A media arts-based praxis process of building towards a relational model of curriculum oriented towards reconciliation through water justice

Sarah Van Borek

PhD Candidate, Rhodes University, South Africa

Abstract

This research shares a process of developing a relational model of curriculum that is based on media arts praxis and is oriented towards reconciling peoples and waterways that have been historically entangled in unjust power relations and related social and ecological mistreatment in Canada and South Africa. I provide a window into this process by reflecting on a pilot course on 'Making [form]s' which I presented at a Canadian university in 2018. This site-specific, media-arts-based environmental education course is intended for universities committed to 'walking the talk' of decolonising education. Centred around water as a mirror of the state of our relations, which it seeks to transform, the curriculum facilitates public education and dialogue around the importance of healthy waterways. In my analysis, I outline the three most prominent relational sensibilities and abilities towards reconciliation cultivated by students through the programme, namely (1) knowledge ecologies; (2) a hopeful social imaginary; and (3) embodied ways of knowing.

Keywords: water, relational, reconciliation, media arts, decolonising education

---

PO Box 94, Environmental Learning Research Centre, Faculty of Education, Rhodes University, Makhanda, Eastern Cape, 6140, South Africa
Email: svanborek@gmail.com | **Tel:** +27 (0)63 789 9590 | www.sarahvanborek.com
Research conducted at the Emily Carr University of Art + Design, *xʷməθkʷəy̓əm* (Musqueam),
Sḵwx̱wú7mesh Úxwumixw (Squamish Nation) and *səl̓ilwətaʔɬ* (Tsleil-Waututh) territories currently known as Vancouver, Canada | **ORCID ID:** https://orcid.org/0000-0003-4430-7883

Introduction

It is alleged in one story that our planet is becoming warmer and that this could be the beginning of an irreversible catastrophe. Other sources offer hopeful solutions. While one story suggests that water is a commodity for human consumption, another story, rooted in what Rita Wong (2011: 86) calls a 'watershed mind', suggests that it is a living element at the heart of all life. There is a story that tells how I am separate from you, and from wind, water, soil, fire and the creatures—both human and wider than human—around me, and another that suggests that we are all interconnected and interdependent. 'Storytelling is one of the great arts of witness' (Van Dooren & Rose 2016: 91) ... and responding affectively to what we witness. It is 'a dynamic act of "storying" ... an ethical practice ... [where] the stories we tell are powerful contributors to the becoming of our shared world' (Van Dooren & Rose 2016: 89). Listening to stories connects the teller and the listener with each other and the story world. The creation of stories through careful witnessing and responding results in the establishment of a relationship between the witnessed and the witness. 'Stories [themselves] are relational—both in the creation and the telling' (Todd 2018: 161, in Van Borek & James 2019: 15). The full potential of stories for creating and transforming our world through creating and transforming relations lies not only in *what* story is shared, but *how* it is created and shared.

Reconciliation in practice: A framework for socio-ecological justice

The story of reconciliation takes on different forms and meanings for different people in different contexts. In the case of the Israeli-Palestinian conflict, reconciliation has been explained as

> *decolonisation within a transitional justice framework ... [which] begins with acknowledging the power structures and asymmetry between colonized and colonizer as the point of departure, with the explicit goal of transforming them into structures of equality and reciprocity in a new democratic political order.* (Rouhana 2018: 657)

In Sweden, a white paper project (2012-2017) aimed at a reconciliation between the indigenous Sami peoples and the Church was influenced by what Tore Johnsen

proposed as four phases of reconciliation, which are (1) acknowledgement; (2) repentance; (3) restoration, including the restoration of the relationship between the two parties involved in the past injustices; and (4) forgiveness (Lindmark & Sundström 2018). In their report titled 'The state of reconciliation in Australia', Reconciliation Australia (2018) outlines what it views as five key aspects of reconciliation, namely (1) race relations; (2) equality and equity; (3) institutional integrity; (4) historical acceptance; and (5) unity. In her research around reconciliation in Rwanda, Hodgkin (2006: 200) refers to Minow's (1998) definition of reconciliation as 'a process that involves the rebuilding of relations—both individually and collectively'. In examining the meanings of reconciliation for teachers across mixed schools in diverse conflict-ridden societies, Zembylas, Bekerman, McGlynn and Ferreira (2009) emphasise links to inclusivity and point to Cole's summary of five essential aspects of reconciliation:

(1) Reconciliation is a dynamic, complex and long-term process; (2) it is a spectrum rather than a definition; (3) it is an ongoing struggle to engage and manage difference rather than harmony; (4) it is not synonymous with amnesia and forgetting; and (5) it should be seen in realistic and practical terms rather than in idealist and sentimental ways. (Cole 2007: 408)

The most common meanings of reconciliation in the two contexts on which my PhD studies were focused—Canada and South Africa—were identified by both Reconciliation Canada in The National Narrative on Reconciliation Report (2017) and the South African Reconciliation Barometer Survey[1]: 2019 Report. Those meanings are listed below, starting with the highest ranking in terms of national public perception, according to these surveys:

---

1 'The South African Reconciliation Barometer (SARB) is a cross-sectional, iterative public opinion survey conducted by the Institute for Justice and Reconciliation (IJR) since 2003. It is the world's longest-running public-opinion survey on national reconciliation and provides a nationally representative measure of South Africans' attitudes to reconciliation and several other important social and political indicators' (Potgieter 2019:19). South Africa's Truth and Reconciliation Commission evolved into the IJR in 2000.

Table 1: The meaning of reconciliation in South Africa 2019 and Canada 2017

SOUTH AFRICA	CANADA
Forgiveness[2] – past victims forgiving past perpetrator	Create opportunities for all people to reach their full potential
Peace – the reduction of violence and establishment of peace	Embrace diversity of worldviews and **respect** differences
Moving on – **moving forward** from the past	Acknowledge and work to eliminate stereotypes
Truth – establishing the truth of the past	**Move forward** as **equals**
Respect – respecting people and their humanity	Work together to overcome social and economic inequalities
Justice – redressing injustice / creating a more **equal** society	**Revitalize relationships** between indigenous and non-Indigenous Canadians
Democracy – building a democratic culture	Move beyond the past
Relationships – **improving relationships** between past enemies	**Forgiveness**
Making amends – past perpetrators taking responsibility for their actions	Indigenous control of economic activity
Race relations – addressing racism	Move away from dependence on government systems
Compromise – two sides make compromises	
Nothing - it has no meaning	
Dialogue – finding ways to talk about the past	
Memorialising – remembering the past	

(**Source**: Potgieter 2019: 24)   (**Source**: Reconciliation Canada 2017: 2)

My research is rooted in the concept of reconciliation as *a practice towards thriving together*, where 'together' includes both humans and non-humans. This aligns closely

---

2 Note: The words printed in bold in the above table indicate similarities in the approaches to dealing with reconciliation in the two countries.

with Cole's (2007) concept of reconciliation as a *process,* Morcom and Freeman's (2020) concept of reconciliation as '[moving] forward in a spirit of right relations', and what Platz describes as an 'aesthetico-ethical concept of reconciliation' (2004: 257), which he credits environmental poet Judith Wright to have conceived of through her poetry practice. Platz (2004: 257) defines this concept as a reconciling of humans and nature through 'aesthetic appreciation of nature'. I see reconciliation between peoples and ecosystems profoundly damaged through colonisation as essential to current climate justice and social justice since, through colonisation, distinct narratives were constructed and ceaselessly proliferated—then and ever since—about who/ what is valuable and who/what is disposable (Chamberlain 2003). Settlers viewed the territories that they had occupied and claimed ownership over, now known as Canada, as 'vacant or under-utilized' (Johnson 2016: 1) and 'wild untamed nature' (Preston 2017: 354), and disregarded the indigenous occupants and their valuing of the land/water that was not merely contingent on its productivity.

The pilot course presented from 2018, on which I reflect in this paper and which was intended as a form of reconciliation education, was an important step in preparing to design and teach two courses as iterations in 2019—one in Vancouver, Canada and one in Cape Town, South Africa. Both the abovementioned courses would share key elements of the pilot course's curriculum with the details of each course customised to be contextually relevant. A comparison between these two courses will allow me to assess which aspect(s) of the curriculum may or may not be applicable across contexts. I am not interested in a technicist form of comparative analysis, but rather in identifying dimensions from each context that could potentially inform curriculum in both, and also in other contexts.

After careful consideration, I chose two countries for my study. When it comes to the treatment of institutionally marginalised peoples, the colonial project in Canada shows strong similarities to the South African situation. This includes legislated racism, forced relocation, exploitation of land and natural resources, and depriving children of their languages and cultures through alienating educational systems (residential schools in Canada and Bantu Education in South Africa). This institutionalised oppression, which Wolfe refers to as 'cultural genocide' (2006, in Baijius & Patrick 2019: 270), has been facilitated through government laws such as South Africa's 1913 Natives Land Act (Government of South Africa 2017) and Canada's 1876 Indian Act (University of British Columbia 2009). Both Canada and South Africa adopted Truth and Reconciliation (TRC) processes 'to discover the

truth about our respective pasts', in recognition that 'addressing this history is … a fundamental necessity that is required for the future well-being of society' (Wilson-Raybould 2017). Despite both countries' TRC efforts having since concluded—South Africa's in 2002 and Canada's in 2015—reconciliation, conceived of as a deliverable, seems to not have been achieved since populations in both countries that have been historically marginalised remain as such. Manuel draws a direct link between poverty and land dispossession, where 'in B.C.[3] all Indian reserves make up [only] 0.36 per cent of all B.C. lands' (2017: 209). In South Africa, according to a Land Audit Report by the country's Department of Rural Development and Land Reform (2017), whites own '72% of … farms and agricultural holdings' (ibid.: 7), '49% of … erven land' (ibid.: 12), and '45% of … sectional title units' (ibid.: 16).

