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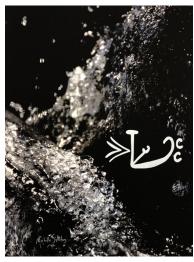


jiksituinen listen to us

INDIGENOUS AND TRANS-SYSTEMIC KNOWLEDGE SYSTEMS

Wiehelle Dy

Spring 2021



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Michelle Sylliboy is Mi'kmaq/L'nu an award-winning author (Kiskajeyi—I Am Ready, Rebel Mountain Press, 2019) and interdisciplinary artist, born in Boston and raised on her traditional L'nuk territory in We'koqmaq, Unama'ki. Sylliboy has degrees from Emily Carr University, Simon Fraser University, and currently a PhD candidate at Simon Fraser University working to reclaim her original written komqwejwi'kasikl language. She is an assistant professor at St. Francis Xavier University.

Sharing L'nuk (hieroglyphic) komqwejwi'kasikl writing and its relation to ecology by photography. Sylliboy captures spirit, style, and manner as her ancestors. The water represents a subliminal brushstroke in the photograph. The hieroglyphic message from water jiksituinen (listen to us) represents samquan (water In the Augustine creation story, the water lodge is revealed by Netawansum, the nephew and knowledge keeper. Netawansum brought the covenants and comprehension of the water realms, the use and importance of spiritual energy and respect, and the amazing ability of dreams and visions to see far away to find their way over distant territories. This generated a treaty covenant with the water animals and guardian spirits that ordered and guided the kinship relationship and shared obligations. The komqwejwikasikl symbol jiksituinen (listen to us) allows us to step back and remember who we once were when nature and humanity spoke as one.

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> GUEST EDITORS g⊳∇ⁿ′ ∇dΔ⊃≥ⁿ



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From the Guest Editors

Indigenous and Trans-Systemic Knowledge Systems

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In the 1982 Constitution Act, Canada reaffirmed a new order guaranteeing the effective enjoyment of the ancient constitutional rights of Aboriginal Peoples, both collectively and individually. The affirmation of Aboriginal and Treaty rights in the Canadian Constitution and the first generation of First Nations, Métis, and Inuit educated in the Eurocentric systems in Canada create a nexus for a transgenerational alliance between knowledge systems. While Indigenous Peoples are still recovering from the assimilative, destructive, and appropriative effects of colonialism and Eurocentrism, including removal from and the theft of their lands, the constitutional affirmation of their Aboriginal and Treaty rights has generated a foundation for the courts and Canadian systems to reconcile with Indigenous Peoples.

In the last half century, a growing number of Indigenous scholars have successfully passed through the conventional educational systems in almost every profession and in every disciplinary tradition, and while most have not



Marie Battiste and Sa'ke'j Henderson

had Indigenous Knowledge systems embedded in that education, there are growing efforts to include Indigenous Knowledges, perspectives, and communities in various forms and under various theories, such as culturally responsive curricula, infusion and integrations in conventional disciplinary knowledges and methodologies, Indigenization, etc. As well, the contributions of many Indigenous scholars in their doctoral research have contributed to the larger discussion and critique of appropriate Indigenous methodologies and concepts/theories and to a growing number of scholarly publications, both nationally and internationally (Styres, 2017; Davidson & Davidson, 2016; Wilson, 2008; Nakata, 2002; Kawagley, 1999; Smith, 1999, 2013; Smith, 1997; Cajete, 1986;). These advances in research with Indigenous Knowledges and their accompanying applications from Indigenous scholars have begun to address the important ways in which Indigenous Knowledges can be respectfully approached from various disciplinary foundations. Yet, Indigenous Knowledges are a distinct knowledge

system different from Eurocentric or western knowledge systems, though they are still not being fully appreciated by Eurocentric knowledge scholars as knowledge systems with their own languages, protocols, ethics, ontology, and epistemologies. Each Indigenous Knowledge system is distinguished by its own language, and in Canada at least 11 language families exist with over 60 Indigenous languages currently being spoken. Hence, when discussing Indigenous Knowledge, it is important to note when one is referring to a singular language knowledge system or the many Indigenous Knowledge systems. Most scholars are still learning how to approach Indigenous Knowledges in ways that recognize their distinctiveness, accessibility, ethics, protocols, and respectful and practical applications.

This special issue addressing the theme of "Indigenous and Trans-Systemic Knowledge Systems" seeks to expand the existing methods, approaches, and conceptual understandings of Indigenous Knowledges to create new awareness, new explorations, and new inspirations across other knowledge systems. Typically, these have arisen and have been published through the western disciplinary traditions in interaction and engagement with diverse Indigenous Knowledge systems. Written by Indigenous and non-Indigenous scholars, and in collaborations, the contributions to this issue feature the research, study, or active exploration of applied methods or approaches from and with Indigenous Knowledge systems as scholarly inquiry, as well as practical communally-activated knowledge. These engagements between Eurocentric and Indigenous Knowledges have generated unique advancements dealing with dynamic systems that are constantly being animated and reformulated in various fields of life and experiences. While these varied applications abound, the essays in this issue explore the theme largely through scholarly research or applied pedagogies within conventional schools and universities. The engagement of these distinct knowledge systems has also generated reflective, immersive, and transactional explorations of how to foster well-being and recovery from colonialism in Indigenous community contexts.

The theme for this journal has been activated by the affirmation of Aboriginal and Treaty rights as part of the supreme law of Canada and the affirmation and mobilization of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in Canada and beyond. It is also inspired by contemporary work on Indigenization and reconciliation. Each of these events seeks the recovery of Canadian and Indigenous communities from the legacy of colonialism and the traumatic long-lasting effects of Indian Residential Schools on Indigenous children and youth, families, and communities. We are witnessing early shifts in many universities moving from a defensive, assimilative, rigor-keeping story to a receptive, transformative, openness narrative that accepts the benefits of Indigenous Knowledge systems are not just benefits to Indigenous students but benefits to the entire academic community and the multiple publics who look to elite institutions to lead and to listen. As such, innovation from diverse sources can lead to beneficial change for all.

Indigenous Renaissance (\triangle $^{\circ}d\triangle g\nabla\dot{\triangle}^{\cap} \ge \nabla \triangle \triangle^{\cap} \subseteq ($

The self-determination movement inherent in the Indigenous Renaissance has displayed the depth and power of a small portion of our humanity, its noble commitment to empower

the powerless and dispossessed to lead better lives and overthrow the obstacles of racism, assimilation, and Eurocentrism. This renaissance among Indigenous Peoples is carrying the dreamers, workers, and professionals, as they build creative, effective institutions and programs for their people. They generate visions of the future and foundations for hard-line front workers in schools and institutions, ensuring our Indigenous Knowledge systems and Indigenous rights are respected and addressed. They embody the horizon of potentiality, possibility, and empowering hope to which countless other Indigenous Peoples and non-Indigenous allies hold tenaciously as we do our work.

For more than twenty years at the United Nations, the Indigenous Renaissance built upon the concept of inherent dignity that is at the heart of international human rights to forge the United Nations Declaration on the Rights of Indigenous Peoples (2007). The Declaration consists of a preamble and forty-six articles setting forth Indigenous Peoples' rights as well as state obligations. It acknowledges that Indigenous Peoples' societies are individual and collective, comprise both rights and responsibilities, and are shaped by intergenerational knowledges and relationships with the biosphere and among humans. It operates as a global standard-setting document representing a global consensus of the human rights of Indigenous Peoples. In the Outcome Document of the World Conference on Indigenous Peoples (2014), all 193 member states of the United Nations expressed support for the Declaration and committed to its implementation.

The Declaration on the Rights of Indigenous Peoples affirms the inherent dignity of Indigenous Peoples and the minimum standard for nation-states to meet. It affirms article 1 of the Universal Declaration of Human Rights: "All human beings are born free and equal in dignity and rights." It asserts the belief that all people hold a special value that is intimately tied to their humanity. It contextualizes how the universal human rights standards apply to Indigenous Peoples. Holding that Indigenous Peoples are equal to all other peoples, it follows that Indigenous Peoples have a right to self-determination.

While recognizing the right of all peoples to be different, to consider themselves different, and to be respected as such, the Declaration recognizes the urgent need to respect and promote the inherent rights of Indigenous Peoples which derive from their political, economic, and social structures and from their cultures, spiritual traditions, histories, and philosophies. Article 15 reads, "Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information." Article 31 speaks to Indigenous Peoples having the right to maintain, control, protect, and develop their cultural heritage, traditional knowledge, and traditional cultural expressions, as well as the right to the manifestations of their sciences, technologies, cultures, and visual and performing arts. It also affirms Indigenous Peoples have the right to maintain, control, protect, and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions. It attests to the right for Indigenous Peoples to be recognized as distinct peoples who have free, prior, and informed consent. The affirmation of these inherent rights generates the need for methodologies and ethical guidelines for trans-systemic approaches to Indigenous and European Knowledge systems.

The Truth and Reconciliation Commission's (TRC) Final Report on the Indian Residential Schools (2015) has been another important impetus for change. Institutional responses to Indigenization and reconciliation have grown significantly with opportunities in government-funded research (Call to Action # 65)¹ and with publicly-funded schools including Indigenous contents, perspectives, and materials (Call to Action # 63).² Moreover, the Truth and Reconciliation Commission recommended the implementation of the UN Declaration on the Rights of Indigenous Peoples to begin to reconcile and redress educational injuries inflicted by coercive assimilation over the centuries. In Canada, the province of British Columbia, which has the most Indigenous Peoples' unresolved Aboriginal rights, has enacted the *Declaration on the Rights of Indigenous Peoples Act*, SBC 2019, c 44, which seeks to make provincial law consistent with the UN Declaration into provincial law. In December 2020, Canada proposed national legislation, An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples, Bill C-15, to ensure that the laws of Canada are consistent with the United Nations Declaration. At this time, the House of Commons passed the bill and it now goes to the senate.

Universities Canada established Indigenous education principles (2015) for post-secondary institutions in consultation with Indigenous communities, meant to improve educational outcomes for Indigenous students. Together with Ministries of Education calling for prioritization of Aboriginal education, Indigenization and reconciliation have featured significantly in the last decade in most universities, as well as in the Tri-Council's three federal funding research agencies: the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council of Canada (SSHRC), as well as the Canada Research Chairs (CRC) programme.

Though the number of Indigenous scholars, as well as research on Indigenous Knowledges, are growing, little is still known about the methods needed to blend two distinctive knowledge systems. Assumptions that Eurocentric knowledge systems hold the only protocols and methods of research have led to inappropriate or appropriative research in Indigenous communities. Maori scholar Linda Tuhiwai Smith (1999/2013) has written and spoken widely and passionately about how Eurocentric research, contaminated with false colonial and racist assumptions, has left Indigenous communities deploring and distrusting research and researchers in their communities. The experience of colonialism and Eurocentric methods of research in Indigenous communities have also contributed to many Indigenous students'

¹ TRC Call to Action (2015) #65: "We call upon the federal government, through the Social Sciences and Humanities Research Council, and in collaboration with Aboriginal Peoples, post-secondary institutions and educators, and the National Centre for Truth and Reconciliation and its partner institutions, to establish a national research program with multi-year funding to advance understanding of reconciliation."

² TRC Call to Action (2015) #63: "We call upon the Council of Ministers of Education, Canada to maintain an annual commitment to Aboriginal education issues, including: i. Developing and implementing Kindergarten to Grade Twelve curriculum and learning resources on Aboriginal Peoples in Canadian history, and the history and legacy of residential schools. ii. Sharing information and best practices on teaching curriculum related to residential schools and Aboriginal history. iii. Building student capacity for intercultural understanding, empathy, and mutual respect. iv. Identifying teacher-training needs relating to the above."

distrust of research and have led them to discount their inherent capacities and gifts, their elders' wisdom and knowledge, and their Indigenous values and teachings. No educational system is without flaws, yet few have been as destructive to human potential as Canada's, with its obsession with paternalism and assimilation and racialized discourses.

The cooperation of Indigenous scholars in Canada with the federal research funding agencies—Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council, and the Social Science and Humanities Research Council—has generated a minimal approach to trans-systemic research. The Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (2018) is based on respect for human dignity. Ethical conduct requires that research involving humans is sensitive to the inherent worth of all human beings and the respect and consideration that they are due. The Tri-Council Policy Statement expresses the three core principles of inherent human dignity—respect for persons, concern for welfare, and promoting justice. These core principles transcend disciplinary boundaries and therefore are relevant to the full range of research. These principles mark a step toward establishing a framework for developing an ethical space in a trans-systemic dialogue and acknowledge a move away from Eurocentric disciplinary research on Indigenous Peoples. The Tri-Council Policy Statement acknowledges and respects the constitutional rights of First Nations, Inuit, and Métis Peoples. Embedded in these constitutional rights are Indigenous laws and ethical guidelines in preserving and managing their collective knowledge system and languages. Ethical conduct in research should affirm respect for the autonomy of Indigenous Peoples' customs and codes of research practice to better ensure balance in the relationship between researchers and participants and to enhance mutual benefit in researcher-community relations. An important mechanism for respecting Indigenous Peoples' autonomy in research is requiring their free, informed, and on-going consent and choice throughout the research process and shared research benefits.

Canada has acknowledged the need to protect Indigenous languages. In 2019, Canada enacted the Indigenous Language Act that is to be construed as upholding the rights of Indigenous people recognized and affirmed by section 35 of the Constitution Act, 1982, and the affirmation of Indigenous Peoples' languages in the UN Declaration on the Rights of Indigenous Peoples. The purpose of constitutional affirmation of the Indigenous languages through this Act was to remedy past discrimination and to support and promote the efforts of Indigenous Peoples to reclaim, revitalize, use, maintain, and strengthen Indigenous languages. These languages contain the active cognitive force of the Indigenous Peoples' Knowledge systems and worldviews. While the Act is passed and funded, it has yet to be implemented fully but is full of promise to regenerate languages through the learning traditions of Indigenous Peoples.

The need is ever more pressing to build appropriate, ethical, and distinctive methods and approaches that draw from the available distinctive knowledges systems and to prioritize respectful collaborations that build on the dynamic value of interacting through, producing, and enriching trans-systemic scholarship. While much of the research collaborations have been directed at various institutions, such as institutions of education, health, justice, etc., Indigenous Knowledge systems must be enhanced in their own context for their own empowerment, self-

determination, and endogenous development. Furthermore, the aspiration for the integrity and viability of self-determining Indigenous Knowledge systems to thrive and flourish is a seven-generation quest that needs to be buttressed with existing systems adapting to and working side-by-side with Indigenous communities. Without appropriate acknowledgement of diverse knowledge systems, scholars may miss the diverse ways that knowledge in Indigenous communities is learned or acquired. They may also misunderstand how best one can learn about and through Indigenous philosophies, worldviews, and cultural knowledge, as well as what applications can or cannot be learned in schools, and what is appropriately learned within families, genders, societies, or from Elders or Knowledge Holders.

We begin this introduction with how the term and concept of "trans-systemic" fits the scholarly approach of working across distinct knowledges systems and how it offers a foundation to examine how two knowledge systems contribute equally and productively to various contexts and systems. We then offer a review of the essays and describe how they have worked trans-systemically to expand Indigenous resurgence and thrivance, while contributing to contemporary reconciliation and decolonization. Finally, we offer an explanation of the various orthographic systems that are depicted with the essays.

Trans-systemia ('S⊃∩∩♭∩UГ⊲)

Trans-systemic is a term created by the faculty of Law at McGill University in 1997 to reconcile the common law with civil law (Emerich, 2017). The term began as a described integrated teaching method to understand the underlying structure of legal thought. The civil and common law traditions are central to the construction of Eurocentrism based on the intersection of two legal traditions derived from the Roman and British empires. The term trans-systemia was anchored in the bilingualism and bijuralism of Canada as an innovative legal approach centred on jurilinguistic dialogue, translation, and comparison between legal traditions, anchored in a pluralist and non-hierarchical method that celebrates the irreducible differences and similarities between various legal traditions. Trans-systemic approaches in law searched for ideas neither conceptually nor geographically embedded in a legal tradition and sought to transcend the traditional dichotomies between civil law and common law to reveal a more extensive vocation of legal epistemology for comprehending knowledge systems that supported these legal traditions. Law Dean Nicholas Kasirer (2003) builds on anthropologist François Laplantine's and literary theorist Alexis Nouss' work to propose the image of métissage as a third paradigm of a renewed legal education. Richard Janda (2005) called transsystemic law cosmopolitan law. Law Dean Roderick Macdonald and Professor MacLean (2005) conceptualized the transsystemic approach to law as pluralistic and polycentric. The transsystemic epistemological approach seeks to develop theoretical and practical knowledge to identify concepts and remedies that different legal traditions share and the tensions between legal traditions and their modes of expression, all toward generating a pluralistic legal system.

Indigenous lawyers, scholars, and allies have expanded this concept to reconcile British common law and Indigenous law (Borrows, 2005). The trans-systemic approach between Indigenous law and Eurocentric law revealed a broader orientation of legal thought and justice

derived from both Eurocentric and Indigenous Knowledge systems and languages. It became an enhanced dialogue between distinct and diverse language systems beyond English and French languages. Most Indigenous scholars have adopted this approach in their response to the formal education system and their universities' and colleges' positions. They find themselves in this liminal space between Eurocentric and Indigenous Knowledge systems, developing their academic achievement from the Eurocentric disciplinary knowledge foundations and belonging to the Indigenous Knowledge traditions.

Academic scholars have sought to generate an understanding of the intersections of distinct knowledge systems. They are interweaving and intraweaving an entanglement of knowledge systems, languages, concepts, and feelings that create a liminal space. This liminal space between Indigenous Knowledges and languages and Eurocentric knowledges and languages has been described in the past. It is embedded in the meaning and interpretation of two-row Wampum belt, the concept of two worlds (Eastman, 2011), double-consciousness (Du Bois, 1903), cognitive métissage (Donald, 2012), split headedness (Cajete, 1986), jagged worldview (Little Bear, 2000), two-eyed seeing (Bartlett, et al., 2012), ambiculture (Nicholson et al., 2019), and related concepts. Yet how their liminal insights, sensations, and interactions occur, reflect, stimulate, and produce trans-systemic knowledge remains a haunting mystery. The various processes are subliminal, subtle, and experiential.

Academic scholars and educators have generated innovative experimentation from Indigenous Knowledges and languages combined to inspire animation and advancement of Indigenous Knowledge foundations, protocols, teachings, theory, methods, reconciliation, and therapeutic purposes, including transforming education from elite and assimilative to inclusive and transformative learning.

Indigenous Peoples' search for a trans-systemic synthesis acknowledges that no knowledge system is complete in itself; it exists with other knowledge systems. These knowledge systems are intergenerational strategies to create meaning in life. No one has a pure knowledge system; rather, they have an integrated or ambidextrous consciousness. Within each knowledge system, many orientations, worldviews, languages, and ways of interpretation exist, as revealed by dialogues and disputes. These orientations reflect something about human consciousness that occurs in all knowledge systems in different eras and places.

Knowledge is filled with absences and gaps, such that learners are both what they know and what they don't know. Moreover, if what we know is deformed by absences, denial, or incompleteness, our knowledge is partial and limited. This view of knowledge suggests that ignorance is an essential part of learning. This situation calls for an urgent and sensible search for a reconciliation of the knowledge systems. Honorable reconciliation and trans-systemic synthesis need to be based on the belief that knowledge systems need to learn from each other to create a new vocabulary that transcends the existing categories.

Trans-systemic synthesis generates a daunting balance on a tightrope between distinct knowledge systems and languages. From their Eurocentric education, many Indigenous scholars characterize their tightrope experiences as multi-dimensional voices and methods accessing both complex knowledge systems, which remain independent yet connected by

mystery and knowing. Indigenous scholars share many connections with Eurocentric scholars. The commonalities gain significance because of the differences. Yet, the diversity of differences is as important as their shared themes.

Interweaving the distinct knowledge systems used by both Indigenous and Eurocentric scholars generates a dialogic opposition, a trans-systemic synthesis or synergy that offers convergence points that respect the divergence points. Their various trans-systemic convergences attempt to weave differences and similarities into an overarching method of comprehending the distinct knowledge systems and languages.

Trans-systemic synthesis between Indigenous and Eurocentric Knowledge systems is searching for an enfolded knowledge system that reveals wholeness, rather than fragmentation of logic and causality. Yet, in this synthesis, it is not a quest for a grand theory of everything. Indigenous scholars view this search as an ambitious, daunting, and demanding task. It moves from the known to the unknown. Yet, this emerging synthesis deals with the foundational problem in life. It seeks a living, regenerating field of inquiry that balances complementary and contradictory descriptions, assumptions, and knowledges, performative enactment of processes of knowing, issues of knowledge production and dissemination and their ongoing ceremonies, rituals, and renewals. This emerging synthesis can often appear undefinable and immeasurable but interconnected and relational. It is an unbroken field of mutually-informing thought. It is a tradition of thought that affirms the becoming over being, spirit over structure that invites complexity and diversity of thought. It is related to the idea of the stream of consciousness, the impermanence of structure, and the idea that the new can emerge from possibility to actuality.

Reviews of Essays $(\cup \nabla \Delta \nabla \circ \triangleright f \nabla \cap \neg)$

nêhiyawak researchers and language learners Lana Whiskeyjack and Kyle Napier, in their "wahkotowin: (Re)connecting to the Spirit of nêhiyawêwin (Cree language)," explore richly in protocol, ceremony, and circle conversations with *nêhiyawak* speakers within Treaty 6 how the Elders and participants in the research have come to know and learn from the spirit of the nêhiyawêwin, the sources of (dis)connection between nêhiyawak (Cree People) and their language, and the processes of reconnection with that spirit. They reveal the main disruptions to that spirit have come from colonization, capitalism, and Christianity, all of which have affected their kinship systems, their relatives, and their connections to their language and land. The authors summarize that only in centering *nêhiyawêwin* worldview and its connections to the land and the land spirit, through land-based Indigenous learning with ceremony and reciprocal-relational methods, can *nêhiyawêwin* sovereignty be restored.

Researchers Mairi McDermott, Jennifer MacDonald, Jennifer Markides, and Mike Holden, in their essay "Uncovering the Experiences of Engaging Indigenous Knowledges in Colonial Structures of Schooling and Research", share the after-effects and the ongoing learning from a research project in an Alberta school district that wove Indigenous Knowledge into the school curricula. Their reflections come two years after the research with teachers, though the narratives illustrate the strength of some key teachings: the personal and relational connections made with each other; the quandaries and tensions unleashed in working with different ontologies and epistemologies; the necessary disentanglements with Eurocentric colonialism and processes in schools; and the possibilities and personal learnings animated by an ethical relationality approach with Elders.

Marie-Eve Drouin-Gagné, a Franco-Québécois settler scholar, raises concern about the knowledge hierarchies in universities and the limitations of Eurocentric knowledge frameworks as Indigenization is expanded in Canadian universities. Her essay "Beyond the 'Indigenizing the Academy' Trend: Learning from Indigenous Higher Education Land-Based and Intercultural Pedagogies to Build Trans-Systemic Education", explores several Indigenous Knowledge models and applications in higher education that unsettle existing hierarchies of knowledges and that centre on reciprocal relations within Indigenous communities, ensuring the application of knowledges benefit communities, and on Indigenous Peoples' navigating innovations to protect their land, the main source of their knowledge.

Kathy Absolon-King is an Indigenous/Anishinaabe scholar who explores "Four Generations for Generations: A Pow Wow Story to Transform Academic Evaluation Criteria". Her experience illustrates how university discourses and practices recruiting and advancing Indigenous scholars with Indigenous Knowledge often disconnect them from the very Indigenous Knowledges the universities are suggesting they value. Accepting Indigenous Knowledge as a subject area but not as part of one's professional identity together with the necessary relationships lived in communities creates barriers to Indigenous scholars' scholarly work and to the evaluations toward tenure and promotion. She writes of her family's preparation for inducting her daughter into a role at a Pow Wow, illustrating how Indigenous Knowledges can and should be understood and counted in the universities' applications of tenure and promotion standards, such as framing Indigenous Knowledges as lived reciprocal relationships, as artistic and intellectual production of cultural knowledge, as knowledge transmission and dissemination, and as respect, relevance, responsibilities, and reciprocity restored.

Discourses circulate in various forms, in western academia: as cited text, as personal narratives or stories, as research data, as cultural insights, as witnesses or as testimonies taken from cultural events and activities involving Indigenous Knowledges. As they travel in academic venues, they often lose the original identities of the speakers, narrators, and their tribal or cultural connections to the knowledges, as academics identify what is important to them. In this essay "'To See Together Without Claiming to be Another': Stories as Relations, Against One-Directional Move of Indigenous Stories Travelling," Sandra-Lynne Leclaire and Eun-Ji Amy Kim draw attention to the academic assumptions and consequences of knowledge transfer from Indigenous Knowledges to disciplinary knowledges. These consequences include allowing text to be appropriated from Indigenous Knowledge holders and distorting their purpose and functions from their original knowledge systems. The authors review and critique how Indigenous stories circulate in disciplinary knowledge traditions and lose the original authors/creators of these stores. They offer cautions and necessary protocols for use of Indigenous Knowledges among researchers and academics.

University professor mentorship of graduate students has typically been a hierarchical relationship involving hegemony and power, with the assumption that the university faculty

member holds more knowledge than students. Authors Kathy Bishop and Christine Webster explore their relationship as an Indigenous graduate student and a non-Indigenous supervisor who navigate the university professor-student relationship conscious that they are dealing with two knowledge systems with different expertise in each. Respecting knowledge holders and their positionalities is fundamental to this essay on a research project and a thesis that evolves from these diverse knowledges. "Reciprocal Mentorship as Trans-Systemic Knowledge: A Story of an Indigenous Student and a non-Indigenous Academic Supervisor Navigating Graduate Research in a Canadian University" brings the stories of two researchers together as they learn to lead, follow, and walk side-by-side with one another while exploring and expanding both *Nu-Chal-nuth* and academic knowledge systems.

Tewa Pueblo scholar Gregory Cajete, in "Native Americans and Science: Enhancing Participation of Native Americans in the Science and Technology Workforce through Culturally Responsive Science Education", advocates for a trans-systemic extension of the cumulative influences of Indigenous forms of science in stories and traditional activities. This extension involves culturally-responsive education and creative strategizing for the teaching and learning of science with the effect of engaging rather than alienating Native American students from science. His creative approaches have been evolving over the last 40 years with adaptations that continue to expand the trans-systemic symbiosis of knowledges and methodologies using art, story, and culture. Three metaphoric models are explained in terms of their connections, relationships, and outcomes with diverse Indigenous and western knowledges.

Economics, like education, have roots in colonial development frameworks, discourses, and logics that trap Indigenous communities in a circular logic that does not include their own conceptions of well-being. Dara Kelly and Christine Woods, in their essay "Ethical Indigenous Economics", argue that trans-systemic analysis of ancient and dynamic Maori and other Indigenous economic philosophies can generate alternate and more congruent economic foundations and outcomes in and for Indigenous communities. What would make these foundations more effective is when they are aligned with Indigenous concepts of relationship, reciprocity, and interconnectedness, rather than based on developed wealth accumulation, poverty alleviation, and patronizing logics of progress.

Melitta Hogarth is a Kamilaroi woman from Australia and Kori Czuy is Cree/Métis English/Polish, both recent doctoral graduates from universities, one in Australia and the other in Canada. In their doctoral work, both chose to centre and expand trans-systemic methodologies, each exploring their own Indigenous Knowledges' traditions. In this essay, through metalogue, which is a way of bringing together voices through dialogue, they explore their choices and challenges in the intricate weaving of Indigenous Knowledges and methodologies, demonstrating the agency of two emerging Indigenous researchers through their adaptations, resistances, and refusals. Their metalogue, using artificial intelligence (AI), captures a yarning storytelling circle of curious animals engaged with the authors in learning more about their dissertations, drawing attention to the Indigenous Knowledge traditions from their territories. Their title aptly describes their journeys: "Walking Many Paths, Our Research Journey to (Re)Present Multiple Knowings: Creating Our Own Spaces".

Anishinaabe Métis author Vicki Kelly uses métissage, a narrative of mixed literary artistry and counternarrative, to model a form of Indigenous scholarship rooted in praxis, territorial respect, artful metaphor, and strong community engagement. Her explorations of Indigenous applications in higher education led to her essay, "Radical Acts of Re-imaging Ethical Relationality and Trans-Systemic Transformation", which claims that through "multi-eyed seeing" and the creation of ethical space, Indigenous and Eurocentric Knowledge systems can co-exist and advance each other in a positive way in a public university setting.

Exchanges $(\nabla_{X} \neg \triangleleft \neg g \nabla \cap)$

The Exchanges section of the journal gave us the opportunity to do an interview with a well-known Indigenous scholar and friend, Blood nation scholar of the Blackfoot Confederacy, Dr. Leroy Little Bear. Leroy is well known for his multiple diverse trans-systemic contributions to the university systems of Alberta and beyond, as well as for his unique style of lecturing, both of which have been drawn from his Blackfoot knowledge and language foundations. He is best known for his scholarly work as a leader in Native American Studies, his contributions to Indigenous governance and law, and years leading dialogues at the Banff Centre for Management. We met with him, virtually during the winter of 2020, and the interview animates Leroy's personal life journey and lessons, which take him from his home in Alberta to academia and then back home again to build one of the first and finest Native American Studies programs in Canada, from which trans-systemic lessons and teachings continue to emerge.

Reports from the Field ($\geq \nabla \geq \leq ^{\cap} f \geq c \leq f \triangle \nabla^{\top} d$)

Katalin Doiron Koller and Kay Rasmussen are mixed-heritage and Indigenous co-researchers and co-authors in this essay that explores an Indigenizing and decolonizing project that begins with a partnership between the Child and Nature Alliance of Canada (CNAC) and The Three Nations Education Group Inc. (TNEGI) to pilot an Indigenous-led Forest and Nature School Practitioners Course (FNSPC). Their main question: What might a trans-systemic pedagogy of land-based education look like in the context of First Nations education in *Wabanaki* communities? Their co-generative learning emerges in a five-day, on-the-land learning experience with teachers, creating teaching guides and performance reviews that offer a co-creating generative learning research exploration with Indigenous schools, communities, and organizations. The reclaimed land-based pedagogy, grounded in *Wabanaki* oral herstories and *Mi'kmaw* language of *Esgenoopetitij*, also generate other transformative educational outcomes that are continuing to unfold from this relevant, authentic, and transformative Indigenized outdoor education for *Wabanaki* students, families, and educators.

A linguist of *Mi'kmaw/Lnu* language, Stephanie Inglis, in her essay "*Mi'kmaq /* Non-*Mi'kmaq* Conversational Turn-Taking," draws on the specific discursive situation of *Mi'kmaw* and non-*Mi'kmaw* students at Cape Breton University to illustrate a common occurrence leading to miscommunication, anxieties, and inequities that can occur when something simple like the conversational wait times among culturally different groups are not understood or accommodated. Conversational turn-taking, or the length of wait times that students normally

use in their conversations and in classrooms, is significant to who gets the floor, who is heard, and who may get shut out. Based on her experiences as a linguist and teacher, she shares her approach to correcting this problem, thus enabling students of diverse linguistic backgrounds to work together more effectively.

Book Review ($b\dot{\triangleright}^{\lor} \ge \nabla_{V} \triangle \nabla^{\circ}$)

Vice Provost Indigenous Engagement at the University of Saskatchewan Jacqueline (Jackie) Ottman reviewed *Research and Reconciliation: Unsettling Ways of Knowing through Indigenous Relationships*, edited by Shawn Wilson, Andrea Breen, and Lindsay DuPré (2019). In her review of the 17 engaging and creatively developed essays, Ottman notes the reoccurring tensions and challenges for scholars involved in research and engagement with reconciliation but also the lessons and teachings that support it. The collection of essays, Ottman writes, "demonstrates a trans-systemic approach, showing respect for diverse perspectives and letting co-creation guide the engagement processes of research so reconciliation can be experienced in deeper forms".

Hieroglyphics and Indigenous Knowledge Orthographies $(\text{$^{\square}\Delta\nabla \supseteq g^{\square}$}) \triangle^{-n} \triangleleft^{\neg}d \triangle^{\neg}d \triangle g \nabla \dot{\bowtie}^{n} \triangle^{\neg}d g \nabla \triangleright \geqslant^{e} \triangleright g \square \triangle \nabla^{n})$

Indigenous Knowledges and languages are intricately linked by a variety of Indigenous writing systems, some that were introduced by missionaries and other explorers in Indigenous territories, while others have been developed by Indigenous Peoples themselves in multiple forms. As a graduate student at Stanford University in the late 70s and early 80s, I, Marie, came upon my research topic and question of how did these writing and communicating forms come into being and how were they diffused among *Mi'kmaq*? My own experience in learning two of the writing systems, and also the controversies at the time about which was better for teaching children to read their language, led me to explore the origins and diffusion of Indigenous writing systems among my people and the value they put to them (Battiste, 1984; 1986). At least four Roman alphabets systems had been introduced to Mi'kmaq from as early as the 1620s by various missionaries attempting to learn the languages and leaving behind their notes, their prayers, and their insights about Mi'kmaw languages and people in letters and other documents. But over those many centuries, Mi'kmaw people were learning not only these scripts, but also drawing on their own communicating forms. My mother knew two of these systems, and she taught me what she knew, and then interested me in those "komkwejwi'kasikl" or hieroglyphics that our Elders read from books, but not like any of the other writing systems known. My mother did not read them; but she knew only that the skill of reading them had been passed on within those families, much in the same ways as she taught me to read Mi'kmaq and later English. My dissertation research led me to discover much about the graphic elements of oral traditions in which Indigenous Peoples created multiple forms of meaningmaking, such as through tattoos, pictographs, petroglyphs, birchbark libraries of knowledge, land forms and markings and placements of stones, in medicine wheels or wampum, and other tribal and individual communicating forms. I also found that similar signs, graphemes, symbols, and totems were used among other Indigenous language communities, a finding that helped me create my first chapter in my thesis on Algonkian literacies. But the character of the hieroglyphics was unique to *Mi'kmaq* and had not been fully deciphered.

In the mid-70s, Mi'kmaw friend Murdena Marshall, who was a reader of these hieroglyphics, and linguist David Schmidt (1995) did a review of the multiple uses of them in an attempt to sort out an initial theory of the grammar of the hieroglyphics, although the value of that work was more in the collecting of the known hieroglyphics and in putting them in both Mi'kmaq Roman script form and then in English. What Murdena and David found was there are approximately 2,700 graphemes, and while many of them are in prayer form, not all were simply memorized. They concluded, "By combining glyphs and their constituent graphemes in various ways, we believe that hieroglyphic-literate Mi'kmaq were able to write and read information they had not previously memorized" (Marshall & Schmidt, 1995, p. 4). At least two different missionaries gave themselves credit for teaching these to Mi'kmaq, although notably the first missionary, Christian Le Clercq (1697), wrote of his inspiration:

I noticed children making marks with charcoal on ground ... This made me see that in form would create a memory of learning more quickly the prayers I teach. I was not mistaken the characters produced the effect I needed. For on birchbark they saw these familiar figures signifying a word, sometimes two together. The understanding came quickly on leaflets they called kekin a'matin kewe'l tools for learning. (as cited in Schmidt & Marshall, 1995, p. 16)

Later, Michelle Sylliboy, *Mi'kmaw* speaker, artist, and educator, would begin to use the hieroglyphics in other ways, moving them out of their characteristic form of prayers, ceremony, and history to innovative arts and poetry (Sylliboy, 2019). The picture on the cover of this journal issue represents her stylistic eye capturing the picture of water in its vibrant animate formation superimposed with the hieroglyphic and the M'kmaw word "*jiksituinen*," in English, "listen to us." Michelle Sylliboy's transformation of the Mi'kmaw hieroglyphic tradition to new forms and functions demonstrates the dynamic nature of Indigenous Knowledge and worldviews and the distinctiveness of their systems of knowing as embracing deep relationality and non-canonical bodies of knowledge.

The distinctions among knowledge and worldviews and the coercive privileging of the English language generate emergent methodological and ethical challenges to trans-systemic approaches. Scholars have been spotty at best in developing methodologies for discerning translations between Indigenous and European knowledge systems. The more speakers of Indigenous languages who enter the academe, the more scholarship will move closer to new methods and ethics of trans-systemic approaches and will unpack meanings in knowledge systems based on verbs and beingness as distinct from knowledge systems based on nouns or objects. This distinction generates philosophical distinctions in time, space, and language structures. The distinct approaches transform the knowledge systems' schemas, processes, relationships, causation, categories, metaphors, and translations.

Throughout this issue, we have incorporated the Plains *nêhiyawak* syllabics, which is an initial trans-systemic attempt to capture the rhythmic sounds of the languages into a writing system. We use the Plains Cree syllabics to honour place of the journal on Treaty Six Territories and Homelands of the Métis. The Plains Cree syllabic titles were created by using the Algonquian Linguistic Atlas Plains Cree Syllabic converter.³ In addition, with respect for the various authors' Indigenous identities, we have connected the syllabic system, hieroglyphic tradition or languages drawn from obtainable Algonquian and other syllabics and orthographies.

About the Editors

Marie Battiste is Mi'kmaq of the Potlotek First Nations and Professor Emerita at the University of Saskatchewan. She is an Honorary Officer of Order of Canada, a 2019 Fellow of the Pierre Elliott Trudeau Foundation and Fellow of the Royal Society of Canada. Her books include Decolonizing Education: Nourishing the Learning Spirit (UBC Press, 2013), co-author of Protecting Indigenous Knowledge and Heritage: A Global Challenge (UBC Press, 2000), with J. Youngblood Henderson; and is editor of several collections: Visioning Mi'kmaw Humanities: Indigenizing the Academy (CBU Press/Nimbus, 2016); Living Treaties: Narrating Mi'kmaw Treaty Relations (CBU Press/Nimbus, 2016); Reclaiming Indigenous Voice and Vision (UBC Press, 2000) and First Nations Education in Canada: The Circle Unfolds (UBC Press, 1995). Email: marie.battiste@usask.ca

Sa'ke'j James Youngblood Henderson was born in Oklahoma to the Bear Clan of the Chickasaw Nation and Cheyenne Tribe in 1944. In 1974, he received a Juris doctorate in Law from Harvard Law School. He became a law professor who created litigation strategies to restore Aboriginal sovereignty, knowledge, and rights. During the constitutional process in Canada (1978-1993), he served as a constitutional advisor for the Mi'kmaw nation and the NIB-Assembly of First Nations. He has continued to work in aboriginal and treaty rights, treaty federalism in constitutional law, and international human rights. For his achievements, he has been awarded the Indigenous Peoples' Counsel (2005), the National Aboriginal Achievement Award for Law and Justice (2006), and Honorary Doctorate from Carleton University (2007) and fellow of the Native American Academy (2000) and Royal Society of Canada (2013). Email: sakej.henderson@usask.ca

³ Access the Plains Cree syllabic this converter at https://syllabics.atlas-ling.ca.

References

- 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. https://doi.org/10.1007/s13412-012-0086-8
- Battiste, M. (1984). An historical investigation of the social and cultural consequences of Micmac literacy [Unpublished doctoral dissertation]. Stanford University.
- Battiste, M. (1986). Micmac literacy and cognitive assimilation. In J. Barman, Y. Hébert, & D. McCaskill (Eds.), *Indian education in Canada: The legacy* (pp. 23-44). UBC Press.
- Borrows, J. (2005). Creating an Indigenous legal community. *McGill Law Journal/Revue de Droit de McGill* 50, 153.
- Cajete, G. (1986). Science: A Native American perspective: A culturally based science education curriculum [Unpublished doctoral dissertation]. International College.
- Davidson, S.F., & Davidson, R. (2018). *Potlatch as pedagogy: Learning through ceremony*. Portage and Main Press.
- Donald, D. (2012). Indigenous métissage: A decolonizing research sensibility. *International Journal for Qualitative Studies in Education*, 25 (5), 335-355.
- Du Bois, W.E.B. (1903). The souls of Black folk. A.C. McClurg & Co.
- Eastman, C. [Ohiyesa] (2010). Living in two worlds: The American Indian experience (M. Oren Fitzgerald, Ed.). World Wisdom.
- Emerich, Y. (2017). Concepts and words: A transsystemic approach to the study of law between law and language. *Revue juridique Thémis de l'Université de Montréal 51*(2&3), 591-624.
- Government of Canada. (2018). Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. https://ethics.gc.ca/eng/policy-politique_tcps2-eptc2_2018.html Indigenous Languages Act, S.C. 2019, c. 23.
- Janda, R. (2005). Toward cosmopolitan law. McGill Law Journal/Revue de Droit de McGill 50 (4), 967-984.
- Kawagley, A.O. (1995). A Yupiaq worldview: A pathway to ecology and spirit. Waveland Press.
- Kasirer, N. (2019). Legal education as métissage. Tulane Law Review. 78(2), 481-501.
- Little Bear, L. (2000). Jagged worldviews colliding. In M. Battiste (Ed.), *Reclaiming Indigenous voice* and vision (pp. 77-83). University of British Columbia.
- Macdonald, R.A., & MacLean, J. (2005). No toilets in park. McGill Law Journal, 50(4), 721-787.
- Nicholson, A., Spiller, C., & Pio, E. (2019). Ambicultural governance: Harmonizing Indigenous and western approaches. *Journal of Management Inquiry*, 28(1), 31–47. https://doi.org/10.1177/1056492617707052
- Smith, G. H. (1997). *Kaupapa Maori theory and praxis* [Unpublished doctoral dissertation]. University of Auckland.
- Smith, L. T. (1999/2013). Decolonizing methodologies: Research and Indigenous Peoples. Zed Books.
- Styres, S. (2017). Pathways for remembering and recognizing Indigenous thought in education: Philosophies of Iethi'nihsténha Ohwentsia'kékha (Land). University of Toronto Press.
- Sylliboy, M. (2019). Kiskajeyi I AM READY: A hermeneutic exploration of Mi'kmaq komqwejwi'kasikl. Rebel Mountain Press.

