Act: Help us rebury our ancestors. Seminar presented at NAIS Speaker Series, University of Texas at Austin. Austin, TX.
- Gross, C. (2012). Science concepts young children learn through water play. *Dimensions of Early Childhood*, 40(2), 3–11.
- Haraway, D. (2015). Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making kin. *Environmental Humanities, 6,* 159–165.
- Haraway, D. (2016). *Staying with the trouble: Making kin in the Cthulucene*. Durham NC: Duke University Press.
- Havu-Nuutinen, S. (2005). Examining young children's conceptual change process in floating and sinking from a social constructivist perspective. *International Journal of Science Education*, 25, 259-279.
- Hickey-Moody, A. (2018). Materialising the social. *Ruukuu: Studies in Artistic Reseach, 9,* online. Retrieved from: https://www.researchcatalogue.net/profile/show-exposition?exposition=371583
- Hodgins, D. (2012). Pedagogical narrations' potentiality as a methodology for child studies research. *Canadian Children*, *37*(1), 4-11.
- Indigenous Cultures Institute. (2018). *Sacred sites*. Retrieved from https://www.indigenouscultures.org/sacred-sites
- Intergovernmental Panel on Climate Change. (2018). *Global Warming of 1.5 °C.* Retrieved from: https://www.ipcc.ch/sr15/
- Kind, S. (2010). Art encounters: Movements in the visual arts and early childhood education. In V. Pacini-Ketchabaw (Ed.), *Flows, rhythms and intensities of early childhood education curriculum* (pp. 113–132). New York, NY: Peter Lang.
- McKittrick, K. (2011). On plantations, prisons, and a black sense of place. *Social & Cultural Geography,* 12(8), 947–963.
- Murris, K., Reynolds, R-A, & Peers, J. (2018). Reggio Emilia inspired philosophical teacher education in the Anthropocene: Posthuman child and the family (tree). *Journal of Childhood Studies, 43*(1), 15-29.

- Neimanis, A. (2017). *Bodies of water: Posthuman feminist phenomenology*. London: Bloomsbury Academic Press.
- Nxumalo, F. (2015). Forest stories: Restorying encounters with 'natural' places in early childhood education. In V. Pacini-Ketchabaw, & A. Taylor (Eds.), *Unsettling the colonial places and spaces of early childhood education* (pp. 21-42). New York: Routledge.
- Nxumalo, F. (2018). Situating Indigenous and Black childhoods in the Anthropocene. In A. Cutter-Mackenzie, K. Malone, & E. Barratt Hacking (Eds.), *International research handbook on childhoodnature: Assemblages of childhood and nature research* (pp. 1-22). Springer: New York.
- Nxumalo, F. (2019). Decolonizing place in early childhood education. New York: Routledge.
- Nxumalo, F., & Cedillo, S. (2017). Decolonizing 'place' in early childhood studies: Thinking with Indigenous onto-epistemologies and Black feminist geographies. *Global Studies of Childhood,* 7(2), 99-112.
- Nxumalo, F., Gargliadi, L.M., & Ryung, H. (in press). Inquiry-based curriculum in early childhood education. In M. F. He &. W. Schubert (Eds), *Oxford encyclopedia of curriculum studies*. Oxford: Oxford University Press.
- Nxumalo, F., & ross, k.m. (2019). Envisioning Black space in environmental education for young children. *Race, Ethnicity & Education*, 22(4,)502-524.
- Nxumalo, F., & Rotas, N. (2018). Interdisciplinary dialogues in environmental early childhood education (Editorial). *Journal of Childhood Studies*, 43(1), 1-3.
- Nxumalo, F., & Rubin, J.C. (2018). Encountering waste landscapes: More-than-human place literacies in early childhood education. In C.R. Kuby, K. Spector & J. Johnson Thiel (Eds.), *Posthumanism and literacy education: Knowing/being/doing literacies* (pp. 201-213). New York: Routledge.
- Nxumalo, F., & Villaneuva, M. (forthcoming). Listening to water: Situated dialogues between Black, Indigenous & Black-Indigenous feminisms. In J. Ulmer & C. Taylor (Eds.), *Transdisciplinary feminist research practices*. New York: Routledge.
- Nxumalo, F., Delgado, C., & Nelson, N. (2018). Pedagogical gatherings in early childhood education: Mapping interferences in emergent curriculum. *Curriculum Inquiry*. Advance Online Publication https://doi.org/10.1080/03626784.2018.1522930
- Pacini-Ketchabaw, V., & Clark, V. (2016). Following watery relations in early childhood pedagogies. *Journal of Early Childhood Research*, 14(1), 98-111.
- Pacini-Ketchabaw, V., Taylor, A. & Blaise, M. (2016). De-centring the human in multispecies ethnographies. In C. Taylor & C. Hughes (Eds.), *Posthuman research practices in education* (pp. 149-167). Hampshire: Palgrave Macmillan.
- Pink, S. (2013). Engaging the senses in ethnographic practice: Implications and advances. *The Senses and Society*, 8(3), 261–267.
- Planet Texas 2050. (2018). *Planet Texas 2050*. Retrieved from https://bridgingbarriers.utexas.edu/planet-texas-2050/
- Recollet, K. (2015). Glyphing decolonial love through urban flash mobbing and Walking with our Sisters. *Curriculum Inquiry, 45*(1), 129-145.
- Rooney, R. (2018). Weathering time: Walking with young children in a changing climate. *Children's Geographies*, Advance Online Publication DOI: 10.1080/14733285.2018.1474172
- Rose, D.B. (2016, March 14). Lively water. Retrieved from http://deborahbirdrose.com/?s=living+water.
- Rowe, A. C., & Tuck, E. (2017). Settler colonialism and cultural studies: Ongoing settlement, cultural production, and resistance. *Cultural Studies* ↔ *Critical Methodologies*, *17*, 3–13.
- Saint-Orens, L., & Nxumalo, F. (2018). Engaging with living waters: An inquiry into children's relations with a local Austin creek. *Journal of Childhood Studies*, 43(1), 68-72.
- Seigworth, G. J., & Gregg, M. (2010). An inventory of shimmers. In M. Gregg & G. J. Seigworth (Eds.), *The affect theory reader* (pp. 1–25). Durham, NC: Duke University Press.