Environmental challenges remain equally intact. Both Canada and South Africa have increasingly toxic waters due to pollutants from resource extraction, for example the oil tar sands, 'the world's largest industrial project' (Leahy 2019) in Alberta, Canada and the mining industry across South Africa (Olalde & Matikinca 2019). Both countries have been experiencing extreme weather conditions. Cape Town's extreme drought of 2018 (Joubert & Ziervogel 2019) is a counterpoint to the record-breaking snowfalls in British Columbia, Canada in 2020 (Lirette & Kurjata 2020). Preston (2017: 356) describes a key force influencing such kinds of climate impacts as 'racial extractivism', which

> *… positions race and colonialism as central to the extractivist projects under neoliberalism and underpins how these epistemologies are written into the economic structure and social relations of production and consumption.* (ibid.: 356)

An eco-authoritarianism restricting whose expertise gets to be part of creating solutions exacerbates the problem. Baijius and Patrick (2019: 269) point to the corruption of cognitive power in Canada's water sector where 'water resource management in First Nation communities has long been a technocratic and scientific mission controlled by state-led authorities … [with] limited engagement of First Nations'. A technocratic approach means key decision-making is restricted to experts in science and technology (Machin & Smith 2014) without acknowledging

---

3 B.C. refers to the province of British Columbia, Canada.

the importance of local knowledge in creating lasting environmental solutions. Local knowledge is now the commonly used term that includes traditional or Indigenous knowledge. Brush (1996: 4, in Fischer 2000: 195) defines local knowledge as 'the systematic information that remains in the informal sector, usually unwritten and preserved in oral traditions rather than texts'. Similarly, in South Africa, Roussouw and Wiseman (2004: 33) outline how, '[during] the apartheid era, environmental policy-making processes were technocratically driven and broader civil society was excluded from policy deliberations'. The shift to democracy in 1994 included aims for greater citizen participation in environmental policy as expressed in the Environmental Management Policy for South Africa (Republic of South Africa 1998, in Roussouw & Wiseman 2004). However, without clear ways for local government and civil society to be involved, this has not been optimally put into practice (Roussouw & Wiseman 2004). Since social and ecological injustices are entangled with each other and historical relations, solutions can be possible when engaging in a *practice* towards reconciling social and socio-ecological relations. I argue that reconciliation, when applied to education, offers the potential to be one such practice and I endeavour to create evidence of this through designing and enacting a curriculum to this effect.

Despite an increase in higher education institutions' determination to *Indigenise, Africanise* and/or *decolonise* education (which I see as linked to reconciliation), there are limited examples of what reconciliation education can look like in practice. In *Reconciliation and Pedagogy* (a book of essays from South Africa, Canada, USA, Australia, Cyprus and Israel), Robert Hattam (2012: xv) states that 'the pedagogical potential of reconciliation processes has yet to be adequately elaborated', while Hattam, Atkinson and Bishop (2012: 4) point out that 'while ideas about reconciliation are proliferating, few scholarly accounts have focused on its pedagogies'. The current South African higher education landscape has revealed a growing demand for decolonising higher education (Heleta 2016: 1). Potgieter (2017: 7) reports that reconciliation 'in South Africa's current and historical context requires a nuanced approach to overcoming and preventing social division'. In my opinion, this relates to decolonising education at least insofar as creating opportunities to engage with and develop appreciation for knowledge(s) and Knowledge Keepers originating outside academic institutions. Based on Siemens' (2017: 132) suggestion that 'education

for reconciliation must find a way to connect Western and Indigenous systems of knowledge … and must offer new ways of being and learning that promote a new relationship', and Potgieter's (2019: 55) assertion that 'more just and equitable power relations would create a more fertile environment for reconciliation', I argue that education for reconciliation requires a relational approach. In an article detailing my praxis process (Van Borek & James 2019: 15), I argued that:

> *… since society is constructed of relations, and that relationships themselves determine their own conditions, social change can only truly be possible when we change the 'relational context' (Donati 2016). I therefore apply an approach based on Ken Gergen's relational vision of education as 'a set of processes intended to enhance relationships' (Wortham & Jackson 2012: 164) … [with] an emphasis on individuals as woven into contexts and knowledge as produced in relations, a view of knowledge as contextualised, and a view of knowledge and action as heterogeneous.* (Wortham & Jackson 2012: 164)

The fluidity of reconciliation: A focus on water

> *'Contemporary notions of environmental and social justice largely hinge on how we come to think about water in the twenty-first century'.* (Mascarenhas 2012: 1).

The relational and reconciliation potential of this curriculum is further enhanced by a focus on the water-climate change nexus. While water is a public good, the fact that water follows the ebb and flow of (often racialised) economic and political opportunities more than geophysical features in a city prevents water from being such a good. In both South Africa and Canada, in addition to a rising demand for drinking water as a result of population growth compounded by droughts related to climate change, the unequal access to clean water seems to be largely due to legacies of colonisation and current neo-liberal actions where water is valued through a global economic lens. These legacies and actions include, but are not limited to land distribution, privatisation, resource extraction, institutionalised racism, lack of infrastructure, water service fees, global water trading and oppressive educational practices, which silenced cultural practices that contained keys to living in harmony with the natural world. The profound damage done is effectively described by Preston

(2017: 353) as 'a normalization process, whereby free market ideology deeply anchors settler claims to Indigenous lands [and waters] in the rhetoric of individualism, private property and capital power that is state-supported'. Washburn (2012) points to Schreiner's (2010) view that today's poverty—and, I would add, relative power—barometer can be measured according to a person's access to clean water. For example, despite Canada having 'more fresh water per capita than most countries' (Suzuki 2018), government-issued Boil Water Advisories (BWAs), which indicate a severe degree of chronic, limited access to clean drinking water, have been endemic to '100 First Nations[4] communities … for years, or even decades' (Suzuki 2018). When trying to explain the impact of BWAs, Lukawiecki (2017: 8) highlights how '[these] challenges are compounded by, and partially a result of, historical injustices First Nations face as a result of a legacy of colonialism, forced relocation, residential schools and systemic racism in Canada'. We can draw similar conclusions from Cape Town, which in 2018 narrowly escaped being the first major city to run out of water (Ziervogel 2019) when it referred to the extremely low dam levels and the impending possibility of shutting off the municipal water supply to taps as a water *crisis.*

The multitude of conflicting ideologies at play in this highly polarised situation (V. Strang, personal communication, 6 September 2018), a legacy of mistrust between government and citizens, and a lack of clear communications to the public around a rapidly evolving scenario fuelled debate over whether or not this really was a crisis (Enqvist & Ziervogel 2019). For example, while on one side you had a city relying on water service fees as a main source of income, which meant that increasing water tariffs was more desirable than reducing consumption (Enqvist & Ziervogel 2019), on another side there were activist groups like the Cape Town Water Crisis Coalition who, in their inaugural protest outside Cape Town's Civic Centre on 2 February 2018, shouted the slogan 'Water for all or the city must fall', which demonstrated their view of drought-related economic gains, such as companies drilling boreholes and selling bottled water. While this crisis received international media attention, the same cannot be said of many city residents in mainly poor communities who had experienced inadequate water services for many years (Lang 2018; Smith 2004; Tafirenyika 2018; Von Schnitzler 2008, in Enqvist & Ziervogel 2019). According to Beck, Rodina, Luker and Harris (2016) and Pengelly, Seyler, Fordyce, Janse van Vuuren, Van der Walt, Van Zyl and Kinghorn (2017, in Engqvist & Ziervogel 2019),

---

4 Canada's Indigenous peoples are referred to as First Nations, Métis and Inuit.

'[a]bout 10% of residents in Khayelitsha[5] have neither access to running water nor any form of toilet' (ibid.: 9). The roots of Cape Town's water tensions can be traced back to the apartheid era's racial and economic segregation:

> *During apartheid, water was a relatively low-cost luxury for white South Africans, who had one of the highest levels of home swimming pools per capita in the world. In contrast, black South Africans were highly vulnerable to inadequate water supplies in both urban townships and the segregated 'Bantustan' system of rural homelands.* (Bond 2011: 1)

In both Canada and South Africa, private-public partnerships in water management mean individual financial gains are given preference over collective basic needs as citizens become customers. Bond (2011) points to a deepening state of water inequality in South Africa after the demise of apartheid in 1994 due to the country's adoption of global trends in commercialisation, including water commodification and privatisation in the form of long-term water management contracts with private companies. According to Maude Barlow, former UN Senior Advisor on Water (2008–2009), in Marshall's documentary *Water on the Table* (2010), the public perception is that there is an abundance of water in Canada because the government is discretely selling off the country's water to private corporations. According to Mascarenhas (2012: 3), Canada's worst drinking water contamination incident, which occurred in rural Walkerton in 2002, can be attributed to 'an increase in private sector participation, a commercialization of water management activities, and a diminished governmental association'. Rita Wong (2011: 85) suggests that 'one way to move forward together [towards reconciliation] … is to cooperatively focus on the health of the water that gives us all life'. With this curriculum, that is precisely what I aim to do.

---

5 Khayelitsha is one of Cape Town's largest townships. In South Africa, a township is 'a suburb or city of predominantly black occupation, formerly officially designated for black occupation by apartheid legislation' (Oxford n.d.).

Relational sensibilities and abilities towards reconciliation

Due to the shift away from developing intellect or skills in individual actors towards building, enhancing and/or shifting relations amongst actors, expected learning outcomes, which often act as a starting point for curriculum development, might be better titled '*un*expected learning outcomes' in a relational model of education. For this reason, I decided to adopt the terms *relational sensibilities and abilities* to describe what I aim to develop or enhance in students through the course. I developed a set of questions to be used as an analytical tool to determine whether and how these sensibilities and abilities might surface in the course. This tool and its application to my data analysis can be seen in Table 1 below. The questions emerged from first drawing main lines of argument from theoretical research on reconciliation and relationality, then selectively combining these lines of argument to arrive at a general theme that reflects the sensibilities and abilities related to reconciliation and relationality and finally more specific questions. This list is not exhaustive and is likely to expand as I move through the research process and the data shows up further nuances via the analysis.

In this paper, I argue that a relational, site-specific, university environmental education curriculum that is based on media arts and focused on water can cultivate students' relational sensibilities and abilities towards reconciliation in Canada. I have chosen a praxis process to align with my goal to engage in 'reflection and action upon the world in order to transform it' (Freire 2005: 51, in Given 2008: 677). I begin by describing the main elements of a pilot course I co-designed, facilitated and monitored. I then outline data collection methods and participant demographics, subsequently introducing my main data analysis tool, outlining the relational sensibilities and abilities towards reconciliation that I aim to cultivate. I conclude with a critical reflection on the pilot programme using observations, student reflective journals and narrative analyses of students' videos.