- Truth and Reconciliation Commission of Canada. (2015). Calls to action. https://archives.nctr.ca/ NCTR-EDU-003-001-004
- UN General Assembly. (2007). United Nations Declaration on the Rights of Indigenous Peoples. https://www.refworld.org/docid/471355a82.html
- Wilson, S. (2008). Research is ceremony: Indigenous research methods. Fernwood.
- Wilson, S., Breen, A.V., & DuPré, L. (Eds.) (2019). *Unsettling ways of knowing through Indigenous relationships*. Canadian Scholars.

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Issue Statistics

A. Authors and Submissions

Authors and Co-Authors	
University-based	21
Non-University Based	3
Total	24

Article Submissions	
Original proposals for peer and editor review	29
Articles submitted for editor review	3
Articles submitted for peer review	12
Peer-reviewed articles accepted for publication	10
Editor-reviewed articles accepted for publication	2
Book reviews submitted for editor review	1
Book reviews accepted for publication	1

Geographic Distribution (Corresponding Authors Only)		
Atlantic Canada		
Cape Breton University	1	
Non-University Based	1	
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Institut National de la Recherche Scientifique	1	
Wilfrid Laurier University	1	
Western Canada		_
Royal Roads University	1	
Simon Fraser University	2	
University of Alberta	1	
University of Calgary	1	
University of Saskatchewan	2	
International		_
Griffith University, Australia	1	
University of Melbourne, Australia	1	
University of New Mexico, USA	1	
Total	1	4

B. Peer-Reviewers and Peer-Reviewing

Peer Reviewers	
Total invitations to peer review	51
Number of peer reviewers who accepted invitations	24

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Atlantic Canada	
Cape Breton University	1
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University of New Brunswick	1
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McMaster University	1
Wilfrid Laurier University	1
York University	2
Western Canada	
First Nations University	1
Simon Fraser University	2
University of Alberta	1
University of British Columbia	1
University of Fraser Valley	1
University of Saskatchewan	3
University of Victoria	1
University of Winnipeg	2
Non-University Based	2
International	
University of Melbourne, Australia	1
Non-University Based, United States	1

Essays

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wahkotowin: Reconnecting to the Spirit of nêhiyawêwin (Cree Language)

Lana Whiskeyjack, Kyle Napier

ABSTRACT The Spirit of the Language project looks to the Spirit of nêhiyawêwin (Cree language), sources of disconnection between nêhiyawak (Cree people) in Treaty 6 and the Spirit of nêhiyawêwin, and the process of reconnection to the Spirit of the language as voiced by nêhiyawak. The two researchers behind this project are nêhiyaw language-learners who identify as insider-outsiders in this work. The work is founded in Indigenous Research Methodologies, with a particular respect to ceremony, community protocol, consent, and community participation, respect and reciprocity. We identified the Spirit of the language as having three distinct strands: history, harms, and healing. The Spirit of Indigenous languages is dependent on its history of land, languages, and laws. We then identified the harms or catalysts of disconnect from the Spirit of the language as colonization, capitalism, and Christianity. The results of our community work have identified the methods for healing, or reconnecting to the Spirit of language, by way of autonomy, authority, and agency.

KeyWords nêhiyawêwin, decolonization, land-based, ceremony, kinship

Lana Whiskeyjack, the lead researcher of the Spirit of the Language project, is a treaty iskwêw (woman) who holds her doctorate degree from University nuhelot'ine thaiyots'i nistameyimâkanak Blue Quills. Kyle Napier, the co-writer and a graduate research assistant with the Spirit of the Language project, is Dene/nêhiyaw Métis and a member of Northwest Territory Métis Nation. Both of us have independently dedicated ourselves to learning the Indigenous languages of our lineage and supporting community-based Indigenous language revitalization methodologies honouring ancestral governance and kinship systems. As Indigenous academics, the goal of our Spirit of the Language project is to respond to the community-voiced needs of Indigenous language learners in reconnecting to the Spirit of nêhiyawêwin. Our work seeks to braid three themes of interdependent impacts against Indigenous language vitality, which we have identified as the language's history, harms, and healing. Each of those themes are described further in this article, which also addresses our work supporting trans-systemic knowledge sharing by nêhiyawak communities in academia. The collaborative work and insight of both authors is based on the collective knowledge, teachings, reflections, and guidance from our experiences, mentors, knowledge keepers, communities, academic references, and research participants whom the authors may have viewed as extended relatives. Those who have shared their words in this work as participants may have opted to remain anonymous, while others preferred to remain credited.

At the immediate outset of our work with the Spirit of the Language project, we realized our dual roles as researchers in the transition between nêhiyaw and non-nêhiyaw knowledge systems. We recognize this work is done through insider-outsider trans-systemic methodologies (Kovach, 2009, p. 51) in that both of the authors are nêhiyawak dedicated to supporting community-based nêhiyawêwin revitalization, while also working within the bounds of colonial institutions. In navigating the plurality of knowledge systems, we have deliberately prioritized Creator's Laws over academic convention. Prior to and throughout this project, we committed to Indigenous ceremony to ground and guide us towards maintaining good health and relationships — both in ourselves and with those we involve in this work. We then



Figure 1. Matilda Lewis, Kevin Lewis' mother, holds the small birchbark canoe in the sharing circle. A larger birchbark canoe was built recently at the kâniyasîhk Culture Camp.

© kâniyasîhk Culture Camps. Photo by: Kyle Napier

conducted a literature review, with a focus on the catalysts of disconnection from the Spirit of the language. Throughout the process of conducting the literature review, we were mindful about smudging and holding ourselves in ceremony, both for the spiritual integrity of the work as we conducted it and the healing processes required because of the retraumatizing nature of our research. Identifying those disconnects enabled us to more informatively discuss the Spirit of the language, and to support communityvoiced reconnection to the Spirit of the language by the language-speaking community.

Our collaboration is informed by Indigenous Research Methodology (IRM) as proposed in the foundational works of nêhiyaw scholar Margaret Kovach (2009), Shawn Wilson (2008), Leona Makokis (2010), and Māori scholar Linda Tuhiwai Smith (2012), as well as by wahkotowin — or the specific nêhiyaw law that guides kinship and relationality — as reflected in our active inclusion of nêhiyaw ceremony and of the nêhiyawêwin speakers and learners in their insights. We held 12 community visits with nêhiyaw scholars and nêhiyawêwin language-learning communities. These twelve community visits were made up of nine individual interviews and two sharing circles, one with six nêhiyawak collaborators and another with 14 collaborators — all from diverse backgrounds. We began each of our community visits asking permission through protocol, giving the initial offer of tobacco to each potential speaker. Each interview began in nêhiyaw ceremony, sometimes smudging before, during, or after each interview, or holding other sacred land-based ceremonies throughout the collaborative process. We sought and maintain informed oral consent in

our obligations to community members and their words, including in an oral agreement not to publish their words without their review.

These conversations often addressed personal experiences related to community language trauma. We were in the trusted role of actively stewarding recordings and coding intimate and personal lived experiences. By reflecting on these sensitive moments, we were then able to discuss community-expressed methods for reconnection to the Spirit of nêhiyawêwin. The results of this research further affirm the elements of the Spirit of nêhiyawêwin, which are that the Spirit of the language is intrinsically connected to land, language, and laws. These interviews reaffirm what we have identified as the catalysts of Indigenous language decline: colonization, capitalism, and Christianity. Those involved in this collaborative work then further provide pragmatic, Indigenous-centred epistemological solutions for greater fluency of nêhiyawêwin by nêhiyawak, which include solutions such as language agency, autonomy, and authority by Indigenous language communities. The collective knowledge of our Indigenous relation and references lead our research to providing pragmatic, Indigenous-centred epistemological solutions for greater fluency of nêhiyawêwin by nêhiyawak, which include solutions towards language agency, autonomy, and authority by Indigenous language communities.

History, or the Vitality of nêhiyawêwin: Land, Languages, and Laws

Indigenous languages have been alive on this continent for the many millennia since Creation. Indigenous communities across this continent often spoke several Indigenous languages — in trade, travel, and treaty with other groups of Indigenous Peoples. These languages, and their variances within the linguistic continuum, have each been facing a decline in fluent language speakers.

The language of us nêhiyawak is nêhiyawêwin, which is the most prominently spoken Indigenous language in Canada (Statistics Canada, 2017). nêhiyawêwin is a polysynthetic Indigenous language still spoken by 96,575 speakers across 11 recognized dialects in the 2016 census (Statistics Canada, 2017). nêhiyawak also represent the largest population of Indigenous Peoples in Canada, and one of the largest in North America, with more than 200,000 nêhiyawak in Canada (Statistics Canada, 2017). Statistics Canada still incorrectly refers to nêhiyawêwin as Cree, even though the language has the strongest presence of the Indigenous languages. We have distinguished nêhiyawêwin from other Indigenous languages in three ways: land, language, and laws. nêhiyawêwin is ancestrally connected to nêhiyaw-askiy or mistik — literally, nêhiyaw lands; nêhiyawêwin is distinct in its literal language — in its pronunciation, meaning, and linguistic variances; and nêhiyawak are guided by our specific laws — which inhabit ceremony, connections, and Creation.

nêhiyawêwin does not use Standard Roman Orthographic capitalization conventions, whether through nêhiyaw Roman Orthography or spirit markers. As a result, nêhiyawêwin words, including proper nouns, are not capitalized, so as not to hold orthographic hierarchy and prioritize one word, sound, or morpheme as more important than another. We have made the stylistic decision not to italicize nêhiyawêwin or English words, so as not to establish a hierarchy of one language over another.

The root words of nêhiyawak are nêwo, meaning four, and ayisiniywak, meaning beings of this earth. In our language, we nêhiyaw(ak) are the Indigenous people of four parts of the soils of this earth. The steady decline of nêhiyawêwin vitality is not to be discussed without consideration of historical contexts and forced removal of nêhiyawak from their connection to ancestral homelands. As shared by renowned nêhiyaw educator Reuben Quinn, more than 600,000 words and concepts were awakened in nêhiyawêwin by being spoken. These days, most of the nêhiyawêwin languages and concepts are, however, known to be sleeping — with only 15,000 words and terms generally known to be awake (Leavitt, 2018). The catalysts of such Indigenous language loss will be considered more thoroughly later in this paper.

nêhiyawak are often referred to by their misnomer, Cree. In early interactions between nêhiyawak and the French on this continent, the nêhiyawak identified the land region they had lived upon to be kenisteniwuk, or kinistinôk. The French mistakenly heard, and subsequently referred to nêhiyawak as, Kristenaux, further truncating the term to the phonetic "Kris," "Cris," "Crise," or "Cree," as written in English (Lacombe, 1874, p. 7; Milloy, 1990, p. 6; Preston, 2018). Renowned Knowledge Keeper Vince Steinhauer shared his teachings that the word "Cree" arrived when nêhiyawak first came in contact with the French Canadians (personal communication, September 12, 2008). He continues describing how the nêhiyawak warriors called out to the newcomers with their sâkowê, a call to identify one's self and tribe from a distance, which the French Canadians translated as a "cri" (cry, yell, shout, shriek), and those French Canadians therefore began to call nêhiyawak "Cree" (personal communication, September 12, 2008). "This sâkowê is still done in most singing and ceremonial songs to create joy, enthusiasm and create excitement," writes Kevin Lewis, a nêhiyaw knowledge keeper and founder of the land-based kâniyâsihk Culture Camps (personal communication, July 25, 2020). Acknowledging the irony of the term "Cree" not being within the nêhiyaw lexicon, David Thompson writes, "The French Canadians... call them 'Krees', a name which none of the Indians can pronounce... " (Hopwood, 1971, p. 109). Of course, Cree is not a nêhiyawêwin word, as the letter R is not spoken in the "y" dialect of nêhiyawêwin, except with borrowed words or in the Moose (L) or Attikamek (R) nêhiyawêwin dialects, yet previous and ongoing publications on nêhiyawak still include instances in which nêhiyawak are referred to as Cree. This story reflects the distinction between the three languages, French, English, and nêhiyawêwin, and their ways of interpreting the historical and contemporary experiences and worldviews of one another.

Foundational Works around Indigenous Research Methodologies

The intention of our methodology, as with our research, is to work against the historical abuses and mistreatment of Indigenous Peoples and nêhiyawak by centering the voices of communities and their intentions when conducting the collaborative process and producing work in resulting publications. We drew from prominent Indigenous academics to set the foundation for our research practices, protocols, and processes: Margaret Kovach to provide a nêhiyaw-oriented research methodology, Leona Makokis to provide insight into co-developing community-oriented solutions, and Linda Tuhiwai Smith to provide considerations around

community and community work as insider-outsider researchers. We also draw from the works of Glen Coulthard and Neyooxet Greymorning to address the roles of capitalism, Christianity, and colonization as catalysts of disconnection to the Spirit of Indigenous Languages in our literature review.

Margaret Kovach's *Indigenous Methodologies: Characteristics, Conversations, and Contexts* (2009) is referenced by Indigenous scholars for its role in proposing methodological frameworks grounded in Indigenous research methods. Kovach (2009) notes that

Indigenous knowledges and the results of Indigenous research can never be standardized, for they are in relation to place and person. How they integrate into Indigenous research frameworks is largely researcher dependent. At the same time, Indigenous methodologies are founded upon Indigenous epistemology, and they will (or ought to) be evident in such frameworks, revealing shared qualities that can be identified as belonging to an Indigenous paradigm. (p. 55)

Following Kovach's lead, we work with nêhiyaw paradigms, as informed by our inward intuitions through lived experiences as nêhiyawak and nêhiyaw scholars. Kovach (2009) continues, "Because of the interconnection between all entities, seeking this information ought not to be extractive but reciprocal, to ensure an ecological and cosmological balance" (p. 57). In this way, we engage in reciprocity, giving back to communities and community members when we are able. We attain consent by community members each time we use their voices or images in publications. Further, published results of our work are shared back with community members, and all proceeds in honoraria or payments resulting from our work are given back to the land-based community camp that supported our stay as researchers.

The distinguished nêhiyaw educator Leona Makokis et al., (2010) of Saddle Lake Cree Nation provides context as to the fundamental epistemological connection between language and culture, as well as the protocols and processes guiding the relationships between people and the land underfoot. She writes,

As we learned more about language learning methods we learned more about Indigenous culture and knowledge systems, and it became apparent that we had to find a way to relate our learning in a manner consistent with the protocols and relationships of our people. (p. 9)

Makokis et al., (2010) then addresses the contextual dangers of framing Indigenous or environmental stories through an academic or analytic lens:

We have to tell the story, this is not an academic exercise, so to express this in academic theoretical frameworks would be to contradict what we have learned, would be a disservice to our people and our knowledge, would be a re-colonization. This learning determined my research method — a qualitative

approach which is more effective in evaluating language learning/acquisition experience, rather than seeking empirical data on how many language speakers there are or measuring how much language a learner acquires in a given period by a particular method. Our Elders have taught us that the quality of the experience, is the first measure, the results will follow. (p. 9)

With enduring respect to Makokis' words, one outcome of the Spirit of the Language project is the ongoing collaborative efforts maintained between us with, by, and for the nêhiyawak collaborators and Elders.

Linda Tuhiwai Smith (2012), the renowned Māori research theorist, posits communities as "physical, political, social, psychological, historical, linguistic, economic, cultural, and spiritual spaces" (p. 215). Where Smith makes the distinction between community-based projects and those afforded through academic spaces, the Spirit of the Language project works in both academic and Indigenous spaces. "There are also protocols of respect and practices of reciprocity," continues Smith (2012): "Consent indicates trust and the assumption is thatthetrustwillnotonlybereciprocated



Figure 2. The inside of the teepee at kâniyâsihk Culture Camp, where we held the sharing circle.

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but constantly negotiated — a dynamic relationship rather than a static decision" (p. 229). Our research process recognizes the sovereignty and authority of participants over their words, and uses of their words, in that we continually ask for consent prior to publishing — consent that can be withdrawn at any moment. The Spirit of the Language project is also conducted as a form of what Smith (2012) and Kovach (2009) refer to as insider-outsider dynamics. As nêhiyawak on our own learning journeys, our dual role in this dynamic encourages us to think critically within this collaborative work.

The contributions of these Indigenous scholars to the global field of Indigenous scholarship supported our collaborative work, work that prioritized community-led processes and protocols informed by relational kinship through the law of wahkotowin. wahkotowin is embodied by — but not limited to — relationality, reciprocity, humility, humour, sensitivity, ceremony, honesty, and kinship. As nêhiyawak, wahkotowin guides our lives and our Indigenous Research Methodology, within which we situate our academic community-based participatory research methodology. Upholding wahkotowin further necessitates ongoing consent from those whose words or visual representations are included in this work, and conducting our work according to the terms voiced by the communities and individuals involved.

Harms, or the Catalysts of Language Disconnect: Colonization, Capitalism, and Christianity

Our literature review sought to include anything that affected the relationships between nêhiyawak and the histories embodied in the Spirit of our languages, specifically in our lands, languages, and laws. Each colonial policy created and enforced by various governments reflected a deliberate intention to forcefully remove Indigenous Peoples from their land, starve Indigenous Peoples of their languages, and illegalize the ceremonies inherently bound within our nêhiyaw laws. Our literature review is introduced by the theoretical frameworks presented by Dr. Glen Coulthard (2014) and Dr. Neyooxet Greymorning (2018). Coulthard's (2014) conceptualization of grounded normativity addresses the simultaneous impacts of colonization and capitalism on the land, while Greymorning (2018) identifies Christianity and government policy as ensuring forced disconnect between Indigenous Peoples and their lands and languages. This research process required many moments to pause for reflection, prayer, and ceremony.

Glen Coulthard (2014), a Dene theorist of Denendeh, introduces the term *grounded normativity* as a theoretical framework for understanding land- and place-based experiential knowledges flowing through Indigenous Peoples in their ancestral homelands. Coulthard (2014) says, "place-based practices and associated ways of knowing" fit contextually within the land (p. 60). He furthers this point by addressing the connection between Indigenous languages and cultures, within both human and nonhuman relations, related to areas of specific place and land (p. 61). Coulthard is explicit in his words, which connect place-based learning with Indigenous land-based practices involved in Indigenous ceremony, dancing, regalia, culture, language, and nearly every aspect of Indigenous ways of being. Coulthard (2014) elaborates that the primary motive of settler-colonialism was claims to territory and land, subsequently leading to "structured dispossession" through ideological and literal displacement and diaspora (p. 7). Coulthard (2014) identifies Indigenous anticolonialism and anticapitalism as

a struggle primarily inspired by and oriented around the question of land — a struggle not only for land in the material sense, but also deeply informed by what the land as system of reciprocal relations and obligations can teach us about living our lives in relation to one another and the natural world in nondominating and nonexploitative terms... I call this place-based foundation of Indigenous decolonial thought and practice grounded normativity, by which I mean the modalities of Indigenous land-connected practices and longstanding experiential knowledge that inform and structure our ethical engagements with the world and our relationships with human and nonhuman others over time. (p. 13)

Coulthard's introduction of the term grounded normativity into academia allows for further emphasis on the ancestral depth of the roots that support place-based learning in Indigenous languages.

Neyooxet Greymorning is an Arapaho scholar and language activist who is currently a professor in Anthropology and Native American Studies. Greymorning (2018) observes governmental policies and control as deeply impacting Indigenous identity, particularly governmental abetting and support of residential schools. Greymorning (2018) states, "It should also be realized that governments, like those found in the United States and Canada, have crafted policies regarding Indigenous people in such a manner as to give those countries an ability to manipulate, and to a large degree define, who is and who is not Indigenous" (p. 2). Greymorning (2018) looks to the Doctrine of Discovery (19), published by Pope Alexander VI in 1493, as a pinnacle document for the religious imperialistic influence of colonizers onto Indigenous Peoples. The Doctrine of Discovery followed Columbus' return to Spain, and specifically denied Indigenous Peoples' right and title to their own lands, as they were not viewed as people because they were non-Christian. This paved a path for Spain's assumed jurisdiction over Indigenous lands, as colonizing nations competed for the lands now colonially referred to as North and South America. Greymorning (2018) continues,

In Canada, the definition of who is Indian is prescribed by the Indian Act (1876), which historically not only could change a female Indian's identity to white, but could also change a white female's identity to Indian. Another example is provided by the Canadian government's policy to change the tribal identity of First Nations women who marry men from other tribal bands. (p. 3)

That is, Canada maintained the use of policy to assert its heteronormative, patriarchal views on identity, which included enfranchising Indigenous Peoples, and particularly women, into status Canadians, as opposed to recognized Indigenous persons, also known then as official Section 35 Indians under the Indian Act. In addition, this policy-making automatically negates non-heteronormative relationships held between Indigenous Peoples. Greymorning (2018) further identifies that the colonially-administered religious imperialism continually diffracts precolonial Indigenous connections to land.

In our literature review, we identify capitalism, colonization, and Christianity as the main catalysts of disconnect from the Spirit of Indigenous languages within North America. The literature review we conducted illustrates a chronological history and thematic pattern of colonial, capitalist, and Christian impacts on Indigenous connections to the Spirit of nêhiyawêwin since 1492. We recognize each catalyst as an inter-related cause of the disconnection between Indigenous Peoples and their lands, languages, and laws. Through our content analysis, we determine these catalysts to be three separate but inherently interwoven imperialist ideologies affecting Indigenous language vitality: colonization, disconnecting Indigenous people from their languages and culture through forced removal, assimilation, enfranchisement, slaughter, and slavery; capitalism, enforcing diaspora of Indigenous Peoples for the exploitation of their lived-upon lands, while continentally damaging ecologies and species for profit; and Christianity, which dominated through religious doctrine and denounced the existence of Indigenous Peoples as peoples because they were not Christian, while simultaneously delivering state-

funded residential schooling. Together, these led to a diffraction in the connection between Indigenous Peoples, the living creation inherently connected to the lands, and the languages of those lands.

Our research resulted in a thorough, albeit truncated, post-contact chronology observing the effects of catalysts against the vitality of nêhiyawêwin through colonially administered policy-making, the compounding diaspora begetted by capitalism, and the horrors of religious imperialism executed against Indigenous languages. We look to how colonization, capitalism, and Christianity have categorically compounded against Indigenous Peoples, while we situate nêhiyawêwin as one of many Indigenous languages affected by those catalysts. We also recognize the irony of writing Indigenous Peoples into European chronologies presented in a format based on the Gregorian calendar, and in an academic context that contributes to the Anglophonic and European biases towards conventions around time, accountability, worldview, and typography.

Terra nullius is a primary example illustrating the interconnectedness between all three catalysts. Terra nullius is a pre-colonial papal doctrine, with terms unavailable in nêhiyawêwin. In its intent, terra nullius denies humanity to those who do not believe in Christ. According to terra nullius, land lived on by non-believers is considered unoccupied — or, rather, nobody's land. This precedent for sources of Indigenous language disconnect through colonization, capitalism, and Christianity would start on this continent in 1492. Upon Christopher Columbus' first arrival to Taíno-occupied Guanahani — colonially referred to as San Salvador in the Bahamas — he and several of his ships would almost immediately begin the enslavement and slaughter of the Taíno. Over time, European demands for lands to colonize would justify the wholesale cull of millions of bison and the slaughter of other species who have lived on this continent in abundance and reciprocity with Indigenous Peoples since Creation. European demand for pelts and bones would create a market in the fur trade, interrupting the many millennia of subsistence living for various Indigenous Peoples and causing the extinction and near-extinction of many animals that were relied on for subsistence. These actions would be justified through nefariously-worded religious doctrine denying identity, and therefore land attachment, to those who were not believers in Christ. The governmental sway of resource extraction industries, such as gold, uranium, and diamond mining, and energy sectors such as the development of dams for hydro and oil and gas extraction for power, would cause sincere harms to environments and the Indigenous Peoples. The effects of mining and environmental degradation have only compounded as they directly imbalance climates and ecologies, transforming the land and altering the populations and behaviours of many species' relationships to the land. The institution of reserves for Indigenous containment and national parks under the guise of conservation mandated the forced removal and relocation of Indigenous Peoples from their ancestral homelands, while colonial jurisdictions assumed authority over the care and protection of now federally-protected animal populations.

The Indian Act in Canada, and Title 25 under the United States Code, would enable the continental illegalization of Indigenous ceremonies, such as the potlatch, Sun Dance, and other ceremonial dances, along with banning and confiscation of ancestral and cultural regalia.

The Indian Act would further determine itself as holding jurisdiction over the pluralities of Indigenous genders and sexual identities, limiting two-spiritedness and broad spectrums of Indigenous genders into a reductionist binary of male or female (Lee and King, 2020). In its many evolutions, the Indian Act would continually gate-keep Indigenous access to land, inherently held by Indigenous people, by instituting a pass-system (Legacy of Hope, 2015). This pass-system required Indigenous people living on reserve to request permission from an Indian Agent before leaving the reserve (Legacy of Hope, 2015). Indigenous women were constantly disenfranchised through assimilationist and patriarchal policies maintained by Canada's Indian Act, and Title 25 in the United States, while Indigenous women simultaneously faced ongoing forced sterilization (Greymorning, 2018) and risk-by-existence through ongoing systemic issues related to Missing, Murdered, and Exploited Indigenous Peoples (MMEIP).

Worst of these catalysts of diffraction were the residential schools. At their beginnings, churches and their missionaries would appropriate Indigenous languages to produce Catholic and other Christian texts in native languages for the purposes of conversion, beginning with catechisms in 1610 (Curtis, 1915, p. 272). Residential schools on the continent were trialed and failed in the early 1600s, but re-emerged in the 1800s. Canada's first prime minister, John A. Macdonald, would make attendance to residential schools and Indian Day Schools mandatory for all Indigenous children. This began one of the most atrocious institutional systems of abuse against Indigenous Peoples in recorded Canadian history, as only exacerbated with the legalized forced removal of Indigenous children from their families to impose their attendance at these schools (Truth and Reconciliation Commission, 2015). This legacy of removing Indigenous children from their families continues today through the foster care and child welfare systems. There are now three times more Indigenous children in foster care today than were in residential schools at the height of the residential school system in 1931 (Blackstock et al., 2004).

These catalysts and their impacts are ongoing. The policies, abuses, and displacements against Indigenous Peoples by Canada are considered by the Truth and Reconciliation Commission (2015) and the United Nations Declaration on the Rights of Indigenous Peoples (2008) as constituting cultural genocide. Canada and international organizations have responded to these legal claims with apologies and minor, but still colonially-entrenched, policy revisions. As a whole, these attempts at reconciliation have not thoroughly addressed the half-millennia of maintained abuses. This lack of resulting change in oppressive policies and ongoing policymaking, and the absence of genuine consultation with Indigenous Peoples toward tangible results, has continually enabled further disparity between Indigenous Peoples and the Spirit of their ancestral language.

Foundational Theory: Indigenous Research Methodology and Institutional Affiliation

Further to colonization, capitalism, and Christianity, there exists historical and ongoing oppression, abuse, and racism against ayisiniywak within academia and institutionalized education, as historically maintained from outsider academics and researchers. These centuries of estranged documentation and extraction have resulted in a justifiable distrust between some

Indigenous Peoples and university institutions. As nêhiyaw academics working within the University of Alberta, we have an opportunity to address those challenges while ensuring that voices from the community remain supported and upheld, such that we steward the words shared with us as opposed to convolute them.

Our work actively seeks to maintain Indigenous spaces for Indigenous language speakers, knowledge keepers, language learners, and academics to voice their insights and recommendations for reconnecting to the Spirit of the language for their language community. Our methodology prioritizes nêhiyawak epistemologies to ensure this work is supported by communities, and we provide the results of our research as a vehicle to further empower and embolden the voices of those who have dedicated themselves as speakers or learners of nêhiyawêwin and its teachings. We draw from Indigenous scholars to identify the processes related to our own Indigenous Research Methodology (IRM) (Kovach, 2009; Smith, 2012; Wilson, 2001). In positioning our methodology, we look first to Makokis' acknowledgement of the protocols of the relationship between Indigenous Peoples and the land to further inform the reciprocal-relational methods that guide our work. We also draw upon her work when we revisit communities to invite community members to share their own preferred means to learn the language. We then incorporate the work of Smith (2012), who asserts the importance of recognizing variations of community self-identification, and who reinforces that Indigenous Research Methods are themselves community-defined, as well as contingent and established on the basis of mutual respect and reciprocity. In this way, we only worked with nêhiyawêwin learners and speakers in spaces occupied mostly by nêhiyawak and those with a self-identified connection to nêhiyawêwin to better honour the sensitivity of nêhiyaw spaces.

IRM deviates from Community-Based Participatory Research, or CBPR, in that it centers Indigenous hope, healing, and resistance. Shawn Wilson is an Opaskwayak nêhiyaw who works with international communities. He acknowledges that Indigenous paradigms are outside the scope of conventional academic framing, noting the differences in academic work as Indigenous researchers working within Indigenous ontologies, epistemologies, axiologies, and productive methodologies. "From an epistemology and ontology based upon relationships, an Indigenous methodology and axiology emerge," writes Wilson (2001, p. 77). To elaborate, Wilson (2001) describes Indigenous axiologies as being "built upon the concept of relational accountability" (p. 77). That said, the collaborative research conducted through the Spirit of the Language project focuses on and prioritizes nêhiyaw worldview and relationality. This inherently means steering the process away from traditional institutional academic research methodologies, to favour nêhiyaw ways of being and to collaboratively support nêhiyaw ways of learning.

Working within Indigenous Research Methodologies includes being deliberate about how we engage with and prepare non-Indigenous people who have held active leadership positions within academic institutions, which have historically situated themselves on Indigenous lands and in contrast to Indigenous languages and laws. Dr. Martin Cannon, of Oneida Nation of the Six Nations at Grand River Territory, is a professor of Sociology and Gender Studies. He asks, "How do we engage privileged learners to take responsibility for histories and legacies of settler colonialism and make change?" (2013, p. 54). Our work responds to his question in how we

collaborate and research in ways that honour and retain the integrity of Indigenous knowledge. Barnhardt and Kawagley (2008) argue that the key to overcoming the mistrust between community members and university institutions will be through collaborative research that focuses on Indigenous knowledge systems in which the process has "primary direction coming from indigenous people so they are able to move from passive role subject to someone else's agenda to an active leadership position with explicit authority in the construction and implementation of the research initiatives" (p. 239). By ensuring that work is Indigenous-led with the ongoing consent



Figure 3. Lana Whiskeyjack, left, listening to Kevin Lewis share his words during the sharing circle. He started kâniyâsihk Culture Camps, an accredited land-based nêhiyawêwin-immersion program. © kâniyasîhk Culture Camps. Photo by: Kyle Napier

of communities, while also outwardly acknowledging the histories and legacies of infractions against the language, we encourage nêhiyawêwin learners to share solutions to language learning that counter historic legacies of disconnect.

Dwayne Donald (2013) suggests that the Spirit, intent, and integrity of Indigenous philosophies and teachings can be meaningfully maintained, even in formal institutional settings, with students who typically have very little prior experience with such philosophies and teachings (p. 14). Reflecting on this, we continually reach out for ongoing and full participation of those who collaborated with us, the Elders who kept us in ceremony, and those who guided us in Indigenous epistemologies beyond the formal setting of our associated university. Our community-based research contributes to the discussion of the challenges of integrating Indigenous ontologies and epistemologies into research, teaching, and publication associated with the University of Alberta. These discussions were led by learners and instructors who were in accredited post-secondary nêhiyawêwin programs and classes and who were present in the sharing circles. This research fosters a model of community-engaged transformative learning between Indigenous and non-Indigenous systems of knowledge, the benefits of which model support Indigenous-based ownership of education. The research approach, methods, analysis, and knowledge mobilization activities are designed with the words of Shuswap leader George Manuel (Secwepemculecw) in mind. Corntassel (2013) says, "We will steer our own canoe, but we will invite others to help with the paddling" (p. 50). The Indigenous community members we met with are steering their own canoe, while we nêhiyaw researchers assist with the paddling.

Honour, or Respecting nêhiyaw wahkotowin within Academic Knowledge Systems: Principles, Process, and Praxis

Through the process of working with and coming from these communities, we are familiar with — and intrinsically bound to uphold — nêhiyawêwin protocols that honour nêhiyaw ceremony and epistemologies in relational wahkotowin. To honour these nêhiyaw epistemologies, we have committed to ceremony in our own personal processes in this work, as well as in the collaborations with Indigenous community members and nêhiyawêwin learners. We developed research principles, processes, and practices congruent with nêhiyaw ceremony and protocol, and that reflect Indigenous research methodologies proposed by nêhiyawak and Indigenous theorists. The community-based research we conducted centers on nêhiyaw-voiced methods of reconnection to the Spirit of language, as well as the processes to provide community-voiced tangibilities of the Indigenous abstract to the academic concrete. The recommendations, and work that results out of these collaborations, constitute the embodied praxis of our work.

We chose the communities to work with based on previous established relationships, environments, and people actively supporting nêhiyawêwin revitalization and acquisition, and we invited those who joined the sharing circle to contribute to discussions around the Spirit of nêhiyawêwin, disconnects to the Spirit of the language, and methods of reconnecting to the Spirit of the language. We drew largely on the knowledges and lived experiences of nêhiyawak and nêhiyawêwin learners, and we invited 31 total nêhiyawak, including nêhiyaw-speaking Elders, educators, and learners, into interviews and sharing circles. Our community work needed to be conducted through principles that actively privilege Indigenous voices and perspectives in accordance with the participation of nêhiyaw Elders and Indigenous language speakers and learners, and not prescriptivist processes brought into their lives through our involvement as researchers. This meant fostering and maintaining a space for openness, trust, and informed consent in shared discussions. We also followed tapwêwin, or honesty, with everyone and ourselves, even so far as being honest in our humour and laughing during interviews and sharing circles. We further ensured participants in sharing circles could speak in both English and nêhiyawêwin. Most of the interviews were conducted in English as a dominant language, but several participants chose to answer in nêhiyawêwin. We were mindful to work with a transcriber fluent in both nêhiyawêwin and English. The transcriber, in dealing with some personal, private, and contentious information, also had to maintain ethics associated with the research by committing to a Transcriber Confidentiality Form. It was also integral to work with an Indigenous transcriber sensitive to knowledge systems and privacy who could transcribe in both nêhiyawêwin and English, with an understanding of both worldviews. We also made room in our work — independently and with community — for ceremony. In the instance of our research, ceremony included smudging, but also included making room for breaks, healing, and food, and ensuring we began only when participants felt comfortable.

The participants in our collaborative research identified problems with previous research and the way it had been conducted around Indigenous communities and languages. For some, this included sharing their own hesitations about institutional involvement and the

potential mismanagement of their ancestral Indigenous intellectual properties. As helpers in this Indigenous research, Indigenous and non-Indigenous researchers with institutional involvement have a responsibility to make research and work directly relevant to, and centered on, the priorities of the Indigenous communities they are working with and for. We must learn how to justly and collaboratively honour and uphold Indigenous Peoples' knowledges and values in their own pedagogies and language support systems, as opposed to imposing colonially institutionalizing knowledge systems. We recognize there were some processes in our research that remained institutional, and this paper therefore acknowledges its facilitative role in trans-systemic knowledge systems. In tandem with these systems, we have learned to prioritize Indigenous knowledge and languages as led by Indigenous scholars and knowledge holders within the university and communities, and to ensure the publishing processes are guided by community members.

Our institutional involvement in the Spirit of the Language project required us to either gather signatures on the Research Information and Consent Form, or decolonize the process through oral promise and exchange of tobacco, with a mutual understanding of the significance of the research and of ethical conduct in our role as institutionally-supported researchers. We then wrote an an oral consent agreement on behalf of those involved. However, if participants were not comfortable with sharing their words and knowledges with us, or had not yet given consent to share their direct quotes as words, we respected their wishes and did not publish their direct quotes or sensitive knowledges. These same ethical procedures were applied to the photo consent form. If desired, participants could withdraw their words from interviews within two weeks of viewing their transcription, or the papers in which their words are used, and they can also choose to withdraw participation, and therefore further publication of their words, at any moment. It is necessary that research lifts the knowledges of and benefits the community and its members.

The Research Information and Consent Form indicated whether or not a participant was able to offer informed consent in their participation with the research, and participants could choose to include their name and nation/affiliation or indicate they would prefer to have their shared words anonymized in future publishings. The information and consent documents outlined our processes in maintaining the integrity of our work and the words of the participants. In lieu of participants signing this document on location, we encouraged some participants to take their time to read the agreement first. Participants were welcome to withdraw consent any time after the interview, or to participate later if they felt more comfortable. We noted to participants that it is easier for us to physically remove participant contributions from the recordings and transcriptions sooner, and prior to publishing. At the outset of the interviews, we also outlined the timeline for us returning the transcripts and detailed draft works back to community members. That is, we indicated that it would take about a year for us to organize the sharing circle and hold one-on-one interviews, review the information shared, and work with community members in publishing material using the words of or information about participants. We also indicated that participation is completely voluntary, that participants can choose not to answer any or all of the questions — for example, they can choose to pass if they do not wish to share their words and that they are invited to leave the conversation at any time. However, we also realized and indicated that we might not be able to completely participants' remove recorded contributions to the sharing circles, as some notes they bring to the discussion might be touched upon by other participants. We also indicated to participants that the raw recording of the interviews would be held in encrypted digital storage for a minimum of five years. The participants continually have chances to review their words and contributions, and may withdraw their words prior to us publishing



Figure 5. A copy of the research consent forms and media release forms, along with tobacco to be shared, all rest on the ground. The sharing circle at kâniyâsihk Culture Camp continues past sunset. We could hear the five-dozen sled dogs howling into the night.

© kâniyasîhk Culture Camps. Photo by: Kyle Napier

content from their interviews. This ethics approval process is maintained by the University of Alberta Research Ethics Board, which is independent from us as researchers but does grant institutional approval of our research. The nature and intent of our research further ensured our due diligence in offering fair compensation for participants sharing their voices. We documented this compensation using the Honoraria Form, indicating receipt of honoraria. More importantly, we offered tobacco to those participants willing to share their words. We provided equal honoraria of \$100 in gift cards to each of the participants, regardless of the duration of their participation or their Indigenous language fluency. While the Honoraria Form required a signature, we were able to sign on behalf of the participant with their expressed permission, particularly if they chose not to write their own signature or to exchange trust through tobacco. Ultimately, this process was used to ensure our accountability, as researchers, in the use of provided funds.

Although our work was funded by Alberta Health Services through the Métis Life Skills Program and delivered by the University of Alberta, we were deliberate in honouring nêhiyaw methods over institutional biases or funding sources. This allowed us, as Indigenous researchers, to place ourselves as relatives and partners in the learning and community-building towards a collaborative solutions-based approach. In principle, this process required reciprocity with community members, as researcher-relatives in nêhiyaw language learning. In practice, this might look like avoiding referring to and treating the recorded interviews as data because the knowledges shared with us are sacred and beyond conventional quantitative interpretations of data. Instead, we honour the Spirit of the words with ceremonial integrity, by offering tobacco, gifts, and involvement in the knowledge-sharing processes. We also avoided the academic bias of focusing on one aspect of language acquisition, such as with prescriptivist approaches in

formal linguistics, to instead illuminate the interdisciplinary and holistic nature of Indigenous language revitalization work with communities.

Inevitably, elements of ancestral knowledge were shared in these sharing circles and interviews while we were recording. As Indigenous researchers and collaborative community partners, we have a responsibility to steward digitized Indigenous knowledges with the utmost respect, integrity, and cautions, particularly in documentation and publishing. This praxis is guided by the individuals sharing their knowledge to ensure they are comfortable sharing that particular knowledge in the contexts we intend to communicate them, including in our publication of their voices across platforms (platforms that are addressed later in this paper). When we share the results of this collaborative work back with communities, we will invite community members to provide their own considerations about how this work should be published, and for which audiences. The publishing process necessitates ongoing collaborative idea-making around the publishing and circulation of knowledge and words shared in this research, ensuring that we continue visiting with community members and confirming their ongoing consent prior to publishing work that includes their words.

History, the Spirit of the Language: Land, Language, and Laws

In addition to the elements of nêhiyaw historical connection that have been written about, we also asked nêhiyawak about the Spirit of the language and the history of the ancestral language. Through our lived experiences as nêhiyaw academics, and throughout the learnings accompanying our community work, we have heard overwhelmingly that land is sacred, and that land is the Spirit of the language. Critically, those who offered their words in interviews and sharing circles reaffirmed the historical and ongoing consequences of colonization, capitalism, and Christianity, noting how each significantly impacts relationships with the ancestral language, land, and laws. Those who shared their words identified as a catalyst of disconnect the forced removal of Indigenous Peoples from their ancestral homelands onto reserves and into residential schools, for purposes of religious conversion, resource extraction, and territorial colonization. The nêhiyaw speakers and learners suggested that every impact resulting from colonization, capitalism, and religious imperialism would need to be undone to allow for a reconnection between nêhiyawak and nêhiyawêwin. In essence, language learning and teaching practices must counteract the policies and laws that systematically disconnect ayisiniywak from their lands, languages, and laws.