- Simmons, K. (2017, November 20). Settler atmospherics. *Dispatches. Cultural Anthropology.* Retrieved from https://culanth.org/fieldsights/1221-settler-atmospherics
- Simpson, L. (2011). Dancing on our turtle's back: Stories of Nishnaabeg re-creation, resurgence and a new emergence. Winnipeg: Arbeiter Ring Pub.
- Taylor, A. (2019). Countering the conceits of the Anthropos: Scaling down and researching with minor players. *Discourse: Studies in the Cultural Politics of Education,* Advance Online Publication, 1-19. DOI:10.1080/01596306.2019.1583822
- Taylor, A. (2017). Beyond stewardship: Common world pedagogies for the Anthropocene. *Environmental Education Research*, *10*, 1448-1461.
- Taylor, A., & Pacini-Ketchabaw, V. (2015). Learning with children, ants, and worms in the Anthropocene: Towards a common world pedagogy of multispecies vulnerability. *Pedagogy, Culture & Society,* 23(4), 507-529.
- Taylor, A., & Pacini-Ketchabaw, V. (2018). *The common worlds of children and animals: Relational ethics for entangled lives.* New York: Routledge.
- Tsing, A., Swanson, H., Gan, E., & Bubandt, N. (Eds.). (2017). *Arts of living on a damaged planet*. Minneapolis, MN: University of Minnesota Press.
- Tuck, E., & Yang, K.W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education, Society*, 1(1), 1-40.
- Tuck, E., Guess, A., & Sultan, H. (2014). Not nowhere: Collaborating on selfsame land. In: Decolonization: Indigeneity, Education & Society Blog Available at: https://decolonization.files.wordpress.com/2014/06/notnowhere-pdf.pdf
- Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, postcolonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1-23.
- Villanueva, M. (2018). An auto-ethnography of water as life: Decolonizing our connection with Mother Earth. Unpublished MA Thesis University of Texas at Austin.
- Watts, V. (2013). Indigenous place-thought and agency amongst humans and non-humans (First woman and sky woman go on a European tour)! *Decolonization: Indigeneity, Education & Society, 2*(1), 20–34.
- Yazzie, M.K., & Baldy, C. (2018). Introduction: Indigenous peoples and the politics of water Decolonization: Indigeneity, Education & Society, 7(1), 1-18.

Fikile Nxumalo is an assistant professor in the Department of Curriculum, Teaching and Learning at the University of Toronto, Canada. She may be reached at f.nxumalo@utoronto.ca.

Marleen Villanueva is a doctoral student at the University of Toronto, Canada. She may be reached at marleen.villanueva@utoronto.ca.