Method

Procedure and research design

For this research, I adopted a generative research approach that involved the co-construction of knowledge (see Djenontin & Meadow 2018; Lazarus, Taliep & Naidoo

2017; McAteer & Wood 2018) with participating students, NGO staff members, Knowledge Keepers, guest lecturers and museum audiences in project-based courses as a process within my method that developed through reflexive monitoring. This contrasts with a traditional, hermeneutical approach that analyses what has been done before. In 2018, I piloted a course on *Making Wave[form]s*. It was offered at the Emily Carr University of Art + Design (ECUAD) in Vancouver—the traditional and unceded territory of the Musqueam (xʷməθkʷəy̓əm), Squamish (Sḵwx̱wú7mesh) and Tsleil-Waututh (səl̓ilwətaʔɬ) Nations—in Canada, in partnership with the David Suzuki Foundation[6] (DSF), the Native Education College[7] and the Beaty Biodiversity Museum, as an undergraduate for-credit summer course in the Faculty of Culture and Community. Many Canadian universities, including ECUAD, now have as strategic priority to 'Indigenise the academy', in other words, to embrace and activate reconciliation processes across curriculum, staffing and campus life (MacDonald 2016). A 2017 report titled Eight Commitments to an Emergent Future: Emily Carr University of Art + Design's Strategic Plan to 2020, identifies the institution's most current vision and mission. It specifically indicates that ECUAD (2017: 13) 'will engage with Truth and Reconciliation recommendations and commits to intentionally understanding and embedding the role of art, design, and media in the reconciliation process' through 'expand[ing] upon … Aboriginal programming [towards] strategies of decolonisation and Indigenisation within curricula more broadly'. Vancouver is a particularly relevant site for this study as it hosts 'the third largest urban Aboriginal population in Canada' (Wilson & Henderson 2014: 4). I have been teaching media arts-based sustainability courses at ECUAD in partnership with DSF since 2012. Over the years, the meaningful collaborations that I witnessed unfold between Aboriginal and non-Aboriginal people through the course contributed to my realisation of the potential of this approach to become a form of reconciliation education, and I embarked on PhD studies to explore that potential.

In this course, students (who, after registration, self-identified as non-indigenous[8]) were taken through a relational process that unfolds through a combination of group and independent experiences. Through short screenings, exercises and dialogues, students were introduced to concepts of dominant public narratives, social systems

---

6 DSF is a Canadian science-based not-for-profit environmental organisation.
7 The Native Education College has been educating indigenous learners for more than 50 years (Native Education College).
8 The course was open to both indigenous and non-Indigenous students.

and the intersectionality of water issues and climate change, and a number of class field trips (i.e. ocean canoeing and a creek-side soundwalk) were undertaken to explore our relationships with water. A local, indigenous-led post-secondary school called the Native Education College (NEC) hosted us for a class, which introduced students to their institutional culture (e.g. a traditional longhouse structure and welcome pole). As a paid instructor contracted by ECUAD, I was primarily responsible for deciding on and designing these activities. Wherever possible, I aimed for activities to be co-designed through collaborations I initiated a year prior to the implementation of this pilot course. For example, the NEC's former President Dan Guinan and former Dean of Academics Jason LaRochelle participated in multiple planning meetings and communications that led to shared decisions for the ECUAD class visit to the NEC. Alaya Boisvert (DSF's former Public Engagement Manager) contributed to choices around the focus on water and specific water bodies, Knowledge Keepers, guest lecturers and guides. She also suggested an artistic approach to film a narrative, *Slow Media,* that has proved to be a game changer. I will elaborate on this below.

A series of guest lecturers—indigenous and non-Indigenous persons from outside the university— shared their perspectives on topics related to water and storytelling. These guests were invited to choose the specifics of *what* and *how* they shared. Students then chose a specific site (a local water body of social/ ecological importance) to become the focus of their video project. A list of sites and associated Knowledge Keepers[9] were provided for students to choose from, since the recruitment of Knowledge Keepers can take more time than allowed by the timeline of one course. These sites and Knowledge Keepers were sourced and decided on by Alaya and myself, largely due to their accessibility during our course timeline. My aim was to reflect a diversity in water bodies and indigenous traditional territories. Table 2 below outlines the five sites selected according to these criteria:

---

9 The term 'local Knowledge Keepers' is used here to refer to persons outside of the university, including indigenous persons, artists and ecologists.

Table 2. Sites, First Nations' territories and Knowledge Keepers

SITE	WATER BODY	TERRITORY[10]	KNOWLEDGE KEEPER
False Creek	Ocean	Squamish Nation[11] Musqueam Nation1[2] Tsleil-Waututh Nation[13] Stz'uminus Nation[14] Stó:lō Nation[15]	Julie Porter Ecologist and Citizen Science Project Leader with Fraser River-keepers (testing water quality in False Creek)
Sturgeon Banks/ Lulu Island Fore-shore Marsh	Wetland / River/ Estuary	Tsawwassen First Nation Musqueam Nation Tsleil-Waututh Nation Kwantlen First Nation[16] Stó:lō Nation Stz'uminus First Nation Cowichan Tribes[17]	Eric Balke Ecologist and Coordinator of the BC South Coast Conservation Land Management Program
Burrard Inlet	Ocean	Musqueam Nation Squamish Nation Tsleil-Waututh Nation Stó:lō Nation Stz'uminus First Nation	Tarah Stafford Tanker-free BC
Squamish River Estuary	River / Estuary	Squamish Nation Tsleil-Waututh Nation	Randall W. Lewis President of the Squamish River Watershed Society

10 To the best of my knowledge, based on information available at the time of writing from B.C. First Nations' websites and the Province's First Nations Consultative Areas Data Base (http://maps.gov. bc.ca/ess/hm/cadb/)

11 Source: https://www.squamish.net/about-us/our-land/

12 Source: https://www.musqueam.bc.ca/wp-content/uploads/2018/06/MusqueamSOI_Map-scaled. jpg

13 Source: https://twnation.ca/about/our-departments/treaty-lands-resources/

14 Source: http://www.stzuminus.com/our-story/community-map/

15 Source: https://www.researchgate.net/publication/311768934_Sumas_Energy_2_Inc_Tradition-al_Use_Study_Phase_II_Stolo_Cultural_Relations_to_Air_and_Water

16 Source: https://www.kwantlenfn.ca/

17 Source: https://www.cowichantribes.com/about-cowichan-tribes/land-base/traditional-territory

SITE	WATER BODY	TERRITORY[10]	KNOWLEDGE KEEPER
Still Creek (via Renfrew Ravine Park access point)	Stream	Musqueam Nation Tsleil-Waututh Nation Stz'uminus First Nation Stó:lō Nation	Dave Scott Salmon biologist working on Still Creek with Still Moon Arts Society

Students were given the choice to work in pairs or independently. Two collaborated while the rest worked on their own. They undertook multiple independent visits to their sites, each time building on the previous visits. Using video and sound observation / documentation tools and semi-structured mapping assignments, they developed first-hand expertise of their sites and established meaningful connections with local Knowledge Keepers who had close relationships with the sites. They did this by meeting with their Knowledge Keepers and applying an arts-based, participatory research method called photovoice. In photovoice, 'research participants create, analyse and discuss photos that represent their community' (Strega & Brown 2015: 29). The students explored an alternative cinematic narrative model called *Slow Media* and experimented with sound art in nature through *soundscape recording*. Details of this component will be discussed later. Students were then asked to each translate all these experiences into a video and were supported by myself (as their instructor), their peers and our science partner DSF during two work-in-progress feedback sessions. At the end of the course, the final videos were screened as a catalyst for public dialogue at the Beaty Biodiversity Museum.

In respecting proper protocols, the event began with a welcome address from an official representative of the Musqueam nation (on whose traditional territory the event took place), referred to us by the Protocol Administrative Assistant of the Musqueam band office. This was followed by a song sung by a representative of Squamish nation and some opening remarks by project partners at DSF and ECUAD. The programme then unfolded in three parts, with each part consisting of three steps: (1) A screening of a few films linked by a shared water body or theme; (2) an interactive presentation facilitated by ECUAD students who had created the films that had just been screened; and (3) a discussion. Two *Making Wave[form]s* students acted as masters of ceremony (MCs) for the event by following an MC script I had prepared for them in advance. I had initiated and negotiated the collaboration with Beaty in preparation for the course. In my experience, there is

a need for a third space, for example a museum, which, as Zembylas (2012: 59) suggests, 'opens possibilities for re-imagining the sense of community and identity' to bring together academia, civil society, scientists, artists and government in creative dialogue to address the water-climate change nexus. In their call to action #67, which asks the federal government to fund an assessment of national museums' adherence to the United Nations Declaration on the Rights of Indigenous People, Canada's TRC identified museums as being key to the reconciliation process (TRC 2015). The videos continue to serve a purpose as they are hosted on DSF's YouTube channel as public education tools to be utilised through social media.

Data collection methods and measures

Two main projects that were also data collection methods were integrated into the curriculum:

1. The students' primary project was creating a **video**. The process of producing their videos and the influence that it had on them was documented in their reflective journals. Aspects of the videos (i.e. narrative content and style and representations through sound, image, text and editing techniques), contain important data that enhances the influence of the curriculum on the students.
2. The secondary project involved maintaining a **reflective journal** throughout the course. Strampel and Oliver (2007, in Ivala 2015a: 37) define reflection as 'a form of contemplation that determines how one comes to act on new understandings … looking internally to one's thoughts and externally to the issues at hand … it leads to conceptual change, knowledge transfer, and action.' Students were asked to record their personal observations, experiences and ideas with regard to various aspects of the curriculum.

The other main data collection method used during this pilot course was my own reflective observations of the various ways in which the students responded to different aspects of the curriculum. This included their interactions, attitudes and behaviour towards their peers and the various guest lecturers and Knowledge Keepers who participated in the course, as well as the development of their ideas about and approaches to their videos.

Videos and reflective journals had been key parts of the courses I had taught at

ECUAD prior to this pilot course and that greatly influenced my thinking around the potential of these methods for use in reconciliation education. In addition to this, my aim was for the research methods to be embedded in the teaching/learning methods wherever possible. For these reasons, videos, reflective journals and my own reflective observations—indicative of my entanglement in both the course and the research—became essential methods for both this course and my educational research.

Participants

This course was offered as an elective to ECUAD students from all disciplines and years who were enrolled for undergraduate degrees. The nine students who registered for the course included four Asians, one Latin American, one American and three Canadian students of European heritage.

Results

Data analysis

Table 1 illustrates my analytical tool, a set of questions developed from theoretical research on reconciliation and relationality, and includes my initial analysis of how various aspects of the curriculum respond to these questions. I am working on surfacing these sensibilities and this paper is the starting point of this analysis. Since these sensibilities are quite complex in constitution, treating them technically presents a number of challenges and I find it both useful and important to use thick description to explore them.