Those who shared their knowledge in interviews and sharing circles have said that the Spirit of the language is drawn not only from the language itself as it is spoken and understood, but also from the Creator. Each Indigenous language is interrelated with the land of its origin, and those languages are best understood when spoken about lands underfoot through ancestral lineage and connectedness. Because nêhiyawak are ancestrally connected to specific lands, nêhiyawêwin understandings of the world are best understood on those ancestral lands. The connectedness between all of Creation and the language speaking specifically to those lands is guided through nêhiyaw law. wahkotowin, which guides the relationality behind our project, is just one of many nêhiyaw laws.

As our work realized the importance of place-based immersion for learning, the research expands deeper into land-based pedagogies. This can also be contentious in that, owing to diaspora, colonization, and migration, some Indigenous languages have had varying presences in different regions, but have since been locked into reserves, municipalities, and other colonially-enforced boundaries, grossly limiting access to ancestral lands. That is, some Indigenous languages have been spoken in newer regions as of the last few hundred years, and are less linguistically representative of the regions in which they are situated now. In this way, English and French are not regionally-specific to the areas inhabited by English speakers on this continent. The rematriative effort against colonial naming of locations is seen in the current and ongoing recognition of place names. Where communities, as municipalities, have recently designated names of places in the last few hundred years, Indigenous place names with deeper spiritual or cultural significance are often overlooked or erased in those discussions and localities.

Through our independent teachings as nêhiyaw language learners, we have learned the nêhiyaw words for woman and fire illustrate this worldview reconceptualization — the word for woman, iskwew, contains the root morpheme for fire, which is iskotew. Together, these words remind us, in nêhiyaw worldview, of the importance of women being the home fires of family, community, and Nations. Further, effective land-based immersion courses are dependent on the seasonal changes within local ecologies and recognized in our language. Where English sees four seasons, nêhiyawêwin sees six. These seasons are miyoskamin, or ice break-up; sikwan, or spring; nîpin, or summer; takwâkin, or fall; mikiskon, or ice freeze-up; and pipon, or winter. The addition of the two seasons to the English context, both miyoskamin, or ice break-up, and mikiskon, or ice freeze-up, reveals nêhiyaw worldview, which is interdependent with the land and important for harvesting, hunting, trapping, fishing, and dog-sledding on the ice inbetween the fall, winter, and spring.

nêhiyawêwin speakers and learners, from their words spoken in interviews and sharing circles, favour transgenerational aspects of language learning, in which multiple generations of learners are able to draw from each other's nêhiyawêwin learnings and teachings. Regardless of age, we encouraged nêhiyawêwin speakers and learners to speak candidly about their own learnings and teachings during interviews and sharing circles, instead of responding to the possible biases we brought as researchers. Knowledge sharers identified youth as the ones to revitalize Indigenous languages within their families. At this critical moment, young Indigenous language speakers are countering a generational gap of learners and are learning from their Indigenous relatives whose first language is nêhiyawêwin.

Several nêhiyawêwin knowledge holders have independently proposed nitisiy, or the belly button, as a morphological metaphor that embodies the Spirit of the language. This phrase rings true in the nêhiyawak adage of ê-nitonahk otisiy, "s/he is looking for their belly button," which can be used to say someone who is on their path to find their roots (Personal communication, Auger, October 19, 2019). When someone introduces themself, they say their name, then nitisiyihkâson, which translates to the person behaving like the Spirit of their name. In this way, nêhiyawak are introducing their Spirit (Personal communication, Auger, October 19,

2019). néhiyawak Elders have also shared with us that when we introduce ourselves, we are introducing ourselves as our Spirit through the connection to our mother, the umbilical cord connected first through our belly button, and that that spiritual connection is passed from our mother and our matrilineal ancestors, such as our grandmother, our grandmother's grandmother, and all the way back to Spirit and Creation.



Figure 6. Participants in the kâniyâsihk Sharing Circle, sharing their words.

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Participants shared examples of the ways in which morphological concepts come alive to represent the Spirit of the language. This can be found in the word e-pîsâkik-sakikihk or e-sâkipakâcik. Both are different ways of saying that the plants are showing themselves, and it is that first part of a plant blooming to show love. Participants have suggested that Love, from the Creator and for Creation, is within the Spirit of the language. In this same way, plants are raised to show us love each spring. They bloom and they grow, reflecting love's own growing and blossoming. Where the morpheme sâkiis drawn from sâkihitowin, which is love as a

concept, sâkihitok, or to love, is also imperative. Love, for us, is "with the six nations, the winged people, the four-legged people, plant people, insect people, water people, and us two-legged people, we have to be in relationship, and to communicate with those ones as well" (Personal communication, Makokis, July 15, 2020).

As nêhiyaw learners, nêhiyaw law, and concepts of wahkotowin, guided our work with communities. Within the concept of wahkotowin, nêhiyaw speakers and learners also discussed healing and other options for Indigenous language acquisition. In this way, our collaborative research offers reciprocity in order to counter retraumatization. However, healing should be available to those invited to share their experiences and to revisit traumatic experiences for institutional research — healing through, for example, anonymous opportunities for post-interview therapy and involvement in the process based on one's own emotional availability. Ceremony, as guided by the community, led the healing in this process. Each of these ways of collaborating are guided through nêhiyaw law of wahkotowin.

Community conversations identified the holistic worldview of the language, in which view the language is both from and of the land, and each sound is alive with its own Spirit. In these ways, nêhiyawêwin is embedded with ancestral spiritual connection to land and as reinforced through nêhiyaw law. Elders and community members shared the importance of honouring the living language through land-based Indigenous learning pedagogies, which center reciprocal-relational methods like ceremony and mentorship. Because Indigenous languages are intrinsically tied to the land, land-based language immersion pedagogies have been found to be the most effective for nêhiyawêwin acquisition.

Healing, or Reconnecting to the Spirit of the Language: Agency, Autonomy, and Authority

Three themes emerged as solutions from nêhiyawak when addressing reconnection to the Spirit of nêhiyawêwin. The themes were agency, or those involved in language work taking personal accountability to their language work, and reducing the influence of their biases in the collaborative work; autonomy, or self-determination and sovereignty by the Indigenous language community over their own language programming; and authority, in which Indigenous nations and their communities of language speakers and learners are designated as holding the principal rights and responsibilities to Indigenous language policies, programming, and funding.

Our work realizes the expressed call to provide equitable Indigenous language programming through decolonial approaches based on community needs. In this same way, we recommend

that research communities working with Indigenous Peoples and Indigenous knowledge systems ensure reciprocity, respect, and reflexivity, and that they conduct the work under terms set by the community. Decolonizing our academic approach means being transparent in recognizing our roles as academics with institutional affiliations. challenging the tethered historical exclusivity and dominance of post-secondary institutions, and removing our biases while retaining relational wahkotowin. In particular, we must challenge the hierarchical influence maintained by knowledge- and gatekeeping institutions by ensuring that Indigenous communities have sovereignty



Figure 7. Stan Lee (left), a nêhiyawêwin educator; Matilda Lewis (middle), a fluent nêhiyawêwin speaker; Michelle Whitstone (right), Diné Asdząą, who is also researching effective Indigenous language revitalization efforts.

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over the work being done with them, as well as access to the research done on, with, by, and for them. We particularly support, and maintain, community-initiated, consent-driven, multistep collaborative processes. For linguists and researchers working with Indigenous language learning communities, this call supports the undoing of infractions against Indigenous language vitality maintained by colonization, capitalism, and Christianity through institutional and ideological imperialism.

There is a further distinction between nêhiyawêwin and English language pedagogies. For nêhiyawêwin, verbs and nouns are often joined together with prefixes and suffixes to create whole expressions of thought within just a single word. Though the expressed thought may be a longer term or concept, the expression may be viewed linguistically as one word. This may be unfamiliar to English or European language speakers who are used to longer sentences to form expressions or thought, and not used to how the morphological conjugation of verbs and nouns together within a word can be used to form an expression. Through language, nêhiyawêwin

also distinguishes between conceptions of animacy or inanimacy in ways unrealized in English. Where European languages, such as Spanish or French, differentiate between nouns through gender and their corresponding pronouns, nêhiyawêwin refers to a noun as either animate or inanimate based on the corresponding verbs and pronouns. It should be noted, there are no uniform rules on what constitutes nouns with animate or inanimate characteristics in nêhiyawêwin. For instance, while liquids, recognized with the -apoy suffix, are viewed as inanimate, even though they have motion, asiniy, or stones and rocks, are viewed as animate because they carry with them the Spirit of the grandfather. Some berries are animate, while others are inanimate. As voiced by community members and our experiences with successful nêhiyawêwin programs, these difference in language are best learned through nêhiyawêwin immersion and ceremony. Fluent Indigenous language speakers also told us that there are several sounds from English that are not in nêhiyawêwin, such as B-D-F-G-J-K-P-Q-T-V-X-Z (personal communication, anonymous, 2019). It had been further noted by participants that Spirit markers — known in nêhiyawêwin as nehiyaw atahkipehikana or by English linguists as syllabics — are the preferred typographic forms for learning nêhiyawêwin morphologies.

Indigenous communities need to have ownership their own communities language learning. This which include speakers and learners of language communities having priority access to supports for Indigenous language immersion programming, their inclusion when discussing ceremony and Spirit in language teachings, and when teaching through connection to the land. Those in the sharing circles also noted that expressions favouring land-based pedagogies have inspired non-Indigenous academics to change their practices, and that those non-Indigenous academics now have the responsibility to incorporate the land when conducting research with, by, and for Indigenous Peoples. Those speakers and learners also expressed caution when teaching or incorporating Indigenous knowledges in various academic or published works, particularly when that work is guided by non-Indigenous academics. To elaborate, some participants remain hesitant to share Indigenous knowledges with non-Indigenous Peoples, for reasons related to the ongoing legacies of colonization, capitalism, and Christianity, as well as institutionalized oppression. Non-Indigenous academics have more recently valued Indigenous knowledges as having merit within academic frames of thinking, though these efforts attempt to force-fit these Indigenous knowledges within academic and European epistemologies. The worldview presented in English, or inherent in Anglophonic biases, often privileges a scientific approach, which has not historically validated Indigenous Peoples' modes of knowledge or ways of thinking, unless there is a perceived or added benefit to non-Indigenous societies.

Indigenous sovereignty over language programming incorporates the need for care, stewardship, rehabilitation, and return of the land and regionally-specific, Indigenous-led houses for learning that are guided by Indigenous Peoples. The methodologies conducted to arrive at these conclusions deliberately amplify the considerations of Indigenous language learners, and ensure the right to sovereignty by the Indigenous communities sharing their knowledges and knowledge systems.

By highlighting the process undertaken to conduct research for this project, we hope to provide ceremony- and community-based academic resources for Indigenous language speakers,

leaders, and learners to reclaim sovereignty over their own language education, community-building in ceremony, and connections to the land through language. As a response, the results of our research will offer platforms for publication that centre the Indigenous voices speaking towards meaningful holistic learning of Indigenous languages in spaces not usually available and accessible to nêhiyawak for language learning. Our publication processes are done through methodologies that are collaborative, that respect sacred words and knowledges, and that involve knowledge sharers in the process of overseeing the finished works that use their words. Platforms that have emerged from the project so far include this paper, our website, the founding of the Spirit of the Language conference, and presentations at local and international linguistics conferences. Any research awards for publications or speaking fees have been donated back to kâniyâsihk Culture Camps. This article itself is one of the resources we have created based on community-voiced protocol, and it describes processes for engagement when working with outside groups and institutional organizations. Other publications or presentations have involved collaborations and emerging opportunities for co-involvement in mutally-realized Indigenous language learning opportunities.

The nêhiyawêwin speakers and learners we talked to favoured reconnecting to the Spirit of language through experiential land-based immersion programming. As Indigenous languages allow for the most linguistically detailed accounts about the land within land stewardship, compounding damage to ecologies further acts as a catalyst of disconnection from the Spirit of the language. Ancestral Indigenous ways of being are directly dependent on the land and its vitality, and on immersion in the ways of being that directly relate to the land. The Indigenous children who spend time within mandated education systems are further removed from the Indigenous lands, languages, and laws of their ancestry. However, this can be counteracted with opportunities for Indigenous language immersion programming that are connected to the literal place to which the language is connected, through footsteps walked by our ancestors, and led by Indigenous language speakers and communities. nêhiyawak community members voiced the land-based learning as achieving a significantly higher chance of fluency than an institutionalized single-course program in classrooms.

Other options voiced by community members for language acquisition include Master-Apprentice / Speaker-Learner programs for more intimate learning environments, learning independently through digital media like apps and social media, creating content to foster one's own learning processes, and ensuring that Elders and knowledge keepers are included in those language learning environments. Those who shared their words with us stressed the importance that the nêhiyawêwin instruction include the Creator's Laws of love and kindness, as reiterated in several nêhiyawêwin concepts. Other comments suggested by community members included reminding educators to always speak as though we were speaking to our own children or in the ways our childhood self would have yearned for. For any of these language learning methodologies, the collaborative community partners elaborated on connecting ceremony, culture, Spirit, intergenerational responsibilities, and Creation, which includes the land, the cosmos, and all animate and inanimate beings with which they are connected.

Our transparent identification as insider-outsider nêhiyawak academics relates to our own lived experiences as Indigenous researchers now and in the future, and opens the space more to talk about the issues and solutions raised most pertinently by nêhiyawak. Our kinship systems come from nêhiyaw identities, we share ancestral connection with the communities we are working with, and we have been raised, mentored, and trained to be of service to nêhiyawak in our communities. Since utero, throughout our growth and learning in education, to the daily duties of our work, we acknowledge we are stewarding ancestral knowledges through our work as engaged scholars. This community engagement is intrinsic to wahkotowin, nêhiyaw kinship systems, and the health of communities as reflected in the Spirit of Indigenous languages. Most importantly, the agency, autonomy, and authority for language learning programming needs to be held by the same communities and people who are ancestrally connected to the language.

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References

Auger, Darlene. Edmonton, Alberta, personal communication, October 19, 2019.

Barnhardt, R., & Kawagley, A. O. (2008). Indigenous knowledge systems and education. *Yearbook for the National Society for the Study of Education, 107*(1), 223-241.

Blackstock, C., Trocmé, N., & Bennett, M. (2004). Child maltreatment investigations among Aboriginal and non-Aboriginal families in Canada. *Violence Against Women*, *10*(8), 901–916. https://doi.org/10.1177/1077801204266312

Cannon, M. (2012). Changing the subject in teacher education: Centering Indigenous, diasporic and settler colonial relations. *Cultural and Pedagogical Inquiry*, 4(1), 21-36. https://journals.library.ualberta.ca/cpi/index.php/cpi/article/view/19109

- Corntassel, J. (2013). Insurgent education and the roles of Indigenous intellectuals. In M. Smith (Ed.), *Transforming the academy: Essays on Indigenous education, knowledges, and relationship* (pp. 47-51). Edmonton, AB: University of Alberta. https://www.academia.edu/12915050/E_Book_Transforming_the_Academy_Essays_on_Indigenous_Education_Knowledges_and_Relations
- Coulthard, G. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition.* University of Minnesota Press.
- Curtis, G. (1915, October). Early conversions to the Catholic Church in America (1521-1830). *The Catholic Historical Review, 1*(3), 271-281. https://www.jstor.org/stable/25011337
- Donald, D. T. (2009). Forts, curriculum, and Indigenous métissage: Imagining decolonization of Aboriginal-Canadian relations in educational contexts. First Nations Perspectives: The Journal of the Manitoba First Nations Education Resource Centre, 2(1), 1-24. https://www.academia. edu/12915050/E_Book_Transforming_the_Academy_Essays_on_Indigenous_Education_ Knowledges_and_Relations
- Donald, D. (2013). On making love to death: Plains Cree and Blackfoot wisdom. In M. Smith (Ed.), Transforming the academy: Essays on Indigenous education, knowledges, and relationship (pp. 14-18). https://www.academia.edu/12915050/E_Book_Transforming_the_Academy_Essays_ on_Indigenous_Education_Knowledges_and_Relations
- Greymorning, N. (2018, November, 29). Being Indigenous: Perspectives on activism, culture, language and identity. Routledge.
- Hopwood, V. G. (Ed.). (1971). David Thompson's travels in Western North America, 1784-1812. Macmillan.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts*, University of Toronto Press.
- Lacombe, A. (1874). *Dictionnaire de la langue des Cris.* C. O. Beauchemin & Valois. https://archive.org/details/cihm_30679/page/n14
- Leavitt, K. (2018, August 2). Racing against time to bring Indigenous language back from the brink. *The Star.* https://www.thestar.com/edmonton/2018/08/02/will-the-governments-indigenous-languages-law-save-endangered-tongues.html
- Lee, D., & King, G. (2020, March 2). Re-affirming Indigenous citizenships: Two Spirit family-making and the future of belonging. *Yellowhead Institute*. https://yellowheadinstitute.org/2020/03/04/re-affirming-indigenous-citizenships/
- Legacy of Hope. (2015, December). *Indian Residential School System Timeline* (image). Legacy of Hope Foundation.
- Makokis, L., Shirt, M., Chisan, S., Mageau, A., & Steinhauer, D. (2010). mâmawi-nehiyaw iyinikahiwewin. Blue Quills First Nation College. http://www.bluequills.ca/wp-content/uploads/2017/03/BQ_SSHRC_2010_final_report.pdf
- Milloy, J. S. (1990). *The Plains Cree: Trade, diplomacy and war, 1790 to 1870.* University of Manitoba Press. https://www.deslibris.ca/ID/412998
- Murdoch, J. (1981). A serious read on syllabics: The M.Ed thesis of John Murdoch. *Cree Literacy Network*. https://creeliteracy.org/beginning-to-read-plains-cree-in-standard-roman-orthography/a-serious-read-on-syllabics-the-m-ed-thesis-of-john-murdoch/
- Preston, R. (2018). Cree. In *The Canadian Encyclopedia*. Retrieved July 12, 2019, from https://www.thecanadianencyclopedia.ca/en/article/cree

- Statistics Canada. (2017, October 25). Census in brief: The Aboriginal languages of First Nations People, Métis and Inuit. Statistics Canada. https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016022/98-200-x2016022-eng.cfm
- Smith, L. T. (2012). Decolonizing methodologies: Research and Indigenous Peoples. Zed Books.
- Truth and Reconciliation. (2015). Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada. Government of Canada. ISBN: 978-0-660-02078-5.
- Wilson, S. (2001). What is indigenous research methodology? *Canadian Journal of Native Education*, 25(20), 175-179. https://www.researchgate.net/publication/234754037_What_Is_an_Indigenous_Research_Methodology
- Wilson, S. (2008). Research is ceremony: Indigenous research methods. Fernwood Publishing.

Uncovering the Experiences of Engaging Indigenous Knowledges in Colonial Structures of Schooling and Research

Mairi McDermott, Jennifer MacDonald, Jennifer Markides, Mike Holden

In response to the Truth and Reconciliation Calls to Action (TRC, 2015), a school board teamed with university educators and educational partners to generate a professional learning series to support educators' engagement with Indigenous knowledges. A research team that assembled two years later interviewed the learning series participants to explore how educators were navigating Indigenous knowledge within a Eurocentric school system. This research acknowledges the challenges of doing this work within shifting institutional policies and initiatives, the wider politics of Indigenous and non-Indigenous relations, building intercultural understandings and community partnerships, and negotiating epistemological difference. The researchers — including Indigenous and non-Indigenous peoples — echoed resonances with the participants that occurred throughout the data collection process and often spoke about the parallel paths of research and schooling — both historically used as tools of colonization and now having a role in decolonization. To disrupt colonial propensities, we share our reflections as researchers, specifically around complexities and tensions of engaging Indigenous knowledges throughout our research processes concerning the participants' experiences. By sharing the tensions and (un)learning that emerged on these parallel paths, we honour diverse entry-points and experiences to animate how trans-systemic knowledge building might ensue.

KeyWords Indigenous education, Eurocentrism, trans-systemic knowledges

Into the Beyond-Space

Eurocentrism is the view that sees Europe [...] as the world's center of gravity, as ontological 'reality' to the rest of the world's shadow, as the originary fountain from which all things flow.... [It is] an ideology which has long *entered the bloodstream* of the dominant discourses, the educational systems and the media of most countries. (Shohat and Stam, 2009, p. 137, emphasis added)

To understand why Indigenous knowledge was ignored or marginalized in the colonial educational curricula was first to unravel Eurocentrism, something that each of us, despite the school we attended, have been *marinated in*. (Battiste, 2013b, p. 6, emphasis added)

If Eurocentrism circulates through the discursive bloodstream of society, and if we are in a time when more people are acknowledging how we have all been marinated in the ravages of this single truth, how do we respond to the Truth and Reconciliation Calls to Action (TRC, 2015)? How might we shift — to think, relate, and engage — beyond the logics of Eurocentrism? Indeed, this is our way of thinking about the call for a trans-systemic approach: "that is, reaching beyond the two distinct systems of knowledge [and] [b]eyond suggesting that neither Indigenous knowledge nor Eurocentric knowledge systems can be the sole arbiter of the work involved" (Battiste, 2013a, p. 103). As a diverse group of researchers, three non-Indigenous and one who identifies as Métis, we each have various relationships to Indigenous and non-Eurocentric ways of knowing and being in the world. We realized early on that we must push ourselves into the beyond in our approach to the research discussed in this paper. The question of how to do so emerged through time.

The purpose of assembling our thoughts, processes, contradictions, and hesitancies, as well as our collective and individual perspectives, is to invite readers to join in seeking space for trans-systemic knowledges. We hope to enact decolonial relations on different terms than those offered by remaining in the Eurocentric marinade. As we navigate schooling and research institutions, we draw from a research project interested in how educators are taking up a school board response to the Truth and Reconciliation Calls to Action (TRC, 2015). We traverse this terrain alongside our interview participants and consciously strive to better understand the ways Eurocentric knowledge continues to work on us and how we might open spaces for Indigenous ways of knowing in our teaching and research practices.

In what follows, we start navigating the terrain by discussing the broader context of the research. This leads into a discussion of the different ways we felt compelled to write about the research's unfolding process (or methods) in relation to trans-systemic work. The first part of the paper was written in a collective voice as we describe the original plan. As we continue to spiral out (and perhaps in) from that starting point, each of us provided an individual reading of the data to animate four ideas that resonated with each of us:

- (1) emotional connections and becoming human (Jennifer MacDonald);
- (2) competing pressures, tensions, responsibilities, and pedagogies (Jennifer Markides);
- (3) confronting truths, narratives, and silences (Mike Holden); and
- (4) knowledge production, privilege, and solidarity (Mairi McDermott).

We conclude by spiraling back and sharing our insights for reaching and dwelling in the potentials of the trans-systemic, of space beyond.

Part I

Framing the Initial Research

In response to the Truth and Reconciliation Calls to Action (TRC, 2015), a school board in Alberta worked in partnership with a team of university educators to generate a professional learning series to support educators' engagement with Indigenous knowledges. The research team assembled two years later to understand how the participating educators might have taken up their learning within their practice. Initially framed as a case study, the research

was bounded by the educators' identities, who were recruited based on participation in the professional learning series. We assumed a certain level of interest among these educators due to their active pursuit of professional development around ways to incorporate what Alberta Education (2018) calls "Foundational Knowledge about First Nation, Métis, and Inuit" (p. 6).

In response to the Truth and Reconciliation Commission Report (2015), we noted a shift in the discussions around and approaches to Indigenous roles in the school board where our participants work. Until this time, Indigenous learning leader roles were assigned to specific schools and focused on supporting individual students who self-identified as Indigenous. The Calls to Action, alongside the development of two Alberta Education policies — the Teaching Quality Standard (TQS) and Leadership Quality Standard (LQS) (Alberta Education, 2019a, 2019b) — marked a shift in the focus of work for educators and education in Canada. Namely, in Alberta, all teachers are asked to "develop and apply foundational knowledge about First Nations, Métis and Inuit for the benefit of all students" (Alberta Education, 2019b, p. 5) and school leaders to "support the school community in acquiring and applying foundational knowledge about First Nations, Métis and Inuit for the benefit of all students" (Alberta Education, 2019a, p. 6). To address knowledge and experience gaps of teaching Indigenous topics and prepare for the implementation of the Quality Standards (in effect as of September 2019), the school board involved in this study created new centralized roles for Indigenous Education to support all schools and students.

As a research team made up of both Indigenous and non-Indigenous scholars coming from diverse entry points to the topic, we engaged in parallel paths alongside the participants, attending to our projects of decolonization and relationality (Donald, 2009, 2016; Kovach, 2009). Each of us were drawn to the research project because we believe in the necessity and possibilities of decolonizing our minds, relations, institutions, and societies (Battiste, 2013b; Patel, 2016a; wa Thiong'o, 1986). The impossibility of some straightforward, linear progressive "answer" or Truth became evermore apparent along the way. The geopolitics of knowledge (Mignolo, 2002; Sandoval, 2000; Wynter, 2003), the relationship between knowledge and social identities, or the pedagogical questions of who can say what, in what ways, to whom, when, and under what conditions, made universalizing the experiences impossible. So, we began to ask ourselves, what can our research do? Through time we realized that it is our individual and collective journeys through the quagmire — as sociopolitically positioned and considering our relationships to knowledge regimes — that echoed in the interviews. In other words, the research became as much a site of negotiating our positions on our learning paths as it was about the participants' practices.

¹ This is the language used in Alberta Education's Teaching Quality Standard, a set of competencies that teachers in Alberta are expected to reach towards in their ongoing professional learning and practices. In Canada, the terms First Nations, Métis, and Inuit (FNMI) are sometimes used to refer to Indigenous peoples from different communities. In this paper, we include these terms in reference to policy documents; however, we otherwise use the term "Indigenous" to honour the diverse cultures, knowledges, and histories of Indigenous peoples.

We assembled as a research team in the fall of 2018. One aspect of our research towards the beyond-space of trans-systemic knowledges materialized at the beginning of our collaboration. Indigenous methodologies are often called upon when working with Indigenous peoples (Smith, 2012). Yet, we cautiously believed that thinking-being-doing research shaped by Indigenous approaches could be repositioned as a significant interruption to how research is conceptualized in the dominant Eurocentric articulations. We reflected that the investigation might involve Indigenous peoples, yet we knew that most of our participants would be non-Indigenous.

Siksika Elder Clarence Wolfleg honoured us by joining our grounding meeting before the research began. Elder Wolfleg's presence and engagement immediately influenced how we paused in our research and returned to lessons in different ways, opening a portal to the transsystemic. Elder Wolfleg reminded us that this is the first generation of educators being formally asked to weave Indigenous knowledge into our teaching practices; relatedly, we have to learn to crawl before we can walk. In other words, we are all amid a continuous learning process, which is necessarily a transformative and challenging process. We need to slow down and first disentangle Eurocentrism from the discursive bloodstream to allow Indigenous lifeforce into our worlds and relations (Graveline, 1998; Hooks, 1994; Patel, 2016b). The longer something has been marinated, the harder it becomes to distinguish the individual ingredients. We must be gentle yet firm and intentional in our learning and knowledge production, something which the pressures of finding immediate solutions and answers in conventional schooling and education do not always support.

As the research proceeded, we noticed that institutional policies and initiatives are just one layer of the response to Truth and Reconciliation (2015); the necessary and challenging work would involve navigating the wider politics of relations between Indigenous and non-Indigenous peoples and groups, building intercultural understandings and communities, and negotiating epistemological differences. We observe inherent tensions play out (Kapyrka & Dockstator, 2012) as many people, ourselves included, feel lost when seeking how to learn about Indigenous epistemologies, histories, pedagogies, and protocols; i.e., we don't know where to start, whom or how to ask, and frequently fear making mistakes (Dei & McDermott, 2019; MacDonald & Markides, 2018, 2019). These awkward moments, however, can provide the learning that is necessary to move forward differently. Donald et al., (2012) suggest that educators use an ethical relational approach to navigate conflicting research, curriculum, and culture expertise, which implies that truth and reconciliation journeys are profoundly personal and dynamic.

Mapping the Process: Methods and Data Sources

In this section, we discuss our approach toward negotiating Eurocentric and Indigenous ontoepistemologies. In particular, as we work through our struggles and agreements, we want to highlight the historical and ongoing colonial relations of conventional schooling and research uncovering the assumptions underpinning the way we "do school/research" (Battiste, 2013a/b; McDermott, 2020; Patel, 2015; Smith, 2012). We make our work a site of vulnerability to show how we moved within and between two processes influencing the research: (1) a linear, planned approach to research guided by the Western Eurocentric regime; and (2) the embodied, relational, and reflexive approach that emerged through time and dialogue about our collective unease with the first approach and what we felt was limiting our ability to ethically honour the complexity of the topic.

Eurocentric, linear planning: The language of measurable outcomes and verifiable truth-claims As mentioned, the initial research goal was to investigate what happened during the professional learning series and what has resulted in the school system. Three of the 14 participants who were interviewed were part of the professional learning series planning and implementation team from two partner institutions, while 11 participated in their roles as teachers, principals, assistant principals, program facilitators, and learning leaders within the school board. Four participants identified as having Indigenous heritage. Figure 1 illustrates the underlying process and assumptions about knowledge built into this approach of professional learning.



Figure 1. The Eurocentric Linear Plan for Learning and Research

We can reflect now on how our initial process followed a similar logic: researchers engage with interview participants, researchers gain knowledge about participants' experience, researchers share expertise with the community. To transform the orality of interviews into the superior (within the Eurocentric imagination) form of written text, interviews were audio-recorded and transcribed. This allowed the first level of analysis to start at different times for different research team members. The interviewers and transcribers were encouraged to keep a journal with notes about their ponderings and reflections about each interview and what was said and felt. Once all of the transcripts were complete, they were sent back to the participants to check with the invitation to make additions, changes, or deletions. Four of the 14 participants made changes or clarified details in their transcripts. After this process, the next phase of analysis had members of the research team individually read through all the transcripts, focusing on in vivo coding (Miles et al., 2014), wherein we attuned ourselves to what was said and what stories were striking us as meaningful. We then came together to discuss our initial, individual sense of the data, hone the themes that spoke to all of us, and reach consensus about the data's meanings.

Process-driven, spiraling, and emergence of learning and research.

We found ourselves being able to frame the above description of methods and data sources with relative ease. Why? Because this is the way we are taught and trained to do research. It provides a certain level of comfort and "knowability" that is recognized by us as research and is recognizable to others as legitimate. However "easy" it was, it never felt right. It seemed to miss

the most compelling aspects of the work for us. It contradicted our emerging premise that we are not seeking an additive model wherein school knowledge and research structures are left intact with minor sprinklings of Indigenous ways of knowing and ways of being periodically introduced.

As we gained confidence in our individual and collective positions on these uneven terrains of recognizable research, we came to reconsider and differently assess what we did in the research. What follows, then, is our approach to embody how we were individually drawn to divergent and convergent stories interpreted within the data. Yes, the data were collected in the way we described above; and perhaps in our first attempt to collectively analyze the data, we defaulted back to the habit of coding the transcripts for themes upon which we agreed. To resist the pull towards coding until saturation and consensus (e.g., singular reading), in our first analysis meeting, we started by asking, "what stories stood out or resonated with you?" When we shared those stories, we then attempted to categorize the stories to indicate our initial findings. Again, this did not feel right, so we had to be our own critical friends.

We took a step back and, after a prompt by one of the team members, we each wrote down our relationship to the research. Why did we decide to participate in the project, and what did we desire for and from the work? This exercise helped us further build our relationships as a team and recognize the different reasons and life experiences that brought us to the research. We each returned to the data after this "aha" moment to listen for the stories that resonated deeply with our purposes for doing the research, which then prompted us to realize that each time we went back to the data-as-story, we were taking away different meanings because along the way we were growing, learning, and needing something else. Much like Indigenous storytelling,

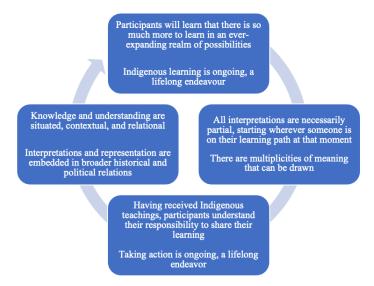


Figure 2. The Process-driven Indigenous Learning (Learning Through Research)

there is no singular, ultimate, or universal meaning to the story (Archibald, 2008). Like the teaching and learning relations we experienced with Elder Wolfleg, we came to understand how working with data can also let the stories work on us by keeping them alive, local, and situated. Figure 2 illustrates this shift in our thinking about learning and research in an alternative, process-driven framework.

We share in Part 2 how each researcher makes sense of the research at this moment of writing to situate ourselves in relation to the participants' experiences and the social identities and experiences that shape our interpretations of what mattered in the research.

Part 2 Embodying Trans-Systemic Sense-Making By Weaving Participants' and Researchers' Stories

To embody the sensibility that stories continually work on us depending on where we are socially, spiritually, conscientiously, and physically situated, we play with a contextualized and layered interpretation of the data's stories. Each researcher positions themselves regarding our individual desires for the research and situatedness on our journeys. In this way, the reader gets a sense of the different ways the data was read concerning who we are and how we attempt to weave Indigenous and Eurocentric knowledge regimes.

Emotional Connections and Becoming Human (Jennifer MacDonald)

When I returned to the interviews time and again, I was struck that sentiments about this work were intensely personal and emotional across the diverse participants. Understandably, with topics such as intergenerational trauma, abuse, and a general need to shift historical consciousness to address racism, that complicated and challenging responses, ideas, and opinions would emerge. Crying, laughter, and sentiments of frustration, exhaustion, disappointment, hope, confusion, nervousness and excitement, were among the conscious feelings readily apparent to me when reading the transcripts.

As a non-Indigenous person, I am absorbed with the project of expanding my worldview, and I work with care in the field of Indigenous education. The theme of intricate emotional work resonates with my experience. While I have been mentored by different people in Indigenous knowledges and worldviews, I know that I grew up marinating in Eurocentric knowledge, which persists in how I see the world. Releasing myself from the marinade will be a lifelong project. Likewise, I am always cognizant that this shifted focus towards reconciliatory agendas may re-traumatize and burden others who have endured the realities of intergenerational colonial violence. As I worked on myself, I also wanted to bring others like me into the circle to heal the mess that we inherited — how might we limit the Eurocentric contamination of the discursive and social bloodstream from flowing to the next generation?

bell hooks (1994) writes that "there can be, and usually is, some degree of pain involved in giving up old ways of thinking and knowing and learning new approaches" (p. 43). For participants coming to learn different interpretations of Canadian truths, the power of hearing

personal accounts was striking. For example, Mark² talked about listening to an Elder's story of attending residential school, "I felt like he was the way he spoke, he really, you could see what was happening when you were in there with him. So that was pretty emotional." In turn, these learning moments helped him develop a more critical lens to recognize deeply rooted systemic injustices in his everyday interactions:

I realized we're really insensitive and inaccurate [...] looking at things through a more critical lens in that way, in just everyday interactions that I, you don't know what you don't know. How much I have missed in the past that I'm much more aware of now. I never really thought about how a lot of these people were suffering were there because of policies of our government and then, I think what lit a fire under me is realizing that I work for the same government, I work for the same system that did this harm.

Developing critical sensibility can empower us to recognize our own complacency in the problems and increase knowledge, but this can also lead to confusion and isolation if we don't know what to do with it. For example, when I began noticing knowledge gaps and pointing out imbalances within my institutions, I often felt that I was questioned — from both sides — and I had to negotiate a line between resting in the critical and imagining other possibilities. Through this process, I worried that my intentions would be interpreted as disrespectful. As I learned to listen to my gut to discern obligation in Indigenous spaces, I recognized that I often spent too much time second-guessing and not just trusting myself. Making mistakes and stumbling are also part of the learning (Wagamese, 2016). Many of the participants, including Mark, talked about the significance of generating artifacts and giving presentations about the learning series to their colleagues; they spoke about the experience bringing others in and involving them in the work. However, the institutional challenge of regularly changing teams, locations, and continually starting over made it difficult to find traction in the work participants wanted to do after the learning series.

Over the past several years, I was drawn to complicated and uncomfortable positions to work out my responsibilities. Opportunities for humble self-questioning repeatedly surfaced, at times in harsh ways. Once I began recognizing myself as a colonizer, I wanted to learn how to respond respectfully and to enact the choice to do so regularly. The fact that I had a choice, again, was the privilege. Many participants spoke to this felt commitment from the professional learning series, understanding the importance of this work in schools, and were enthusiastic about living it out in their own contexts. However, some spoke to the resistance endured from their colleagues and inner frustrations when others did not understand the significance of the task. Coral spoke to the heaviness and emotional labour of frequent encounters with colleagues who felt that the momentum towards reconciliation was a personal attack on them, and needing to guard herself from the enormity of the task:

² All names of participants are pseudonyms.

I deal with people thinking about why so many resources are being put in towards an Indigenous education strategy, into a full-time grad coach, to the attention that is being paid, when they recognize and see that there are many students who could use that additional support. I can only control the conversations that are had with me present. And that took me a long time to create that boundary for myself, to be able to say, like, I can help you unpack as far as I think you are able to in terms of your understanding and expectation of what my role is here.

Like other social justice work, reconciliation initiatives are inherently political and can stir many divisive responses (Sensoy & DiAngelo, 2012). Other participants spoke to the frustration of continual ignorance and that the people who need to learn the most do not take the time. There needs to be recognition of the why underneath this work, so the quick impulse towards the how does not get lost by the politics.

Ultimately, reconciliation work should strive towards becoming human. I am drawn to Coral, who comments on foundational knowledge: All people already have a foundation. Of course, amid the complexities we all have the answers within us. Learning to slow down, to listen deeply, and articulate the tension is essential work. Paulette Regan (2010) speaks to this, saying, "Connecting head, heart, and spirit in ways that value vulnerability and humility enables us to accept harsh truths and to use our moral imagination in order to reclaim our own humanity" (p. 237). The learning is deeply layered, and I understand it will continue to work on me as long as I am open and resist needing to control the outcome. When I keep that in mind, it becomes more than including or embedding Indigenous knowledge content — or seeing this knowledge as something we can just acquire — but it needs to be lived with, dwelled with, struggled with.

Competing Pressures, Tensions, Responsibilities, and Pedagogies (Jennifer Markides)

Several examples of competing pressures arose through the interview conversations. Participants remarked that some colleagues were reluctant to teach about Indigenous topics because they believed they did not have any Indigenous students in their classes. These comments highlight a prevailing misconception that Indigenous education is only for Indigenous students (Battiste, 2013a).

Some participants noted that they wanted to take up Indigenous topics but worried it was not their place or that their knowledge was inadequate because they were not Indigenous themselves. Cassidy stated, "I don't have deep, deep understanding of Indigenous cultures because I'm not Indigenous." While this concern often comes from a place of genuine care, it implies that only Indigenous people can teach Indigenous education; it also assumes that Indigenous people — by virtue of being Indigenous — have expertise in Indigenous teachings and knowledges.

Unfortunately, many Indigenous people, myself included, have been raised outside of their home communities due to the systemic violence perpetuated and enacted by programs, initiatives, and laws intended to assimilate Indigenous people into the body politic. Many Indigenous people are raised with little connection to their culture. Parents and grandparents choose to "protect" their children from the racism and oppressive systems by not teaching them their language, ceremonies, histories, and practices (Four Arrows, 2008; MacDonald & Markides, 2019; St. Denis, 2007).

Two of the participants who identified as having Indigenous heritages — Cristina and Kylie — expressed feelings of loss and guilt for not knowing more about their cultures. Cristina recalled, for example, that she was not legally recognized as Indigenous until her mid-twenties, at which time her mother informed her that the government has now changed their policies and you are now status First Nation.³ Despite the years spent without her status, Cristina's grandmother had shared teachings with her while being out on the land. They picked berries, set traps, fished, and hunted; as she recalled, "there would always be moose hanging in the basement."

Yet, Cristina expresses sorrow for not being immersed in her culture.

Similarly, Kylie shared her story of [growing] up without culture. Her mother was non-Indigenous, and her father was Indigenous. Kylie noted that her father's mother had passed away during childbirth and, therefore, she was raised in the absence of his mother's teachings, as cultural knowledge would have been passed down from the matriarch. Concerning the learning series, Kylie said, "I remember feeling a really strange combination of like, anxiety, and pride" as she learned alongside the Elders and Knowledge Keepers. Despite the teachings she received, she remarked, "It's just crazy. I still feel very inadequate."

As often happens when I am listening to the experiences of Indigenous people raised without traditional teachings, ceremonies, and structures, I can relate to the feelings of guilt and inadequacy — an Indigenous imposter syndrome. The influences of colonization doubly harm Indigenous people living under these circumstances: first, we suffer from the absence or loss of cultural connections, experiences, and teachings; and second, we struggle with never feeling Indigenous enough as we try to (re)connect, (re)claim, and (re)inhabit our whole selves. Kylie says, "I still carry with me quite a bit of shame for not taking steps earlier, and not knowing more."