Table 1. Relational sensibilities and abilities towards reconciliation through curriculum

SENSIBILITIES AND ABILITIES	ASPECT(S) OF CURRICULUM
Knowledge ecology: 1. How does the curriculum engage students with both western and indigenous/local knowledge so that they: a) recognise that there are diverse knowledge systems; and b) view diverse knowledge systems as having equal importance? 2. To what extent does the curriculum challenge ethnocentrism, and how does this manifest?	- Partnership with science-based organisation - Student-led photovoice process with Knowledge Keepers - Student expertise developed and shared through hands-on observation, documentation and video-making - Emphasis on storytelling as a form of knowledge co/creation and sharing - Learning about place and ecosystems through indigenous/local languages - Knowledge commons established through public event at museum - Guest 'lecturers' from different backgrounds, including non-academic perspectives - Embodied, experiential learning (i.e. canoeing and pipeline protest camp field trips) - Diverse learning spaces

SENSIBILITIES AND ABILITIES	ASPECT(S) OF CURRICULUM
Intercultural understanding: 1. To what extent does the curriculum build student capacity for intercultural understanding, and how does it manifest? 2. How does the curriculum contribute to student awareness of the interdependence of life?	- Students are introduced to inequalities in respect of access to water, and how these are racialised and gendered, and to the intersectionality of issues that contribute to this (through short screenings and/or readings and/or discussions, revealed through field trips/guest lectures/photovoice) - Meaningful opportunities for cross-cultural contact and interactions (i.e. ocean canoeing, photovoice, final event) - Exploring the indigenous cinematic narrative model known as Slow Media - Emphasising the interconnectedness of life through place-based, outdoor learning - Encouraging the use of diverse languages and subtitling in students' videos
Empathy: 1. To what extent does the curriculum encourage students to express empathy, and how does it manifest?	- Photovoice/interview processes with Knowledge Keepers and students becoming custodians of their stories - Independent student site visits to their chosen water bodies, using camera lens and sound recorder to pay attention, and developing empathy for wider-than-human elements of that place -Students using the stories of others (i.e. of plants, animals, water and local Knowledge Keepers) in constructing their own stories

SENSIBILITIES AND ABILITIES	ASPECT(S) OF CURRICULUM
Reciprocity: 1. How does the curriculum encourage students to express reciprocity, either with people or the wider-than-human, or both? 2. How does the curriculum support students to engage in both personal and social transformation?	- Photovoice as a participatory interview process that empowers participants to present issues and themes that are of value to them - Students create video projects that emphasise the value(s) of a water body through honouring a Knowledge Keeper's relationship and/or the wider-than-human relationships with that water body. - Students' videos are shared with the public through a final event and through social media to further promote the valuing/protection of these water bodies. - Students work on projects aimed at social and ecological change that have the potential to contribute to personal transformation

SENSIBILITIES AND ABILITIES	ASPECT(S) OF CURRICULUM
Embodied ways of knowing: 1. How does the curriculum foster critical dialogue, especially dialogues that support cross-cultural understanding? 2. How does the curriculum encourage listening, especially just and active listening? 3. How does the curriculum address the student as a whole person?	- (2 & 3) Outdoor field trips - (3) Independent student site visits to their chosen water bodies, using a camera lens and sound recorder to pay attention and build relationship with the sites - (2 & 3) Students engaging in active listening through soundscape recording and photovoice - (2 & 3) Site-specific creative work (experiential knowledge developed through observation, documentation and creative video-making) - (1, 2 & 3) Storytelling (with ocean canoeing guides, photovoice, creating videos) - (1, 2 & 3) Creative works used as catalysts for critical dialogue (work-in-progress critiques, final event) - (3) Diverse learning spaces

SENSIBILITIES AND ABILITIES	ASPECT(S) OF CURRICULUM
A hopeful social imaginary:	- Tone of the course is solutions-oriented
1. In what way(s) does the curriculum develop students' critical awareness of their surrounding social systems, seen through a lens of relations that can be shifted?	- Process of keeping a reflective journal built into course - Introduction to concept of dominant public narratives versus personal narratives, and how they are de/re/constructed
2. How does the curriculum encourage students to explore, think, speak and/or act from a source of hope?	- Learning hands-on (photovoice, site visits, viewing peers' videos) about restoration/conservation success stories - Direct experience of creating something (e.g. a video) that can have a positive impact
3. To what extent does the curriculum encourage students to 'think, dream and consider [alternative] possibilities' for communities (e.g. inclusive, harmonious and just)?	- Convening a public dialogue event at a museum, thereby giving students a first-hand experience of a new way for science/local knowledge/arts/civil society to relate and share
[Re-]connection to place:	- Outdoor field trips
1. In what way(s) does the curriculum foster and/or expand students' connection to place?	- Site-specific creative work - Students develop a deeper understanding of place through someone else's relationship with that place uncovered through a photovoice/interview process

Source of left side of table and additional literature review information: Van Borek (in Van Borek & James 2019: 17)

Some of the relational sensibilities and abilities outlined in Table 1 can be best identified through a narrative analysis of students' final video projects. Mischler (1995, in Strega & Brown 2015: 154) defines narrative research as 'a systemic approach to studying stories in context'. I apply two main models of narrative analysis: '1) *thematic analysis*, which emphasises what is said; [and] 2) *structural analysis*, which emphasises how stories are told' (Strega & Brown 2015: 155). Within this, I apply two

out of seven of Fraser's *phases* of narrative analysis: 1) '*Scan across different domains of experience*–including those relating to the intrapersonal, interpersonal, cultural, and structural,' and 2) '*Link the personal with the political*–this includes noticing references (explicit or latent) to popular dominant discourses' (Fraser 2004, in Strega & Brown 2015: 155).

Reflective observations

In this section, I present some of my own reflective observations of how students responded to various aspects of the programme. I intersperse these with quotes (included with permission) from students' reflective journals, printed in bold for emphasis, to elaborate on how certain aspects of the course encouraged some relational sensibilities and abilities towards reconciliation in students.

During a guided ocean canoe ride with an indigenous family from the Squamish Nation, students developed sensibilities and abilities around: a) [re-]connection to place, b) embodied ways of knowing, c) intercultural understanding, and d) knowledge ecology. DSF had referred me to a particular indigenous canoeing family with whom they had worked in the past. Fortunately they were interested and available to lead a field trip with the students attending our course. As part of class preparations, I discussed our aims with the family's main representative, who suggested the inclusion of cultural aspects during the journey, which I agreed would be very relevant and much appreciated. During our journey, our guides—who led us in paddling and pausing to listen at various points—took turns sharing stories about geographical features as they appeared around us and related stories about their people. For example, as two prominent mountain peaks known to many as The Lions became visible, we learned that the Squamish Nation calls them The Sisters, and that a story links these peaks to a historic peace treaty. They introduced us to some of their Nation's protocols for canoe journeys by engaging us in these practices at the appropriate points in the journey. Our main guide sang a lot during the trip and sometimes became very excited. His excitement would then be echoed by his relatives in the front. This spirited and contextualised learning offered an important contrast to conventional classroom lectures. Being out on the ocean and susceptible to the rise of waves, tide action and weather conditions was a humbling way to get away from any attempt to separate one's self from nature, as we tend to do in the city, and very quickly created a feeling of connectedness with the rest of the group.

'The canoe trip was an amazing, inspiring experience that connected me to the water, land, people, and this bustling city port of Vancouver. It was humbling to be on the water and enveloped in nature with the meaningful stories and songs shared by the … family as I felt conflicted by the development, industrialisation [sic] of the area … I am honoured to have witnessed the stories and beliefs of the Squamish people to learn and see first-hand their powerful words and actions to protect the land, nature and connections with people' (Ryanne Bergler).

'During our canoe ride, I clearly remembered I could smell their canoe's natural wood smell. I feel [sic] a sense of spirituality, making me even more connected to the land and water while paddling' (Jocelyn Chang).

'Today we went on a canoe trip. The experience was amazing as it made me realize my close inter-relationship with nature. In addition, I have gained more knowledge in the culture of the First Nations people. Their traditions, stories, and what land and water meant for them is definitely inspirational to listen [sic]' (Sophia Chen).

'It was a real joy to be out on the water! It is always an honour to hear the stories of First Nations peoples, because by being told the stories, we become witnesses and bearers of the story, keeping the story alive in us' (Susannah Hoffman-Mitscherling).

As is clear from their remarks, students' experiences of the field trip were extremely positive. The only moment of tension, which was felt more as part of escalating tensions in the city and country than within our group, was when a Greenpeace ship passed us on its way to a floating protest against the controversial Trans Mountain pipeline expansion (Parmar & Nassar 2018). A few weeks before this protest, Greenpeace activists had rappelled from Vancouver's Ironworkers Memorial bridge to block oil tanker movement and gain media attention (Ip 2018). This pipeline project was being driven by private enterprise and the state without proper consultation with the Indigenous peoples on whose lands it would trespass, and without adequate assessment of the potential threat oil spills would pose to coastal ecosystems.

Later in 2018, the Supreme Court of Canada overturned its approval of the project[18] (Kassam 2018). This encounter added a socio-historical layer to our contextualised learning.

Listening to place-based stories from Knowledge Keepers challenged students to expand their understandings and perspectives. This contributed to students developing sensibilities and abilities around a) [re-]connection to place; b) a hopeful social imaginary; c) embodied ways of knowing; d) empathy; e) reciprocity; f) intercultural understanding; and g) knowledge Ecology. Early in the course, students began forming their video concepts based on their video- and audio- mapping processes. Most of these concepts seemed fairly clear, with concrete plans for production. After listening to Knowledge Keepers in a literal *watershed moment*, some students adapted their original concepts as they grappled with the challenge of honouring the stories of which they had become custodians alongside constructing their own stories, which had been irreversibly changed by what (and how) they had learned:

'His [the Knowledge Keeper's] relationship is very different than mine because of his cultural and spiritual connection with traditional food sources, medicines, and his past ancestors and current peoples living on this land … Meeting with [him] has shown me more ways that the land and animals have been impacted and that one individual can make a very big and positive impact' (Ryanne Bergler).

'It was interesting to hear about the area from a man who was so deeply attached to it, and it gave me a new appreciation for the land, that I did not know well' (Susannah Hoffman-Mitscherling).