I could also relate to Kylie's inner conflict as she learned from the Blackfoot Elders, who led parts of the learning series. She explained, "I know more about Blackfoot than I know about my own [community]." Fortunately, Kylie had a dear friend who reminded her that "our Elders are sacred no matter what [and] our Elders are important no matter where they're from." Hearing this was important because, as she says, "It gave me permission to still seek out support here."

As a participant in the learning series and leader of Indigenous professional learning, Laura described a tension between wanting to provide spaces for participants to learn from Elders but not wanting them to think that all Indigenous teachings need to come from Elders. I believe this point may be ripe for further research and commentary. In the way of cooperative binaries described by Barbara Mann (2003), Elders' teaching and the teachings of others do not need to

³ In 1985, Bill C-31 was passed to amend the Indian Act to remove remaining enfranchisement clauses (Government of Canada, 2020).

be held in opposition; instead, both may be privileged simultaneously. Educators' roles in the sense of other teachings extend beyond Indigenous and non-Indigenous to include the morethan-human world (Abram, 1996; Sheridan & Longboat, 2006).

From participants who were wary to begin the learning journey in Indigenous education to those who were already engaging in Indigenous circles and learning from Elders, all participants shared a common desire/need for ongoing learning opportunities for themselves. This common sentiment illustrates that the more you learn in Indigenous education, the more aware you become of how little you know. Being in this kind of weak position stands in direct opposition to most professional learning programs' educational goals — programs that foster expertise in a given area.

I have yet to meet anyone in any Indigenous education communities who will claim to be an expert in their Indigenous-related knowledge. That is not to say that many people do not have expertise; instead, my statement is intended to point to the incredible respect and understanding of the boundless teachings that the universe has to offer. Seeing the world as a limitless teacher gives rise to great humility. In contrast, a worldview that imagines learning to be attained through neatly parcelled chunks — lessons, units, series, outcomes, courses, programs — produces all-knowing experts. I believe that the comparison as mentioned earlier highlights the jagged worldviews described by Leroy Little Bear (2000).

To elaborate further, participants in the learning series, along with all Indigenous education students who begin to see and understand the world differently, will not claim expertise in the Eurocentric sense of expert-knowledge: a narrowing down or narrowing in. Instead, Indigenous teachings recognize that observing, respecting, and caring for the world may lead to an opening up of possibilities and insights. The pedagogical awakenings most noted by the participants include learning on the land; ethical relationality (Donald, 2009); storytelling; Elder teachings; and listening. As Janelle said, "Learning is your responsibility and it often comes through listening." She also proffered, "We cannot do this work without trust and relationships." I believe that reconciliation is alive and that trans-systemic education is possible in spaces where Indigenous pedagogies and knowledges are being shared with generosity and received with grateful humility — truly touching the hearts and minds of learners.

Confronting Truths, Narratives, and Silences (Mike Holden)

In reading the transcripts, I was particularly struck by how much of what our participants shared reflects a desire to confront the truths, narratives, and silences that they encountered. I noticed how participants were troubled, for example, by the many ways silence had taken root in their schools. Sometimes this silence was literal: Sylvie shared a story of a school that chose (knowingly or not) to schedule their school spirit day on September 30, Orange Shirt Day.⁴ In

⁴ Orange Shirt Day is an act of recognition, reconciliation, and healing around Residential School experiences. The date in September is aligned with the time of year when Indigenous children were taken from their families, brought to Residential Schools, and often had their cultures literally stripped from them. The story grounding Orange Shirt Day is with regards to an Indigenous child, Phyllis Webstad, whose brand new orange shirt was among the items taken from her by the authorities (https://www.orangeshirtday.org).

a photograph the school posted online, one child wore an orange shirt in a sea of school-spiritblue, but that act of resistance went unacknowledged.

For many of the participants, the silence embedded in or driven by Eurocentrism manifested as ignorance; several non-Indigenous participants recalled only recently learning about residential schools' history. Sylvie described it as a challenge of people "not really hearing." She continued, "Some people were completely oblivious to it and had no idea what I was talking about."

Writing in an American context, Caruthers (2007) describes a "soil of silence" (p. 303) that masks the social, educational, and cultural roots of injustice. Only when that soil is disturbed and confronted can teachers and students see the devastating consequences this silence has had. Paul captured this notion well when reflecting on his own journey:

[Being part of this work] allowed me the time and space to be reflective of my own role and privilege, and the challenges that other people have that I'm not aware of.... Like sure, I had heard about residential schools, and things like that ... but my knowledge of even just residential schools wasn't very deep. There wasn't anything during my academic work that was about intergenerational trauma. That's actually a fairly new term to me.

Paul's reflections resonated with my own experiences. I was born less than 30 minutes from the largest reserve in Canada and went to school with many Indigenous students. Despite that opportunity, I knew almost nothing about Indigenous peoples before attending university. Like many Canadians, I was steeped in silences that restricted these conversations to the past — almost always in the history classroom. We were told Indigenous people lived in longhouses, traded furs, and weren't terribly fond of railroads. "Civilizing influences" weren't problematized, and lasting challenges like intergenerational trauma were never mentioned. Amanda offered a promising story about this all-too-common issue:

What our students' knowledge is, and how they speak and understand Indigenous cultures and people, has changed massively in five years. At the beginning, Indigenous people were extinct. They only existed a long time ago, they're not around today.... And so even, you know, bringing people in from the community and sharing stories in the school, and going out on field trips, they get that Indigenous people are part of our community and they have strengths and they have their part of our past and our future. And so it's a change in the language they use, it's a change in their perspective and how they view the world.

By confronting those silences and growing with her students, Amanda creates a space where her students can learn from and alongside Indigenous perspectives.

Beyond silence, participants also recognized persistent, harmful narratives about Indigenous education and Indigenous students. One such narrative surrounded teachers and parents,

challenging why Indigenous perspectives were being given attention at all. Cristina shared:

So many times I hear, "Can't they just get over it and move on?" And it just — it's like nails on a chalkboard to me. And it comes from people that truly have no understanding. How can you even say that when you have no base of knowledge? You can't just get over it and move on.... They don't know, children taken away, some were brought back, and then the community wouldn't allow the children back. All that trauma. Growing up not knowing how to care for your own child. No, you don't just move over, or move on and get over it. You don't. It takes time. Frustrating.

Coral expressed similar frustrations when she recalled a non-Indigenous parent who complained about a school sports event. The event encouraged Indigenous students to play and learn about their culture in a local setting. The parent wanted to know, "Why couldn't her son come?" Coral continued:

Actually, your son can come if he wants, but you need to understand that your son can go anywhere and do anything. [Indigenous] kids are not welcome [in the community]. And I'm serious about this. I have seen it firsthand in the community. I have a friend on Vancouver Island who got me to go to Walmart with her one day. And she said, "Stay back about 10 feet and watch what happens." Within minutes of us entering the store, we pretended we were apart, and there was a store detective behind her, watching her.

I felt especially drawn to Coral's story because of my own experiences learning about the prejudices Indigenous students and communities face that I never had to consider. In 2016, I was invited to visit one of the high schools we work with to learn about the work they were doing around social justice and environmental sustainability. I had never been on reserve before, and I was shocked by the number of people who felt the need to "warn me" ahead of the visit: to be careful, to tell me how I'd be entering "a different world," somewhere "like a third-world country."

While Canada continues to be criticized for the profound disparity between urban and reserve communities (United Nations, 2019), the warnings I received felt misplaced. I have visited that community five times since moving to Alberta, and I have always felt safe, welcomed, and privileged. That stands in sharp contrast to the stories those students have shared with me. As young Indigenous women, they are all too aware of missing and murdered Indigenous women and how that crisis manifests in their community. Like Coral's friend, they have shared stories of being watched by security staff every time they visit off-reserve malls. Their championship basketball team players — who should be excited about competing with schools from across the province — instead face reminders to travel in pairs, to avoid strangers, and talk about what to do "if they are taken."

Again, I was drawn to what Kenneth and Coral shared as I reflected on my learning with the reserve high school students. When I come into that space, I wonder, am I the only one that notices that I am a White male representing a university? Am I actually welcome here, or am I imposing myself on these students and their teachers?

That sentiment of fear of making mistakes is powerful — as Cassidy shared, it is far easier not to engage, to stay away, so that we do not offend, impose, or recolonize. But as Coral and Kenneth point out, while we will make mistakes, that is part of the learning. That counternarrative of willingness to engage in the work despite its messiness appeared across the interviews. Amanda perhaps captured it best when she was asked how she saw herself as a leader in Indigenous learning: "I'm a learner in Indigenous learning....I've chosen to go and try to build relationships with people...and so you're building relationships, and those relationships, we're hoping, are reciprocal in different ways."

Knowledge Production, Privilege and Solidarity (Mairi McDermott)

As a White woman, I represent most educators in North American schools — regardless of student demographics (Sleeter, 2001). During my time as an English language arts teacher in a disinvested Brooklyn high school populated by youth and families who identified as African American, Caribbean, and Latinx, I became acutely aware of the need for more substantive representation of equity-seeking peoples and knowledges. As an outsider, however, I often wondered about my relationship with nondominant and marginalized knowledges. Rather than shying away from engaging different knowledges that are geopolitically located because of dangers around cultural appropriation, I felt (and still feel) that I had an ethical responsibility to find a way to disrupt Eurocentric concepts of what counts as knowledge and where knowledge resides (see, for example, Dei & McDermott, 2019). These are some of the experiences that drew me into the present research on the ways that teachers with varied relationships to Indigenous knowledges integrate this knowledge into their practices. While we are at the early stages of institutionally mandated foci on Indigenous knowledges, I must admit that I am hopeful that we can move beyond integration and instead focus on disrupting, de-linking, and moving towards epistemic disobedience (Mignolo, 2002) as a way to re-organize and inscribe the possibilities for schools and society.

Much like many of the participants interviewed in this research, I waver between being hopeful about the willingness to name and mark coloniality through these government and institutional initiatives, and recognizing that the documents and policies themselves cannot do the work alone (Ahmed, 2012). Paula, who identifies as a non-Indigenous ally or co-conspirator shared this perspective: "I don't love that the move towards learning was, 'Oh, there's going to be some accountability in the teacher quality standards around First Nations, Métis, Inuit culture, so we better learn about it,' but whatever gets the ball rolling."

What resonated with me was that while she recognized the potential problem of what is propelling people's focus on engaging with Indigenous knowledges and ways of learning and being, strategically, we must take this moment to "get the ball rolling." Indeed, of the four participants who identified as Indigenous, three explicitly noted the importance of having the

policy make their lifeworlds, histories, and experiences legible, even as they were on their paths of learning and seeing themselves differently.

Honouring that everyone is on their own learning path resonated in several ways. Both the Indigenous and non-Indigenous educators agree that we each have a role to play. From one perspective, Laura, an Indigenous educator, actively invites people into the work by making explicit what stories can be told and, more so, that non-Indigenous folks need to tell certain stories:

When I tell you a story, I'm trusting you to keep it alive, and you have to care for this. Like, you have to walk around with the story in your hands from now on. [...] And so, oh. Oh. Like they see themselves as part of and that it's important that they carry it carefully with love and grace. And it doesn't mean that you get to go tell, you know, the stories you've heard from other people. I'm just telling you [that] you can tell this story.

Laura doesn't ask the non-Indigenous educator to sort through what stories they can tell on their own; instead, she guides and allows them to see what stories they must tell. However, this level of explicit boundary marking cannot be expected from every educator who identifies as Indigenous. That proposition is problematic, placing the burden of decolonizing on Indigenous peoples. As Laura says at another point in the interview and Jennifer Markides also amplifies in her reflection: "Just because you're Indigenous doesn't mean you need to do Indigenous work."

This seemingly mundane statement re-orients us to the Eurocentric view of knowledge as geopolitically situated. The only universal knowledge is Eurocentric, objective, scientific, verifiable, and so on. In contrast, Others have local knowledges, and membership in the cultural group means you can speak for the entire group.

Being in a position of privilege, both due to my institutionally backed title and as an educated White woman, I am reminded by Paula that I must stand beside so that I can know when, where, and how to interrupt. Freire (1970) reminds me that "true solidarity with the oppressed means fighting at their side to transform the objective reality which has made them these 'beings for another'" (p. 49). In her role as a non-Indigenous graduation coach, Paula lived this sense of solidarity. Importantly, she was recognized in the Indigenous community as an "ally" who can help to support the two worlds, Eurocentric and Indigenous, living together trans-systemically.

Yet, much of her discussion in the interview was around the struggles with getting other non-Indigenous colleagues on side, which she saw as part of her role as ally-bridge. This came with difficulties though, as she said: "And trying to negotiate how do you inform people of it and honour that it's new learning for some folks?" Her recognition that to function as an ally is exhausting, requiring the ability to "create that boundary for myself, to be able to say, like, I can help you unpack as far as I think you are able to in terms of your understanding and expectation of what my role is here," but this also perpetuated her privileged position.

Paula would find ways to bridge the two knowledge systems by making connections between them. She used her position to speak to a particular audience, to help them bridge and make connections. For example, she talks about the difference between

[the] brain science behind trauma-informed practice and adverse childhood experiences and trauma awareness, and then the circle of courage, and using that sort of notion of balance. And if I could bridge those two worlds of, like, neuroscience and then Indigenous ways of knowing and understanding — people got behind it.

Simultaneously, her privilege allowed her to step away when her well-being was affected, as reflected in her words: "And so I think of those that, like, don't get to step away, right."

This acknowledgement came with a stronger sense of responsibility because as she continued, she notes the ways in which who you are to your audience shapes the way your messages are interpreted: "So I say that knowing, like, I would like the messaging to be the same, but I also know that it can't be the same because of who is giving the message in front of class too."

Paul, a non-Indigenous educator, said that "what I learned was to question my own experience and my own perspective on things." Both Paul and Paula agreed on how important it was to resist the "expert" position hoisted upon images of the teacher (Britzman, 2003). Instead, they both worked to make themselves vulnerable as they shared their learnings, struggles, and mistakes. Many non-Indigenous educators saw their role as bridging and inviting others into the mess without the worry — of messing something up or saying something wrong — stopping them from trying. Often they saw their audience as other non-Indigenous educators, students, and community members, and a common approach was similar to Paula, above. She spoke the language she was familiar with, making connections to the Indigenous ways of knowing as an act of trans-systemic invitation.

Conclusion

As authors, researchers, and individuals, we each agree that everyone has a role to play in this trans-systemic work. We cannot ethically ask those oppressed, marginalized, and dehumanized in the ongoing colonial structures of Eurocentric-dominant culture to bear the burden of decolonization (Battiste, 2013a; Patel, 2016a). Furthermore, while social identity matters, we cannot assume that those who identify as Indigenous have decolonial mindsets because we have all been told the same social stories repeated through various institutions in society (Battiste, 2013a, 2013b; Shohat & Stam, 2009; Smith, 2012). We believe, along with many other key scholar-activists, that schools and research — even though steeped in colonialism — are necessary elements of the process of re-structuring their bases and promoting and educating broader societal changes (Battiste, 2013; Patel, 2016a; Smith, 2012). What we learned through the research, through listening to and with our research participants as they navigated the potential beyond-spaces opened in the historical moment of provincial educational policies, is how the trans-systemic requires multilayered approaches in various institutions (e.g., schools

and research). We are furthermore reminded — and rejuvenated — that the emphasis of reimagining the mess has inherent and valuable potential for transformative possibilities in the processes of learning and unlearning.

Leroy Little Bear (2000) explains ideological differences between Eurocentric and Indigenous worldviews, notably between stability and flux, respectively. In Western culture, stability is valued such that the education system seeks to maintain, repeat, and improve upon successful models and experiences (e.g., best practices). In contrast, many Indigenous groups see the world as existing in a perpetual state of flux, recognizing continuous renewal cycles as the norm. While contrasts endure in these perspectives and we don't suggest conflating the two worldviews, this inquiry's framework is driven by our desire to immerse ourselves in the messiness of learning to view, work, and live differently while creating a trans-systemic space in schools and research.

As such, we return to Elder Clarence's guidance that reminds us to crawl before we walk. We have each felt that, while it is important to incorporate Indigenous knowledges into our current educational practices for the benefit of all students, we must resist the temptation to run straight into best practices and checklists for already over-extended teachers and leaders in our schools. Our research participants echo these sentiments. Incorporating Indigenous knowledges into existing educational policy, teaching, and leadership will take time. We are all at different stages on our learning paths, some requiring removing significant debris leftover from the Eurocentric marinade in which we are all steeped. It is our hope, however, that our collective voice in part one and individual narratives of reflection and vulnerability in part two invite others to join in the promise of doing and being in more relationally just and trans-systemic ways through our teaching, research, and learning practices (Donald, 2009; Ricoeur, 1990).

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References

- Abram, D. (1996). The spell of the sensuous: Perception and language in a more-than-human world. Pantheon Books.
- Ahmed, S. (2012). On being included: Racism and diversity in institutional life. Duke University Press.
- Alberta Education (2018). First Nations, Metis and Inuit Education: Education for reconciliation.

 Retrieved from https://education.alberta.ca/first-nations-métis-and-inuit-education/education-for-reconciliation/everyone/overview/
- Alberta Education (2019a). Leadership Quality Standard. Retrieved from https://education.alberta.ca/media/3739621/standardsdoc-lqs-_fa-web-2018-01-17.pdf
- Alberta Education. (2019b). Teaching Quality Standard. Retrieved from https://education.alberta.ca/media/3739620/standardsdoc-tqs-_fa-web-2018-01-17.pdf
- Archibald, J.-A. (2008). Indigenous storywork: Educating the heart, mind, body and spirit. UBC Press.
- Battiste, M. (2013a). Decolonizing education: Nurturing the learning spirit. UBC Press.
- Battiste, M. (2013b). You can't be the doctor if you're the disease: Eurocentrism and Indigenous renaissance. *CAUT Distinguished Academic Lecture*, April 26, 2013.
- Britzman, D. P. (2003). *Practice makes practice: A critical study of learning to teach* (revised). SUNY Press.
- Caruthers, L. E. (2007). The soil of silence: Deconstructing socio-cultural and historical processes that have influenced schooling for First Nations people and African Americans. *American Educational History Journal*, 34(2), 303-313.
- Dei, G. J. S., & McDermott, M. (Eds.) (2019). Centering African proverbs, Indigenous folktales, and cultural stories in curriculum: Units and lesson plans for inclusive education. Canadian Scholars Press.
- Donald, D. (2009). Forts, curriculum, and Indigenous métissage: Imagining decolonization of Aboriginal-Canadian relations in educational contexts. *First Nations Perspectives*, 2(1), 1-24.

- Donald, D., Glanfield, F., & Sterenberg, G. (2012). Living ethically within conflicts of colonial authority and relationality. *Journal of the Canadian Association for Curriculum Studies*, 10(1), 53-76.
- Four Arrows (Wahinkpe Topa), aka Jacobs, D. T. (2008). *The authentic dissertation: Alternative ways of knowing, research, and representation.* Routledge.
- Freire, P. (1970). Pedagogy of the oppressed. Continuum Publishing Corporation.
- Government of Canada. (2020). Indian Act (RSC, 1985, c. I-5). Retrieved from https://laws-lois.justice.gc.ca/eng/acts/I-5/
- Graveline, F. J. (2000). Circle as methodology: Enacting an Aboriginal paradigm. *International Journal of Qualitative Studies in Education*, 13(4), 361-370.
- hooks, b. (1994). Teaching to transgress: Education as the practice of freedom. Routledge.
- Kapyrka, J. & Dockstator, M. (2012). Indigenous knowledges and western knowledges in environmental education: Acknowledging the tensions for the benefits of a "two-worlds" approach. *Canadian Journal of Environmental Education*, 17, 97-112.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts.* University of Toronto.
- Little Bear, L. (2000). Jagged worldviews colliding. In M. Battiste (Ed.), *Reclaiming Indigenous voice and vision* (pp. 77-85). UBC Press.
- MacDonald, J. & Markides, J. (2018). Called to action: Dialogue around praxis for reconciliation. In L. Daniels, S. Deer, D. Donald, B. Low, and D. Wiseman (Eds.). Taking up the Calls to Action of the TRC in Teacher Education [Special Issue]. *McGill Journal of Education*, 53(2), 213-232.
- MacDonald, J., & Markides, J. (2019). Duoethnography for reconciliation: Learning through conversations. *Alberta Journal of Educational Research*, 65(2), 1-16.
- Mann, B. A. (2003). Native Americans, archaeologists, and the mounds. Peter Lang.
- McDermott, M. (2020). On what autoethnography did in a study on student voice pedagogies: A mapping of returns. *The Qualitative Report*, 25(2), 347-358. Retrieved from https://nsuworks.nova.edu/tqr/vol25/iss2/5
- Mignolo, W. (2002). The geopolitics of knowledge and the colonial difference. *The South Atlantic Quarterly*, 101(1), 57-96.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- Patel, L (2016a). Decolonizing educational research: From ownership to answerability. Routledge.
- Patel, L. (2016b). Pedagogies of resistance and survivance: Learning as marronage. *Equity & Excellence in Education*, 49(4), 397-401.
- Regan, P. (2010). Unsettling the settler within: Indian residential schools, truth telling, and reconciliation in Canada. UBC Press.
- Ricoeur, (1990). Oneself as another (K. Blamey, Trans.). University of Chicago Press.
- Sandoval, C. (2000). Methodology of the oppressed. University of Minnesota Press.
- Sensoy, O. & DiAngelo, R. (2012). *Is everyone really equal? An introduction to key concepts in social justice education*. Teachers College Press.
- Sheridan, J. & Longboat, D. R. "He Clears the Sky" (2006). The Haudenosaunee imagination and the ecology of the sacred. *Space and Culture*, 9(4), 365-381.

- Shohat, E. & Stam, R. (2009). What is Eurocentrism? In A. H. Itwaru (ed.) *The white supremacist state: Eurocentrism, imperialism, colonialism, racism,* (pp. 137-156). The Other Eye.
- Sleeter, C. E. (2001). Preparing teachers for culturally diverse schools: Research and the overwhelming presence of Whiteness. *Journal of Teacher Education*, 52(2), 94-106.
- Smith, L. T. (2012). Decolonizing methodologies: Research and Indigenous peoples (2nd ed.). Zed Books.
- St. Denis, V. (2007). Aboriginal education and anti-racist education: Building alliances across cultural and racial identity. *Canadian Journal of Education*, 30(4), 1068-1092.
- Truth and Reconciliation Commission of Canada. (2015). Truth and reconciliation commission of Canada: Calls to action. Winnipeg: Truth and Reconciliation Commission of Canada. Retrieved from http://trc.ca/assets/pdf/Calls_to_Action_English2.pdf
- United Nations General Assembly. (2019). Adequate housing as a component of the right to an adequate standard of living, and the right to non-discrimination in this context (A/74/183). Retrieved from https://www.undocs.org/A/74/183
- wa Thiong'o, N. (1986). *Decolonizing the mind: The politics of language in African literature.*James Currey.
- Wagamese, R. (2016). Embers: One Ojibway's meditations. Douglas & McIntyre.
- Wynter, S. (2003). Unsettling the coloniality of being/power/truth/freedom: Towards the human, after man, its overrepresentation An argument. *The New Centennial Review*, 3(3), 257-37.

Beyond the "Indigenizing the Academy" Trend: Learning from Indigenous Higher Education Land-Based and Intercultural Pedagogies to Build Trans-Systemic Education

Marie-Eve Drouin-Gagné

Given the UNDRIP's assertion of Indigenous Peoples' rights to their education and knowledge systems, and in the wake of the Truth and Reconciliation Commission of Canada's calls to action, many Canadian Universities are considering "Indigenizing the Academy." Yet, the meaning of such undertaking remains to be clarified. This article explores trans-systemic approaches as a possible avenue for "Indigenizing the Academy," and, more specifically, what Indigenous higher education programs and institutions can contribute to a trans-systemic approach to education. Considering two existing models I encountered in my doctoral research, namely the Intercultural approach as developed in the Andes (García et al., 2004; Mato, 2009; Sarango, 2009; Walsh, 2012), and land-based pedagogy as developed in North America (Coulthard, 2017; Coulthard & Simpson, 2016; Tuck et al., 2014; Wildcat et al., 2014), I argue they present trans-systemic elements that would allow us to re-think the frameworks in which to engage with Indigenous Peoples' rights and knowledge systems in the mainstream academy. What could be learned from the principles and practices of these two Indigenous higher education philosophies to articulate Indigenous knowledge into transsystemic education in the mainstream academy in ways that foster solidarity and mutual understanding between Indigenous and non-Indigenous people?

KeyWords Indigenous higher education, trans-systemic education, intercultural education, land-based pedagogy, decolonization

Positioning Myself

I approach the theme of this issue of *Engaged Scholar Journal* on Indigenous and trans-systemic knowledge systems from a specific standpoint that seems important to unfold before I get to my argument. Born and raised in Montreal, the descendant of a Franco-Québécois family, my education left out a piece of my identity and my place in the world, which I ignored for most of my life: the fact that I am a settler on unceded Indigenous territory, and that I am a result and an actor of the colonial and globalizing processes of this world, right here in my "hometown." It took me several years living abroad in South America and meeting faculty members of an Indigenous University in Ecuador to begin questioning my position and history as a member of a settler society.

Given the ignorance which I constructed and consolidated throughout my years of education, I decided to center my doctoral research on Indigenous higher education. I quickly

realized that the personal ignorance I experienced in my education is part of a bigger problem, the academy's epistemic ignorance, which is a result of colonial processes and the ensuing socio-cultural hierarchies (Kuokkanen, 2007). Working with Indigenous higher education institutions and programs in the US and Ecuador, in the academic context of "Indigenizing the Academy" and in the national context of "reconciliation," I argued throughout my dissertation that mainstream universities could learn lessons from existing approaches in Indigenous higher education programs and institutions. At Concordia University, I became involved with the Indigenous Direction Leadership Group, which brought important changes in our institutions to decolonize and Indigenize it.

It is based on these experiences that I now contemplate trans-systemic knowledge systems as transformative avenues for the academy. I sincerely hope to contribute to better education for future generations in trans-systemic frameworks that will engage with Indigenous Peoples' complex knowledge systems and the full realization of Indigenous Peoples' rights. However, some obstacles remain in our national and institutional frameworks to attain such a goal. This article addresses some of these obstacles and considers how trans-systemic education inspired by Indigenous higher education could bring some solutions to overcome them. As a settler and a scholar, I do not pretend to bring Indigenous knowledges in the academy. I instead situate myself in a critique of mainstream academy based on what I have learned from Indigenous higher education.

What Framework for Indigenous Rights and Knowledges in the Academy?

In 2015 after the Truth and Reconciliation Commission (TRC) issued its reports, it remains to be seen how its 94 calls to action will be fully implemented throughout Canada. In its calls to action, the TRC refers to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), calling upon all levels of government to implement said declaration "as the framework for reconciliation" (TRC, 2015, Call to action #43). It also calls upon "the Government of Canada to develop a national action plan, strategies, and other concrete measures to achieve the goals of the *United Nations Declaration on the Rights of Indigenous Peoples*" (TRC, 2015, Call to action #44). In December 2020, the Government of Canada put forward Bill C-15, which "provides that the Government of Canada must take all measures necessary to ensure that the laws of Canada are consistent with the United Nations Declaration on the Rights of Indigenous Peoples, and must prepare and implement an action plan to achieve the objectives of the Declaration" (House of Commons of Canada, 2020).¹ While this allows for UNDRIP to become a new legal instrument in Canadian courts, many questions remain as to how the implementation of this international declaration into domestic laws will play out, as

¹ In 2016, Roméo Saganash, a Cree Member of Parliament, introduced Bill C-262, a private members bill aiming at ensuring that the laws of Canada are in harmony with the UNDRIP. This was Saganash's second attempt since 2013 to have Canadas's laws aligned with this international declaration. However, the bill was stalled in the senate until the dissolution of the parliament in 2019. The liberals then promised during their campaign to submit a bill to adopt the UNDRIP nationally, which they fulfilled in December 2020. It is also to be noted that the Government of British Columbia had already passed Bill 41 that puts UNDRIP into action by provincial legislation.

it still has to be interpreted in the framework of the Canadian constitution, including section 35(1) and 35(2) regarding Aboriginal rights.² It is to be noted that, while the UNDRIP affirms Indigenous Peoples' right to self-determination, the multiple rights that it recognized are still presented in a nation-state framework, where the state is responsible for the implementation of such rights.³ In this context, while the realization of Indigenous Peoples' rights seems to rely on nation-states transforming their relationships with Indigenous Peoples, one can wonder how settler states such as Canada can become agents of decolonization, without questioning their own structures, laws, jurisdictions, and, more importantly, the histories, traditions, and overall modes of thinking that support them. In other words, if Indigenous Peoples' rights to education and to their own systems of knowledge are to be implemented in a nation-state framework, then the coloniality of this framework needs to be questioned, in relation to Indigenous Nations' own framework.

In terms of education, as the TRC Calls to action are meant to redress the legacy of residential schools, they also include many recommendations regarding education, both in terms of addressing the educational inequities between Indigenous and non-Indigenous people through adequate support for Indigenous education (Calls to action #6-12), and in terms of establishing a system of "education for reconciliation" that would aim at teaching about colonial realities and including Indigenous knowledges in education at all levels (Calls to action #62-65). Both the implementation of the UNDRIP, which contains rights to education and traditional knowledges, and the call for an "education for reconciliation" require changes in our educational systems. However, the question remains as to what framework(s) will allow these changes to occur.

Implementing the UNDRIP nationally implies changes in our educational systems in terms of the right of Indigenous Peoples to self-determination in establishing and controlling their educational systems and institutions (UNDRIP, 2007, art. 14), but also in terms of the right for Indigenous Peoples to have their diverse "cultures, traditions, histories and aspirations [...] appropriately reflected in education and public information" (UNDRIP, 2007, art. 15). Additionally, article 31 of the UNDRIP states the right of Indigenous Peoples to maintain, control, protect and develop their knowledge systems, including their sciences, which arguably could be done through education. This, nevertheless, would challenge the continuous colonial knowledge hierarchies that installed a "Western privilege" (Kuokkanen, 2007) or "white privilege" or a "settler privilege" (Irlbacher-Fox, 2014) in educational institutions of the Americas.

² See, for example, Russ Diabo's critique of Bill C-15 on December 21, 2020: https://www.aptnnews.ca/national-news/undrip-bill-c-15-federal-government-soverignty-russ-diabo/

³ For example, Article 38 of the UNDRIP mentions that "States in consultation and cooperation with Indigenous peoples, shall take the appropriate measures, including legislative measures, to achieve the ends of this Declaration". In fact, many articles of the UNDRIP are structured around (1) the affirmation of Indigenous rights, followed by (2) the call for States to implement them ("States shall in [consultation, cooperation, conjunction, etc.] with Indigenous Peoples take measures to..."). Additionally, article 46 of the declaration reaffirm the territorial integrity and the sovereignty of nation-states, in which framework the rights of Indigenous Peoples are to be realized.

Indeed, Battiste (2013) argues that while it might no longer be acceptable for educational institutions to discriminate against Indigenous Peoples based on their skin colour or "race," their intellectual traditions continue to be rejected, based on colonial cultural hierarchies. Battiste articulates how this rejection becomes institutionalized in the academy, mainly through curricular selection and exclusion:

Selecting curricular knowledge requires that decisions made include the overriding issues of power, status, and legitimation, as well as racism, hierarchy, and normativity. These decisions entail questions about whose knowledge is included, whose languages are considered legitimate vehicles for carrying the knowledge, who are the people who make these decisions, how will their choice be made, and what governs those choices? (Battiste, 2013, p. 105)

Accordingly, colonial legacies in the academy entail institutionalizing hierarchies of knowledge and what Battiste has called "cognitive imperialism" (Battiste, 2005). Engaging with Indigenous knowledge and education as fundamental rights to be implemented and protected in educational institutions implies addressing these knowledge hierarchies.

Following the TRC report, many Canadian universities jumped on the "Indigenizing the academy" wagon (Compton, 2016; "Indigenizing the academy: the way forward," 2016; MacDonald, 2016) or at least formed committees and task forces to address "reconciliation" in their institutions (see, for example, Concordia University, 2019; McGill University, 2017; Queen's University, 2016; Stewart, 2016). Institutionally, the renewed interest in "Indigenizing the Academy," which has become almost synonymous with efforts to enact reconciliation in the academy, raises the question of the framework in which "Indigenizing" happens. "Decolonizing" and "Indigenizing" the academy are becoming common expressions, almost trendy, in the past couple of years, but their meaning remains hard to pin down.

For example, Newhouse (2016) mentions that the cultural representation of Indigenous Peoples in the academy is not enough, and the real Indigenization of universities needs to address the labour happening in the academy, which is "about knowledge and its production and transmission from one generation to another" (p. A2). The goal should thus be for Indigenous knowledges to affect and transform research and teaching that happens across all disciplines in universities. Similarly, Kuokkanen (2007) suggests that the academy needs to shift its mindset towards a "logic of the gift" and hospitality regarding Indigenous epistemes. In other words, Indigenizing the academy means "reclaiming and validating indigenous epistemologies, methodologies, and research questions" (Kuokkanen, 2007, p. 143). This task, as many Indigenous scholars have argued over the years (Alfred, 1999, 2008; Battiste & Henderson, 2000; Kuokkanen, 2007; Mihesuah & Wilson, 2004), cannot remain the burden of Indigenous Peoples. The mainstream academy must address the limits of its Eurocentric

⁴ Cognitive imperialism is a form of manipulation used in Eurocentric educational systems. Built on damaging assumptions and imperialist knowledge, educational curricula and pedagogy are built on a monocultural foundation of knowledge, and privileges it through public education (Battiste, 1986).

teaching and research activities and find frameworks to engage with Indigenous knowledge and legal systems respectfully.

However, if educational institutions have been and continue to be one of the main tools for colonization and assimilation (Battiste, 2013; Child & Klopotek, 2014; Grande, 2004; Lomawaima & McCarty, 2006), how can they become tools of Indigenization? If there is a tradition of Eurocentric intellectual privileges, of "white supremacy of intellectual conventions" (Kuokkanen, 2007, p. 65) and cognitive racism (Battiste, 2013) engrained in our institutions, a profound questioning of mainstream academic frameworks will be needed for any meaningful Indigenization to happen.

In the current state of the academy, Indigenous knowledges, when considered, tend to be included as content within a Western scientific framework (Bala & Gheverghese Joseph, 2007), mostly as objects of study. The extraction of information and intellectual labours is still taking place in research projects that systematically study Indigenous Peoples and analyze them based on the researcher's worldviews, theories and understandings (Smith, 1999, 2012). Bala and Gheverghese (2007) warn against this type of "one-sided attempt to exploit traditional knowledge to advance science, by using traditional techniques and data to further articulate modern scientific theoretical and methodological programs" (p. 54). They mention that Indigenous knowledges are not only a set of practices and body of information, but also imply theoretical frameworks and methods that ought to be considered if Western sciences are to establish real, equitable, dialogues with other sciences.

To sum up, real tensions exist between the aspirations of the UNDRIP and the TRC — including the "Indigenizing the academy" trend that ensued it — and the frameworks in which these aspirations are to be realized. This article aims to consider trans-systemic approaches to resolve these tensions. Furthermore, I suggest that Indigenous higher education (IHE) already points to trans-systemic models, from which mainstream universities could learn to engage with Indigenous Peoples' knowledge systems and educational rights. My aim is not to appropriate IHE practices and information but to consider two IHE models' theoretical frameworks as transformative perspectives for the mainstream academy.

Trans-systemic Approaches as Possible Educational Frameworks

In 1999, McGill's Faculty of Law implemented its "Transsystemic legal education" program (McGill University, 2020), which aimed at combining the teaching of common law and civic law for a broader understanding of these systems that co-exist in Québec, and an even more expansive understanding of legal orders in a global perspective. As articulated by Rosalie Jukier (2005) one of the Faculty members, "transsystemia focuses on the fundamental structures, ideas, values, techniques, and processes of law, rather than the laws or legal rules of a single jurisdiction" (p. 792). In other words, a trans-systemic approach unveils the frameworks in which diverse legal orders emerge, rather than focussing on the content of specific laws.

In doing so, Jukier (2005) argues, the program engages its students in a dialogue with "systems that have distinct historical developments and distinct modes of organization and that evidence other ways of structuring and thinking" (p. 792). Addressing the "fallacious

notion that there is one structure of reality" (Jukier, 2005, p. 795), a trans-systemic approach therefore opens the door for deeper dialogues between different modes of thinking, or different knowledge systems, rather than enclosing the content of other knowledge systems into one's own. This is also a powerful way of unsettling existing hierarchies, as it leads to questioning one's own system:

Understanding the differences in another mode of thinking (in this case, another legal tradition) causes one to question the approach in one's own mode of thinking (or legal tradition), which ultimately invites opportunity for greater insight and more sophisticated contemplation of both. (Jukier, 2018, p. 11)

Hence, a trans-systemic approach in education could create an adequate framework to engage with Indigenous knowledge systems and educational rights.

The University of Victoria took an affirmative step in that direction with the implementation, in September 2018, of a joint degree program in Canadian Common Law and Indigenous Legal Orders. In this program, the trans-systemic approach in law now includes Indigenous legal orders in Canada. As Alan Hanna, a member of the Faculty writes:

Reconciliation with First Nations requires a sea change in the Canadian legal system and in peoples' minds to think and act in new ways that involve respect, reciprocity, humility, and equality. Engaging with Indigenous legal traditions after Indigenous people have been engaging with state law since the beginning of the colonial encounter is an act of reciprocity, which signals a sincere interest in recognizing difference and reconciling relationships. (Hanna, 2019, p. 839)

Arguably, a trans-systemic approach in legal education allows for this type of reconciliation and unsettling of hierarchies to be implemented. Hence, Hadley Friedland at the University of Alberta's Faculty of Law contends that the trans-systemic approach, as developed at McGill, "offers one way of thinking through how Indigenous laws can be taught and learned within law schools" (Friedland, 2018, p. 270).

Moreover, Friedland reminds us that Indigenous Peoples throughout Canada are much more used to trans-systemic systems than the rest of Canadians, as they have had to navigate more than one system at the time (Friedland, 2018, p. 279). She points at the lack of necessity, until now, for settler population to engage in these trans-systemic processes, as Indigenous Peoples' laws (and knowledge systems) have been erased or invisibilized in our education. However, this means that Canadians and mainstream universities can learn from Indigenous Peoples' ways of navigating multiple systems, or, in other words, from their trans-systemic approaches.

I am interested in taking this argument for trans-systemic teaching in law schools, based on Indigenous Peoples' trans-systemic experiences and expertise, and apply it to higher education and Indigenous knowledge systems in general. Based on my Ph.D. research on Indigenous higher education as a tool for decolonization (Drouin-Gagné, 2019), I am convinced that

if we are to engage with Indigenous rights to their knowledge systems and education, and if we intend to "Indigenize the Academy," then we need to pay attention to the work done in the past 50+ years by Indigenous educators, scholars, and institutions of higher education. Just as Indigenous Peoples and scholars in Indigenous laws have a better understanding of trans-systemic approaches to law, so do Indigenous educators and scholars regarding trans-systemic approach to knowledge and education. And while many models have been developed in IHE in the past decades, I would argue they all imply trans-systemic elements that would allow us re-thinking the frameworks in which to engage with Indigenous Peoples' rights and knowledge systems in the mainstream academy. The next section presents two existing models I encountered in my research — the Intercultural approach as developed in the Andes and land-based pedagogy as developed in North America — and how they both contribute to a decolonial trans-systemic approach to education.

Indigenous Models of Trans-systemic Education

Since the beginning of the twentieth century, the efforts of Indigenous Peoples to establish control over their own education systems have been part of ongoing struggles to ascertain social and political sovereignty (Alfred & Corntassel, 2005; Battiste, 2000; Brayboy, 2005). It is for this reason that Indigenous higher education (IHE) has developed in the last 60 years or so (Barnhardt, 1991; Battiste & Youngblood Henderson, 2000; Wilson, 2008) across the Americas as an essential tool for national and international processes of decolonization (Beck, 1999; García et al., 2004; Juneau, 2001; Stonechild, 2006; Szasz, 1974, 1977, 1999). Depending on the local, regional and national contexts, IHE encompasses many models (e.g., storytelling, community-based pedagogy, place/land-based pedagogy, intercultural pedagogy), which cannot all be explored in this paper. To give an idea of how IHE can contribute to the development of trans-systemic educational approaches, I consider here two models developed in two different contexts: the Andean intercultural approach as developed by the Indigenous, intercultural and communal university Amawtay Wasi in Ecuador, and the North American land-based pedagogy approach, which was developed in many institutions and programs, but I am considering more closely the Dechinta Center for Research and Learning (Coulthard & Simpson, 2016).

Interculturality (Andes)

In the Andes, since the 1930s (Bolivia) and 1940s (Ecuador), Indigenous movements continuously worked toward developing a bilingual education that would be intercultural,⁵ with the explicit aim of maintaining Indigenous languages and cultures alive. In 1982, the Ecuadorian government officially established intercultural, bilingual education, at least in

⁵ Intercultural and Interculturalidad (in Spanish) has often been translated in English with cross-cultural (see, for example, De La Cadena, 2006), rather than intercultural. However, interculturalidad as described and put forward by the Amawtay Wasi includes a deep respect, understanding and conversation between different cultures — intercultural — rather than a comparison, acknowledgement of cultures and their differences — cross-cultural.

regions where Indigenous Peoples were the majority.⁶ In 1988, two years after the creation of the national Indigenous organization — the Confederation of Indigenous Nationalities of Ecuador (CONAIE) — the government agreed in establishing the National Intercultural Bilingual Education Department - (García et al., 2004). The efforts for a control over intercultural and bilingual education were paired with activism for the redefinition of the nation-state into a plurinational state, that would recognize the specificity of Indigenous nations and the sovereignty of Indigenous communities. In Ecuador and Bolivia's case, Indigenous mobilization eventually led to Constitutional Assemblies, which redefined the countries as plurinational states in the 2000s. In both countries, these processes also involved the development of Indigenous higher education since the 1990s.