Site-specific soundscape recordings contributed to shifting students' awareness of their relationship with the sound sources (humans, nonhumans and earth sounds) of a place and the interconnectedness that existed. Listening enhanced by a microphone and headphones, which do not filter sounds the way the human brain does, can draw a person's attention to sounds. In a conversation following a class sound

---

18 Prime Minister Trudeau and his government's support for the pipeline expansion is most evident from their purchasing of the project for approximately $4.5 billion in 2018 and their continued support of the project which, in 2020, gained traction from Canada's Federal Court of Appeal (Kennedy 2020).

walk, one student shared how she always walks around with earbuds[19] and had not realised that there are so many sounds in the world. This modality contributed to students developing sensibilities and abilities around: a) [Re-]connection to place, b) embodied ways of knowing, c) empathy, and d) reciprocity. Some of these sensibilities and abilities relating to place were developed by interactions between listening and recording, and direct interactions with the site to create sounds:

'As I put on the earphone [sic], I realized lots of interesting sounds that I've never noticed before. I am more sensitive to tiny noises like birds, bees and winds. Wind is the most interesting element since we can't see wind through visual [sic].' (Jocelyn Chang)

'On the right side of the road, I recorded close up sounds of the water, which was very quiet. So, I started throwing rocks in the water and running my hands through it to create sounds. It was interesting to interact with the physical environment specifically to better hear sounds!' (Susannah Hoffman-Mitscherling)

Narrative analysis of students' videos

Clare Wilkening's video, *Sturgeon Bank and Orca* (2018), is exemplary of disrupting dominant public narratives. She presented her personal narrative, which dealt with why she cared about the declining Southern Resident orca population and what she was doing in her art practice to try to do something about it (she was making a ceramic tile dedicated to each of the 75[20] surviving whales). It was presented with a sense of intimacy created by her narration and point-of-view camera work. She wove her story together with YouTube footage of the orcas, with themes of connection and presence, and with critical commentary around consumption, capitalism, disconnection and speed as a counter-narrative to the dominant public narrative promoting the growth economy. In her narration, she shared how her 'goal is not so much to humanise the Southern Residents, as it is to cetacean-ise the Lower Mainland.[21] They cannot change who they are, but we can change how we live to

---

19 Earbuds, in this case, refers to headphones connected to a personal device.
20 Southern resident orcas, found only off the coast of Vancouver, were down to 75 members at the time of this course (Kines 2019).
21 The Lower Mainland refers to the region surrounding Vancouver.

make space for them to live and thrive' (2:53–3:07 min). In doing so, Wilkening revealed her understanding of some of the larger relations and systems intersecting around the issues with which she was engaging and exercised her ability to voice her ideas about how they could be changed. This message also suggests Wilkening's empathy with the whales. Her work exemplifies a valuing of a knowledge ecology through the integration of Western science (information gleaned from her ecologist Knowledge Keeper), indigenous/local knowledge (experienced through the protest camp field trip and guest lecturers, suggested by pointing to the whales as original inhabitants of the city), citizen science (knowledge she developed through her own site visits), and the arts (through the ceramic work she documented in the film, and in the making of the film itself).

Ryanne Bergler's video *Skwxwu7mesh, Squamish Estuary* (2018) is a great example of the possibilities for shifts in perspective when applying Slow Media. The unconventionally long, at times stationary or slow-moving shots across breathtaking landscapes pull the viewers into being more deeply present (and therefore [re] connecting) with the place. In his lecture presented to our class on 11 July 2018, Gregory Coyes, founder of the Slow Media community (a growing online library of decolonised media), pointed out how the Western influence on video editing is all about compressing time and that, in moving to real-time cinematic experiences and finding dramatic movement *within* the frame, as in Slow Media, we can create 'an indigenous sense of cinematic time and space'. For the artist and audience, engaging with this format can potentially contribute to intercultural understanding. In Bergler's case, this indigenous cinematic language inspired the inclusion of the Squamish language through text (which arguably may not have been a consideration if the pacing and visuals were moving quickly). Bergler used text on screen to highlight key concepts heard in the narration and to label ecological features of the place that appear throughout the video. The inclusion of both Squamish (shown first) and English (shown second) makes a bold statement about diverse ways of knowing and seeing, and the importance of treating them all with respect.

Discussion

At the heart of this 'teaching from the heart' curriculum (Denton & Ashton 2004, in Battiste 2013: 183) is an approach suggested by a Mi'kmaq elder, Albert Marshall, which is also called Two-Eyed Seeing (Abu, Reed & Jardine 2019: 4). Two-Eyed

Seeing combines indigenous and Western knowledge and awards them equal value for 'enabling triangulation' (ibid.: 4) and 'creating synergies' (Tengö, Brondizio, Elmqvist, Malmer & Spierenburg 2014: 579, in Abu et al. 2019: 3) that allow for 'a wider and deeper view' than when looking at something with only one 'eye' (Iwama, Marshall, Marshall & Bartlett 2009, in Abu et al. 2019: 5). Western knowledge is expressed in this course through input from science-based course partners, archival documents, and observations of sites. Indigenous knowledge is brought into the course through non-Indigenous knowledge Keepers pointing students to Indigenous knowledge, and Indigenous knowledge Keepers, guest lecturers and field trip guides sharing their water stories with students. As custodians of these stories, students use reflective practices in video creation to draw out synergies between the two forms of knowledge. In this time of climate crisis 'a combination of both seems essential' (Aikenhead & Michell 2011: 114, in Bartlett, Marshall & Marshall 2012: 331). The ways of seeing do not stop here. '[All] of the world's cultures … have understandings to contribute in addressing the local to global challenges faced in efforts to promote healthy communities. Thus, one might wish to talk about Four-Eyed Seeing, or Ten-Eyed Seeing, etc.' (Bartlett et al. 2012: 336). The *Making Wave*[form]s course employs what I consider 'Three-Eyed Seeing' as it combines Two-Eyed Seeing with artistic creation and is thus a multifaceted process that invites students to engage their whole selves and awaken the 'learning spirit' (Battiste 2013). Referring to Aboriginal education, Ottoman and Pritchard (2009: 12, in Battiste 2013: 181) suggest that 'learning is a multidimensional process and it requires knowing the visible (physical) and invisible (spiritual) aspects of oneself and of creation'. Artistic expression is a form of knowledge creation that taps into realms of spirit, intuition and imagination, and plays with existing knowledge in an affective way of knowing forward to possibilities of what might be, rather than representing what already is.

What this brings to the decolonial turn is that it is about changing *lenses*, changing the way we look at ourselves, each other, the world, and our place in it, and allowing this to change (or 'reconcile') how we relate to each other, not necessarily or only changing the positions of power in an educational institution. In recent years, universities in Canada and South Africa have made efforts to appoint more professors of diverse representation. In 2019, for example, ECUAD appointed four new tenure-track indigenous faculty members (ECUAD 2019). According to Cloete and Bunting (2000: 75, in Sadiq, Barnes, Price, Gumedze & Morrell 2018: 427), South Africa's

1997 Education White Paper articulated aims for increasing the 'proportion of blacks and women on academic and executive staff of institutions', but practical shifts to this effect have been slow (Sadiq et al. 2018). While diversifying access and opportunity to historically under-represented individuals is an important step in decolonisation, this focus on changing individual actors does not take into consideration the relational context which, as I mentioned earlier, Donati (2016) asserts to be essential to social change. For example, while professors may change, institutional cultures may intensify oppressive practices. This seems to have been part of the forces at play in the tragic story of the University of Cape Town (UCT)'s late Professor of Cardiology and Health Sciences, Dean Bongani Mayosi who, in 2018, 'had been battling depression for … two years, and ended his own life' (Isaacs 2018). Cairncross (2018) speculates that factors influencing Mayosi's death may have included a 'black academic tax' in the form of pressure to pave the way for future black academics; an alienating university environment; polarisation between the institution and black students, which was made especially visible in the #FeesMustFall movement in the years preceding Mayosi's death; and the university's performance-based 'unhealthy work ethic'. While these are speculations, Mnguni (2018) highlights one undisputable fact, namely that Mayosi 'attempted to resign from his position as Dean of the Faculty of Health Sciences not once but twice,' first in 2016 and then in 2017, but was denied his request by university management. In my opinion, this suggests that the UCT management required Mayosi to do the work of their institution's transformative change although, in fact, the institution as a whole should play an active role in transforming its relationality.

I support the idea that anyone engaged in a learning environment, regardless of race/ethnicity/citizenship/class/gender, can and should contribute to decolonisation and I undertake to learn and embody this in ways that evolve with the relationships in which I am entangled. First, as a Caucasian Canadian, I consider my 'teacher' role to be non-traditional as I am a project coordinator and facilitator of knowledge co-creation, rather than a lecturer. Second, my own ways of knowing have been strongly influenced by having studied African oral music traditions and living with rural communities across Africa throughout my formative years. Third, I agree with Marie Battiste, Mi'kmaw educator of the Potlotek First Nation, when she states that 'each educator has a role, if not a responsibility, in changing her own and students' conceptions about First Nations students, their heritage, and their contributions to society' (2013: 177). The challenge of *indigenising* academic institutions also lies in

recognising and considering how Indigenous peoples and knowledge encompass more than one thing (Battiste 2013). For example, '[there] are 203 First Nations bands in BC and 614 in Canada' (Wilson & Henderson 2014: 9). Inside these cultures there are of course also variations in experience with cultural traditions, gender, religion, sexual orientation, abilities, etc. Battiste (2013: 168) refers to Visano and Jakubowski's (2002) point of view that 'the pedagogical challenge of trans-systemic education is not just reducing the distance between Eurocentric thinking and Aboriginal ways of knowing but engaging decolonised minds and hearts'. How then do we disrupt the 'cognitive frameworks of imperialism and colonialism' that breed 'systemic discrimination?' (Daes 1991, in Battiste 2013: 185-186).

Bekerman and Zembylas (2012: 209) suggest there are three strategies to reconciliation education by means of creating 'dangerous memories'[22]: (1) '[De-essentialising] memory and identity;' (2) '[creating] opportunities for anamnestic solidarity'[23]; and (3) '[highlighting] common suffering and common humanity'. These three strategies surface in the *Making Wave[form]s* programme. The first appears through engaging students, guest lecturers and Knowledge Keepers in alternating between teacher and learner roles, and by inviting the reframing of memories through storytelling. The second occurs when Knowledge Keepers are invited to share their stories of past injustice regarding dislocation from land and water, and re-contextualising these as lessons for how to live cooperatively and with mutual respect in the future. The third is a focus on the shared (and heterogeneous) human experiences of climate change, relations with water and the interdependence between people and the natural world. This can be best understood by taking a closer look at each of these three aspects of the *Making Wave[form]s* course.

Memory and identity are strongly at play in the dynamics of this course. In a conventional university setting, participants register as students and a contracted teacher guides them through a learning journey. Power hierarchies are reinforced by using tools like project briefs, deadlines, evaluations and grading. Generally, there is an expectation that the teachers are the experts—as per their relevant academic credentials—hired to impart their expertise to less knowledgeable students. The ways in which people identify with these roles are typically reinforced by memories of

---

22 '"Dangerous memories" are memories that can counteract hegemonic narratives' (Bekerman & Zembylas 2012: 22).

23 '... it is not that the unjust past and the suffering are being forgotten. Rather ... the anger and the hatred' (Bekerman & Zembylas 2012: 203) attached to them.