The Indigenous, Intercultural and Communal University Amawtay Wasi was established in Ecuador in 2004.⁷ The Amawtay Wasi's project, as articulated in its foundational document (García et al., 2004), can be summarized in the following way: having a higher education that would (1) be rooted in an intercultural and plurinational philosophy; that would (2) build positive relationships with Indigenous communities; and (3) would work with their Indigenous knowledges while engaging in scientific dialogues. Accordingly, the Amawtay Wasi's philosophy includes an epistemological and political decolonial project relying on two main aspects: the intercultural paradigm on which it relies for knowledge building and transmission; and the political goal of Indigneous communities' Good Life in an intercultural perspective (García et al., 2004, p. 284). "Good life" refers to the support of the multiple life projects of the different nations composing the Ecuadorian State, including Indigenous Nations.

Interculturality as a Dialogical Approach

In the Amawtay Wasi's philosophy, the intercultural paradigm includes the recognition of worldviews, myths, and axioms as the context in which knowledges are developed in diverse communities. In this intercultural view, any way of producing, organizing and transmitting knowledge will imply a specific relationship to traditions, ancestral philosophies, symbols and myths that organize the scientific logic (García et al., 2004).8 This context does not invalidate knowledge as pseudo-scientific, but rather, it is a first step in understanding the differences between knowledge systems to establish a conversation between them. Thus, as part of the decolonial project of the Amawtay Wasi is an epistemological undertaking that reasserts the validity of Indigenous knowledges as theoretical frameworks, and which fosters conversations between Indigenous and non-Indigenous knowledges, intending to decolonize science and the knowledge hierarchy it implies.

⁶ From the state perspective, intercultural policies served, and continue serving, integration of Indigenous Peoples. In other words, "special" programs of Intercultural and bilingual education are created for Indigenous Peoples based on the assumption that Indigenous students should become bilingual and intercultural, whereas non-Indigenous students could maintain their monolingual/monocultural education (Walsh, 2012, p. 157).

⁷ For further information on the complex, on-going history of the Amawtay Wasi, see Vargas Moreno (2014) and Drouin-Gagné (2016, 2019).

⁸ This is a common perspective in Indigenous relational epistemologies (Meyer, 2001; S. Wilson, 2008).

Accordingly, part of Amawtay Wasi's epistemological project implies that knowledge building should integrate various cultural perspectives to achieve a broader understanding of the complexity of the world. This is achieved in class by presenting informative modules about Western perspectives on a certain subject and informative modules about Indigenous perspectives on the same subject. Students also learn through practical projects in which they are asked to integrate both perspectives. Indigenous communities' members participate in the process as knowledge keepers with whom students interact. Therefore, oral and experiential Indigenous knowledges are part of the curriculum as valid sources of knowledge. To achieve such a pedagogical model, the University is established in the communities, with teaching centers in La Esperanza, Saraguro, and Macas, and in Quito, where the administrative center of the university is also situated.

Interculturality and Indigenous Rights

Indigenous communities' life projects are at the center of the Amawtay Wasi's educational model, through the disciplines taught: intercultural pedagogy to educate Indigenous youth, agroecology sustaining food sovereignty and respecting the ecology in the communities, ancestral architecture reflecting the ecological and cultural context of Indigenous communities, and communication fostering Indigenous communities' self-determination. Thus, the Amawtay Wasi's model includes the importance of serving communities through the university. This community engagement serves the political decolonial project of a plurinational state, shifting the focus from a nation-state framework in terms of Indigenous rights, to a framework where communities are at the center, defining their needs and projects.

In terms of educational rights, the Amawtay Wasi was established by the Ecuador's national Indigenous organization (CONAIE) to respond to the need for Indigenous post-secondary education representing the 14 Indigenous nations' knowledge systems in an intercultural perspective (Sarango, 2009). De la Cadena (2006) presents the work of the Amawtay Wasi as the materialization of the effort to restructure the old state, questioning the liberal consensus that sustains it, as well as its colonial hierarchies. More specifically, De la Cadena argues that the Amawtay Wasi represents the most ambitious version of interculturality since it both questions the knowledge structure and institutions of the liberal consensus and contributes to the rewriting of national history (De La Cadena, 2006). Accordingly, the Amawtay Wasi played an important role in the official articulation of Indigenous practices and philosophies that support Indigenous movements' struggles in Ecuador for a reform of the state (plurinational state) and the economy (around the principle of *Sumak Kawsay* – or the Good Life). Consequently, Amawtay Wasi is developing a higher education that challenges Ecuadorian society, politics, and economy, based on inter-epistemic conversation and a critical interculturality (Walsh, 2011) which aim at transforming the society and the state based on Indigenous knowledges, concepts, and practices.

Interculturality and Indigenous Knowledges

The intercultural model developed by the Amawtay Wasi reframes Indigenous knowledges and their place in the academy by challenging the hierarchy between university and community knowledges. Amawtay Wasi's philosophy emphasizes a construction of knowledge in a reciprocal relation with communities: communities are the subject and not object of knowledge — they contribute to its production — and the knowledge and activities of the university are meant to serve the communities. Concretely, the Amawtay Wasi articulates a knowledge creation process through four areas: informative modules, preparation to investigation, undertaking (practice) and conversations. While all the areas relate to the communities in different ways, the conversation part explicitly implies that students would enter in conversation with people in the communities, who are considered experts in their field, to learn from them and have a conversation about whatever subject or field they are studying. Thus, students undertake concrete projects informed both by the informative modules taught in class and by the knowledge of the community members they meet in the practical and conversational modules.

Hence, teaching, which implies researching, involves service of the community to the university. In return, as knowledges come from the community, and as students then put these in dialogue with Western knowledges in their own practical projects, at the end of the process, it is also important to return the outcomes to the communities. This is usually done with a "harvesting feast" through which the students present their projects to each other, to their professors, but also to community members who are invited. This is a time to give back and also to receive feedback from community members. Students' projects aim at producing knowledge that would serve the community, rather than the sole purpose of knowledge in and of itself or the academic purposes.

Interculturality as a Decolonizing Trans-systemic Approach

The Amawtay Wasi's unique epistemological project of a "scientific dialogue" between Indigenous and Western knowledges aims at decolonizing science and its knowledge hierarchy, through a curriculum and a methodology inspired by Andean worldview and symbolism, which support recuperation and revalorization of Indigenous and community-based knowledges (García et al., 2004). In its intercultural approach, the Amawtay Wasi presents Indigenous and Western knowledges as built on the worldviews, symbols, myths, axioms, and histories of their respective communities, rather than one being scientific and the other being traditional. This "critical interculturality" (Walsh, 2012) is therefore linked to a decolonial praxis that questions power and racialization implied in the construction of the cultural difference (Walsh, 2012, p. 171). In this perspective, Western and Indigenous knowledges are complementary alternatives that can relate in productive dialogues. The Amawtay Wasi's critical interculturality (Walsh, 2012) therefore offers a trans-systemic framework of knowledge building and transmission, in which a multicultural recognition of scientific knowledge systems and cross-cultural exchanges between them can be both creative and helpful in the advancement of our understanding of the world and its complexity (García et al., 2004; Walsh, 2012).

This trans-systemic framework takes a distance from institutional and nation-state frameworks by putting the community at the center of their knowledge practices in different ways: first, by answering needs expressed or identified in the communities, and in some cases, in the Indigenous movement or organizations; and second, by considering the community as an integral part of the knowledge-building process. The community is not only an object of knowledge — or an object of study — but it is also the subject expressing knowledge and teaching it to the students, as well as participating in the assessment of the students' projects. Finally, the community is envisioned as being at the receptive end of the knowledge practice: the knowledge produced is shared through harvesting feast to give back the time and efforts invested by community members, Elders, and leaders. This directly challenges the power dynamics that exist between communities and the national academy. While Indigenous communities are at the center of the Amawtay Wasi, the intercultural approach developed here aims at changing and eventually decolonizing both academic knowledge and the Ecuadorian society generally. It forces a reframing of what we consider as valid knowledge in the academy and a reframing of Ecuadorian political and economic projects concerning Indigenous communities' knowledges and experiences.

Land-Based Pedagogy (North America)

In North America, many Indigenous authors recognize land as the source of knowledge for Indigenous nations, both traditionally and contemporary (Kermoal & Altamirano-Jiménez, 2016; Simpson, 2011,2017; Wildcat et al., 2014). Accordingly, and in response to a colonial educational system that has ignored, and even tried to destroy, Indigenous histories and knowledges, land-based pedagogy has emerged in Indigenous higher education systems, since at least the 2000s. Aiming at re-establishing the relationships between Indigenous Peoples and their territories, this pedagogy is part of the movement of Indigenous knowledges resurgence (Borrows, 2016a; Coulthard, 2017; Coulthard & Simpson, 2016; Simpson, 2014; Wildcat et al., 2014).

Examples of this pedagogy include the University of Saskatchewan, where a master's program in education with a land-based focus has been offered since 2011. Inspired by Peggy and Stan Wilson and developed by their daughter Alex Wilson, the program alternates between online courses and 2-week intensive courses in Indigenous territories. The University of Victoria and the University of British Columbia have also developed Indigenous law courses based in territory (Borrows, 2016a). Following these experiences, the University of Victoria launched, in 2018, an Indigenous law program directed by Anishinaabe law professor John Borrows. Dr. Borrows has also been participating in Anishinaabe Law Camp, taking place every year in Anishinaabe territory. Law students and professors learn about Anishinaabe juridical principles with community knowledge holders and Indigenous law professors. Another emblematic initiative of land-based pedagogy is the Dechinta Center for Research and Learning, about which both Leanne Simpson and Glenn Coulthard have written extensively.

Dechinta is situated in the Northwest Territories. It offers training credited by the University of Alberta in collaboration with the University of British Columbia and the Dene First Nation

of Yellowknife and Indigenous experts of that territory. The curriculum includes issues of colonization, decolonization, Indigenous laws and languages, and sustainable community building. As a unique model, Dechinta is not necessarily exportable everywhere, but the principles that it embodies are. As a resurgence project, it offers an interesting possibility when it comes to thinking about trans-systemic approaches through land as an alternative framework to those of nation-state and academic institutions.

Land-based Pedagogy as Resurgence

While the Amawtay Wasi's interculturality emphasizes a dialogical approach, the land-based program at Dechinta instead focuses on Indigenous resurgence. Indigenous resurgence is fundamentally about the renewal and restoration of the relationships (material, ontological, and epistemological) of Indigenous Peoples with their lands, as well as the knowledges and responsibilities that are embedded in these relationships (Corntassel, 2012; Simpson, 2008). Coulthard and Simpson (2016) express the central role of land relationship in resurgence, saying that:

Indigenous resistance and resurgence in response to the dispossession forces of settler colonization, in both historical and current manifestations, employ measures and tactics designed to protect Indigenous territories and to reconnect Indigenous bodies to land through the practices and forms of knowledge that these practices continuously regenerate. (p. 154)

Accordingly, land-based pedagogy is fundamental to resurgence (Alfred & Corntassel, 2005; Corntassel, 2012; Coulthard & Simpson, 2016; Simpson, 2008, 2014; Wildcat et al., 2014).

Furthermore, resurgence reframes Indigenous knowledges and life projects away from nation-state and institutional frameworks. According to Corntassel (2012), Alfred & Corntassel (2005) and Coulthard (2014), decentering Indigenous actions from the nation-state conceptions is an important dimension of resurgence. For example, this includes moving away from the rights-based discourse (legality), which creates an illusion of inclusion, to instead focus on Indigenous responsibilities to their relations, including with land (Corntassel, 2012). Hence, by centring on relations to land, resurgence offers a new way to engage with Indigenous rights and knowledges. Academically, this means to move "from talk[ing] about the land within conventional classroom settings, to studying instances where we engage in conversations with the land and on the land in a physical, social and spiritual sense" (Wildcat et al., 2014, p. II).

Land-based Pedagogy and Indigenous Rights

At the core of land-based pedagogy as resurgence lies a reframing of Indigenous rights in terms of the relationships to land. Many Indigenous scholars highlight how Indigenous juridical, political and ethical systems emerge from the relationship each nation establishes with their territory and its various entities (Borrows, 2016b; Corntassel, 2012; Metallic, 2008). However,

this relationship is disrupted by colonial violence and the imposition of a property/ownership relationship to land (Tuck & Yang, 2012). Hence, land-based pedagogy represents an answer to colonial violence:

At the heart of colonialism is the violent separation of our peoples from our social relation to the land. Any education aimed at decolonization must confront that violence — and one of the best ways to do this is to reintroduce and re-place Indigenous peoples on their lands with the knowledge-holders who are experts in living it. That is the thinking behind Dechinta Bush University. (Coulthard, 2017, p. 58)

In this context, the decolonial project of reconnecting with land in a material, ontological, and epistemological level relates to the reassertion of Indigenous legal orders in relation to this land.

Finally, the conversation is reframed from talking about Indigenous Peoples' rights to the land, to asserting this right through the knowledge systems that the relationship to land entails. Land-based pedagogy therefore challenges and transforms the role of land, and the place for building relationships with land, in higher education, both intellectually and materially (Simpson, 2014). Hence, Simpson (2014) argues that decolonizing the academy means joining Indigenous Peoples in "dismantling settler colonialism and actively protecting the source of our knowledge — Indigenous *land*" (p. 22).

Land-based Pedagogy and Indigenous Knowledges

In a land-based pedagogy perspective, land is the context of Indigenous knowledges and traditions. It becomes the curriculum, the text and the professor (Wilson 2012). Land, or the territory, is a privileged place to practice language, remember histories, learn and practice ecological knowledges and reconnect with Indigenous philosophies. By reframing education around land, land-based pedagogy re-centres on Indigenous "source of knowledge and strength" (Wildcat et al., 2014, p. II). A relationship to the land is fundamental, according to these authors, to the "transmission of knowledge about the forms of governance, ethics and philosophies" (Wildcat, et al., 2014, p. II).

In other words, education through a relationship with land implies reconnecting with deep philosophical knowledge, including ontologies and epistemologies, but also political, ethical and juridical principles that emerge from the land and the different entities that are embedded in the relational networks of *places* (Coulthard, 2010). Coulthard and Simpson have described these principles in terms of "grounded normativity," which they define as "the ethical frameworks provided by these Indigenous place-based practices and associated forms of knowledge (Coulthard & Simpson, 2016, p. 254).

Because land-based pedagogy allows one to connect to a specific territory, a place made of a web of relationships (Deloria, 2001), it also creates space for the relational nature of Indigenous knowledges. Building on Deloria's concept of place as a web of relations, Coulthard (2010) writes about the profoundly different orientation of place-based Indigenous

worldviews and time-oriented Western worldview. While the latter ought to be understood as the historical, developmental, evolutionary perspective on the world (which also comes with linear hierarchical power relationships), the former ought to be understood as a field of relationships that influence "a way of knowing, experiencing, and relating with the world; and these ways of knowing often guide forms of resistance to power relations that threaten to erase or destroy our senses of place" (Coulthard, 2010, p. 79). Finally, through the engagement with this place-based relational knowledge, land-based pedagogy contributes to the resurgence of Indigenous ways of knowing and being, and it reconnects with Indigenous political and ethical principles from which solidarity with other nations (Indigenous, non-Indigenous, and otherthan-human) can emerge. Land becomes the framework of this relationship.

Land-based Pedagogy as a Decolonizing Trans-systemic Approach

Indigenous land-based pedagogy offers a framework that shifts from nation-state conceptions of rights and institutional time-oriented conception of knowledge. Rather, it centres on Indigenous rights in terms of their emergence from a relationship to land and relational placebased orientation of Indigenous knowledges. It also offers a trans-systemic model in terms of possible place-based solidarity and learnings for non-Indigenous peoples. Land-based pedagogy's decolonial potential includes questioning settlers' place on the land and their relations to the land. Learning from a place and in relation to that place (and all the relations, genealogy, and power dynamics that a place entails) is a powerful tool to create concrete solidarity between Indigenous and non-Indigenous people, in relation and care for a shared place.

For instance, Snelgrove et al. (2014) develop the concept of place-based solidarities where Indigenous resurgence meets settler colonial power in a relational and practical way that forces an engagement, on both sides, with "the literal and stolen ground on which people stand and come together upon" (Snelgrove et al., 2014). By working on the land, and through the relationships with the land, these authors contend that "solidarity between Indigenous and non-Indigenous peoples must be grounded in actual practices and place-based relationships, and be approached as incommensurable but not incompatible" (Snelgrove et al., 2014, p. 3). The engagement with the land on which we now have come to live, and the revealing of different, contradictory ways of relating to it between settler and Indigenous peoples, could be at the core of trans-systemic decolonizing process and development of new solidarities.

For example, Irlbacher-Fox recounts her experience, as a non-Indigenous person, in an Indigenous land-based education experience, where she realized that this could be a powerful tool to decolonize settlers because it disrupts the power dynamics and creates self-awareness for settlers:

Settlers placed in Indigenous land-based education contexts are forced to understand themselves in relation to the limits of their knowledge contrasted with superior capabilities possessed by Indigenous Elders and land-based knowledge holders [...] Transitioning from a position of dominance to one of dependence constitutes an important moment of "unsettling": reaching a place of potentially transformative discomfort. An often completely new and deeper understanding of Indigenous peoples' cultural practices then begins to fill what was once a space of ignorance and privilege, replacing erroneous beliefs with appreciation and understanding. (Irlbacher-Fox, 2014, p. 155)

Land-based pedagogy consequently offers the possibility not only for Indigenous Peoples to reconnect with their knowledges and cultures but for non-Indigenous people to question their privilege and live an "unsettling" experience, which might then create space for solidarity, alliances, and decolonization. Accordingly, Indigenous land-based pedagogy challenges the settler supremacy logic that underlines nation-states and educational institutions. The transsystemic model of land-based pedagogy thus relies on a fundamental element of Indigenous identity (land), which is often ignored by settler institutions, in spite of its fundamental nature for settler identity too. By bringing together different (Indigenous and settlers) understandings, relations, and knowledges regarding the broader context of land and place, new comprehensions and solidarity can emerge.

Re-Centering Land and Communities as Trans-Systemic Frameworks

The two examples explored in this article — namely, intercultural and land-based education — point at two frameworks used to establish a trans-systemic education in their respective ways: communities and land. Both models are already trans-systemic in their ways of engaging Indigenous and non-Indigenous peoples, students, ideas, exchanges and solidarities. Could it be possible, then, for mainstream higher education to undertake a change of framework from a nation-state and institutionally centered perspective to one that centers on communities and land as sources of knowledges and trans-systemic understanding of these knowledges? How would that look like, concretely?

Aside from the many Indigenous scholars in mainstream universities across Canada who are making space for land-based research and teaching, universities across Canada have mainly engaged with the land through the emerging practice of territorial acknowledgements. A territorial acknowledgement is meant for a settler institution or person to recognize the Indigenous Peoples of the land they stand on and give visibility to the sustained Indigenous presence on the territory, both in terms of complex histories and current realities. In that sense, it can be a step towards addressing the colonial situation, repudiating the terra nullius ideology, and re-establishing nation-to-nation relationships. That is, of course, if the territorial acknowledgement is accompanied by commitments and actions for ongoing relationship building with land, Indigenous Peoples of the territory, and the institution or person making the acknowledgement. Without concrete changes in practices and relationships, a territorial acknowledgement runs the risk of staying on the symbolic level, thus playing the game of neoliberal politics serving the colonial status quo (Coulthard, 2014; Tuck & Yang, 2012).

Nevertheless, if it is supported by concrete relationship and practical changes, a territorial acknowledgement can be an important step for an academic institution to take towards engaging with Indigenous knowledges and rights through land. For example, this could take

the form of research on the history and genealogy of the land and cities where universities are situated, in collaboration with Indigenous communities in these lands, in order to uncover the colonial histories, but also make space for Indigenous knowledges of these places, and formulate alternative relationships to these lands, in a nation-to-nation approach with local Indigenous communities. Leanne Simpson reminds us that cities are also in Indigenous lands, and mainstream universities in urban context can also engage in place-based solidarity that and land-based pedagogy offers. According to her:

The beauty of culturally inherent resurgence is that it challenges settler colonial dissections of our territories and our bodies into reserve/city or rural/urban dichotomies. All Canadian cities are on Indigenous lands. [...] While it is critical that we grow and nurture a generation of people that can think within the land [...] this doesn't have to take away from the contributions of urban Indigenous communities to our collective resurgence. (Simpson, 2014, p. 23)

In this context, land-based pedagogy has a tremendous decolonizing power in an urban context for both Indigenous and non-Indigenous students (Henry, 2014).

When framed around land as the source of this relationship, the nation-to-nation relationship offers an interesting trans-systemic approach to engaging with Indigenous knowledges and rights in the academy. For example, in Montreal, where I work, it could take the form of re-storying (Dahl Aldern & Goode, 2014) the city as an Indigenous place, or as creating a curriculum that fosters Indigenous resurgence (Alfred & Corntassel, 2005; Simpson, 2014) and resituates non-Indigenous students as settlers in Montreal. These approaches allow for the possibility of creating a relationship with the land and land-based practices that will include respect for and solidarity with Indigenous communities in Montreal.

Indigenizing the academy also requires engaging with Indigenous communities, especially the communities in which territories universities are situated. For many years now, universities have been involved in building relationships with communities, sometimes including Indigenous communities, through offices of community outreach, development of community-based education programs and of community-based research approaches. Nevertheless, Barinaga and Parker (2013) highlight the problems that can emerge from such an endeavour if the power dynamics between communities and academia are not questioned, therefore "re-inscribing the sometimes harmful role universities have played in their engagement with communities, particularly communities of colour" (Barinaga & Parker, 2013, p. 6).

Consequently, Barinaga and Parker (2013) call for the pairing of community engagement with explicitly decolonizing, participative, and transformative methodologies. Similarly, considering community engagement in Indigenous and Chicano contexts, Zavala (2013) explains these problems based on "the often contradictory goals between the university and the community, the hierarchical relation of power that privileges academic over local, Indigenous knowledges, and the production of knowledge that has very little practical value to Indigenous and Raza communities" (p. 57). As universities are embedded in state interests and discourses

of Western/Modern research, they often reproduce "axes of difference and power in our society" (Zavala, 2013, p. 66) that hinder a real dialogue with Indigenous communities.

A trans-systemic dialogue requires that mainstream universities recognize that the knowledge they build and teach relates to the worldviews, symbols, histories and experiences of certain communities, most often in a euro-centric perspective. There is much that mainstream universities can learn from the Amawtay Wasi's approach where Indigenous communities are understood as knowledge holders and experts based on their worldviews, symbols, histories and experiences, which are as valid as mainstream academies. Following this model, an epistemological dialogue needs to happen with Indigenous communities' knowledges and life projects, which might differ from the modern/colonial settler life projects. While these are incommensurable by nature (Tuck & Yang, 2012), many tensions are to be expected in the negotiation of these life projects and how the universities support them. Re-centring the conversation around these communities, rather than on the institution's and the State's privileges, is the challenge of Indigenizing the academy, which implies an unsettling process where not everyone will "be happy."

Hence, an essential dimension of Indigenous community engagement that can be learned from IHE is the challenge to the knowledge asymmetry (Hall & Tandon, 2017) that exists between the academy as "experts," researchers and "knowers," and the communities as non-knowers. The Amawtay Wasi's programs all build the knowledge they teach, and the theories they produce, on the experiences and knowledges of Indigenous communities, as valid knowledge that should also be taught in the academy. Developing relationships with Indigenous communities to craft curricula and research agendas that fit their priorities in a community framework would also mean engaging with the elements that constitute these communities (stories, symbols, principles, practices, etc.) and the knowledge they build in conversation with the elements that constitute academic communities (stories, symbols, principles, practices, etc.) and the knowledge they build.

These are some of the lessons that Indigenous higher education can teach us about trans-systemic education. The frameworks need to shift from institutional and nation-state perspectives to land and community frames of conversation. A deeper engagement with the efforts and models already existing in Indigenous higher education can inform the way we try to "Indigenize" the academy.

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References

- Alfred, T. (2008). *Peace, power and righteousness, an Indigenous manifesto* (2nd ed.). Oxford University Press.
- Alfred, T., & Corntassel, J. (2005). Being Indigenous: Resurgences against contemporary colonialism. *Government and Opposition*, 40(4), 597-614.
- Bala, A., & Gheverghese, J. G. (2007). Indigenous knowledge and western science: The possibility of dialogue. *Race & Class*, 49(1), 39-61.
- Barinaga, E., & Parker, P. S. (2013). Community-engaged scholarship: Creating participative spaces for transformative politics. *Tamara Journal of Critical Organisation Inquiry*, 11(4), 5-11.
- Barnhardt, R. (1991). Higher education in the Fourth World: Indigenous people take control. Canadian Journal of Native Education, 18(2), 199-213.
- Battiste, M. (1986). Micmac literacy and cognitive assimilation. In J. Barman, Y. Hébert, & D. McCaskill (Eds.), *Indian education in Canada: The legacy* (Vol. 1, pp. 23-44). UBC Press.
- Battiste, M. (Ed.). (2000). Reclaiming Indigenous voice and vision. UBC Press.
- Battiste, M. (2005). Indigenous knowledge: Foundations for First Nation. World Indigenous Nations Higher Education Consortium (WINHEC) Journal, 1, 1-17.
- Battiste, M. (2013). *Decolonizing education. Nourishing the learning spirit.* University of British Columbia Press.
- Battiste, M., & Youngblood Henderson, J. S. (2000). *Protecting Indigenous knowledge and heritage: A global challenge*. UBC Press and Purich Publishing
- Beck, D. R. M. (1999). American Indians higher education before 1974: From colonization to self-determination. *The Australian Journal of Indigenous Education*, 27(2), 12-23.
- Borrows, J. (2016a). Indigenous law, lands, and literature. *Windsor Yearbook of Access to Justice*, 33(1), v-ix. https://doi.org/10.22329/wyaj.v33i1.4806
- Borrows, J. (2016b). Outsider education: Indigenous law and land-based learning. *Windsor Yearbook of Access to Justice*, 33(1), 1-27. https://doi.org/10.22329/wyaj.v33i1.4807
- Brayboy, B. M. J. (2005). Toward a tribal critical race theory in education. *The Urban Review*, *37*(5), 425-446.
- Child, B. J., & Klopotek, B. (Eds.). (2014). *Indian subjects: Hepispheric perspectives on the history of Indigenous education*. School for Advanced Research Press.
- Compton, J. (2016). Contextualizing Indigenizing the academy. CAUT ACPPU Bulletin, 63(6), A3.
- Concordia University. (2019). The Indigenous Directions Action Plan: Concordia's Path Towards Decolonizing and Indigenizing the University. Retrieved from https://www.concordia.ca/content/dam/concordia/offices/oce/docs/IDLG/indigenous-directions-action-plan.pdf
- Corntassel, J. (2012). Re-envisioning resurgence: Indigenous pathways to decolonization and sustainable self-determination. *Decolonization: Indigeneity, Education & Society*, 1(1), 86-101.
- Coulthard, G. (2010). Place against empire: Understanding Indigenous anti-colonialism. *Affinities: A Journal of Radical Theory, Culture, and Action, 4*(2), 79-83.
- Coulthard, G. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition.* University of Minnesota Press.
- Coulthard, G. (2017). Dechinta Bush University: Land-based education & Indigenous resurgence. In P. McFarlane & N. Schabus (Eds.), *Whose land is it anyway? A manual for decolonization* (pp. 57-61). Federation of Post-Secondary Educators of BC.

- Coulthard, G., & Simpson, L. (2016). Grounded normativity / place-based solidarity. *American Quarterly*, 68(3), 249-255. https://doi.org/10.1353/aq.2016.0038
- Dahl Aldern, J., & Goode, R. W. (2014). The stories hold water: Learning and burning in North Fork Mono homelands. *Decolonization: Indigeneity, Education & Society*, 3(3), 26-51.
- De La Cadena, M. (2006). The production of other knowledges and its tensions: From Andeanist anthropology to interculturalidad? In G. L. Ribeiro & A. Escobar (Eds.), *World anthropologies. Disciplinary transformations within systems of power* (pp. 201-224). Berg.
- Deloria, V. J. (2001). Power and place equal personality. In V. J. Deloria & D. R. Wildcat (Eds.), *Power and place. Indian education in America* (pp. 21-28). American Indian Graduate Center, FULCRUM.
- Drouin-Gagné, M.-E. (2016). L'Université Interculturelle des Nations et Peuples Autochtones Amawtay Wasi. L'éducation supérieure autochtone peut-elle contribuer à la décolonisation de la société en Équateur ? *Cahiers de La Recherche Sur l'éducation et Les Savoirs*, 15, 193-216.
- Drouin-Gagné, M.-E. (2019). *Indigenous higher education as a tool for decolonization in the hemisphere:*Comparative perspective between decolonial projects in Ecuador and USA. Concordia University.
- Friedland, H. (2019). Indigenous laws in law schools: Trans-systemia or transformation? In Y. Emerich & M.-A. Plante (Eds.), *Repenser les paradigmes: Approches transsystémiques du droit* (pp. 267-287). Yvon Blais.
- García, J., Lozano, A., Olivera, J., & Ruiz, C. (2004). Sumak Yachaypi Alli Kawsaypipash Yachakuna, Aprender en la Sabiduría y el Buen Vivir, Learning wisdom and the good way to live. Universidad Intercultural Amawtay Wasi & UNESCO.
- Grande, S. (2004). Red pedagogy: Native American social and political thought. Rowman & Littlefield.
- Hall, B. L., & Tandon, R. (2017). Decolonization of knowledge, epistemicide, participatory research and higher education. *Research for All*, 1(1), 6-19. https://doi.org/10.18546/RFA.01.1.02
- Hanna, A. (2019). Reconciliation through relationality in Indigenous legal orders. *Alberta Law Review*, 56(3), 817-839. https://doi.org/10.29173/alr2524
- Henry, E. (2014). A search for decolonizing place-based pedagogies: An exploration of unheard histories in Kitsilano Vancouver, B.C. *Canadian Journal of Environmental Education*, 19, 18-30.
- House of Commons of Canada (2020). Bill C-15. An act respecting the United Nations Declaration on the Rights of Indigenous Peoples. https://parl.ca/DocumentViewer/en/43-2/bill/C-15/first-reading
- Indigenizing the academy: The way forward. (2016). *CAUT Bulletin*, *63*(6). Retrieved from https://bulletin-archives.caut.ca/fr/bulletin/articles/2016/06.html
- Irlbacher-Fox, S. (2014). Traditional knowledge, co-existence and co-resistance. *Decolonization: Indigeneity, Education & Society, 3*(3), 145-158.
- Jukier, R. (2005). Where law and pedagogy meet in the transsystemic contracts classroom. *McGill Law Journal*, 50, 791-808.
- Jukier, R. (2018). The untapped potential of transsystemic thinking. In Y. Emerich & M.-A. Plante (Eds.), *Repenser les paradigmes: Approches transsystémiques du droit* (pp. 1-30). Yvon Blais.
- Juneau, S. (2001). *Indian education for all: A history and foundation of American Indian education policy*. Montana Office of Public Instruction.
- Kermoal, N., & Altamirano-Jiménez, I. (Eds.). (2016). Living on the land. Indigenous women's understanding of place. AU Press.

- Kuokkanen, R. (2007). Reshaping the university: Responsibility, Indigenous epistemes, and the logic of the gift. UBC Press.
- Lomawaima, T., & McCarty, T. (2006). To remain an Indian: Lessons in democracy from a century of Native American education. Teachers College Press.
- MacDonald, M. (2016). Indigenizing the academy: What some universities are doing to weave indigenous peoples, cultures and knowledge into the fabric of their campus. *University Affairs/Affaires Universitaires*. http://www.universityaffairs.ca/features/feature-article/indigenizing-the-academy/
- McGill University. (n.d.). *Transsystemic Legal Education*. Retrieved from https://www.mcgill.ca/centre-crepeau/projects/transsystemic
- McGill University. (2017). Provost's Task Force on Indigenous Studies and Indigenous Education. Final Report. Retrieved from https://www.mcgill.ca/provost/indigenous-success
- McGill University. (2020). *Transsystemic Legal Education*. Retrieved from https://www.mcgill.ca/centre-crepeau/projects/transsystemic
- Metallic, F. (Gopit). (2008). Strengthening our relations in Gespe'gewa'gi, the Seventh District of Mi'gma'gi. In L. B. Simpson (Ed.), *Lighting the eighth fire: The liberation, resurgence, and protection of Indigenous nations* (pp. 59-71). Arbeiter Ring.
- Meyer, M. A. (2001). Our own liberation: Reflections on Hawaiian epistemology. *The Contemporary Pacific*, 13(1), 124-148.
- Mihesuah, D. A., & Wilson, A. C. (Eds.). (2004). *Indigenizing the academy: Transforming scholarship and empowering communities.* University of Nebraska Press.
- Newhouse, D. (2016). The meaning of Indigenization of our universities. *CAUT ACPPU Bulletin*, 63(6), A2-A7.
- Queen's University. (2016). Truth and Reconciliation Commission Task Force Preliminary Report. http://www.queensu.ca/provost/sites/webpublish.queensu.ca.provwww/files/files/Comittees/TRC%20Reports/TRC%20Task%20Force%20Preliminary%20Report%20(final).pdf
- Sarango, L. F. (2009). Universidad Intercultural de las Nacionalidades y Peublos Indígenas "Amawtay Wasi". Ecuador/Chinchaysuyu. In D. Mato (Ed.), *Instituciones interculturales de educaciín superior eb América Latina. Procesos de construcción, logros, innovaciones y desafíos* (pp. 191-214). UNESCO-IESALC.
- Simpson, L. B. (2008). Our elder brothers: The lifeblood of resurgence. In L. B. Simpson (Ed.), Lighting the eighth fire: The liberation, resurgence, and protection of Indigenous nations (pp. 73-87). Arbeiter Ring.
- Simpson, L. B. (2011). Dancing on our turtle's back: Stories of Nishnaabeg re-creation, resurgence, and a new emergence. Arbeiter Ring Publishing.
- Simpson, L. B. (2014). Land as pedagogy: Nisnaabeg intelligence and rebellious transformation. Decolonization: Indigeneity, Education & Society, 3(3), 1–25.
- Simpson, L. B. (2017). *As we have always done: Indigenous freedom through radical resistance.* University of Minnesota Press.
- Smith, L. T. (2012). *Decolonizing methodologies Research and Indigenous peoples* (2nd ed.). Zed Books.
- Snelgrove, C., Kaur Dhamoon, R., & Corntassel, J. (2014). Unsettling settler colonialism: The discourse and politics of settlers, and solidarity with Indigenous nations. *Decolonization: Indigeneity, Education & Society*, 3(2), 1-32.

- Stewart, S. L. (2016). Final Report of the OISE TRC Task Force in response to the Truth and Reconciliation Commission of Canada Final Report's Calls to Action. OISE, University of Toronto. https://www.oise.utoronto.ca/oise/UserFiles/File/Report_OISE_TRC_Task_Force_Final.pdf
- Stonechild, B. (2006). *The new buffalo. The struggle for Aboriginal post-secondary education in Canada*. University of Manitoba Press.
- Szasz, M. C. (1999). Education and the American Indian. The road to self-determination since 1928 (3rd ed.). University of New Mexico Press.
- Truth and Reconciliation Commission (TRC). (2015). *Calls to Action*. http://nctr.ca/assets/reports/Calls_to_Action_English2.pdf
- Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1-23.
- Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society, 1*(1), 1-40.
- United Nations. (2007). United Nations Declaration on the Rights of Indigenous Peoples.
- Vargas Moreno, P. (2014). Educación superior intercultural en disputa. *Polis*, 38. http://polis.revues. org/10136
- Walsh, C. (2011). *Etnoeducación e interculturalidad en perspectiva decolonial*. Cuarto Seminarion Internacional Etnoeducación e Interculturalidad, Lima, Peru.
- Walsh, C. (2012). Interculturalidad crítica y (de)colonilidad. Ensayos desde Abya Yala. Abya Yala & ICCI/ARY.
- Wildcat, M., Irlbacher-Fox, S., & Coulthard, G. (2014). Learning from the land: Indigenous land based pedagogy and decolonization. *Decolonization: Indigeneity, Education & Society*, 3(3), i-xv.
- Wilson, A. (2012). Learning from the land. Cottage North Magazine, September-October, 11-12.
- Wilson, S. (2008). Research is ceremony Indigenous research methods. Fernwood.
- Zavala, M. (2013). What do we mean by decolonizing research strategies? Lessons from decolonizing, Indigenous research projects in New Zealand and Latin America. *Decolonization: Indigeneity, Education & Society, 2*(1), 55-71.

Four Generations for Generations: A Pow Wow Story to Transform Academic Evaluation Criteria

Kathleen Absolon

Abstract Within this article, I share a story of four generations of my family and community coming together through pow wow dancing. I present the storying and re-storing of Indigenous scholarly engagement through pow wow regalia making and dance to accomplish two things: 1) to center Indigenous knowledge, kinship and community work through scholarship; and 2) to generate merit and value in the good work in which Indigenous scholars engage. Our creative and cultural selves are often excluded in terms of what receives value and merit in collective agreements. The academy wants us to teach, publish, and engage in community service. My community service is often within Indigenous kinship and community service where I engage in creativity and expressive arts. Evaluations of our tenure attribute value, credit, and merit for work produced, service generated, and research conducted steeped in a eurowestern definition of scholarly work. We theorize about the significance and importance of our culture and traditions; however, our families and communities' practices are regarded as external and outside of the eurowestern academic contexts. This article brings together the knowledge of preparing for and dancing in a pow wow as valued and good work of Indigenous scholars within the academy. It calls attention to a need to revise systems of value and merit in a manner that benefits Indigenous scholars' whole knowledge systems.

KeyWords Indigenous knowledge, collective agreements, merit, decolonization, kinship and community, Indigenous scholarship

It's time for beading and other Indigenous women's modes of knowledge production to become a part of the lives of those within the academy (Ray, 2016, p. 376).

I am an Indigenous/Anishinaabe philosopher, knowledge seeker, and community helper. I am a mother, daughter, grandmother who loves kinship and community. I am a bush woman who loves chopping wood, hauling water, being on the land, singing, dancing, sewing, painting, and drumming. And I hold a faculty position in the academy. Many times over the years, I have felt like my whole indigeneity did not fit within the academy primarily because academia "obviates the need for spiritual guidance and inspiration, and it promotes head thinking over heart thinking (Stonechild, 2020, p. 167). Universities have been dismissive of Indigenous worldviews where spirit, heart, knowledge, land, relationships, and ancestors matter. I think that

Cree scholar Blair Stonechild accurately describes my dissonance in stating that the "university disciplines promote rationality, science, and technology as solutions to contemporary society's challenges" (Stonechild, 2020, p. 168). Within academia, there still does not seem to be any value placed on all parts of who I am that contribute to my role as an Indigenous scholar. Sometimes my ambidextrous consciousness gets weary navigating systems that are foreign to my being (Little Bear, 2000). First, I have to acknowledge the work of my many brothers and sisters across Indigenous nations who have informed my work, such as Dr. Marie Battiste (Mi'kmaq), Dr. Leroy Little Bear (Blackfoot), Dr. Susan Dion (Potwatomi-Lunapé), Dr. Lauri Gilchrist (Cree), Dr. Michael Hart (Cree), Dr. Verna Kirkness (Cree), Herb Nabigon ban (Anishinaabe), Dr. David Newhouse (Onondoga), and Dr. Linda Tuhiwai Smith (Maori) who have all been leaders in Indigenous education in creating space for Indigenous students, curriculum and faculty and whose work continues to inform ongoing transformation. There are so many others, and this article accompanies their work, and for that I am grateful.

Within this article, I share a remarkable story of my family and community with a hope of generating structural shifts within the academy. I want my academic evaluations toward tenure or promotion to include my wholistic Indigenous identity. Often our creative and cultural selves are excluded in terms of what receives value and merit in collective agreements, which is what tenure and promotion committees refer to in deliberating tenure and promotion. The academy wants us to teach, publish, and engage in community service. My community service is often kinship and Indigenous community service, where I engage in restoring ceremony, medicine walks, cultural knowledge through creativity, and expressive arts. My community service extends beyond the academy. If the academy is going to value Indigenous knowledge, they must also value the work/service we do in the places where Indigenous knowledge is cultivated.

The reality is that my Anishinaabe identity, like other Indigenous scholars, within the eurowestern university context is marginally recognized (Absolon & Dion, 2017; Corbiere, 2019). I receive credit for work done if done within parameters of eurowestern standards. Whole expressions of Indigeneity in culture, language, and creative work are marginally afforded value wherein "performance evaluation criteria utilized by universities inhibit this vital work...Creative writing, such as short stories that would serve pedagogy, is also unlikely to be deemed scholarly work" (Corbiere, 2019, p. 19). I am not saying that our settler peers do not appreciate our cultural presence or the rich Indigenous knowledge bundles we share. The omission of valuing it in our tenure is a structural issue.

Western theoretical hegemony manifests primarily in educational institutions. The most harmful assumptions are that western thought ought to be the standard educational platform, is automatically relevant and valid, and is universally applicable. The Aboriginal person becomes a virtual non-entity in institutions that marginalize Aboriginal thought and reality through the neglect and erroneous authoring of Aboriginal cultural knowledge, languages, and colonial history (Sinclair, 2019, p. 12).

There seems to be marginal spaces for ourselves as cultural artists and expressive artists in academic collective agreements to recognize and give credit to the core work we do within our kinship and community systems. Evaluations of our tenure attribute value, credit, and merit for work produced, service generated, and research conducted that is steeped in eurowestern definitions and models, and these eurocentric standards create tensions in how we work, partnership, and prioritize (Absolon & Dion, 2017). We theorize about the significance and importance of our culture and traditions; however, our families and communities' practices are regarded as external and outside of the eurowestern academic contexts. When people see me dancing with my regalia, they typically respond with amazement having had no idea that I was a traditional dancer, let alone that I create traditional regalia and craft traditional ceremonial objects. There is so much my peers do not know about me because in the university contexts, the academy values the intellectual and physical realms of our indigeneity and leaves out heart and spirit. Yet, my heart and spirit are with my family and communities and do not leave me when I go to work. This brings me to why I wanted to write this article as an Anishinaabe who is engaged in my community as a traditional dancer and maker of traditional regalia and an intellect and scholar. Valuing whole Indigenous knowledge sets (Absolon, 2019) is the challenge of weaving Indigenous peoples' knowledge into eurowestern academic settings, coined trans-systemic synthesis (Battiste & Henderson, 2000). This weaving is challenging much like the current day challenges in defending the land, water and Indigenous sovereignty. Colonial violence is ever present in acts of commission and omission.

As I bear witness to the strong-armed and military presence of Royal Canadian Mounted Police (RCMP) and Ontario Provincial Police (OPP) to Indigenous land defenders, I increasingly feel pushed to assert self-determination of my scholarship by weaving layers of subjective knowing, experience, and kinship community into my writing. In the academy, faculty are prescribed colonial standards that we are expected to subscribe to, but which we have not had input into and which we are evaluated against. Standards that omit where Indigenous peoples' priorities typically rest in restoring and protecting Indigenous knowledge, language, and traditions. Indigenous scholars face challenges being underrepresented within the academy, including institutional racism, cultural, and community disruptions (Judge, 2018). Indigenous scholars also are sought out for their Indigenous knowledges and ways of knowing, cultural experiences, and community relationships and are recruited into Indigenous postings. Still, we have to leave our communities and cultural contexts to do so. Institutional racism is evident through omission when Indigenous scholars are underrepresented on promotion committees and when the criteria for promotion is steeped in models of scholarship based on western disciplinary knowledge systems and omit Indigenous models of knowledge. Indigenous scholars end up engaging in work that has little benefit to our kinship and communities, or the work we do does not receive credit, value, or merit within academia (Corbiere, 2019). By problematizing issues of underrepresentation and value, like other Indigenous scholars, we are generating knowledge and "developing new syntheses and methodologies to decolonize [ourselves], [our] communities, and [our] institutions, as well as bring about a blended transsystemic synthesis in an educational context" (Battiste & Henderson, 2009, p. 5). The layers

of colonialism, decolonialism, and Indigenization in colonial academic environments are all around us and "universities had not been thinking about Indigenous people when they were moving forward with their governance structures and plans" (Talaga & McMurchy, 2019, p. 6). The contradictions and rhetoric have never been more apparent than it currently is with the Wet'suwet'en blockades and protests across Canada and the United States. We have been here before, again and again, as colonial control agents use military force to take over Indigenous lands and territories. At all levels, academia and specifically colonial evaluation criteria within the academy omit placing value on the good work Indigenous scholars carry out in restoring Indigenous knowledge within kinship and community systems.

Like other Indigenous authors, I push back by centering and storying my lived experiences, Anishinaabe knowledge and community toward restoring the good life of lived Indigenous knowledge systems (Settee, 2013). This push back is to counter the marginalized place Indigenous women's knowledge traditions have within the academy. When we bring our whole selves into our teaching, research, and service, our whole presence contributes to "unmarginalization" (Ray, 2016). I seek to realign my Anishinaabe-kweness (Anishinaabe womanhood) in my writing and integrate a personal kinship story of family and community (referred to as The Grand Entry). My wholistic knowledge bundle matters (Absolon, 2019). My four generations story is the main pillar that upholds my article. I integrate Indigenous scholarship to support the Indigenous knowledge rooted in pow wow regalia making and dance. Regalia making, beading, threading, and stitching is knowledge and community service that is indeed worthy of merit because this "good work does not just come from the mind, but from the heart as well. It must include physical, intellectual, spiritual, and emotional dimensions" (Ray, 2016, p. 373). The wholistic community and kinship work in preparing for a pow wow, round dance, community feast, language class, shawl making, and beading are all examples of the good work Indigenous scholars engage with while restoring Indigenous knowledge traditions from their academic positions. This article tells a story of restoring kinship of four generations of dancers within a beautiful gathering that celebrates Mother Earth and life (the pow wow). Further to this story is an engagement with how my good work relates to what we carry and care for as Indigenous scholars in the academy and where structural shifts are required to generate transsystemic synthesis for Indigenous scholars. As many stories go, I am the storytelling and weaver of my Indigenous identity into my position within the academy on a search for transsystemic synthesis.

Four Generations: A Grand Entry

Together, a community and family gathered to sew, bead, make moccasins, dance, and sing a young woman who is lifted up as head dancer. I begin with a story of a visual and oral expression of a spiritual, social, intellectual and cultural heritage that is deeply seeded in our ancestors' presence and relationships to the land and Creation. Storytelling and co-creating are Indigenous forms of knowledge creation. I present the storying and re-storing of Indigenous scholarly engagement through pow wow regalia making and dance to accomplish two things: 1) to center Indigenous knowledge, kinship, and community work through scholarship; and 2)

to generate merit and value in the good work in which Indigenous scholars engage. The place of this article is the pow wow arena. The pow wow dance is an expression of strong deep-seeded heritage connecting Indigenous peoples to Mother Earth and all our relatives in Creation. Once outlawed under colonial rule, these gatherings are now active acts of reclaiming and recreating Indigenous knowledge and traditions through ceremonial land-based celebrations and community relationships. These gatherings are sources of knowledge. I am acutely conscious that Indigenous knowledge is searched, accessed, and also created alongside of other people we engage with and through the events we participate in, experience, and learn from. Coming to know in Indigenous education is experiential. I have attended and/or danced pow wow for 25 years. My children danced pow wow. My family attend and are vendors or pow wow dancers.

On September 28, 2019, at the University of Waterloo pow wow, four generations of my family dressed in dancing regalia and entered into the grand entry proudly taking our place in the dance arena. In this line, my mother is first generation, I am second, my children are third, and my granddaughter is fourth generation. This is remarkable evidence of how we, as Anishinaabe women, are restoring identity, knowledge and culture. It is especially significant that we are survivors of Indian residential school policies set out to extinguish and eradicate us. Indigenous peoples are increasingly turning to Indigenous knowledge, cultural traditions, and ceremonies to build leadership capacity and restore relationships (Cote-Meek et al., 2012; Manitowabi & Gautheir-Frohlick, 2012).

In my family and community, I am an Anishinaabe helper, knowledge keeper, sewer, artist, community member, and scholar, enacting Indigenous knowledge systems by sewing traditional regalia, bringing family together, building community and lifting up my daughter as a young head dancer. As an Anishinaabe scholar, I am actively engaged in healing from the violent and traumatic impacts the Indian residential school system left in my family by restoring traditions and kinship systems through all the regalia-making layers. To sew regalia is Indigenous knowledge keeping. The restoration is real, lived and remarkable given the violent history of extermination and genocide policies we are now surviving.

The story of making and preparing fancy shawl regalia for my daughter and niece includes several layers of kinship. It involves my skills as a seamstress; working together as a family; beadwork made by kinship sisters; moccasins made by Cocomish; hair by another sister; invitations come from community; and community circles the dancer. All this work allows for four generations to arrive at the pow wow. Knowledge creation and knowledge sharing happen before, after and during the pow wow.

When I entered the eurowestern academy, I was Anishinaabe and still am Anishinaabe. I do not believe that my non-Indigenous academic peers understood fully what my presence meant in terms of institutional change in community relationships, collective agreements, smudging in buildings, ceremony, circle work, and Indigenous research ensue as a result. Before I am a scholar, I am Anishinaabe kwe, a Flying Post First Nation member, Treaty 9 of the Nishnawbe Aski Nation. I am in recovery from the history of colonial trauma to my family through the Indian residential school system. I am decolonizing my mind by unpacking the presence of dominant eurocentric ideologies, theories, and methodologies. My Indigeneity gets restored through

wholistic practices that include attending to my spirit, heart, mind, and body as an Anishinaabe kwe (Absolon, 2019). I am a craftsperson who restores traditional items and clothing.

I sew traditional regalia and ribbon skirts, ribbon shirts, bundle bags, bundle cloths, and make things we use in our ceremonies. I feel most proud to be a sewer in creating regalia and ribbon outfits for my family and community members. Anishinaabe scholar Marianne Corbiere wrote about her work as a language carrier and faculty member. She stated that in her language revitalization work, all of her work is not regarded in merit or promotion applications (Corbeire, 2019). We share a commonality here. The knowledge of crafting traditional regalia is tied to years of teachings and knowledge that has existed and been passed from one generation to the next. My mother taught me to sew and the women in my communities, together, passed on other knowledge related to regalia making. I see my knowledge of sewing and creating regalia deeply connected to knowledge transmission within Indigenous kinship knowledge systems.

This remarkable story of restoration and inclusion began with an invitation (Absolon, 2016). In 2019 my daughter was invited to be lead female dancer at the University of Waterloo pow wow, where she had completed her undergraduate degree. The Indigenous Student Centre (ISC) staff invited her to be the head female dancer and she was both nervous and excited. When she told me of the invitation, I was delighted, and by offering to help make her regalia with her, I took up teaching and learning responsibilities. In academic terms, one might say I agreed to be her supervisor. I was delighted because my daughter had put dancing aside when she was a teenager and now, in her mid-twenties, she was on the cusp of returning to the pow wow arena. In June, I started the regalia making process on one condition — that she would help in the process. My niece also wanted to join in and have regalia made (she too had put dancing aside during her teenage years). In support of her desire to restore dancing into her life, I offered to do her regalia as well. Both outfits would be fancy shawl dancing regalia. Without delving into the intricacies of regalia making, the moments of coming together as a family were profound moments of restoring family relationships. My daughter, niece, sister, and I spent time together working on the fancy shawl ribbon fringe. The process of designing patterns, colors, and placement of ribbons is intricate and time consuming. As we worked on it, we talked about life, laughed and bonded while putting all the love of our relationships into the fancy shawl ribbon fringe. I watched my daughter and niece work together and support each other as they dealt with ribbon placement details one by one. They planned ribbon color placements and talked about their return to dancing journeys. Knowledge and understanding were created; patience, determination, support, love, kindness, and spirit were interwoven into the ribbons making their shawls dance like butterflies. The fancy shawl dancers emulate beautiful butterflies.

Closer to the pow wow date, other women from the community began the beading of hair ties, earrings, headpieces, barrettes, and neck pieces. My mother began making moccasins to wear with their regalia. The young women talked to Cocomish (grandmother) about their regalia colors and bead color choices. Restoring connections and relationships to Indigenous traditions and teachings in life happened throughout the layers of preparing for the pow wow. Engagement in kinship community learning is where leadership building begins. Through the

use of cultural and creative-based processes, youth learn that they are supported, prepared, and ready to become leaders (Cote-Meek et al., 2012).

In my life, lived Indigenous scholarship unfolds from my Anishinaabe culture steeped in ancestral knowledge and oral traditions. This is where kinship systems and community build leaders, pass on knowledge, and provide a lived educational arena for our people. In publications, we begin with a blank page and build from there, drawing on our peers and scholarly communities' genealogies of knowledge. In these moments, the material is my blank page; the story is in the applique; the knowledge mobilization occurs in passing on teachings, sharing knowledge throughout the process, and at the pow wow through dance and enacting centuries of oral traditions. My Indigenous scholarship began with a vision of regalia and shawls, and like a manuscript, it took months to create. I have included a photographic compilation of how living Indigenous knowledge comes from within and moves into kinship and community.



Figure 1. The works of preparing and participating in the pow wow dance.

Photo credit: Kathleen Absolon.

The collage of photos here provides a visual representation of the knowledge mobilization journey. It is from top left to top right: the shawl was visioned and created from a textile. Over months it was developed, drawing on oral traditions and knowledge; restoring kinship and family relationships happens with co-creation of the shawl. The next photo is of ribbons being placed one at a time by the two young dancers. The third photo to the right is the moccasins made by the dancers' Cocomish (Grandmother). The far top right photo is the beading an auntie is creating and, again, more knowl edge is created and passed on. The lower left photo is of a younger sister braiding the head dancers' hair and relationships of interdependence are

fostered and restored. The central and far-right photos are of the knowledge mobilization of the dance. The dancers take their leadership roles in the community as rich cultural traditions and knowledge are restored among kinship systems and community. I, as supervisor, witness and support this transition of youth into their leadership roles. The process depicted is rich lived

Indigenous scholarship steeped in oral traditions, storytelling, kinship, and community. Indigenous scholars are engaged in our community and kinship systems external to university communities. Indigenous kinship and community engagement are often not considered for merit and marginalized in the academy. I think the omission of our good work needs to change.

Through the process of creating regalia, passing on teachings, restoring community, and promoting kinship oral traditions, Indigenous educational processes are enacted that are for many of us more meaningful than writing papers in the academy. On the day of the pow wow, women



Figure 2. From left to right: Jennie Absolon (my mother), Jessica Varga (my niece), Aki Absolon (my daughter), myself, and my granddaughter Manidoo N'gig.

from the community came to our home to prepare the young female head dancer. A younger sister helped braid her hair, and as we all prepared, we feasted, smudged, and shared stories of our lives and dancing moves. Laughter filled our hearts and spirits throughout our work together in preparing for the pow wow. Restoring family and kinship relations was evident at these moments while simultaneously feeling grief about the beautiful and wholistic ways of life our families had before colonial violence attacked our families and children. This is Indigenous higher education!

At the Grand entry, a remarkable coming together of four generations happened. It was a special time that evidenced the disruption of colonialism, its impacts and restoring of relationships, Indigenous identities, and community. Four generations of dancers in my family emerged. I have not experienced this in my life and living it out was remarkable. The matriarch, my mother, who was 87 at the time, was wearing her traditional cloth regalia. Next in line is me, wearing my traditional cloth regalia. The third generation was my daughter, who was head dancer in her fancy shawl regalia, as well as my niece who was in her fancy shawl regalia. The fourth generation, my granddaughter and my mother's great-granddaughter, was wearing her dancing regalia (all made by me). Four generations of familial women spanning a lifetime from spring to winter danced into the grand entry. It was a remarkable moment, an emotional time to experience and beautiful sight to witness.

Regalia-making and creating required months of good work combined with many conversations about its meaning and co-creation of design with the dancers. Much like my written scholarship, the regalia was shared and steeped in generations of knowledge. Beautiful beadwork, moccasins, shawls and hairpieces were all crafted within a kinship system in relationship with one another. My heart and spirit filled with emotions of joy and grief at the Grand Entry: joy at this moment in time I experienced intergenerational pride, and anger and grief because the transmission of knowledge over generations was assaulted and colonial forces violated our kinships systems. The losses are immeasurable. And within academia, the knowledge and knowledge production evidenced in months of good work is invisible and not credited within eurowestern standards of merit. How different life would have been had we had the consistent generational teachings, love, and support of our grandmothers and mothers. Layers of emotions and thoughts emerged from within. I let my tears flow as I danced, slowly processing all the layers of colonial violence, family dismemberment, family love, kinship and community support, and Indigenous knowledge as we entered into the dance arena at grand entry dancing in unity. I danced with my mother and niece while my daughter led the grand entry. Like a butterfly, my granddaughter gleefully danced in and out of all of us, being protected in the safety of the heartbeat, songs and dancers. Photographers were taking pictures of us because this was remarkable to experience and witness.

Four generations' presence is remarkable because for generations, the colonial government has done everything in its power to rid us of our Indigenous identity, cultural traditions and relationships (to each other, the land, spirit and Creation). We have endured cultural genocide tactics for generations, and today there was four generations of visible resilient Anishinaabe pride in the dance arena.

How is this relevant to the academy?

My work and the work of other Indigenous scholars who prepare and participate in cultural practices, including pow wow, are not separate from who we are as Indigenous scholars. I would like to receive merit toward promotion to full professor for this work that includes knowledge creation and knowledge sharing. My lived Indigenous knowledge in community attributes value and ought to be included in evaluation criteria. Ultimately, restoring relationships, expertise, and community connections within Creation is where the heart of my work exists. The layers of knowledge, relationships, kinship systems, traditional knowledge, skills, and arts are interconnected into who we are and what we bring into our roles as Indigenous people within the academy.

Generating trans-systematic synthesis: The Heartbeat of being Indigenous <u>and</u> being Indigenous in the academy

Generally, Indigenous scholars carry a unique and distinct knowledge system when entering into the academy to restore Indigenous practices and knowledge in spaces of education, research, and learning. We also bring our community relationships and responsibilities. Sustainability of knowledge, community connections, relationships and relational accountability continues

because of our community connections, relationships, cultural identity, nationhood, and vision to restore, reclaim and recover our knowledge and traditions (Absolon & Dion, 2017; Battiste, 2002; Battiste & Barman, 1995; Cote-Meek, 2014). We teach about who we are. We live this location out in our daily lives as Indigenous peoples. How we sustain ourselves is embedded in our rich cultural traditions, way of life on the land, and relationships within our community and kinship structures. The physical well-being of pow wow dancing, singing, and drumming through community gatherings regenerates health, community relationships, and Indigenous knowledge (Manitowabi & Gautheir-Frohlick, 2012; McGuire-Adams, 2017). Indigenous identity, nationhood, and knowledge are increasingly asserted within higher education. This self-determination for the "recognition and intellectual activation of IK today is a growing, purposeful, and political act of empowerment by Indigenous peoples" (Battiste & Henderson, 2009, p. 5). Indigenous faculty retention within the academy, for me, is about how I am able to sustain my identity and nationhood within my faculty role and responsibilities and how I support Indigeneity at the center of my teaching, research, and community service. The how is the heartbeat of being Indigenous and being Indigenous in the academy and *how* we "activate holistic paradigms of Indigenous knowledge to reveal the wealth and richness of Indigenous languages, world views, teachings, and experiences, all of which have been systematically excluded from history, from contemporary educational institutions, and from Eurocentric knowledge (EK) systems" (Battiste & Henderson, 2009, p. 5). My passion as an Indigenous scholar is exemplified in that quote.

Indigenous knowledge systems transmit knowing that life is a gift from Creator and human life is sustained by Creation (water, land, all four legged, winged, crawling and swimming creatures, plants, and trees). Wholistic knowledge sets are foundational to teaching and learning (Absolon, 2019; Battiste & Henderson, 2009). Mother Earth sustains the heartbeat of life. Hand drums, water drums and big drums emulate this heartbeat of life, and this heartbeat is medicine for the people. When a community comes together to lift the young people to take their place as leaders and head dancers, singers, and drummers, the layers of required knowledge is rooted in generations of traditions within the diversity of Indigenous nations (Cote-Meek et al., 2012; Goudreau et al., 2008; Victor et al., 2016). The heartbeat of being Indigenous in the academy cannot be separate from this heartbeat of life. When I first heard the drums, my heart skipped a beat, and I knew I was home and that I belonged. Searching for one's heartbeat through the drum is a search for life, wellness, and identity (Goudreau et al., 2008; Laurili, 2016; Pedri-Spade, 2016). Cultural gatherings such as the pow wow tradition celebrate and honor the heartbeat of life (through the ceremonies & big drums). All aspects of the pow wow dancers and attendees emulate the layers of Creation and community. Increasingly there is evidence that culturally-based practices support and restore cultural identity, leadership development, healing, and community relations (Archibald & Dewar, 2010; Cote-Meek et al., 2012; Flicker et al., 2014; Geia et al., 2013; Manitowabi, 2012).

The Four R's: Principles for Change

I echo what many Indigenous scholars have voiced. It's time to rethink, revolutionize and decolonize the way the academy treats Indigenous scholars. It's time to generate concrete shifts that benefit the workload recognition of Indigenous scholars whose heart and spirit work is underrepresented in their evaluation criteria. Academic spaces require a reconfiguration toward inclusion of Indigenous knowledge, transforming academic standards and value knowledge from other ways of knowing with a "reduced reliance on European knowledge" (Drumbrill & Green, 2008, p. 497). The following principles are guidelines toward crediting Indigenous knowledge holders living out their knowledge within their kinship and community systems. I propose an adaptation of the four Rs in education to move academic policies to support the Indigenous people who bring their Indigenous knowledge bundles to the academy. The four R's originated with esteemed Elder Verna J. Kirkness (2013) to transform teachers in Indigenous education. Respect, relevance, reciprocity, and responsibility come to my mind when I consider what guidelines and protocols emerge from this remarkable story and the significance of this story to Indigenous faculty and teachers in the academy. These principles are also important in navigating the complex community-university partnerships we engage in (Absolon & Dion, 2017). Who we wholistically are, as Indigenous peoples, matters because core parts of Indigenous faculty are erased and unvalued through tenure and promotion guidelines typically referred to as the holy trinity of academia: teaching, research, and university service. Our spirits, language, culture, land, ancestors, art, skills, history, lived experiences, and knowledge form our whole selves and are core facets of Indigenous identity that we carry and where our contributions to teaching and research are rooted. Ironically, I have to make this visible by writing about it in a scholarly journal for publication. Currently, there is no space to value this contribution in my promotion or tenure application. I am sure this is a common experience across the academy. My goal is to make our whole selves visible and eligible for merit and to push the academy through my four generations story and through relating it to the four Rs.

The first R represents *Respect*. Respect means becoming familiar and enacting existing policy documents and statements that call for valuing Indigenous scholars' existing relationships to their good work undertaken in their kinship community learning and teaching environments. I can name six existing documents with recommendations that promote respecting Indigenous cultural heritage, traditions, languages, communities etc., beginning with the Constitution of Canada where Section 35(1) affirms existing aboriginal and treaty rights above all others (Battiste & Henderson, 2000). Understand the 1996 Royal Commission on Aboriginal Peoples, with its plethora of recommendations to shift relationships (Erasmus & Dussault, 1996). Enact for the Calls to Action (specifically 62-65) in the Truth and Reconciliation report (Truth and Reconciliation Canada, 2015). Understand that, in 2015, Universities Canada asserted principles on Indigenous Education that recognize Indigenous communities' autonomy and self-determination and that support Indigenous students, faculty, and staff in providing leadership to respond to Indigenous peoples' and communities' educational needs (Universities Canada, 2015). Get to know the Canadian University Association of Teachers (CAUT) *Indigenizing the Academy* policy statement of 2016, a statement to promote practices that support Indigenous faculty and staff. Fifthly,

understand that The United Nations Declaration on the Rights of Indigenous peoples asserts Indigenous peoples' cultural and heritage rights (United Nations, 2007). The *Indigenizing the Academy* statement is explicit in its call to revisit collective agreements for Indigenous faculty and staff. For example, I have extracted a couple of points to highlight policy and practices for:

Explicit recognition, in all Aboriginal academic staff hiring, training, and evaluation procedures, of special qualifications and contributions including: development and sharing of Indigenous knowledge and languages; engagement with culturally appropriate research and publication venues; community service; and any other relevant considerations, including lived experiences within Aboriginal communities. Explicit recognition of, and appropriate compensation for, any increased workload that may be taken on by Aboriginal academic staff as a consequence of their community status and/or obligations.

Appropriate opportunities and support for Aboriginal academic staff to ensure the maintenance of significant ongoing relationships with their home communities, lands and waters. (Canadian University Association of Teachers [CAUT], 2016)

Respect for Indigenous faculty's cultural knowledge, traditions, values, and activities that they bring us into our teaching and faculty work. Respect means to credit community responsibilities: When Indigenous people enter into eurowestern academic spaces, it's highly likely they are only receiving credit for their intellectual scholarship. The forms of evaluation criteria are built on models of education steeped in colonial ideologies upholding eurocentric hegemony. The evidence in policy statements, recommendations and strategic plans for academia to enact respect for all the facets of who Indigenous people are and credit the Indigenous knowledge scholars engage in from within the academia and within Indigenous kinship and community systems.

Indigenous scholars have shifted Indigenous research paradigms and have made some significant inroads in knowledge production forms in the academy (Absolon, 2011; Kovach, 2009; McGregor et al., 2018). Increasingly, there is evidence of wholistic methodologies in research being valued in SSHRC grants, Ph.D. theses, and academic research strategies. The proof of bringing Indigenous arts-based knowledge into research is becoming more visible, and Indigenous methods of knowledge translation are being recognized and valued. I offer several examples here to demonstrate how storytelling, teaching, sewing, arts, and supporting youth leadership are valued methods in kinship and community-based research projects. In a shawl-making project, Jackson et al. (2015) assert that "shawl making and storytelling are processes of knowledge creation connecting participants with Blackfoot culture by foregrounding ceremony, the importance of Elders, and role modeling Blackfoot values" (p. 12). Lynore Geia and others (2013) also bring into their research methods yarning (aka storytelling), like Indigenous peoples across the globe rely on yarning/storytelling as an "ancient practice used by Indigenous persons/cultures for thousands of years that is integral to Indigenous learning within different spheres of life (p. 14). Flicker et al., (2014) engage Indigenous youth in their

communities with arts-based methods shifting both methodologies fueling Indigenous art, creativity, and building kinships. A step in the right direction is the emergence of Indigenous arts, skills, and knowledge embedded in Indigenous community-based practices under university — community collaboration projects (Fraser & Voyageur, 2016). These projects are leading the way to recognition of Indigenous research methodologies. Transferring the value of Indigenous knowledge in research is productive, yet more inroads are necessary to revisit evaluation criteria in collective agreements.

Further to the inroads we are achieving in Indigenous research, shifting what receives merit and value in the academy requires respect for the lived knowledge, stories and methods of teaching, research and, service Indigenous people carry. When faculty publish their wonderful research projects, the publication is counted, and I witnessed the counting of publications in promotion committee meetings. Respect means to take a second look, to re-speculate, which in the academy translates to crediting and valuing all the good work and time Indigenous faculty are hired for and carry out in relationship building, sharing Indigenous teachings, language, and in restoring kinship and community systems. There is real merit in restoring regalia making, restoring four generations, and restoring Indigenous knowledge within the pow wow arena in tenure and promotion community service categories for Indigenous scholars. The absence of valuing these contributions lends to the dual knowledge bundles Indigenous scholars carry, with academic value placed only on one.

The second R represents *Relevance*. Indigenous faculty need to feel their whole life has relevance to their work in the academy, where respect is embedded in their curricula, research, and community service. Who is your community and where does your community service reside? Community service within their Indigenous communities and kinship structures ought to be factored into promotion and tenure. Relevance means promoting a teaching, research, and community portfolio that is relevant to Indigenous faculty priorities. This eventually fosters the retention of Indigenous faculty. Priorities for Indigenous faculty tend not to align within the merit ascribed by collective agreements that push faculty to publish or perish. Indigenous people will leave academic posts because the pulling apart of oneself is too harmful. Often Indigenous faculty have fewer publication records because we are oversubscribed across the university (internally and externally). Our priorities are in restoring language, cultural traditions, knowledge, and in doing Indigenous community service. Lana Ray, An Anishinaabe scholar, integrates beading into her research, and it is in the research arena and publications where change is happening in recognition of Indigenous research methods. She beads and restores this traditional skill into a research methodology employing beading and articulates the interdependent relationship between beading as an art and knowledge translation:

Beading's intrinsic relationship with storytelling, process, and aesthetic activates the fields of collective consciousness, wholistic knowing, and Anishinaabe ethical principles, providing an outlet to collect, understand, and convey knowledges in a way that is meaningful and relevant within Anishinaabe worldview and aligned with concepts of sovereignty and community wellness. (Ray, 2016, p. 376)

Beading, sewing, regalia making, and drum making (a few relevant examples) require vision, synthesis, analysis, perseverance, integration, layers of knowledge, and spirit. These are all Indigenous means of knowledge transmission, translation, and production. This is Indigenous education. A research project, book or article is very similar to generating the knowledge produced in beadwork, regalia, songs, drumming, basket weaving, and the list goes on. The fabric is the blank page, and from there, the knowledge is woven, crafted, and generated. It is how the work of preparing for a pow wow, working with textiles, and restoring family members into the pow wow community gathering is in alignment with gathering knowledge for publication in print and text for the academic community. Ironically, our academies are quick to take credit for hosting such events but omit this work in our promotion and tenure applications.

The third R represents Reciprocity. Indigenous scholars have relational accountability and service responsibilities to our communities from where we come and research. Reciprocity means both relational accountability and collective responsibility to which an individual's merits and honors are accorded. Reciprocity is restoring value and merit for the personal and collective knowledge, relationships, skills, and experiences Indigenous scholars carry into their academic roles. Reciprocity is generating equivalence of knowledge value. Indigenous faculty can receive merit and credit for the oral traditions, cultural knowledge, and living libraries they carry for the collective versus a hierarchal top-down relationship of fitting into eurowestern academic standards of tenure and promotion. While it is a personal gain for Indigenous peoples, it is also a collective gain for the academy. Indigenous scholars' philosophies, knowledge, experiences, and wisdom are steeped in their lived experiences, community relationships, ancestral knowing, ceremonial knowing, nation relationships, and land-based knowledge. Indigenous knowledge holders carry knowledge bundles rooted in Creation's four directions and embed spirit, heart, mind, and body. Creating and transforming spaces allows Indigenous people to be who we are to sing, dance, sew, pray, have ceremony, gather, restore community, restore relationships, restore Indigenous ways of knowing, being, and doing. Often the academy lacks space and relevance to retain and sustain Indigenous knowledge carriers whose sustainability requires land, water, ceremony, and community to thrive. Development for Indigenous scholars moves beyond academic conferences to being with spirit in ceremony, being with Indigenous relatives in community, being with Elders and knowledge carriers, and being on the land with Creation. The pow wow is much more than a cultural tourist event; it is a celebration of life that honors Creation's heartbeat and emulates Creation in the dances and songs. Community is nurtured and sustained through this important gathering. Contributing to restoring Indigenous knowledge and building community is valid community service at knowledge production levels, transmission and mobilization.

Much like generating a written publication, Indigenous creative arts-based knowledge is a process weaving together representations of land, family and community stories that together comprise knowing, being, and doing. Regalia making, beading, singing, dancing, family, and community and their relevance to eurocentric university contexts matters to our work in the academy. A shawl is equivalent to a research paper and carries as much weight and value

in both knowledge and process (Jackson et al., 2015). A blank canvas or fabric is akin to a blank page that calls for reflection, research, knowledge, meaning, application, and knowledge sharing. There are few university contexts where this knowledge lives and receives visible merit in an Indigenous faculty member's promotion letter. Today, many universities hold space for pow wows, often sponsored and funded by their Indigenous student services or initiatives. However, the knowledge contained within the layers of pow wow traditions is often invisible and unrecognized. Authentically restoring Indigenous knowledge means creating, generating, doing, and being. Indigenous languages are verb-dominated languages implying that Indigenous knowledge is first lived knowledge, based on experiences that become intellectual knowing. They are interdependent forms of knowing. Restoring Indigenous knowledge means teaching students how to sew, how to bead, how to trust that embedded in these practices are life-affirming knowledge and practices.

The fourth R is for Responsibility. Responsibility to enact the existing plethora of Royal Commission on Aboriginal Peoples recommendations, Truth and Reconciliation Calls to Actions, universities policy statements, university teachers principles, and other documents that support Indigenous faculty, their knowledge, community, and responsibilities while serving higher education. Those engaged in generating trans-systemic synthesis are responsible for shifting disturbers to promote shifts in collective agreements and evaluation criteria that genuinely reflect respect, relevance, and reciprocity of Indigenous faculty. This protocol shifts responsibility for changing institutional standards of value and merit onto the institution instead of Indigenous faculty who are recolonized with eurowestern standards of value and merit. Currently, Indigenous scholars do double duty in fulfilling the eurowestern standards of evaluation, usually in research, publications, teaching, and university committee work; and the second duty in their communities fulfilling existing responsibilities embedded in their roles as knowledge carriers and community leaders. This double-duty leads to double workloads and expectations without fully recognizing the double bind Indigenous faculty are navigating. The next step would be placing value and merit on the good work Indigenous faculty do within their communities and kinship systems. Ironically and typically, it is this knowledge that universities seek and in which Indigenous scholars are grounded. Issues of inequity and disadvantaged playing fields are the academic stakeholders' responsibility, not the already disadvantaged faculty who are over-subscribed within their departments and across the university (Van Katwyk & Case, 2016). University faculty associations provincially and nationally have the responsibility to revisit these issues and reframe what receives values in Indigenous faculty workloads.

In my years of being involved in academia (since 1992), I have participated in Indigenous academic forums, hosted by CAUT, where Indigenous faculty gather to share experiences, offer support, and express concerns. At these forums, I hear Indigenous academic faculty concerns related to tenure and promotion criteria that omit placing value and merit on priorities Indigenous faculty have in relation to their own communities and kinship responsibilities. Many experiences, issues, and concerns typically echoed among Indigenous faculty across disciplines and the country, but tenure and promotion criteria are prominent. Having been

involved in national Indigenous university teachers' forums to discuss under-representation issues, institutional racism, working outside of our communities, academic pressures and stressors, and shared learning curves have been sources of great relief, knowing I wasn't alone in these experiences. In an era of Truth and Reconciliation in the academy, it is time to certainly tackle Indigenous faculty evaluation criteria in tenure and promotion. While initially written for teachers in Indigenous education, these four principles help refocus principles for a lens on how to attribute actual value and merit within the academy in a manner that supports the whole package of what Indigenous scholars bring to their academic work and their community work. They should not be separate, and while I am an Indigenous scholar, I am also a member of the community and engage in community and kinship work. I have not been able to bring my kinship work of being a regalia maker, community craftswoman and dancer into the academic arena. My tenure and promotion dossiers do not see my whole self. I am forced to fragment and colonize my presence in the academy. Indigenous scholars' knowledge within the academy is much deeper and richer than many of our settler academic peers (who are often at the helms of evaluating our dossiers for promotion and tenure) may realize. Ironically, Indigenization strategies seek to hire Indigenous faculty and staff who have Indigenous knowledge, connection and relationship to the community while not respecting these hiring requirements in the tenure and promotion process. Perhaps some of these guidelines will find pathways to support Indigenous knowledge holders within the academy and disrupt the generations that education has participated in enacting legacies of colonial genocide, violence and assimilation.

The Dance Out

When Indigenous knowledge, language, cultural traditions, worldviews, and land-based traditions are wholistically incorporated into our evaluations for merit everyone benefits. The dance out concludes the pow wow, and all dancers dance out of the arena accompanied by the heartbeat of the big drums. As we weave out of the dance arena, I reflect on how I weave who I am and all the good work I do into my work in the academy. I continue to question how we can make all this good work relevant in my academic life. It still seems fractured, and I continue to do double duty with my dual knowledge bundles and dual responsibilities. The dance layers mirror the layers we weave through in determining a pathway toward a good life mino bimaadsiwin. Finally, also during the dance out, I reflected on this day, and how remarkable it was. The day was memorable for many reasons that disrupt the colonial violence of family dismemberment as we came together to dance and celebrate Mother Earth and life. I am aware that our families and communities have been divided and dismembered over the generations from the Indian residential school projects and federal policies created to fragment and divide us. My mother's physical vessel is reaching its end, and if she dances again, it will be a gift to all of us. The coming together of four generations was truly special and unique. In our family, four generations of dancers may only happen once in a blue moon until my grandchild have children, and perhaps I'll be fortunate enough to dance with them in the winter of my years.

The dance out is both an individual and collective action to value Indigenous knowledge in the academy. Ultimately, issues of stress, burnout, and underrepresentation will decrease and retention of Indigenous faculty will likely grow. This dance out acknowledges that:

When IK is naturalized in educational programs, the learning spirit is nurtured and animated. Individually and collectively, Aboriginal people are able to decolonize themselves, their communities, and institutions, leading to transformation and change; and everyone benefits. Indeed, naturalizing IK creates potential for Aboriginal and non-Aboriginal learners in trans-systemic ways that EK alone cannot do (Battiste & Henderson, 2009, p. 13)

Indigenous knowledge holders individually and collectively bring their living libraries and Indigenous intelligence to teaching and learning. Our lived experiences and Indigenous intelligence has a spirit, heart, knowing, and movement. Education benefits from our whole contributions: all educators benefit, and all learners benefit.

Adopting the four Rs as principles into review processes in eurowestern academic structures could transform systems that force Indigenous scholars and students to comply with colonial evaluation criteria (Battiste & Henderson, 2000). "No foundation exists for saying Indigenous worldviews are inferior ways of knowing. According to Eurocentric reasoning, Indigenous worldviews can only be evaluated according to their ability to Indigenous ends" (Battiste & Henderson, 2000, p. 89). I believe the policy statements are there and the pathways for transformation in place. The inclusion of this four generational story promotes that Indigenous scholars and knowledge carrier's evaluation for promotion and tenure be carried out inclusively of their community and kinship knowledge, responsibilities, and priorities. These guidelines and principles, when adopted, will begin to recognize Indigenous scholars' whole knowledge bundles. All the work we do for the betterment of our kin and communities is worthy of value and merit in promotion and tenure applications. As we attempt to restore Indigenous identity and knowledge within eurocentric university contexts, the challenges and demands of carrying dual knowledge bundles continue to contribute the stress and burnout. It would be so much more respectful if the good work Indigenous scholars do within their communities to restore language, culture, identity, knowledge, community, and kinship was included in their work in the academy. This would be an academic dance out that demonstrates respect, relevant, reciprocity, and responsibility.

Dancing out with trans-systemic synthesis in mind would be a dance where we can blend our whole selves, when our knowledge sustaining our self-esteem, value and worth as Anishinaabe Indigenous peoples is respected and valued. My Anishinaabe knowledge and self-esteem come not from my academic work, but from my traditional teachings, land-based practices, community work, ceremonies, relationships, skills, arts, and crafts. After surviving the onslaught of colonial erasure and genocide restoring Indigenous ancestral traditions, skills and arts is imperative to thriving as a peoples. As I am finding pathways to bring my knowledge from spirit through ceremony, heart through the community, intellect through consciousness

education, and body through physical expressions of who I am and what I love. Increasingly, we are witnessing the emergence of Indigenous creative arts and expressive arts of sewing, beading, drum making, drumming, singing, canoeing, walking, fire building, hunting, fishing, and so much more as methods in Indigenous research methodologies and in pedagogies that reach the spirits, hearts, minds, and bodies of Indigenous students. Addressing collective agreements and crediting Indigenous knowledge that builds community, restores relationships, and heals generations of families from policies set up to dismember and disconnect us from the land, our culture, and relations will aid a blending of Indigenous knowledge in academia. Achieving synthesis of my Indigenous self within academia calls upon academia to acknowledge the expertise and good work I do within my kinships and community systems by recognizing them as eligible for credit and merit. This knowledge, after all, contributes to our Indigenous scholarly knowledge bundles within our academic positions. It is our Indigenous knowledge to which Indigenization strategies are turning. It's time to address the double standards and give credit where credit is long overdue.

Miigwech and all my relations.

About the Author

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References

Absolon, K. (2019). Indigenous wholistic theory: A knowledge set for practice. First Peoples Child and Family Review, Special Issue celebrating 15 years of wisdom. 14(1), 22-42.

Absolon, K. (2011). Kaandossiwin How we come to know. Fernwood Publishing.

Absolon, K. (2016). Wholistic and ethical: Social inclusion with Indigenous Peoples. *Cogitatio: The Journal of Social Inclusion*, 4(1), 44-56.

Absolon, K. & Dion, S. (2017). Doing Indigenous community-university research partnerships: A cautionary tale. *Engaged Scholar Journal: Community-Engaged Research, Teaching, and Learning, 3* (2), 81-98.