A media arts-based praxis process of building towards a relational model of curriculum oriented towards reconciliation through water justice

36

such roles from one course to the next and from one year to another throughout a university degree programme. *Making Wave[form]s* disrupts these seemingly fixed identities when several people from non-academic backgrounds are invited to share their expertise, reinforced by lived experiences, with both students and the contracted teachers. When students conduct multiple site visits, they develop their own expertise about their sites, which is then further enhanced by their interactions with all those who share knowledge about these sites. Students share their new expertise with their teacher and peers through class presentations throughout the course. At the end of the course, they share their expertise in the form of videos and interactive presentations attended by their many 'teachers' and a public audience as they themselves take on a teaching role. This fluidity in teacher/learner roles, and the memories thereof, move participants away from identifying themselves and others with only one role towards respecting everyone for their potential to fulfil any role at any time.

In *Making Wave[form]s*, anamnestic solidarity manifests when memories—about waterways and past relationships related to those waterways—are reframed through the relational act of storytelling. For example, when a Knowledge Keeper shares a story about how their traditional territory was stolen and abused through colonisation, and how this links to the environmental issues currently experienced in that territory along with potential solutions, the interaction embedded within the process of storytelling lays the foundation for the growth of a common ground of solidarity between the storyteller and the listener. This is possible because the reframing of past injustices is done in a way that challenges past hierarchies (through positioning the storyteller as teacher/expert and the student as witness), and this interaction unfolds within a commitment to *thrive together* (relating back to my definition of reconciliation).

Since memories and identities, particularly in post-colonial societies, can so effectively reinforce oppressive practices linked to perceptions of 'otherness', creating memories that reinforce our shared human experiences, such as the impacts of climate change, and our dependence on the natural world, can help to counteract this attitude. This is strengthened when we acknowledge the heterogeneity of these experiences (such as varied levels of access to clean water), as seen in this course. In *Making Wave[form]s,* the stories that are created in the form of students' videos become digital archives, or memories, of the multitude of perspectives and relationships linked to a specific waterway. This 'memory' reinforces notions of

interconnectedness by highlighting the ways in which each actor affects and/or is affected by the ontologies and actions of the others connected through this waterway, and points to how each actor relies on water as the fundamental source of life.

Why make use of a practice that is site specific and based on media arts?

Tasking students to make a video is central to this course. This activity involves three key elements, namely 1) visuals; 2) sound; and 3) narrative. When these three elements are combined with storying a place, all three aspects are extended to the realm of witnessing-responding outlined in the introduction above. In addition to meeting the 'digital native' (Tiba & Chigona 2015: 17), which refers to today's students, in their mother tongue, this takes all the benefits of digital storytelling (DST) in teaching and learning and ramps them up to a place-based, embodied and affective learning process likened to what Tisdell (2013: 42, in Battiste 2013: 184) refers to as 'spirited epistemology'. The author further explains that 'when one engages the cognitive, affective, and the symbolic domains of learning, learning becomes more holistic, thereby increasing the chance for learning to be transformative' (Tisdell 2013: 43, in Battiste 2013: 184).

Working with visual storytelling provides opportunities for students to see— and share that way of seeing—the world from multiple perspectives. While a wide range of considerations and possibilities exists when working with the aesthetics of video, I have, for the purpose of this paper, focused primarily on digital storytelling and aim to expand on this medium in what follows. Digital storytelling (DST) is defined by the Digital Storytelling Association (2002, in Tiba & Chigona 2015: 18) as a 'focus on the art of telling a story using digital technologies'. The book *Telling stories differently: Engaging 21st century students through digital storytelling* (Condy 2015) places particular focus on the potential of DST to foster social cohesion in South Africa. Gachago (2015: 99-100) refers to Nussbaum's (2010) view that living respectfully with difference involves learners 'developing capabilities necessary for an empathic and critical engagement with the "other,"' and suggests that DST has the potential to be helpful in this regard. This is particularly relevant in modern-day South Africa where residual social segregation exacerbates 'deep-seated mistrust and fear of the "other", passed on from generation to generation' (Gachago 2015: 101). In their literature review on the subject, Tiba and Chigona (2015: 17) conclude that the

two main strengths of DST is its ability 'to give voice to learners and to encourage deep reflection'. DST is fundamentally relational in that it 'supports a learning environment rich with student-student, student-lecturer, and student-content interactions' (Ivala 2015b: 33). This enables learners to develop an understanding of themselves holistically and relationally, and to be seen for who they are through expressing languages—including non-verbal languages of imagery, sounds, movement, pacing, and the interactions between these various elements—as well as their cultural dimensions.

Working with storytelling through sound creates awareness—in both students and their audiences—of their relationship with nature and place, and helps to deepen that relationship. Soundscape recording and composition '[translates] acoustic data into sound meant for aesthetic appreciation' (Reich 2016: 5). The act of doing so equips composers to increase their audiences' '*qualitative* knowing from spiritual, emotional, and sensory-based perspectives' (Reich 2016: 5), thereby contributing to the development of a '"qualitative" relationship to nature' (Reich 2016: 5). Soundscape recording is a form of embodied learning. Hull (2001: 12) observes that 'you don't actually listen with your ears, you listen with your whole body … You no longer are aware that you are listening, because you have become absorbed in what you are listening to and so the subject/object distinction disappears'. Westerkamp (2019: 60-61) suggests that sound is essential to 'real reconciliation or de-colonisation [which] can only happen in an atmosphere of mutual respect and in safe conditions from which we can truly listen to each other'.

Working with narratives, particularly during the deconstruction and reconstruction of place-based narratives, when students become the 'custodians' of stories, enables students to directly disrupt hegemonic narratives and create openings for more interconnected ways of self-identifying and relating. In their book *Teaching Contested Narratives: Identity, Memory and Reconciliation in Peace Education and Beyond* (2012), Bekerman and Zembylas argue for the reasons why reconciliation education should do precisely that. Their theory aligns with Lederach's definition of reconciliation (1998, in Bekerman & Zembylas 2012: 57) as '[reframing] perspectives on "the others", thereby allowing for a process leading towards a renewed encounter between "us" and "them"'. Bekerman and Zembylas (2012: 59) highlight the links between narratives, memory and identity, suggesting that 'teachers and students in

conflict-ridden areas often remain stuck in certain self-identifications and collective memories' that get in the way of reconciliation. Identity and memory shape and are shaped by how we relate. They are 'interactional, contextualised and historicised processes rather than isolated inside an individual' (Bekerman & Zembylas 2012: 23). A person's social identity is constructed by 'what defines the "us"' (Hogg & Vaughan 2002, in Bekerman & Zembylas 2012: 45) in a given situation. Hegemonic narratives create and maintain concepts of otherness that can exacerbate conflict (Bekerman & Zembylas 2012), both physically and epistemologically. The task is not to erase memories or promote forgetting, but rather to 'remember forward'[24] (Chopp 2005: 260) in order to 'reconceptualise identity and memory as non-dividing constructs' through 'hopeful pedagogical interventions' (Bekerman & Zembylas 2012: 5). 'Teaching contested narratives … can create space for different affective relations with others' (Zembylas 2008a, 2010c, in Bekerman & Zembylas 2012: 41) 'to disrupt those regimes of feeling and thinking that perpetuate a conflicting ethos with others and to invent new practices of relating with them' (Bekerman & Zembylas 2012: 41).

Conclusion

The story of climate change is one told across a global waterscape of contested narratives. Some of these narratives argue over the original ownership of waterways while others question ownership altogether, debate who should manage water, and question management over stewardship practices. Each of these narratives purports to ascribe a particular value (or disvalue) to water. Since social and ecological injustices—mirrored by water problems—are anchored in and proliferate damaged relations, solutions can be possible when engaging in a practice of reconciling relations. In this paper, I argued that a relational, site-specific, media-arts-based, university curriculum focused on water can cultivate students' relational sensibilities and abilities towards reconciliation by providing examples of how this showed up during a pilot course I taught at a Canadian university in 2018. I identified the three most significant relational sensibilities and abilities developed by students through the programme, and *how* they were developed: (1) *knowledge ecologies,* where students were engaged in 'three-eyed seeing', a synergistic mode of perception at

---

24 To 'remember forward' means to imagine new paths of working together.

the interplay of Indigenous knowledge, Western knowledge and artistic practice; (2) *a hopeful social imaginary*, where students were involved in de/reconstructing contested narratives through story-based learning from local Knowledge Keepers and video story creation; and (3) *embodied ways of knowing*, where students took part in site-specific, creative and multi-sensory mapping activities, field trips and active listening and storytelling. All this contributed to the co-creation of 'dangerous memories' (Bekerman & Zembylas 2012: 209) where (a) institutional roles (and related memories and identities) are fluid; (b) memories of difficult pasts are translated into valuable lessons for the present and future; and (c) digital collective archives in the form of students' videos reinforce our commonality. Results from this reflective praxis suggest that one key strategy for creating reconciliatory openings in education lies in cultivating social identities of interconnectedness.

I acknowledge the potential conflict in my dual role as teacher-researcher, in which I may be looking for specific outcomes from the curriculum and students may hold back on sharing parts of their experience. For the next iteration in this praxis process I will work with a third-party researcher to administer questionnaires and conduct interviews with students with the aim of minimising this. The scope of this paper also did not allow for reflections around the enactment of this curriculum. Another potential study could look at how this curriculum is enacted at one institution by several different instructors to determine what kinds of considerations on the part of the instructors can impact on students' learning experiences.

This article examines a pilot programme that was presented in Canada. Important considerations will be needed for this curriculum to be applicable in South Africa. For example, in Canada the indigenous populations primarily impacted by residential schools are a minority. In South Africa, the indigenous/African[25] populations that were primarily impacted by Bantu Education are a majority. When we focus on water, issues around access are directly proportionate to these populations in the respective countries. As mentioned in the introduction, Canada is one of the world's countries with the most fresh water per capita, while most of South Africa is arid and struggling with varying degrees of drought. South Africa has a history of violent conflict between different races and a Truth and Reconciliation Commission (TRC) that is directly linked to processes that attempted to mediate these racial

---

25 Institutionally marginalised peoples in South Africa may include persons who are or are not indigenous to South Africa (e.g. indigenous to other regions of Africa).

tensions. Many South Africans feel that the TRC was unsuccessful in achieving reconciliation (Yates 2018) and therefore any mention of reconciliation processes in South Africa tends to conjure up associations with both the violent struggle and the unsuccessful TRC attempts. In Canada, the violence of the past residential schools and related racially motivated acts are undeniable. That said, Canada remains in a relatively[26] peaceful state physically (one could argue that the violence exists more epistemologically) and the TRC process was associated more with ideological and systemic processes like 94 Calls to Action (Truth and Reconciliation Commission of Canada 2015). The meaning of 'reconciliation' would need to be carefully unpacked prior to starting this action research in South Africa.

That brings us to the end of the story of this pilot program. There is a story that says that a university education is about getting a ticket to employment and that learning should be about preparing individuals' minds for their place in the growth economy. But then there is another story …

Acknowledgements

---

26 By 'relatively peaceful,' I mean to say that there is not visible, widespread acts of brutality like what South Africa experienced during apartheid. There is ongoing, devastating violence (often hidden and silenced by media and the government) in Canada with regards to the treatment of Indigenous peoples, for example, through a history of missing and murdered women whose stories have not been adequately investigated by law enforcement authorities (Kubik & Bourassa 2016).

(Footnotes)

1. Note: The words printed in bold in the above table indicate similarities in the approaches to dealing with reconciliation in the two countries.
2. To the best of my knowledge, based on information available at the time of writing from B.C. First Nations' websites and the Province's First Nations Consultative Areas Data Base (http://maps.gov.bc.ca/ess/hm/cadb/)
3. Source: https://www.squamish.net/about-us/our-land/
4. Source: https://www.musqueam.bc.ca/wp-content/uploads/2018/06/MusqueamSOI_Map-scaled.jpg
5. Source: https://twnation.ca/about/our-departments/treaty-lands-resources/
6. Source: http://www.stzuminus.com/our-story/community-map/
7. Source: https://www.researchgate.net/publication/311768934_Sumas_Energy_2_Inc_Traditional_Use_Study_Phase_II_Stolo_Cultural_Relations_to_Air_and_Water
8. Source: https://www.kwantlenfn.ca/
9. Source: https://www.cowichantribes.com/about-cowichan-tribes/land-base/traditional-territory

References

Abu, R., Reed, M. & Jardine, T. (2019). Using two-eyed seeing to bridge western science and Indigenous knowledge systems and understand long-term change in the Saskatchewan River Delta. *International Journal of Water Resources Development,* 1–20. http://dx.doi.org/10.1080/07900627.2018.1558050

Ahluwalia, P., Atkinson, S., Bishop, P., Christie P., Hattam, R. & Matthews, J. (eds). (2012).

Reconciliation and pedagogy. London and New York: Routledge.

Baijius, W. & Patrick, R. J. (2019). We don't drink the water here: The reproduction of undrinkable water for First Nations in Canada. *Water, 11*(1079): 269-286.

Bartlett, C., Marshall, M. & Marshall, A. (2012). Two-eyed seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences, 2*(4): 331–340. http://dx.doi.org/10.1007/s13412-012-0086-8

Battiste, M. (2013). *Decolonizing education: Nourishing the learning spirit.* Saskatoon: Purich Publishing Ltd.

Beck, T. L., Rodina, E., Luker, L. & Harris, L. (2016). *Institutional and policy mapping of the water sector in South Africa.* Vancouver: Program on Water Governance and University of British Columbia.

Bekerman, Z. & Zembylas, M. (2012). *Teaching contested narratives: Identity, memory and reconciliation in peace education and beyond.* Cambridge: Cambridge University Press.

Bergler, R. (Director). (2018). *Skwxwu7mesh, Squamish Estuary* [Video]. YouTube. https://www.youtube.com/watch?v=4fAYgvmUzQc&feature=youtu.be

Bond, P. (2011). South Africa 'rights culture' of water consumption: Breaking out of the liberal box and into the commons. http://ccs.ukzn.ac.za/files/bond%20 unesco%20Culture%20of%20Water%20Rights.pdf

Cairncross, L. (2018, 31 July). Thoughts on the death of Professor Bongani Mayosi. *Daily Maverick.* https://www.dailymaverick.co.za/article/2018-07-31-thoughts-on-the-death-of-professor-bongani-mayosi/

Chamberlain, J.E. (2003). *If this is your land, where are your stories? Finding common ground.* Toronto: Random House of Canada Ltd.

Chopp, R. (2005). An agenda for higher education. In Brown, A.B & Premski, K.M. (Eds). *Roads to reconciliation* (pp. 250–255). New York and London: M.E. Sharpes Inc.

Cole, E. (Ed) (2007). *Teaching the violent past: History education and reconciliation.* Lanham: Rowman & Littlefield.

Coyes, G. (2018). Guest lecture at Emily Carr University of Art + Design, Vancouver, Canada, 11 July 2018.

Djenontin, I.N.S. & Meadow, A.M. (2018). The art of co-production of knowledge in environmental sciences and management: lessons from international practice. *Environmental Management*, *61*(1): 885-903. https://doi.org/10.1007/s00267-018-1028-3

Donati, P. (2016, September 13). *Pierpaolo Donati: An introduction to relational realism* [Video]. YouTube. https://www.youtube.com/watch?v=P5NvODHgTJY

Emily Carr University of Art + Design. (2017). *Eight commitments to an emergent future: Emily Carr University's strategic plan to 2020.* https://www.ecuad.ca/assets/content-images/StrategicPlan_2017%C6%92.pdf

Emily Carr University of Art + Design. (2019). Emily Carr University hires four new permanent indigenous faculty members. https://www.ecuad.ca/news/2019/emily-carr-university-hires-four-new-permanent-indigenous-faculty-members

Enqvist, J. & Ziervogel, G. (2019). Water governance and justice in Cape Town: An overview. *WIREs Water.* https://onlinelibrary.wiley.com/doi/epdf/10.1002/wat2.1354

Fischer, F. (2000). *Citizens, experts, and the environment: the politics of local knowledge.* Durham and London: Duke University Press.

Gachago, D. (2015). Seeing the world through somebody else's eyes: Developing capabilities for a socially just education. In J. Condy (Ed), *Telling stories differently: Engaging 21st century students through digital storytelling* (pp. 99–106). Stellenbosch: SUN MeDIA.

Given, L.M. (Ed). (2008). *The SAGE encyclopedia of qualitative research methods.* Los Angeles, London, New Delhi, Singapore: SAGE Publications, Inc.

Government of South Africa: Department of Rural Development and Land Reform. (2017). *Land Audit Report.* https://www.gov.za/sites/default/files/gcis_document/201802/landauditreport13feb2018.pdf

Hattam, R. (Ed.) (2012). Preface. In Alhuwalia, P., Atkinson, S., Bishop, P., Christie, P., Hattam, R. & Matthews, J. (Eds). *Reconciliation and pedagogy* (pp. xiii-xvi). London and New York: Routledge. Hattam, R., Atkinson, S. & Bishop, P. (2012). Rethinking reconciliation and pedagogy in unsettling times. In P. Alhuwalia, S. Atkinson, P. Bishop, P. Christie, R. Hattam & J. Matthews (Eds). *Reconciliation and pedagogy* (pp. 45—64). London and New York: Routledge.Heleta, S. (2016). Decolonization of higher education: Dismantling epistemic violence and eurocentrism in South Africa. *Transformation in Higher Education, AOSIS, 1*(1): 1–8. http://dx.doi.org/10.4102/the/v1i1.9

Hodgkin, M. (2016). Reconciliation in Rwanda: Education, history and the state. *Journal of International Affairs*, *60*(1): 199-210. https://www.jstor.org/stable/24358020

Hull, J. (2012). Sound: An enrichment or state. *Soundscape, 2*(1): 10-15. http://ecoear.proscenia.net/wfaelibrary/journal/scape_3.pdfInstitute for Justice and Reconciliation. (2019). *SA reconciliation barometer.* http://www.ijr.org.za/home/wp-content/uploads/2019/12/800108-IJR-Barometer-Report-2019-final-web.pdf

Ip, S. (2018, 3 July). Pipeline protestors rappel from Ironworkers Bridge in Vancouver. *Times-Colonist.* https://www.timescolonist.com/news/b-c/pipeline-protesters-rappel-from-ironworkers-bridge-in-vancouver-1.23357139

Isaacs, L. (2018, 7 November). Scope of UCT probe into Mayosi's death outlined. *IOL.* https://www.iol.co.za/capetimes/news/scope-of-uct-probe-into-mayosis-death-outlined-17797117Ivala, E. (2015a). Using digital storytelling as a pedagogical tool to promote high levels of reflection. In J. Condy (ed), *Telling stories differently: Engaging 21st century students through digital storytelling* (pp. 37–45). Stellenbosch: SUN MeDIA. .

Ivala, E. (2015b). Digital storytelling as a deep learning opportunity. In Condy, J. (ed), *Telling stories differently: Engaging 21st century students through digital storytelling* (pp. 27–35). Stellenbosch: SUN MeDIA.

Johnson, M. (2016). *The land is our history: Indigeneity, law, and the settler state.* New York: Oxford University Press.

Jourbert, L. & Ziervogel, G. (2019). *Day Zero: One city's response to a record-breaking drought.* http://dayzero.org.za/Day-Zero.pdf

Kassam, A. (2018, 30 August). Trans Mountain pipeline halted after Canadian court overturns approval. *The Guardian.* https://www.theguardian.com/world/2018/aug/30/trans-mountain-pipeline-latest-canada-court-overturns

Kennedy, M. (2020, 5 February). Canadian court clears the way for Trans Mountain pipeline expansion. *NPR.* https://www.npr.org/2020/02/05/803002446/canadian-court-clears-the-way-for-trans-mountain-pipeline-expansion

Kines, L. (2019, 5 October). Southern resident orcas face "imminent threat". *Times Colonist.*https://www.timescolonist.com/islander/southern-resident-orcas-face-imminent-threat-1.2357806

Kubik, W. & Bourassa, C. (2016). Stolen sisters: The politics, policies, and travesty of missing and murdered women in Canada. In Lavell-Harvard, D.M. & Brant, J. (Eds). *Forever loved: Exposing the hidden crisis of missing and murdered indigenous women and girls in Canada* (pp.17–33). Brantford: Demeter Press.

Lazarus, S., Taliep, N. & Naidoo, A.V. (2017). Community asset mapping as a critical participatory research method. In Seedat, M., Suffla, S. & Christie D.J. (Eds). *Emancipatory and participatory methodologies in peace, critical, and community psychology* (pp.45—60). Cham: Springer.

Leahy, S. (2019, 11 April). This is the world's most destructive oil operation – and it's growing. *National Geographic.*https://www.nationalgeographic.com/environment/2019/04/alberta-canadas-tar-sands-is-growing-but-indigenous-people-fight-back/

Lindmark, D. & Sundström, O. (2018). *The Sami and the church of Sweden: Results from a white paper project.* Möklinta: Gidlunds Förlag.