- Archibald, L., & Dewar, J. (2010). Creative arts, culture, and healing: Building an evidence base 1. A Journal of Aboriginal and Indigenous Community Health, 8(3), 1-25.
- Battiste, M. (2002). (Ed.) Reclaiming Indigenous voice and vision. UBC Press.
- Battiste, M. & Henderson, J. Y. (2000). *Protecting Indigenous knowledge and heritage: A global challenge*. Purich Publishing.
- Battiste, M. & Henderson, J. Y. (2009). Naturalizing Indigenous knowledge in Eurocentric education. *Canadian Journal of Native Education*, 32(1). 5-18.
- Canadian Association of University Teachers [CAUT]. (2016). CAUT. https://www.caut.ca/about-us/caut-policy/lists/caut-policy-statements/indigenizing-the-academy
- Cote-Meek, S., Dokis-Ranney, K., Lavallee, L., & Wemigwans, D. (2012). Building leadership capacity amongst young Anishinaabe-Kwe through culturally-based activities and creative arts. *Native Social Work Journal*, *8*, 75-89.
- Corbiere, M. A. (2019). Protecting Indigenous language rights: Much more than campus signage needed. In *Academic Matters. Ontario Confederation of University Faculty Association's Journal of Higher Education. Decolonizing the university in an era of Truth and Reconciliation.*Spring, 16-20.
- Drumbrill, G. C. & Green, J. (2008). Indigenous knowledge in the Social Work academy. *Social Work Education*, 27(5), 489-503.
- Erasmus, G., & Dussault, R. (1996). Report of the Royal Commission on Aboriginal Peoples. Canada Communication Group.
- Flicker, S., Danforth, J. Y., Wilson, C., Oliver, V., Larkin, J., Restoule, J., Mitchell, C., Kosmos, E., Jackson, R., & Prentice, T. (2014)."Because we have really unique art": Decolonizing research with Indigenous youth using the arts. *International Journal of Indigenous Health*, 10(1), 16–34.
- Fraser, J., & Voyageur, E. (2016). Crafting culturally safe learning spaces: A story of collaboration between an educational institution and two First Nation communities. *Engaged Scholar Journal: Community-Engaged Research, Teaching, and Learning, 2*(1), 157-166.
- Geia, L. K., Hayes, B., & Usher, K. (2013). Yarning/Aboriginal storytelling: Towards an understanding of an Indigenous perspective and its implications for research practice. *Contemporary Nurse*, 46(1), 13-17. https://doi.org/10.5172/conu.2013.46.1.3
- Goudreau, G., Weber-Pillwax, C., Cote-Meek, S., Madill, H., & Wilson, S. (2008). Hand drumming: Health-promoting experiences of Aboriginal women from a northern Ontario urban community. *Journal of Aboriginal Health*, 4(1), 72-83.
- Jackson, E. L., Coleman, J., Strikes With A Gun, G., & Sweet Grass, D. (2015). Threading, stitching, and storytelling: Using CBPR and Blackfoot knowledge and cultural practices to improve domestic violence services for Indigenous woman. *Journal of Indigenous Social Development*, 4(1), 1-27.
- Judge, A. (2018). Learning lessons from the impacts of relocating Indigenous scholars for academic appointments. (Unpublished PhD Thesis). University of Western Ontario. London, ON. Electronic Thesis and Dissertation. Repository 5520. http://ir.lib.uwo.ca/etd/5520
- Kirkness, V. J. (2013). Creatings Space: My life and work in Indigenous education. University of Manitoba Press.
- Kovach, M. (2009). *Indigenous methodologies. Characteristics, conversations, and contexts.* University of Toronto Press.

- Laurila, K. (2016). Indigenous knowledge? Listening for the drumbeat and searching for how I know. *Qualitative Social Work, 15*(5-6), 610-618. https://doi.org/10.1177/1473325016652674
- Little Bear, L. (2000). Jagged worldviews colliding. In M. Battiste (Ed.), *Reclaiming Indigenous voice* and vision (pp. 77-85). UBC Press.
- Manitowabi, S., & Gauthier-Frohlick, D. (2012). Relationship building: A best practice model for Aboriginal women's health research. *Native Social Work Journal*, 8, 57-74.
- McGregor, D. Restoule, J. P., & Johnston, R. (2018). *Indigenous Research: Theories, practices, and relationships*. Canadian Scholars Press.
- McGuire-Adams, T. (2017). Anishinaabeg women's stories of wellbeing: Physical activity, restoring wellbeing, and confronting the settler-colonial deficit analysis. *Journal of Indigenous Wellbeing*, 2(3), 90-104.
- Pedri-Spade, C. (2016). The drum is your document: Decolonizing research through Anishinabe song and story. *International Review of Qualitative Research*, *9*(4), 385-406.
- Ray, L. (2016). "Beading becomes a part of your life:" Transforming the academy through the use of beading as a method of inquiry. *International Review of Qualitative Research*, *9*(3), 363-378. https://doi.org/10.1525/irqr.2016.9.3.363
- Settee, P. (2013). Pimatisiwin: The good life, global Indigenous knowledge systems. J. Charlton.
- Sinclair, R. (2019). Aboriginal social work education in Canada: Decolonizing pedagogy for the seventh generation. First Peoples Child and Family Review, Special Issue celebrating 15 years of wisdom. 14(1), 9-21.
- Stonechild, B. (2020). Loss of Indigenous Eden and the fall of spirituality. University of Regina Press.
- Talaga, T. & McMurchy, V. (2019). Bringing Indigenous viewpoints to higher education. In Academic Matters. Ontario Confederation of University Faculty Association's Journal of Higher Education. Decolonizing the university in an era of Truth and Reconciliation. Spring, 3-6.
- Truth and Reconciliation Canada. (2015). Honouring the truth, reconciling for the future: Summary of the final report of the truth and reconciliation commission of Canada. Truth and Reconciliation Commission of Canada.
- United Nations. (2007). Declaration on the rights of Indigenous peoples. United Nations.
- Universities Canada. (2015). Principles for Indigenous Education. https://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/
- Van Katwyk, T. & Case, R. A. (2016). From suspicion and accommodation to structural transformation: Enhanced scholarship through enhanced community-university relations. In *Engaged Scholar Journal: Community-Engaged Research, Teaching, and Learning*, 2(2), 25-43.
- Victor, J., Linds, W., Episkenew, J., Goulet, L., Benjoe, D., Brass, D., Pandey, M., & Schmidt, K. (2016). Kiskenimisowin (self-knowledge): Co-researching Wellbeing With Canadian First Nations Youth Through Participatory Visual Methods. *International Journal of Indigenous Health*, 11(1), 262-278.

"To See Together Without Claiming to be Another": Stories as Relations, Against One-Directional Move of Indigenous Stories Travelling

Eun-Ji Amy Kim and Sandra-Lynn Leclaire

ABSTRACT Once communities' stories are taken up by researchers and shared within the ivory tower of academia, the stories circulate within the ivory tower. It is often the case that these archived stories from communities are used by researchers, without asking permission from the communities where the stories originate. In this article, we aim to critically review and reflect on underlying theories and practices in conventional Eurocentric academia that allows for a "one directional" move of storytelling dissemination, allowing researchers to take the "version" of community knowledge and/or stories without seeking the original approval from the communities themselves. We suggest "thoughtful" questions for both settler and Indigenous researchers to consider in hopes of promoting "travelling back to original sources" in their scholarly work.

KeyWords Primary sources, Indigenous stories, trans-systemic research, community engagement

We are two researchers in the field of social sciences who met in *Kahnawà:ke* (Kanien'kehá:ka territory) located along the *Kaniatarowanèn:ne* (big waterway; St. Lawrence River). Sandra-Lynn is a Kanien'kéha and Mi'kmaw graduate student in history whose work focuses on Indigenous oral history, languages, and historical memory. Amy is a settler researcher, originally from South Korea, in education focusing on the relationships between Indigenous knowledges and Western modern science. In our teaching and research, we strive to create space for stories from diverse sources (e.g., students' lived experience, local Indigenous communities).

Storytelling and using stories or narrative accounts have been widely utilized in academia. For example, Senehi (2002) explored the role of "constructive storytelling" in cultural production. She particularly focused on the difference between constructive storytelling and destructive discourse in social conflicts. Ronai (1992) used storytelling as a method (i.e., layered accounts) for her autoethnography work. Now, with the global circulation of discourses

¹ Direct quote from Haraway, D. (1988). "Situated knowledge: The sciences question in feminism and the privilege of partial perspective". *Feminist Studies*, 14(3), 575-599.

surrounding "decolonizing," "reconciliation" in, or "Indigenizing" academia, there is a surge of academic research involving storytelling and stories from various Indigenous communities around the world. Indigenous storytelling and stories are important elements of Indigenous research paradigms because through stories, Indigenous knowledges are shared (Wilson, 2008; Archibald, 2008). Working with Indigenous storytelling and stories requires a different type of understanding of protocols and the multi-layered processes of preparations (Kovach, 2016).

Despite decades of work from many Indigenous scholars in combating exploitation, misrepresentation, and appropriation (e.g., Battiste & Henderson, 2000; Grande, 2004; Simpson, 1999), we still witness a pan-Indigenous ideology and approach in the field of social sciences and humanities. In particular, we are concerned with the "one-directional" mode of people and Indigenous stories travelling into academia and then spreading to different disciplines, without concepts and people travelling back to the original sources of the stories. Such a one-directional mode of story travelling allows researchers to take the "version" of community knowledge and/or stories without seeking the original approval from the communities themselves.

In this article, we aim to critically review and reflect on underlying theories and practices in conventional Eurocentric academia that allows for a "one directional" mode of storytelling dissemination. We mainly focus on "Indigenous storytelling" and/or "stories," and the implication of academic practices of citing stories. Further, drawing from our own experience and ideas, we suggest a few ways for both settler and Indigenous researchers to respectfully and thoughtfully engage in stories and ideas with Indigenous communities.

We adopt "storytelling" as means to share our ideas for several reasons in this article. First, it is to make this academic paper accessible to everyone. We hope that our ideas are clearly conveyed and accessible to all readers. We invite the readers to continue to grapple with the issues we present in this article and to further reflect on their own research practices.

Second, we have different stances and backgrounds (Sandra-Lynn as an Indigenous woman and Amy as a settler) and thus, diverse experiences, challenges, and permissions to make use of Indigenous stories and storytelling as methodology. Using storytelling (story writing or sharing) as a format for disseminating our ideas allows for us to acknowledge and showcase the parallel yet synergetic settler-Indigenous collaboration in "seeing [phenomena] together without claiming to be one another" (Haraway, 1988). As such, when reading this article, the readers will hear from our collective voices (we) as well as our individual voices. When telling our personal stories from separate voices, you will see the name (Sandra-Lynn or Amy) written before the narrative account.

What Happens After the Extraction of Stories from Indigenous Communities? Onedirectional Move of Concepts Travelling Through Academia

One day, Amy had received an invitation to review a manuscript. The manuscript was written by settler-academics, who had been collaborating with a community organization in *Kahnawà:ke*. The manuscript opened with the *Ohén:ton Karihwatéhkwen* (Thanksgiving address), citing a

written version from another scholar and referenced many community stories including the Creation story and the two-row wampum teachings.

A few days later, Amy and Sandra-Lynn went out for brunch. Over fluffy pancakes (with real maple syrup), Amy asked, "Sandra-Lynn, what do you think of outsiders using community stories in their academic works?" Instead of answering the question, Sandra-Lynn sighed.

There are many stories and ideas "extracted" from Indigenous communities circulating in academia. When researchers bring stories from communities into academia, the knowledges and meaning attached to the stories are often distilled to fit into the conventional cultures and research practices of academia. Michi Saagiig Nishnaabeg scholar and writer Leanne Betasamosake Simpson (1999) critiques such movement of Indigenous knowledge into academia as the "distillation" and "packaging process" of Indigenous knowledges that allows research practices to continue to appropriate and misrepresent knowledges from various Indigenous communities.

We share the same concerns on these issues around the extraction and distillation of the knowledges from Indigenous communities widely shared and discussed by many scholars (e.g., Battiste & Henderson, 2000; Grande, 2004; Smith, 1999). However, we would like to further engage with the questions of what happens after. Once the stories and knowledges are already circulated through the works of researchers, in what ways are the stories being utilized or in what ways have the original source of knowledges and stories become forgotten?

With his "travelling theory," Edward Said (1983), argued that theories, concepts, and ideas travel across time and space, and as they do so, they may be decontextualized and localized. For Said (1983) theories have no fixed political meanings; thus they can take on a different implication and meaning depending on how researchers and communities of researchers contextualize and further utilize the theories or concepts. Meanwhile some scholars, particularly those drawing on the post-colonial perspective, promote a free flow of knowledge and knowledge production without (or beyond) boundaries.

In turn, these "free flowing and travelling" ideas within academia can be used by anybody without reaching out to the primary source of the knowledge. Further, it allows for the onedirectional mode of knowledge circulation while also "effectively silenc[ing] the original time and place" (Donald, 1987, p. 3) of the primary source. To elaborate this idea further, we present a scenario representing some practices in academia:

There was a research collaboration project between Indigenous Researcher A and Settler Researcher B in North America. Indigenous researcher A asked their community Elder, named Audrey, to share stories with A and B for their research purpose. Elder Audrey gladly shared stories from community. After listening to stories from the Elder, researchers A and B asked the Elder, if they could cite the stories in their academic works. Elder Audrey said, yes. Researcher A and Researcher B published an article in an International peer-reviewed journal.

Academic C in South America read the published article written by Indigenous Researcher A and Settler Researcher B. Impressed by their work, Academic C cited the stories from Elder Audrey in their own peer-reviewed articles. When citing the source of community stories from Elder Audrey, Academic C cited Researcher A and B as the source of information in their article.

Academic D in Oceania then read Academic C's work. Academic D was inspired by Elder Audrey's story presented in Academic C's work. D then puts forth a 'new' concept, using Elder Audrey's story as a main foundation. D coined a new term to refer to his/her new concept.

A graduate student of Academic D read the work of their supervisor. The graduate student utilized the new term coined by Academic D. In the midst of all of these concepts "freely travelling" across disciplines in the ivory tower, none of the researchers using the stories visit the original or primary source of the stories. The primary knowledge sources, Elder Audrey and his/her community, were forgotten in the process.

Indigenous stories are currently "freely" travelling in academia through conventional academic dissemination (e.g., written articles, books, peer-reviewed conference presentation or digital archives, etc.). The problem is that original sources and the keepers of these stories, including Elder Audrey and the community members from our scenario, might not have access to these produced works by researchers stuck within the ivory tower. Meanwhile, stories told by Elder Audrey are made accessible in academic settings for researchers to use the stories that were extracted from Elder Audrey, thereby skipping the process of building a relationship with Elder Audrey and gaining her approval to use her community stories. This knowledge dissemination process allows for the continual flow of Indigenous stories entering the ivory tower without flows of researchers travelling to the original primary source of these stories. This flow is something that we refer to as "one-directional move of Indigenous stories travelling."

As seen in our scenario, Elder Audrey's story is used by academics and became decontextualized, losing its ties to the original place and the people who hold these stories. Once decontextualized, these stories could become "hybridized" with some other concepts from Western theories or be presented in an essentialist pan-Indigenous manner. Furthermore, these hybridized ideas can continue to circulate and travel across different disciplines within the ivory tower. The original community has no control to give consent for such new hybrid concepts to be developed using their original stories and ideas, nor are they being informed about where and how their communities' stories and knowledges are being used outside of the community.

Traditional Ecological Knowledge (TEK) is a perfect example of a decontextualizing of Indigenous stories and knowledges. The term and concepts of TEK are coined and hybridized by researchers who are drawing from knowledges and stories originally stemming from Indigenous communities. The term was first coined and used by anthropologists who extracted communities' knowledges focusing on environmental aspects of Indigenous knowledges (Kim, 2018). Compartmentalized subsets of Indigenous knowledges then continued to be "packaged" in a way, only to meet the researchers' needs (Simpson, 1999). The concept and terminology of TEK are now global buzzwords across many academic and non-academic disciplines.

Continual development and promotion of hybridized and re-contextualized academic concepts are only possible because of a one directional move of Indigenous stories travelling, which silences the place and people where the stories originate. "One directional move of Indigenous stories travelling" is the epitome of un(der)-challenged academic practices deeply rooted in settler colonialism coupled with neoliberal capitalist values which ultimately works to dismiss the relationship building process.

Understanding our Limitations in Light of Settler Colonialism and Neoliberal Capitalist-Driven Academic Culture

Settler colonialism works to erase the original inhabitants of the land. Settler colonialism in academia continues to work to erase the original primary source of stories, specifically communities tied with histories and understandings of land.

As mentioned in our scenario of Elder Audrey, some stories from Indigenous communities are extracted from communities, then continue to be cited as an academic work. Throughout the "one-directional move of travelling," these stories become associated with other ideas of the extractor (i.e., researchers), while silencing Elder Audrey and her community. In turn, settler colonialism allows for researchers to view stories and storytelling as academic concepts, albeit some stories from the communities are "collective memories" of the people driven by thousands of lived experiences on Land (Archibald, 2008). The values of meritocracy and neoliberal-capitalism drive academic settler colonialism and researchers' work with stories from Indigenous communities are treated as a commodity that researchers can use as building blocks for their research.

Starting with the early preparation of academics, we have been surrounded by discourses of "publish or perish" and notions of being successful based on meritocracy by the number of publications, research grants, or student supervisions. The more you have listed on your curriculum vitae, the more likely you will gain access to more funding. The richer get richer, and the poorer get poorer phenomenon is real in academia. This sort of environment encourages the fast production of knowledge and results. Jordan and Wood (2015) caution researchers of the danger of falling for the "intellectual blind drift" by ignoring that we all are influenced by global neoliberalism, which "amounts to a reconfiguration of the very foundations of the public sphere and everyday life, with these relying increasingly on principles derived from the market and business" (p. 5). As Gregory Younging (2018) mentions, the interests of Indigenous stories are increasing in the publishing business. Without proper protocols in place, storytellers and Elders have not been properly compensated while researchers and authors benefit from the royalties and credits.

Research involving stories or storytelling from Indigenous communities take a long time to complete properly. There are many different levels and types of stories and storytelling in Indigenous communities. Stories that researchers and academics want to utilize have different levels of permission required to access them. Haudenosaunee scholar Brian Rice (2013) uses oral history as the basis for his book *The Rotinonshonni*. Rice (2013), as a Haudenosaunee scholar, has a different level of permission to access Haudenosaunee oral history. However,

even he describes how he had to pursue a month-long journey to ensure he had "the right to write about...traditional knowledge" (p. 3). Every Indigenous person, community, and Nation has its own perspective on storytelling, stories, and permissions for sharing those stories. There is not one set ideology surrounding Indigenous storytelling and/or stories that encompasses this immense diversity. However, in current academic culture and practices, these diversities are "diluted and diffused" to be assimilated into "the dominant group's knowledge, experience, culture and knowledge as the universal norm" (Battiste, 2005, p. 124). Pan-Indigenous essentialist representation of stories and storytelling continue to surface across the disciplines.

Sandra-Lynn: After a while I've started to feel like a broken record. I constantly have to talk to non-Indigenous and Indigenous academics and students about the importance of proper community engagement. I see many academics, both Indigenous and non-Indigenous, doing projects, reports, and studies about Indigenous communities and they often rely on asking one person for a community opinion. Over the last year I have had to deal with a lot of negative feedback for expressing my concerns about how both Indigenous and non-Indigenous people weren't thoroughly engaging with community consultation. There are conferences and entire books done about and often on behalf of Indigenous communities and Nations. But people in those communities often never hear about it until they see posters or the books at the bookstore. It's exhausting and I have so many stories and examples of this happening that I couldn't decide on what to include or exclude from this article. I could probably write a book on the entire phenomena.

Settler colonialism coupled with neoliberal capitalist values embedded in academia result in academic practice and cultures that reproduce the perpetuation of a one-directional move of Indigenous story travelling. Researchers can engage in and disseminate their findings without explicitly mentioning the "relationship" building, the sustenance of these relationships, and the collaboration process throughout the work. Essentialist pan-Indigenous representation of Indigenous knowledges and stories continue to perpetuate across different academic disciplines. A "trans-systemic" approach may help in re-directing such one-directional Indigenous stories travelling, with an aim to facilitate the building and sustaining of relationships between researchers and communities.

Engaging with Boundaries and Consequences beyond the Essentialist Pan-Indigenous Ideologies Surrounding Storytelling

In conceptualizing "trans-systemic" research, we mainly focus on two concepts: the notion of "beyond" as well as "boundary" between knowledge systems. In her explanation of a trans-systemic approach in the context of education, Battiste (2013) spoke of this notion of "beyond":

Bridging two diverse knowledge systems together needs some consideration of the assumption underlying each foundation and where the points of inclusion or merging might seem advisable. The need then becomes one of developing "transsystemic" analyses and methods — that is, reaching *beyond* the two distinct systems

of knowledge to create fair and just educational systems and experiences so that all students can benefit from their education in multiple ways. Beyond suggests that neither Indigenous knowledge or Eurocentric knowledge systems can be the sole arbiter of the work involved, I am also suggesting that part of the ultimate struggle is a regeneration of new relationships among and between knowledge systems. (p. 123, emphasis added)

Similarly, Klein (2013) also focuses on the notion of "beyond" in her conceptualization of "trans": "'Inter' is conventionally taken to exist between existing approaches, while 'trans' moves beyond them" (p. 190, emphasis original). Cornell and his colleagues (2013) argue that knowledge systems "are made up of agents, practices and institutions that organize the production, transfer and use of knowledge...relationships within knowledge systems shape the flows of knowledge, credibility and power within those systems" (p. 61). As such, each knowledge system may have its protocol and culture of sharing knowledge outside of its design. Trans-systemic approaches, particularly involving Indigenous and Eurocentric knowledge systems, involve, as Battiste (2013) mentions, "some consideration of the assumption underlying each foundation [IK and EK] and where the points of inclusion or merging might seem advisable" (p. 123). Such consideration of a trans-systemic approach requires creativity and criticality.

Trans-systemic approaches require creativity. Here, creativity refers to one's ability to collaborate with others from different backgrounds and paradigms with a collective goal of moving beyond conventional concepts and methods. In order to be creative in trans-systemic approaches requires researchers to reflect on and examine the power dynamics and underlying assumptions already existing in each knowledge system as well as in-between and beyond the knowledge systems. Thinking about the goal and aim of the trans-systemic approach, we turn to the main teaching of Elder Charlie Patten from Kahnawà:ke.

Elder Charlie Patton from Kahnawà:ke gave a prayer and shared a Creation story before the Sauvé lecture at McGill. In his prayer, he emphasized the notion of balance and harmony: "If we have understanding about each other, then it brings harmony, then the harmony brings the balance, balance then brings us to be in tune with cycle of life" (Sauvé Lecture, McGill University, March 12, 2017). We see this balance and harmony between diverse knowledge systems as the aim and goal of the trans-systemic approach. Multiple knowledge systems can allow "for new ideas and ways of looking at things to be incorporated constantly, without the need to search constantly for new theories" (Smith, 1999, p. 40). Indeed, the focus of the transsystemic approach should not be on producing new ideas through hybridization of multiple knowledge systems. Rather, it is finding the "point of inclusion and merging point" (Battiste, 2013, p. 123) collectively and braiding diverse ideas together as a learning community. In this light, "beyond" in a trans-systemic approach does not refer to "hybridity" or "third space" but the creation of a "camping spot" (Vickers, 2007) where collective reflection, communication, learning, and thus an act of braiding ideas happens. The notion of "braiding" here then honours the origins of the stories and ideas of each braid as well as relationships formed through braiding diverse ideas and stories together.

Meanwhile, braiding as a metaphor for trans-systemic approaches remind each researcher to reflect on diverse boundaries that exist in-between knowledge systems, as well as their own limits and stances with each braid.

Sandra-Lynn: As an Indigenous woman I have become aware of my own role within my community and even I have limitations on what I can and cannot share within academia. There are clearly defined and not so clearly defined boundaries engulfed within cultural notions of stories and storytelling. It is up to the researcher to properly learn about the boundaries surrounding the sharing of stories and storytelling. In order to move away from an essentialist pan-Indigenous perspective, it is imperative to analyze the consequences and impact a researcher's work could have on a specific Indigenous person, community, and/or Nation as a whole.

As a Kanien'kehá:ka and Mi'kmaw woman living and working in my own home community, my experiences in academia have been mixed, and I have often felt uncomfortable to share my historical or cultural knowledge in fear of how this knowledge would be disseminated amongst my peers and professors. I am not officially recognized by any Haudenosaunee longhouses as being a cultural knowledge keeper and I do not have an important political role such as a clan mother. I am a historian, student, consultant, community member, and an academic in training. I am aware of my own role within my community and I am aware of how the knowledge I share can impact the people I connect with in my own community.

Honouring *boundaries* existing in between knowledge systems, as well as your own limits and position in relation to these knowledge systems are important. In thinking about respecting boundaries in trans-systemic approach, we turn to teachings from the (Kasentha) two-row wampum belt. Kaswentha is an important aspect of Haudenosuanee culture and history.

Sandra-Lynn: For those that are unfamiliar with the two-row wampum, it is a living treaty that symbolizes the historical agreement made between the Haudenosaunee and the Dutch. It was created to ensure that both groups maintain friendship and peace by respecting each other's autonomy. Having listened to many Haudenosaunee cultural knowledge keepers describing the importance of this wampum and throughout my personal experiences, it is often appropriated and misinterpreted within academia. It has become a buzzword to describe Indigenous and European relations throughout history. It is often referenced as a contemporary way for all Indigenous peoples to interact with Canadian or American populations, and it fails to provide an understanding of the diversity of historical relations between Indigenous and non-Indigenous peoples. The dissemination of this immensely important aspect of Haudenosaunee culture and history is currently following the "one-directional move of concepts travelling through academia."

The ideology surrounding the two-row wampum is often described as "two boats travelling side by side down the river of life." Each boat does not and is not supposed to interfere with the other boat. The renowned Kanien'kehá:ka Bear Clan Elder Tom Porter (2008) explains in his book that, "We're trying to keep our identity. You do yours and everybody does theirs and all keep their identities going. And then together, we'll be like a bouquet of flowers, to be admired

and to beautify the world" (p. 392). Here, Elder Tom Porter is not describing the two-row wampum explicitly but rather his ideas for the future. However, if you do know the historical and cultural contexts of the two-row wampum, you can see some overlapping ideology. He is describing how each person needs to respect each other's autonomy as well as boundary while also being able to come together peacefully. His perspective and my personal perspective about concerns around the dissemination of knowledge from communities to academia are important things to keep in mind when beginning research on Indigenous storytelling and stories.

Respecting boundaries as well as the co-existence of diverse knowledge systems must be the core foundation of a trans-systemic approach. A trans-systemic approach is therefore complicated. It asks for researchers to look "beyond" the existing Euro-centric academic paradigm while still remaining and understanding diverse boundaries that exist in-between. As such, it requires what Battiste (2013) calls a "two-prong process" of decolonizing education, which entails a "deconstruction of (neo-) colonial structure and strategies and reconstruction that centres and takes seriously Indigenous, diasporic, and other post-colonial ways of knowing and ways of being towards reshaping the place-based process and priorities of education" (Battiste 2013, as cited in Higgins, 2016, p. 13, emphasis original). In other words, class as a community can "re-wire and [then] come together in a different way" (Tanaka, 2016, p. 23). In the context of a trans-systemic approach, such two-prong process must honour relationships, and should thus be done with community members or the teller of the stories.

The Plains Cree and Saulteaux scholar, Margaret Kovach (2016), emphasizes the importance and need for "specific multi-layered preparations" for researchers who want to begin engaging with community boundaries and the consequences research can have on communities:

Indigenous inquiry involves *specific multi-layered preparations* particular to each researcher. Preparatory work means clarifying the inquiry purpose, which invariably gets to motivations. Preparation assumes self-awareness and an ability to situate self within the research. It requires attention to culture in an active, grounded way. (p. 95, emphasis added)

Kovach (2016) understands the need for moving away from an essentialist pan-Indigenous ideology and suggests that "specific multi-layered preparations" include locating yourself, understanding your purposes, and culturally grounding yourself. Such specific preparation processes grounded in a specific community are important as these sorts of engagements are key to working with and utilizing Indigenous storytelling and stories. To start the process of accessing and gaining permission to stories and storytelling, one needs to position oneself in a meaningful way for community members and communities. Some communities and even some Nations have research ethics protocols in place, but many communities have not established this yet. This can lead to both harm and appropriation when academics attempt to incorporate stories and storytelling into their research without proper consultation with community members. Despite good intentions, not respecting the boundary between

knowledge systems and their limits, researchers engage in a simple trans-system approach wherein it is still embedded in a colonial Eurocentric mindset. In this light, we suggest that there needs to be a radical reconceptualization of citation practices (or using others' intellectual properties) involved with Indigenous storytelling and stories. Particularly, we will focus on the notion of the "primary source" and argue that primary sources need to be conceptualized as relations, not an artefact.

Re-conceptualizing Primary Sources

Generally, citing primary sources is considered good practice in academic works for a variety of reasons. This practice gives credit to the original work and makes the original source of information accessible to the other readers. However, there is no universal definition of what a primary source is and it often varies across different academic disciplines. For instance, in the sciences, primary sources are considered the product of research that includes "original research, ideas, or findings published in academic journal" (Berea College Hutchis library, 2020, para 5). For the social sciences, primary sources generally refer to the original raw data such as researchers' field notes, manuscripts, or numerical data sets. Academics in the arts (art, dance, music, theater) have a broad definition of primary sources that includes paintings, audio recordings, and music scores (Berea College Hutchis library, 2020). Regardless of discipline, primary sources are considered stand-alone inanimate objects or artifacts that can exist without having relationships with others.

We argue that such conceptualization of primary sources as objects is deeply rooted in Cartesian dualism. Here, objects and concepts that are interconnected are often separated to individualize the meaning of concepts. As such, mind is separated from body, and nature is separated from culture, etc. (Barad, 2007; Cajete, 2006). Knowledge production and meaning-making processes are considered the work of the "mind." In this light, the works of the "body" in knowledge production (e.g., physically being in the community, meeting and building relationships with community members, being embodied in the process of knowledge sharing) are unnecessary in the Cartesian dualistic thinking.

Coupled with post-colonial theory, dualistic thinking promotes the idea that the work of the mind (i.e., knowledge and concepts) travels freely across borders. Due to globalization and migration, these travelling ideas can become new "hybrid" concepts in the "third space" (e.g., TEK). In this current era of technological advancement and globalization, it is inevitable for already-extracted Indigenous stories to circulate or travel freely beyond boundaries as post-colonialists as Said (1983) suggested. However, in the context of Indigenous stories and storytelling, researchers need to understand that gaining access to stories and concepts does not mean that they have gained an approval to use the stories and concepts. It is also important to remember that what is represented in published works only represents partial and/or distilled version of the stories.

Amy: When I opened the manuscript to review (before meeting Sandra-Lynn for pancakes), I first saw the ohén:ton karihwatéhkwen (Thanksgiving address; the "words before all else"). It was written in both Kanien'kéha and English. It was a copy and pasted version from another published work. The manuscript² did not include any of the lessons they had learned particularly surrounding the Thanksgiving address or their position concerning utilizing the Thanksgiving address.

I felt my stomach churn. My experience with the ohén:ton karihwatéhkwen as a visitor and settler within Kahnawà:ke was not a simple one. I have been presented with the Thanksgiving address through various written and oral versions. Some versions were introduced to me during the opening ceremonies of the school year. A designated person, given the role of opening the school year, said the Thanksgiving address with a tobacco burning while everyone remained in circle and listened to that person. Some versions were shared amongst the circle of teachers where everyone had a chance to add something. I never encountered the same version. Even though I gained access to some content of the elements within the Thanksgiving address, I have learned that the meaning goes beyond understanding the content elements of the Thanksgiving address.

When I was teaching a Bachelor's of Education course in the community (for teachers within the community), we opened a class with the ohén:ton karihwatéhkwen. Everyone stood in a circle. Everyone was from Haudenosaunee Nations, except for myself. Following the counter-clockwise direction, everyone was invited to cite (or tell) an element from the ohén:ton karihwatéhkwen. I was about to pass when it was my turn. Then a teacher who was standing next to me said, "I will help you...repeat after me" and they encouraged me to try. The version they guided me with was one sentence in Kanien'kéha.

I was familiar with the order and content as I had to study it many times due to my community's work position. However, saying that one sentence out loud in the language within the circle of community members became very complex. It wasn't just one sentence of thanking the "sun." It was so much more than just thanking the sun, which I could not comprehend fully and without community members, I wouldn't have remembered.

In order to truly understand the meaning and history behind the Thanksgiving address, one has to understand and have relationships with the Kanien'kehá:ka Creation story which comes from the lived experiences within the community. The ohén:ton karihwatéhkwen is not just a speech that can be copied and pasted. From my understanding, it is a way for the Kanien'kehá:ka to express their worldviews, history, and the relations they have with the land and with each other.

I was not comfortable with these authors re-citing a version of the Thanksgiving address that was copied and pasted from a published written work. Gaining access and having a learning opportunity from Indigenous communities is not equivalent to having an approval

² The authors mentioned that the reason why they've included the Thanksgiving was because of a suggestion of an Elder they've worked with. Ironically, I happened to have a few opportunities to learn from the Elder. The Elder always used Kanien'kéha when s/he told the Thanksgiving address, even if all the audiences were settlers. The Elder, mentored young people to recite the thanksgiving address. The Elder would stand by the young people while they are telling their version of the Thanksgiving address. When young speakers would make a mistake, s/he would quietly remind them. I am not saying that the authors did not get an approval from an Elder to use the ohén:ton karihwatéhkwen but perhaps that they may have misinterpreted his/her suggestion on 'how' to use it for academic purposes.

to re-cite the stories or use the stories in other contexts. For me, albeit with good intentions, the manuscript misused Indigenous concepts and stories. They did not go back to the primary source to gain approval to make use of the story.

In the context of academic research involving Indigenous storytelling and stories, there needs to be a different type of conceptualization of what a primary source is regardless of the academic discipline. It should focus on the aspects of "stories and storytelling as relations."

Within many Indigenous storytelling practices, the meaning of the stories emerges through a holistic process involving "interrelationship between the story, storytelling and listener" (Archibald, 2008, p. 32). In this light, the primary source for Indigenous stories is not the "story" itself (e.g., the Creation story from the Kanien'kehá:ka), it is the *relations* between the story and the storytelling process which depends on the relationships between listener and the storytellers. Gregory Younging (2018) also emphasizes the notion of "relationships" in writing about/publishing Indigenous stories. Younging (2018) first cautioned that if "it's in a book- or especially if it's in an academic book from the 1960s, 1970s, and 1980s — [it] doesn't mean the content was appropriate to publish in the first place, or that it has been published with consent, or that it has been published accurately" (p. 30). Instead, he suggested that researchers and readers need to focus on "context of relationship and trust" and follow protocols from communities. In other words, explicit mentions of researchers' relations with storytellers and communities and how researchers engage in relationship building and sustenance with storytellers and community should be considered as "primary sources" for Indigenous stories.

As such, using storytelling or stories from Indigenous communities goes beyond giving proper credit and citation. Primary sources need to be conceptualized as "relation between story, storyteller and listener," rather than story itself, so citing primary sources should explain the context and researcher's relation with the story and the storyteller. Citing and using a written version or archived stories from Indigenous communities or using other scholars' interpretation of stories is not a proper practice of honouring the relationships between stories, tellers and listeners.

Here, we put forth some reflective questions to the readers: Do you remember the authors who used the Thanksgiving address in their works? The one Amy brought up over pancakes with Sandra-Lynn? Do you think that they have properly cited the primary source of the ohén:ton karihwatéhkwen? We do not think so. Even though the authors mentioned that they have relationships with the storyteller and the actual source of the written version of the ohén:ton karihwatéhkwen, they did not follow our conceptualization of "primary source as relations." The author did not provide a proper explanation of their relations with the stories itself.

In the context of utilizing Indigenous stories in academic work, the proper explanation of primary sources should involve the listener's ability and position to participate in *remembering* the story with community members collectively (e.g., re-citing Thanksgiving in a circle with community members). To elaborate on this, we turn to another case using written versions of Indigenous stories from British Columbia.

Jo-Ann Archibald (2008) speaks about her position on the usage of archived and text versions of stories when she was involved with *The First Nations Journeys of Justice Curriculum Project* in 1994. In this project she was involved in creating an educational resource for the Law Courts of Education Society of British Columbia that included stories from Indigenous communities across British Columbia:

Archival material, especially stories written by outsider professionals such as linguists and anthropologists, raises concerns of misrepresentation and appropriation. After careful consideration, we chose to include some archival-source stories in order to "tickle" people's memories... many stories have been 'put to sleep' in people's memories. Talking about stories and presenting text versions helped to reawaken some story memories. (p. 147)

Although the situations were different for Jo-Ann and Amy, both situations suggested that the archived version of stories cannot be the main sources of the meaning-making process for story work unless the listener/reader *remembers* the stories collectively with community members. *Remembering* "implies that one may, if given, the authority, tell the stories to others thereby practicing the principle of reciprocity" (Archibald, 2008, p. 27). In this regard, Sandra Styres (2017) spoke of "Storied (re)memberings of Land" (p. 51). As some stories from communities are meant to lead community members to connect "the voices of their ancestors" Styres, 2017 (p. 50).

It is through an act and ability to collectively remember stories that one gains the approval to use and tell the stories to others from the community the listener was from. Reading a written version and having access to stories does not mean researchers have primary source access to the stories. There needs to be physical embodiment of listening and learning with various storytellers from the community. That said, we are not arguing against the usage of archived stories. However, we suggest that archived stories can be used as a resource to *prepare* listeners before meeting storytellers rather than being used as the sole source for academic research.

Here, we are not arguing against using stories or storytelling from Indigenous communities for academic purposes. Our goal is to raise an awareness of deeply rooted unchallenged practices and driving assumptions that researcher may not pay attention to. Moving forward, in the next section we explore the questions of "to what extent can one draw from stories and storytelling from Indigenous communities?" In so doing, we do not seek to provide a guideline template but rather to promote thoughtfulness surrounding engagement.

Moving Forward: Academic Engagement with Indigenous Stories and Storytelling

Proper engagement with Indigenous stories, storytelling, and storytellers is not an easy process. There are no clear monolithic guidelines for proper engagement and dissemination. However, it is more of an interpersonal learning process to ensure the respect of the stories, the storytelling process, and the storytellers themselves. Therefore, we focus on questions that might help

researchers (Indigenous and settlers) with challenging the "one-directional move of Indigenous stories travelling through academia."

As explored in earlier sections, engaging primary sources for storytelling requires continuous sustainable relationships with community members. In the current environment, it may be wise not to produce academic works using stories from Indigenous communities unless you already have established ties with specific community and primary sources of particular stories.

Amy: There is always the right time, place, and audience to share stories with. I've had fortunate opportunities to learn Haudenosaunee creation stories through a book club that took place in *Kahnawà:ke*. While I was attending the book club, it was coincidental that I got to visit my ancestors' burial site in Korea. It was in a village called Yeon-dong. I worked on a book chapter reflecting on my positionalities in relation to diverse stories told in *Kahnawà:ke* as well as Yeon-dong. In this book chapter, I distinguished the meanings of space, place, and Land in relation to storytelling which allowed me to better position myself in relation to stories told in *Kahnawà:ke*.

Below is an excerpt from the chapter:

Understanding Yeon-dong stories in relation to the Land of which my ancestors are now part allows me to speak with Yeon-dong. Yeon-dong is ¹⁷³ (Land) to me. It is where the stories and the spirits of my halmonee live. It speaks to me through the stories from my halmonee. I may understand the notion of Turtle Island better now; I may even understand the stories, people, and events happening on Turtle Island, but I still don't know. It is a place (jang-so) to me. I do, though, remember the importance of stories and storytelling in forming relationships with land and the people of the land. It was through the relationship with my halmonee that I got to know my ¹⁷³ of Yeon-dong. It was through the relationship with Kanien'kehá:ka people that I got to better understand the meaning of Turtle Island. Stories and storytelling are core elements needed in forming relationships with land and the people of the land. As the stories from *Kahnawà:ke* are shared with me, I am forming a relationship (friendship, not kinship) with the people and the land, but I am not *of* it...

It is through the stories from my halmonee (grandmother), I got to communicate and re-tell the stories from Korea to you. However, as a settler of Turtle Island, I can never retell the stories told by the peoples of Turtle Island. I am taking a stance as a learner and a listener to share the lessons I received from the stories — but never the place-stories themselves. Understanding our own positionality within these place-stories is the first step settlers need to take in engaging the process of becoming allies to Indigenous peoples. (as shared in Kim, 2020, p. 158- 159, emphasis original)

To understand the true essence of stories and storytelling in many Indigenous communities, one needs to have these *kinship-based* relations with the land where the stories are originated.

Brian Yazzie Burkhard (2019) is a Native American scholar who grew up in Tsalagi (Cherokee), Diné (Navajo) and Lakota communities. To Brian, the Sun is not only a source

of life. Instead of speaking of the Sun and himself as a separate entity, he explains that the Sun and his being are considered to be in "relation" from a particular land together that cannot be broken. His being "was in the sun (being-in-the-land) and the sun's being was in me [him] (being-from-the land)" (p. 8). As Haudenosuanee Environmental Task Force (1992) mentioned, Haudenosaunee creation stories tell us about "the great relationships within this world and our relationship, as human beings, with the rest of Creation... people are but a component of the vast Creation. Some say we [Haudenosaunee] are even the youngest child or Creation" (p. 2). In a similar vein a Cree scholar from Barren Lands Cree Nation, Hermann Michell (2018), stated that "We are the land and the land is part of us, We are the context" (p. 17). In this sense, some stories, including the Creation story, are not to be re-cited by outsiders. Further, utilizing communities' stories solely based on other academic works or archived versions of stories without visiting the community members means the work is furthering settler colonialism through a one-directional move of Indigenous stories travelling, whether researchers intended to or not.