Lirette, D. & Kurjata, A. (2020, 15 January). New records broken as extreme cold and snowfall warnings persist Across B.C. interior and north. Canadian Broadcasting Corporation.

https://www.cbc.ca/news/canada/british-columbia/interior-bc-northern-bc-cold-weather-1.5427791

Lukawiecki, J. (2018). *Reconciling promises and reality: Clean drinking water for First Nations.* Vancouver: David Suzuki Foundation.

MacDonald, M. (2016, 6 April). Indigenizing the academy: What some universities are doing to weave Indigenous peoples, cultures and knowledge into the fabric of their campuses. *University Affairs.* http://www.universityaffairs.ca/features/feature-article/indigenizing-the-academy/

Machin, A. & Smith, G. (2014). Ends, means, beginnings: Environmental technocracy, ecological deliberation or embodied disagreement? *Ethical Perspectives*, *21*(1): 47-72.http://dx.doi.org/10.2143/EP.21.1.3017286

Marshall, L. (Director) (2010) *Water on the Table* [video]. Canada.

https://vimeo.com/ondemand/wateronthetableMascarenhas, M. (2012). *Where the waters divide: Neoliberalism, white privilege, and environmental racism in Canada.* Plymouth: Lexington Books.

McAteer, M. & Wood, L. (2018). Decolonising knowledge: Enacting the civic role of the university in a community-based project. *South African Journal of Education*, *38*(4): 1-10. http://dx.doi.org/10.15700/saje.v38n4a1662

Metro Vancouver. (n.d.). First Nations from within the region. http://www.metrovancouver.org/services/first-nation-relations/first-nations/Pages/default.aspx

Morcom, L. & Freeman, K. (2019, 29 September). Teaching truth and reconciliation in Canada: The perfect place to begin is right where a teacher stands. *The Conversation.*
https://theconversation.com/teaching-truth-and-reconciliation-in-canada-the-perfect-place-to-begin-is-right-where-a-teacher-stands-111061Native Education College. (n.d.). www.necvancouver.org

Olade, M. & Matikinca, A. (2019, 17 May). Big increase in mine water pollution. *Mail & Guardian.* https://mg.co.za/article/2019-05-17-00-big-increase-in-mine-water-pollution/Oxford Dictionary. (n.d.) https://www.lexico.com/definition/township

Parmar, T. & Nassar, H.M. (2018, 14 July). Activists take to waters of Burrard Inlet to protest pipeline. *CityNews.* https://www.citynews1130.com/2018/07/14/activists-take-waters-burrard-inlet-protest-pipeline/

Platz, N. H. (2004). Reconciling humans with nature through aesthetic experience: The green dimension in Australian poetry. *Zeitschrift für Anglistik und Amerikanistik*, *52*(3): 257-271. https://doi.org/10.1515/zaa.2004.52.3.257

Potgieter, E. (2017). *SA reconciliation barometer survey 2017 report.* Cape Town: The Institute for Justice and Reconciliation. https://www.ijr.org.za/portfolio-items/south-african-reconciliation-barometer-survey-2017-report/

Potgieter, E. (2019). *SA reconciliation barometer survey 2019 report.* Cape Town: The Institute for Justice and Reconciliation. https://www.ijr.org.za/portfolio-items/sa-reconciliation-barometer-2019/

Preston, J. (2017). Racial extractivism and white settler colonialism: An examination of the Canadian tar-sands mega-project. *Cultural Studies*, *31*(2-3): 353-375. https://doi.org/10.1080/09502386.2017.1303432

Reconciliation Australia. (2018). *The state of reconciliation in Australia: Our history, our story, our future.* https://www.reconciliation.org.au/wp content/uploads/2018/06/ra_stateofreconciliation_report_a4_revised-2018.pdf

Reconciliation Canada. (2017). *The Canadian reconciliation landscape: Current perspectives of Indigenous peoples and non-Indigenous Canadians.* http://reconciliationcanada.ca/staging/wp-content/uploads/2017/05/NationalNarrativeReport-ReconciliationCanada-Released May2017_2.pdf

Reich, M.A. (2016). Soundscape composition as environmental activism and awareness: An

ecomusicological approach. Summer Research Paper 282. http://soundideas.pugetsound.edu/summer_research/282Rouhana, N. (2018). Decolonization as reconciliation: rethinking the national conflict paradigm in the Israeli-Palestinian conflict. *Ethnic and Racial Studies*, *41*(4): 643-662. https://doi.org/10.1080/01419870.2017.1324999Roussouw, N. & Wiseman, K. (2004). Learning from the implementation of environmental public policy instruments after the first ten years of democracy in South Africa. *Impact Assessment and Project Appraisal, 22*(2): 131-140. http://dx.doi.org/ 10.3152/147154604781766012

Sadiq, H., Barnes, K., Price, M., Gumedze, F. & Morrell, R.G. (2018). Academic promotions at a South African university: Questions of bias, politics and transformation. *Higher Education, 78*: 423-442. http://doi.org./10.1007/s10734-018-0350-2

Siemens, J.D.N. (2017). Education for reconciliation: Pedagogy for a Canadian context. *Canadian Journal for New Scholars in Education, 8*(1): 127–135.

Strang, V. (2018) (Executive Director of the Institute of Advanced Study at Durham University, Cape Town, 6 September 2018).Strega, S. & Brown, L. (Eds). (2015). *Research as resistance: Revisiting critical, indigenous and anti-oppressive approaches.* 2nd ed. Toronto: Canadian Scholars' Press Inc.

Suzuki, D. (2018, 14 March). Science matters: Lessons from Cape Town's water crisis. *The Coast.* https://www.thecoast.ca/halifax/science-matters-lessons-from-cape-towns-water-crisis/Content?oid=13315799

Tafirenyika, M. (2018). Cape Town water taps running dry. *United Nations African Renewal.* https://www.un.org/africarenewal/magazine/april-2018-july-2018/cape-town-water-taps-running-dry

Tiba, C. & Chigona, A. (2015). Two sides to a story: A literature review of digital storytelling. In Condy, J. (Ed.). *Telling stories differently: Engaging 21st century students through digital storytelling* (pp. 17–24). Stellenbosch: SUN MeDIA.

Truth and Reconciliation Commission of Canada. (2015). *Calls to action.*http://trc.ca/assets/pdf/Calls_to_Action_English2.pdf

University of British Columbia. (2009). *The Indian Act.* https://indigenousfoundations.arts.ubc.ca/the_indian_act/

Van Borek, S. & James, A. (2019). (Towards) Sound research practice: Podcast-building as modelling relational sensibilities at the water-climate change nexus in Cape Town. *The Journal of New Media, Technology, and the Arts*, *14*(1): 9-27. https://doi.org/10.18848/2326-9987/CGP/v14i01/9-27Van Dooren, T. & Rose, D.B. (2016). Lively ethnography: Storying animist worlds.
Environmental Humanities, *8*(1): 77–94.
http://dx.doi.org/10.1215/22011919-3527731

Washburn, J. (2012). *The flow of water, power, and ideas: Water commodification in Cape Town, South Africa and the stratified experiences of time and space compression.* Masters thesis – Master in Arts: International Studies. University of San Francisco. https://repository.usfca.edu/cgi/viewcontent.cgi?article=1064&context=thes

Westerkamp, H. (2019). The disruptive nature of listening: Today, yesterday, and tomorrow. In Droumeva, M. & Jordan, R. (Eds). *Sound, Media, Ecology* (pp. 45-63). Cham: Palgrave MacMillan.

Wilson, K. & Henderson, J. (2014). First peoples: A guide for newcomers. *City of Vancouver.* https://vancouver.ca/files/cov/First-Peoples-A-Guide-for-Newcomers.pdf

Wilson-Raybould, J. (2017) Separate journeys, similar path: Truth and Reconciliation in Canada and South Africa. *Government of Canada.* https://www.canada.ca/en/department-justice/news/2017/04/separate_journeyssimilarpathtruthandreconciliationincanadaandsou0.html

Wilkening, C. (Director) (2018). *Sturgeon Bank and Orca* [Video]. YouTube.https://youtu.be/t2kELjb-DCw

Wong, R. (2011). What would restitution and regeneration look like from the point of view of water? In Mathur, A., Dewar, J. & De Gagne, M. (Eds). *Cultivating Canada: Reconciliation through the lens of cultural diversity* (pp. 83–90). Ottawa: Aboriginal Healing Foundation.

Wortham, S. & Jackson, K. (2012). Relational education: Applying Gergen's work to educational research and practice. *Psychological Studies, 57*(2): 164-171. http://dx.doi.org/10.1007/s12646-011-0120-z

Yates, A. (2018, 5 September). Justice delayed: The TRC recommendations 20 years later. *Daily Maverick.*

https://www.dailymaverick.co.za/article/2018-09-05-justice-delayed-the-trc-recommendations-20-years-later/

Zembylas, M., Bekerman, Z., McGlynn, C. & Ferreira, A. (2009). Teachers' understanding of reconciliation and inclusion in mixed schools of four troubled societies. *Research in Comparative and International Education, 4*(4): 406-422. https://journals.sagepub.com/doi/pdf/10.2304/rcie.2009.4.4.406

Zembylas, M. (2012). Suffering, memory and forgiveness: Derrida, Levinas and the pedagogical challenges of reconciliation in Cyprus. In Alhuwalia, P., Atkinson, S., Bishop, P., Christie, P., Hattam R. & Matthews, J. (Eds). *Reconciliation and pedagogy* (pp. 45—64). London and New York: Routledge.

Ziervogel, G. (2019). Unpacking the Cape Town drought: Lessons learned. *African Centre for Cities.* https://www.africancentreforcities.net/wp-content/uploads/2019/02/Ziervogel-2019-Lessons-from-Cape-Town-Drought_A.pdf

About the author

Sarah Van Borek is a media artist, educator and PhD scholar in environmental education at Rhodes University, South Africa. She has been a faculty member of Canada's top art and design institute, the Emily Carr University of Art + Design, since 2012 and has designed and implemented project-based university courses towards social and ecological justice in collaboration with a wide range of museums: the Museum of Vancouver, the Vancouver Maritime Museum, the Courtenay & District Museum, the Gulf of Georgia Cannery, the Beaty Biodiversity Museum and the Apartheid Museum. She has been producing videos and social practice media works for more than 15 years and her work, which has won numerous awards, has been featured at film festivals, on television and in museums. Her passion for African music, film and sustainable development has taken her work to Gabon, Zambia, Uganda, Kenya, Tanzania, Mauritania and Mali. She provides customised training and support in digital storytelling through videos and podcasts for research, education and advocacy across a variety of sectors. For her doctoral research, Sarah is using a praxis process to develop a relational model of site-specific, media-arts-based environmental education aimed at promoting reconciliation in Canada and South Africa.