Understanding the need to move away from pan-Indigenous ideologies and engaging with boundaries and consequences is essential to begin researching Indigenous stories and storytelling. Chelsea Vowel (2016) provides us with important questions to ask ourselves when looking at academic research surrounding Indigenous storytelling and stories:

1. Which specific Indigenous nation is this story from? 2. Which community is this story from? 3. Who from the community told this story? You see, our stories have a provenance; a source, an origin. (p. 89)

When planning on utilizing Indigenous storytelling and stories, researchers — Indigenous and settlers — should always think about who or what the primary source was relationally, ask questions and engage critically with what is presented to them. Most importantly, we suggest researchers provide primary source information stemming from their relations with the land, which includes contexts on how the stories were shared, and the relationships between the researchers, the storytellers and community protocols around sharing stories. Albeit small, this is one way to combat deeply embedded settler colonialism and neo-liberal capitalist modes of academic culture work.

When researchers plan to begin working in and with an Indigenous community, they should take the time to learn about the levels of permission that exist with sharing stories and storytelling procedures. Many researchers enter Indigenous communities with the assumption that the community will automatically be interested in their project proposals. However, due to inconsistencies surrounding the existence of research ethics protocols, there needs to be a deeper engagement with community boundaries and research consequences. How will the research work benefit this community? How can researchers ensure that the people sharing stories and storytelling are given the proper credit they deserve?

Be open to discussions about harm and appropriation. Some of the questions researchers could engage before their trans-systemic work include: Does the community want you to use

their Indigenous language and terminology? How are you, as researchers, ensuring that you get proper consultation on using certain language or terminology? Who or what will be cited as your author when you make use of these words in your research articles or books? Each individual, community, and Nation will differ, so in order to move forward, there has to be continual dialogue and relations with communities and community members.

Most importantly, researchers should ask themselves what sort of harm their research could cause this community. Sometimes harm can play out in the simplest ways. Once the researchers begin to critically challenge their own assumptions and preconceived notions, and start to engage with community boundaries, questions about harm may become easier to form. Is the method of recording the stories and storytelling one that could impact the storyteller? If a video of story tellers and community members is posted, as opposed to just an audio recording, could that impact the sorts of requests or harassment the story tellers may receive? Will a video or an audio recording be more accessible to the community?

As a researcher and/or an academic, the focus of your work may target an academic audience. However, it is important to be conscious of the impact settler colonialism within academia continues to impact Indigenous communities. When doing research and academic writing on Indigenous stories and Indigenous storytelling, remember that "the way those stories are presented belong to the oral reciter of the stories, and they deserve credit" (Rice, 2013, p. 18).

Final Dialogues: Readers' Responsibility and Pancakes

Amy: Sandra-Lynn, we reflected together on lots of stuff here (and ate lots of pancakes).

Sandra-Lynn: Yes, we did. I think you and I both were very concerned about the pan-Indigenous, essentialist approach and misrepresentation of Indigenous stories, especially around how Indigenous stories come into academia, and how researcher usage of stories do not benefit the communities.

Amy: Yes, "the one-directional move of Indigenous stories travelling," right? We reflected on Cartesian Dualism that separates the work of "mind" and "body" leading researchers to think that "physical embodiment" is not necessary for knowledge production.

Sandra-Lynn: For academic works involving storytelling and stories, primary sources should be seen as relationships. Relationships between story, storyteller and the listener. Relationships are never static. They evolve and change based on interaction, emotion, and previous experiences. **Amy:** Yes, if researchers would like to cite "primary sources" for Indigenous communities' stories, they should focus on a holistic embodiment process. The notion that primary sources are "relations" rather than static, stand-alone artifacts.

When writing about primary sources that focus on "relations," one should provide an explicit mention of settings, storytellers' identities, and the listener's position with the stories and the communities.

Sandra-Lynn: We also talked about settler colonialism coupled with neoliberal capitalist values in academia, which encourages researchers to engage in knowledge production without visiting communities while also erasing/silencing the communities as knowledge holders.

Amy: Yes, so we talked about understanding one's position in relation to the story, storytellers,

and the Land. We said there needs to be a reflection on "kinship-based" and "friendship-based" understanding.

Sandra-Lynn: Exactly. The relationship and kinship surrounding stories and storytelling needs to be thought out on an individual basis. Discussions about stories and storytelling need to happen at both personal and community levels. It can be a very slow and timely process, but there must always be thorough engagement to ensure that the communities' boundaries are respected and understood.

Amy: Indeed. That's why we presented some questions for researchers to consider as a part of their multi-layered preparation (Kovach, 2016).

Sandra-Lynn: Yes, both research and questions should be considered with thoughtfulness. Indigenous stories and Indigenous storytelling are important to Indigenous cultures. They often guide beliefs of origin or historical timelines. They are in and of themselves living beings that carry the traditions of our ancestors. Indigenous stories and Indigenous storytelling techniques are vast and diverse and immensely important. There is no one set way to approach

Amy: I hope our ideas in this article help those who are thinking of approaching communities, especially for storytelling.

Sandra-Lynn: I hope it will.

Amy: When I met James Sákéj Youngblood Henderson in Toronto back in 2016 at a conference venue, I was very nervous about my positions within academia. I was simply fed up. I thought academia was a very toxic environment.

Sandra-Lynn: I understand. I feel that toxicity too.

Amy: Sákéj was encouraging me, and he shared his wisdom with me and said, "whatever meant to stick will stick." Then, Marie Battiste joined us. She said, "We are providing you tools to play. You will be the one to play in the ground with the tools" (personal communication, May 30, 2016). I guess what we are doing is similar. We are sharing our suggestions and tools for others to engage in. How they are interpreted and taken into practice are their own puzzles to solve.

Sandra-Lynn: Just like the processes of Indigenous storytelling...the process of primary stories as relations involves stories, storytellers, and listeners. The readers have the responsibility to engage in proper community engagement and relationship building. Our way of explaining here, this was just one form of storytelling and the way another pair of academics may pursue discussing storytelling varies. The same applies to Indigenous peoples, Indigenous communities, and even Indigenous stories...there will be an immense amount of diversity, so every experience will come with a new opportunity to teach and learn.

Amy: Well, Sandra-Lynn, I appreciate our friendship together and your critical thoughts. I hope we continue to grow together as critical yet thoughtful researchers. And continue to see together without claiming to be another (Haraway, 1988).

Sandra-Lynn: Yup, just like two-row wampum we can collaborate and appreciate each other while also respecting boundaries and understanding our own diverse lived experiences.

Amy: So, when do you want to go for that fluffy pancakes with real maple syrup again? Sandra-Lynn: Let's go now!

About the Authors

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References

- Archibald, J (2008). Indigenous storywork: Educating the heart, body and spirit. UBC Press. Barad, K. (2007). Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Duke University Press
- Battiste, M. (2013). *Decolonizing education: Nourishing the learning spirit.* UBC Press and Purich Publishing.
- Battiste, M. (2005). You can't be the global doctor if you're the colonial disease. In Tripp, P. & Muzzin, L.J. (Eds.), *Teaching as activism* (pp. 121-133). Queen's University Press.
- Battiste, M., & Henderson, J. (2000). *Protecting Indigenous knowledge and heritage: A global challenge*. University of British Columbia / Purich Press Publishing.
- Berea College Hutchis Library (2020, Jan, 6). *Primary sources*. Retrieved from https://libraryguides.berea.edu/c.php?g=62534&p=402789
- Burkhart, B. Y. (2019). Be as strong as the land that made you: An Indigenous Philosophy of Well-Being through the Land. Science, *Religion and Culture*, 6(1), 26-33.
- Cajete, G. (2006). Western science and the loss of natural creativity. In F. Arrows (Ed.), *Unlearning the language of conquest: Scholars expose anti-Indianism in America* (pp. 247-259). University of Texas Press.
- Cornell, S., Berkhout, F., Tuinstra, W., Tàbara, J. D., Jäger, J., Chabay, I., de Wit, B., Langlais, R., Mills, D., Moll, P., Otto, I. M., Petersen, A., Pohl, C., & van Kerkhoff, L. (2013). Opening up knowledge systems for better responses to global environmental change. *Environmental Science and Policy*, 28, 60-70.

- Donald, J. (1987). Introduction to travelling theory. In J. Donald (Ed.), *New Formations* 3. (pp. 3-4). Methuen Books. Retrieved from: https://www.lwbooks.co.uk/sites/default/files/nf03_01editorial.pdf
- Grande, S. (2004). Red pedagogy: Native American social and political thought. Rowman & Littlefield.
- Haraway, D. (1988). Situated knowledge: The sciences question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575-599.
- Haudenosaunee Environmental Task Force (1992). Words that come before all else: Environmental philosophies of the Haudenosaunee. Native North American Travelling College.
- Higgins, M. (2016). Wandering the pathways of science education: Heeding the call of Indigenous science to come. (Doctoral dissertation). University of British Columbia Theses Databases.
- Jordan, S. S., & Wood, E. J. (2017). The qualitative imagination: Neoliberalism, "Blind drift" and alternative pathways. *Globalisation, Societies and Education, 15* (2), 147-159.
- Klein, J. T. (2013). The transdisciplinary moment(um). *Integral Review*, 9(2), 189-199.
- Kim, E. A. (2018). The relationships at play in integrating Indigenous Knowledges-Sciences (IK-S) in science curriculum: A case study of Saskatchewan K-12 science curriculum (Doctoral dissertation). McGill University.
- Kim, E. A. (2020). Positioning myself in Turtle Island: The storied journeying of a first-generation Korean immigrant-settler to Canada. In E. Lyle (Ed.), *Identity landscapes: Contemplating place and the construction of self.* Brill Publications.
- Kovach, M. (2016). Situating self, culture, and purpose in Indigenous inquiry. In D. Reder & L. M. Morra (Eds.), *Learn, teach, challenge: Approaching Indigenous literatures* (pp. 95–105). Wilfrid Laurier University Press.
- Michell, H. J. (2018). Land-based education: Embracing the rhythms of the earth from an Indigenous perspective. J. Charlton.
- Porter, T. S. (2008). And Grandma Said...: Iroquois Teachings, as passed down through the oral tradition. Xlibris Corporation.
- Rice, B. (2013). The Rotinonshonni: A traditional Iroquoian history through the eyes of Teharonhiawako and Sawiskera (1st ed.). Syracuse University Press.
- Said, E. (1983). The world, the text and the critic. Harvard University Press.
- Simpson, L. R. (1999). *The construction of TEK: Issues, implications and insights.* (Doctorate Dissertation), Retrieved from University of Manitoba Theses Data Base.
- Senehi, J. (2002). Constructive storytelling: A peace process. *Peace and Conflict Studies*, 9(2). Retrieved from http://nsuworks.nova.edu/pcs
- Smith, L. T. (1999). Decolonizing methodologies: Research and Indigenous peoples. Zed Books.
- Ronai, C. R. (1992). The reflexive self through narrative: A night in the life of an erotic dancer/researcher. In C. Ellis., & M. G. Flaherty (Eds.), *Investigating subjectivity: Research on lived experiences* (pp. 102-124). Sage.
- Styres, S. D. (2017). Pathways for remembering and recognizing Indigenous thought in Education: Philosophies of Iethi'nihsténha Ohwentsia'kékha" (Land). University of Toronto Press.
- Tanaka, M. T. (2016). Learning & teaching together: Weaving Indigenous ways of knowing into education. UBC Press.
- Vickers, P. (2007). Ayaawx: In the path of our ancestors. *Cultural Studies of Science Education*, 2, 592-598.

- Vowel, C. (2016). *Indigenous writes: A guide to First Nations, Métis, and Inuit issues in Canada*. Portage & Main Press.
- Wilson, S. (2008). Research is ceremony: Indigenous research methods. Fernwood Publishing.
- Younging, G. (2018). Elements of Indigenous style: A guide for writing by and about Indigenous peoples. Brush Education.

Reciprocal Mentorship as Trans-Systemic Knowledge: A Story of an Indigenous Student and a Non-Indigenous Academic Supervisor Navigating Graduate Research in a Canadian University

Christine Webster, Kathy Bishop

ABSTRACT Reciprocal mentorship is how Indigenous students and non-Indigenous supervisors can supportively navigate their way through graduate research in higher education. Reciprocal mentorship as trans-systemic knowledge values both Indigenous and Eurocentric worldviews, whereby the student has the expertise from Indigenous community and the academic supervisor has the expertise in the academic world. Through sharing stories of their research journey within a Canadian University, Webster and Bishop offer key insights around engaging in reciprocal mentorship, navigating the two-worlds, finding a common language, and having shared values. As a result, Indigenous and non-Indigenous students and supervisors may see themselves within the stories and seek reciprocal mentorship to be successful in the academic research and educational journey and make an impact in their university and beyond.

KeyWords Reciprocal mentorship, Indigenous-non-Indigenous relationships, higher education, trans-systemic knowledge

Indigenous students' perception of schools, and post-secondary education in particular, may be marred by the history of residential schools in Canada. The Truth and Reconciliation Commission (2015) report stated, "Canada separated children from their parents, sending them to residential schools. This was done not to educate them, but primarily to break their link to their culture and identity" (p. 2). Separation of children from families created intergenerational trauma that is still felt and experienced to this day by many Indigenous peoples, and in the experiences of many Indigenous students in post-secondary institutions. However, as noted by Battiste (2014), an Indigenous renaissance is occurring.

In the Indigenous renaissance, trans-systemic knowledge displaces Eurocentrism and "suggests sites of emerging change and innovation that come from Indigenous peoples animating Indigenous Knowledge (IK), as well as from Eurocentric scholars and students actualizing social justice and the human rights of Indigenous people in the academy and in schools" (Battiste, 2014, p. 84). Much work has been done on a national policy level and establishing distinct Indigenous educational spaces within higher education. As a way to further reclaim

"Indigenous voice, vision, and knowledge within the Eurocentric worldview and institution" (p. 90), a third space, as noted by Cajete (as cited in Marker, 2016), may now be possible.

This article suggests that this third space can be found in reciprocal mentorship relationships between Indigenous students and non-Indigenous supervisors when they navigate their way through graduate research in higher education. Mentorship has various ways of being enacted. In the Western world, mentorship traditionally has focused on a senior person guiding someone junior for purposes of career advancement (Kram, 1985); whereas, reverse mentorship (Kram & Hall, 1997) involves a younger person coaching someone older on emergent changes such as technology practices and digital literacy. Reciprocal mentorship posits that mentoring has mutual benefits and responsibilities by both parties (Bessette, 2015; Ferguson, 2017; Harvey et al., 2009). From an Indigenous perspective, mentorship is an essential process in the transmission of knowledge from one generation to the next (Archibald, 2008; Battiste, 2010; Kovach, 2009; Liang & Peters-Hawkins, 2017; McLeod, 2012; Ndaba, 2013; Tippeconnic Fox, 2009; Thomas, 2018). Leaning on this process-based practice in a Western environment while engaging in the academic research journey can assist with whole-person learning: intellectual, emotional, physical and spiritual (Archibald, 2008; Battiste, 2010; Pidgeon et al., 2014) that is critical to Indigenous peoples. However, in this third space, it is not only about the Indigenous student being mentored, but also the academic supervisor. The supervisor brings expertise within the academy, and the Indigenous student brings expertise from their community. Both bring their lived experience and knowledge as whole people to the learning process.

In 2018, a reciprocal mentorship relationship was formed between the authors. Indigenous student, Christine, and academic supervisor, Kathy, embarked on an exciting dual research project to understand how to enhance the overall learning experience for Indigenous students at Royals Road University in British Columbia, Canada. The dual research project findings paralleled some of our own untold research story. The story we share now is that of the reciprocal mentorship relationship between the Indigenous student and the non-Indigenous academic supervisor navigating our unique academic journey. We offer key insights around reciprocal mentorship through our stories, navigating the two-worlds, finding a common language, and having shared values. We conclude by offering considerations for moving forward on the journey.

Our Story

A primary way of knowledge transmission by the *Nuu-chah-nulth*, as within many Indigenous traditions, is through storytelling (Atleo, 2004). McLeod (2012) noted, "the Saulteaux Cree learning system handed down leadership information, knowledge, techniques, and insight from one generation to the next through storytelling" (p. 18). Storytelling can come in many forms, ranging from speaking to lived experiences metaphorically to recounting particular events to reveal life lessons. Recognizing the impact of people sharing their stories, we value the power of storytelling for truth-telling to promote understanding with the potential to evoke change. Smith (2012) shared, "Indigenous peoples want to tell our own stories, write our own versions, in our own ways, for our own purposes" (p. 29).

Furthermore, Pete (2016) counseled faculty to "tell your stories" (p. 87) as one of a hundred ways to Indigenize and decolonize academic programs and courses. Part of storying is to locate the self (Kovach, 2009). Similarly, in qualitative academic research, researchers position themselves (Glesne, 2016; Saldana & Omasta, 2018). We recognize that different worldviews exist with subsequent ontologies and epistemologies between Indigenous and Eurocentric ways of being, doing, and relating. As a point of intersection, we begin our story by positioning ourselves with the intention of both introductions of selves and our relationships to the research.

Author Positioning Christine Webster

My ancestral name is tupal?aqsa, which was given to me by my grandmother. It means woman of the ocean, akin to a mermaid. My name is also Christine, and I am a Nuu-chah-nulth woman from the Ahousaht Nation. Located on the West Coast of Vancouver Island, Ahousaht is a remote community accessed mainly by boat. My grandparents, Andrew and Sarah Webster, raised me in Victoria, British Columbia, the traditional territories of the Coast and Straits Salish peoples. Access to education was the guise for this living arrangement; however, my grandparents gifted much more as they instilled in me strong Nuu-chah-nulth values.

In 2019, I completed my master's degree at Royal Roads University and immediately transitioned into my current doctoral studies at the University of Victoria. Western education has always been encouraged and supported in our family, particularly by my grandparents. To my knowledge, I am the first in my family to receive a master's degree. Choosing a path of education, I hope to inspire others in my family and my community to see higher education as a viable pathway to life-long learning.

Kathy Bishop

My name is Kathy Bishop. I am an academic supervisor, associate professor, and MA Leadership program head at Royal Roads University. I received my PhD in Interdisciplinary Studies in 2015. I am a woman of Scottish and European My paternal grandparents descent. immigrated to Canada when they were children. I was raised in North Vancouver, on the lands of the Coast Salish peoples, specifically the Squamish traditional territory. I followed in my brother's footsteps by going to university.

Along with my aunt, we were the first three in our ancestral family to complete a degree. I am the only one with a PhD.



Figure 1. Kathy Bishop and Christine Webster enjoy a conversation about a Coast Salish carving (carver: Howard LaFortune, Jr.) gifted on the grounds of Royal Roads University. Photo credit: Dan Anthon

Higher education was a substantial value for my father, who never finished high school. Despite this, he rose to a senior-level leadership position in an international insurance company, moving beyond his working-class roots. Both my sons, and three of my nieces and one of my nephews have now attended university. I am deeply committed to being in the service of learning and leadership to make the world a better place.

Research Positioning

In 2018, Christine and Kathy undertook a dual research project. In conjunction with an inquiry team consisting of co-researchers, the Indigenous Education and Student Support office, and The Heron People Elders group, we sought to understand how the overall learning experience for Indigenous students could be enhanced at Royal Roads University. The project simultaneously included the Indigenous Alumni Survey (IAS) (Webster et al., 2019) project and Traversing Culture and Academy (Webster, 2019). However, the dual research project did not start that way. It evolved through internal university funding received by Kathy and her colleagues, Drs. Elizabeth Hartney and Wanda Krause. These funds were to hire an assistant to conduct the research, and merged as Christine and Kathy worked together as thesis student and academic supervisor.

When the IAS study was funded, Kathy sent a call for expression of interest to all students, Indigenous and non-Indigenous, in the program that she was working with inviting anyone to respond if they were interested in being on the project as a research assistant. Although Kathy knew Christine would be a strong candidate, she posted the call to the whole cohort to allow everyone an opportunity to apply. She did this for purposes of transparency. Kathy also did not want Christine or any other student interested to feel compelled if asked directly to participate by their faculty advisor and program head.

Christine recalls one of the first meetings to discuss the potential of this collaboration. The research journey itself was intimidating for her, let alone considering a partnership. The one thing she felt confident about, however, was her personal experience being an Indigenous student. Preparing herself, she walked into the meeting with the intention to listen to the potential of the collaboration and to not be afraid to share her thoughts.

For this meeting, Kathy was conscious of the inherent power dynamics of being a white professor within a Eurocentric university context. Although Kathy held strong beliefs in equality, agency, and a universal life force connecting all life, she also was aware of the reality of operating in structures privileging hegemony and power. Kathy sought to create a space where she and Christine could each speak their truth. She recognized her privilege to take the lead to set this space. Kathy sought to listen to Christine deeply. She appreciated Christine's willingness to risk speaking her feelings and concerns. Kathy believed that Christine would bring much wisdom, experience and commitment to the project.

Kathy hoped that Christine would make the decision that was best for Christine. Christine and Kathy's willingness to listen, speak their truth and create a space for truly sharing formed some of the strong roots of the reciprocal mentorship relationship.

Reciprocal Mentorship

Linking reciprocal mentorship with developing cultural intelligence, Desai et al. (2018) identified that reciprocal mentoring

is relationship-oriented and the cultural differences of the participants can introduce a complexity in this relationship. The success of this relationship is subject to the following assumptions: mutual interest and engagement of the participants; mutual trust and respect; willingness to engage in a discussion related to culture, religion, race, ethnicity, etc.; and commitment to rise above the cultural differences and succeed. (p. 39)

For Christine and Kathy, these assumptions underpinned their work together. As a graduate student, Christine looked to Kathy for mentorship in academic processes, particularly research processes. Tippeconnic Fox (2009) noted that having a "support network of fellow students, friends, professors, mentors, advisors, and Indian organizations, groups or centers" (p. 74) contributed to the success of Indigenous students. Although the student performs graduate research, academic supervisors can provide valuable guidance on how to proceed. Among many examples, we share the challenge of utilizing a conventional method within Indigenous methodology; Christine considered the appropriateness of the online survey. She struggled with how an online survey could be conducted while staying true to Nuu-chah-nulth protocols and practices. Nuu-chah-nulth peoples are an oral people, with critical business normally taken care of face-to-face. Christine was able to make new meaning about the use of the online survey by reading the works of other Indigenous scholars. She was reminded of the Nuu-chahnulth practice of storytelling exemplified in the work of Atleo (2004), whereby he shared origin stories, typically told orally, in written form. Archibald (2008) offered a perspective that "oral tradition still lives, and the written tradition is growing within it" (p. 13) and that "storytellers use their personal life experiences as teaching stories in a manner similar to how they use traditional stories" (p. 112). Recognizing that the intention was to learn about Indigenous student experiences of their post-secondary educational journey, Christine now felt that asking Indigenous students to share their student experience in written form through the online survey could be a suitable method within the methodology. Kathy supported this process, and the time it took for Christine to frame it in a way that felt like the work was being done with a good mind and a good heart. Kathy's support came in the ways of listening to Christine's story, struggles and ideas, and being curious, asking questions respectfully about practice and protocols, and offering insights into Western practice of similar methods to identify the similarities and differences. As the academic supervisor, Kathy provided Christine with enough guidance so that Christine could make sense of completing the work in a meaningful way from an Indigenous perspective.

Although Kathy provided Christine mentorship, Christine also supported Kathy. As an Indigenous woman, Christine believed mentorship to be a responsibility, not only with her supervisor but beyond. Thomas' (2018) work focused on Indigenous women in leadership and

described how Indigenous women have roles and responsibilities related to being "carriers of culture" (p. 13) and are the teachers who lead by role-modelling. By engaging in the work of improving relationships between the university community and Indigenous students through the dual research project, Christine was accepting the responsibility to acquire skills to be able to offer mentorship to future Indigenous students of higher education and to share knowledge with non-Indigenous instructors to enhance understanding of the barriers Indigenous students face. Christine's sharing of knowledge with Kathy contributed to the reciprocal nature of their relationship. This came in many different forms, such as understanding different protocols or other ways of being in relationship. Kathy and Christine had a mutual interest in the formal arrangement of supervisor and student. Both were willing to enhance their learning through their dialogues and commitment to finding solutions to any challenges that arose. Kathy appreciated Christine's willingness to voice her concerns, express how she was making sense of things, and create space for Kathy to offer perspectives, concerns, and questions. Mentoring in this way is not about the faculty member abdicating responsibility nor unfairly burdening an Indigenous student (Pete, 2016), but a recognition that each brings wisdom to the process.

Mentorship also supports women, Indigenous and other minority groups to be successful in their careers in organizations such as higher education environments. McLeod (2012) explained that a "female leadership voice is gained through the example of role modelling, mentoring, and coaching" (p. 20). Throughout Christine's master's journey, there were other forms of Western academic activities that Kathy (along with other university faculty members) had and continue to offer in their mentorships.

In describing Māori women in leadership roles, Ndaba (2013) explained, "mentors were instrumental in the successes of the careers of the participants" (p. 202). With limited Indigenous woman scholars to lean on during her master's journey, the allyship of these non-Indigenous faculty members was appreciated by Christine in gaining hands-on experience with various academic activities. For example, Christine and Kathy, along with other faculty members, have co-presented the dual research project and co-facilitated at conference workshops. These activities were very intimidating for Christine initially, and one may argue that it can be intimidating for all new scholars to begin these academic activities. Tippeconnic Fox (2009) asserts that American Indian women still face gender bias, racism, stereotypes, discrimination, hostility, and cultural issues causing marginality and oppression at the doctoral level in higher education. For Indigenous students, particularly Indigenous women students, challenging these additional barriers while creating space within academic activities can be onerous; having mentorship eases some of the burden.

After completing the master's journey, Christine and Kathy considered how they would continue to work together. The research project provided a strong foundation for them to move forward and develop a new relationship together. As a result, Christine and Kathy have continued to attend conferences, present together, and have committed to co-publishing. This article, for example, also holds a valuable story. When first structuring the piece, Christine and Kathy's focus was on the relational aspects between Indigenous student and non-Indigenous supervisor within the graduate journey. Christine, however, felt the dissemination of the graduate work,

as documented in the thesis as a stand-alone piece, was important to include within the article's framework. Much dialogue occurred with each expressing thoughts and feelings. Kathy agreed, albeit hesitantly. After submitting the original article, Christine reached out to Kathy. She acknowledged that some additional information could have been included that would better guide the message of the article. Upon further reflection, Christine realized that she had felt shy to publish the thesis research work on its own and included it within the original submission as a strategy to feel more comfortable engaging in this academic activity. The graduate work as a stand-alone piece was removed, and the findings interweaved within this article. Additionally, Christine learned to reframe the idea of publishing — initially an individualistic ideation — to a culturally appropriate activity through the work of other Indigenous scholars. Archibald (2008) explained, "sharing what one has learned is an important Indigenous tradition" (p. 2), which is true in *Nuu-chah-nulth* knowledge transmission as well. Through the lived experience and the mentorship of Kathy in discussing and witnessing instead of prescribing the way to write the article, Christine accepted the lesson of publishing as a culturally appropriate activity. Christine felt empowered by the process.

One of Kathy's concerns in developing a new collegial relationship with Christine was that power over dynamics inherent in a student-supervisor relationship may linger. Mendez (2018) reminds us that power differentials include a deficit model of oppression and a strength-based model of the power of existence. Kathy struggled with concerns of not usurping the knowledge of Christine's research, or the process of their writing, in a way that Christine may feel as an academic Kathy had greater agency and decision-making around how the article took shape. After further dialogue about what would be storied, both felt assured. However, what shifted Kathy's concern about power over issues to a strength-based power of existence was when Christine reiterated what she wrote as an acknowledgement in her thesis to Kathy, namely, "walking this journey [is] a process; I appreciate your willingness to lead, follow and walk by my side" (Webster, 2019, p. 6). As a result, Christine and Kathy continue to move between leading, following and walking side by side through reciprocal mentorship.

Navigating the Two-Worlds

The burden of navigating the two-worlds can be lessened with reciprocal mentorship. The dual project research findings identified that "Indigenous students continue to experience the two-world phenomenon" (Webster, 2019, p. 62; Webster et al., 2019). This was the case for Christine, and sometimes it felt like double the work for her. Understanding Western knowledge systems while trying to apply Indigenous knowledge systems was time-consuming. Christine noted, "This required extra time throughout the inquiry ... I questioned whether or not thoughts and processes were an Indigenous way of doing things or if my academic mind was trained to do things this way" (Webster, 2019, p. 36). On a similar note, McLeod (2012) shared, "assimilative experiences caused me to question whose leadership knowledge system I was validating" (p. 19). The mentorship of Kathy fostered the ability for sense-making and understanding for Christine. As described above, Christine was cautious about interchanging Indigenous methodology practices with Western ones. Kathy and Christine talked through

the similarities and differences between methods and referencing and not referencing them interchangeably. Although the process may present the same, the intention with which it was informed, initiated, and analyzed was different. These methods may produce what appears to be similar results; however, the approach and intention are different because the inherent worldview is different. For example, in discussing the similarities and differences between focus groups and circles, Christine and Kathy acknowledged that although these methods may appear similar because people sit in a circle and talk, in an Indigenous circle, specific protocols need to be observed. Once there was an understanding between the terminologies used, Kathy and Christine could reference the terms to help bridge the knowledge of two-worlds in which non-Indigenous people may be able to conceptualize a similar process. By referencing the terms interconnectedly, they could draw the nuances of these practices. Christine became clear that the intention underlying the use of each method was essential to understand. At other times, Christine found it a useful process to verbalize her thoughts about Kathy's different worldviews before trying to write. Kathy would listen and witness.

Navigating difference through the "other world" was not only happening for Christine but Kathy as well. Kathy gained insight into the "other world," *Nuu-chah-nulth* culture specifically, through her discussions and experiences with Christine. For instance, Kathy had a non-Indigenous academic colleague counsel her that for Elder gifts to be reimbursed, retail gifts would need to be purchased rather than paying for handmade gifts. When Christine explained that sometimes handmade gifts from community members are considered more intentional and perhaps more appreciated, Kathy rechecked the academic and research grant parameters of the budget to see how she could make a case for submitting receipts for handmade gifts Christine purchased (as a research assistant). Kathy couldn't find anything documented, so she submitted the receipts. Although the receipts were accepted, Kathy prepared to advocate professionally and, if necessary, reimburse the handmade gifts personally. For Christine, it was not about the financial reimbursement specifically, but the protocol generally. Through open dialogue, Kathy understood the importance of handmade gifts by local community members within "the other" world while sharing institutional perspectives and structures. The navigation of two-worlds here for Kathy was more deeply recognizing the protocols of gift-giving. In this situation, Kathy now understands that Indigenous students as community members may gift Elders differently from university faculty members outside of the community. She also learned that some Indigenous community members gift in advance of receiving knowledge, whereas others gift after receiving knowledge, and some may not practice gifting at all. The key is to seek out understanding within each particular situation and community.

Another example of experiencing the two-worlds occurred during the first term of the graduate program. Christine began the graduate journey a few months after losing her grandmother, the woman who had raised her like her own. As exemplified by others in her graduate research, Christine entered graduate school with a mindset to only focus on school; she felt she put up an emotional wall to protect her grieving process and was intent on maintaining an intellectual approach only. However, keeping an academic journey with only pieces of self was not practical nor healthy. After one reflective activities during the first term of

the program, Christine had reached a deep emotional state that resulted in distress. Christine took to a field overlooking the ocean, with the forest lines in the periphery, and was weeping. She was questioning her decision to pursue higher education while still grieving. She silently talked to her ancestors — asking for a sign, a purpose, an understanding of what it was she was called to do. She was looking for justification, assurance, something — anything to stay in school or quit. She put her hand over her heart, where the eagle pendant that her grandmother gave her was positioned and continued to sob uncontrollably. Suddenly, overhead were two eagles soaring. In *Nuu-chah-nulth* beliefs, timely appearances from majestic creatures are considered visits from loved ones who have joined the ancestors in the spirit world. A calming warmth flowed through her body as she received the sign for which she was asking. This was the *Nuu-chah-nulth* concept of *heshook-ish tsawalk: everything is one* (Atleo, 2004). Relying on her *Nuu-chah-nulth* teachings helped ground her in that moment of her educational path; Christine felt that she was exactly where she was meant to be, experiencing exactly what was meant to be experienced, and her conviction to continue her journey in the academic world was strengthened.

Further to this experience was the critical dialogue that emerged between Christine and Kathy. Kathy explained that the intention behind the activity Christine experienced was to challenge students to look deeply within and find connections with self, others, and nature. Kathy shared that in a program that seeks to support students to transform their self and world views, students can experience different emotional reactions, and this is anticipated. In the particular activity that distressed Christine, Kathy found that for both Indigenous and non-Indigenous students, the activity tended to evoke a deep emotional and transformative experience. Christine explained that although that may be true, for her and perhaps for other Indigenous students the experience goes beyond — touching deep into the historical experiences Indigenous peoples have suffered within academic institutions. Christine shared that in the activity her first reaction was to disengage from the process altogether; to quit. Christine reminded Kathy of the mistrust Indigenous peoples have with academic institutions, and while other non-Indigenous students may experience an emotional reaction, their first response may not be to quit. She counselled that instructors must also navigate the two-worlds by understanding the reasoning behind Indigenous students' actions and reactions and the historical experiences of Indigenous peoples to support Indigenous students truly. Kathy had had a previous interaction with an Indigenous student who had the reverse experience, confiding in Kathy that she was about to quit the program as she was unsure of her place in the academy but after the experience realized she was in the right place. With Christine's wisdom sharing, Kathy realized that there were fundamental core impacts from the different worlds to consider when designing and facilitating certain activities.

Christine and Kathy's experience confirmed the finding that "Indigenous students developed positive relationships with instructors and cohort; however, identified opportunities for instructor preparedness" (Webster, 2019, p. 62; Webster et al., 2019). One recommendation offered was to incorporate a cleansing practice, such as cedar brushing, after conducting deep, reflective activities to ensure all students, Indigenous and non-Indigenous, leave the activities

free from potential negativity but with good minds and hearts as the activity intended. However, integrating this type of content requires instructors to understand the history and connect with Indigenous knowledge keepers to provide guidance. In doing so, reciprocal mentorship can ripple out beyond student and instructor to local Indigenous community members and non-Indigenous students and faculty of the academic community.

Engaging in reciprocal mentorship, Christine and Kathy found that as each brought their specialized knowledge in one of the two-worlds — Kathy in academia and Christine in Indigenous perspective — better impacts could be found across both worlds. Similarly, Liang and Peters-Hawkins (2017) found that the participants in their study "embraced' good values from both [Asian and American] cultures" (p. 60). Furthermore, Chilisa (2016) reminds us, "an Indigenous Research Methodology is not exclusive of other knowledge systems …because if it does it loses the value, our value as Indigenous peoples, as First Nations, as African people, our values of embracing others" [33:33]. Christine prioritized *Nuu-chah-nulth* perspective; however, she acknowledged influences of both worlds.

Finding a Common Language

Communication was a vital element in the reciprocal mentorship relationship. Within Christine and Kathy's student-supervisor relationship, they engaged in many forms of contact: email, phone, video conferencing, and in-person meetings. Establishing a common language was often derived from particular word usage, the intention of the word choices, and the underlying interpretation of words from lived experience. Finding a common language to understand each other's perspective was another form of trans-systemic knowledge in action. This pathway allowed for open dialogue, thus minimizing misinterpretation. Themes that contributed to our discussion included: *Nuu-chah-nulth* words used to express particular experiences; alternative English words used in place of research words customarily found in academia; and other intuitive communication forms.

Nuu-chah-nulth words are not a new language, quite the contrary, Nuu-chah-nulth is an ancient language. However, using Nuu-chah-nulth words in academic contexts is relatively new. For example, Nuu-chah-nulth scholar Atleo (2004) introduced the Nuu-chah-nulth word oosomich as methodology as "an acknowledgment of the cognitive limitations of the physical domain" (p. 124). As a Nuu-chah-nulth woman, Christine understood this work as an expression of translation, selecting a Nuu-chah-nulth word that was better suited toward its intention and use in Western contexts.

For Christine, using *Nuu-chah-nulth* words to better describe feelings and experiences began during her master's degree coursework. For example, there was a phrase used throughout the program delivery of "trusting the process." This phrase was not new language from Christine's perspective; its use was familiar in other outlets. However, asking an Indigenous student to trust the process in higher education, given the history of educational systems used negatively toward Indigenous peoples, felt like a challenge and a misalignment for Christine. As described earlier, during a reflective exercise when students are challenged on multiple levels intellectually, emotionally, physically, and spiritually, the *Nuu-chah-nulth* phrase *heshook-*

ish tsawalk: everything is one (Atleo, 2004) provided comfort to Christine. At that moment, she was guided to trust that everything is one and this experience paralleled trusting the process. Similar experiences were shared by Indigenous students in the one-on-one discussions (interviews) during the research project, although they used word equivalents from their Indigenous languages. For Kathy, connections were made to different Western literature such as systems thinking (Cabrera & Cabrera, 2015; Scharmer & Kaufer, 2013) and systems being (Laszlo, 2012) that recognizes the inter-relationality of everything.

Another example of *Nuu-chah-nulth* expression described an internal process Christine experienced within the research journey. During the research journey, Christine confronted the feeling of needing to compare or validate against Western practice. Smith (2012) reminded, "Methodology is important because it frames the questions being asked, determines the set of instruments and methods to be employed, and shapes the analyses" (p. 144). This message reminded Christine to pay attention to all the sensory experiences as knowledge was being gathered, specifically mindful to what she described as her *thli-muhk-sti*, or internal pauses. Atleo (2004) defined *thli-muhk-sti* as "every life form is of one thli-muhk-sti (spirit)" (p. 61), and Christine also understood this to be as the spirit within each individual, the innermost feeling of our being where teachings are treasured and protected. *tli-muhk-sti* guides one from right and wrong, and the way to walk the earth with integrity. In a Western context, the internal pauses may be thought of as intuition. Using *thli-muhk-sti* in place of internal pauses or intuition brought a deeper level of understanding for Christine within the methodology and intention supported by *Nuu-chah-nulth* values.

Dialoguing about *thli-muhk-sti* and other *Nuu-chah-nulth* words used to express particular situations and experiences, Christine and Kathy delved into deeper levels of conversation. These conversations supported the whole person learning — intellectually, emotionally, physically, and spiritually by clarifying the similarities and differences in views. This also laid the foundations for Christine to utilize alternative English words in place of research words customarily found in academia.

Utilizing English words in place of academic research words enabled Christine to align with the intention and interpretation of the research project. Smith (2012) explained, "The word itself, 'research,' is probably one of the dirtiest words in the [I]ndigenous world's vocabulary" (p. 1). Research for Indigenous communities represents the extraction of knowledge without consent or benefit to the community, extraction by Western context research. Absolon (2011) presented her work as "a petal flower with roots (worldview), centre flower (self), leaves (journey), stem (analytical backbone) and petals (methods)" (p. 12). Inspired by Absolon (2011), Christine also chose to use alternative English words in place of academic research terminology. For example, knowledge gathering (data collection) methods, knowledge sharing providers (participants), sense-making (data analysis), offered guidance (recommendations), or, as noted above, one-on-one discussions (interviews), among others. Kathy appreciated and encouraged Christine's integrity and desire to reflect the research accurately from an Indigenous worldview. Christine was interested to learn that Kathy, in her doctoral work, had also suggested alternative language (see Bishop, 2015). Through the trans-systemic worldviews of theatre and research, Kathy

found that research terminology was privileged over theatre terminology and therefore sought to acknowledge and value theatre's worldview when doing theatre-based research.

As Christine and Kathy's journey evolved, finding a common language came through not only using Nuu-chah-nulth words or alternative English words; it was through other forms of communication. Storytelling is often how Christine communicated her way through the imbalances that Indigenous and Western processes created to express how she was feeling. Storying did take more time, but time was important to take so that Christine felt that Kathy truly understood Christine's experiences. However, when Christine was hesitant to speak, usually through the silent awkwardness, Kathy could sense this. Often the silent awkwardness resulted from an imbalance of understanding perspectives, a misinterpretation of "cringe" words or themes that held different meanings within the different knowledge systems. Silent awkwardness was a response that resulted from Christine trying to formulate an appropriate, respectful response. Respectfully, Kathy would ask what was going on for Christine, knowing intuitively that more internal processing occurred. If the awkward silence could be talked through, it would be. If it couldn't be, this is when Christine would later use alternative forms of communication, such as email, to share with Kathy in a manner that provided space to process the imbalance and to share her thoughts cohesively. No matter which communication form was used, the heart of finding a common language was sense-making together. Sensemaking was foundational to navigating the two-worlds, as was having shared values.

Having Shared Values

Reciprocal mentorship is developed and enhanced through shared values. Christine and Kathy formed a mutual mentoring relationship by honouring their core values, such as respect, curiosity, and integrity, among others. Respect was demonstrated in a number of ways: 1) the methods that were used to communicate, 2) the respect each had for contradictory protocols, and 3) the respect for each other as life-beings. Curiosity was also managed respectfully. When either felt curious about academic or cultural protocols, respectful dialogue took place. Integrity was important for both Christine and Kathy: the integrity of the research community and methodology and the integrity of the academic requirements for completing a degree. Personal integrity was held in high regard, as it was with personal integrity that Christine and Kathy were able to observe, experience and reflect on the trans-system knowledge transfer. Furthermore, Christine and Kathy shared a deep commitment to family and the importance of education and responsibility to give back to the community.

Reciprocal mentorship also felt similar to Wilson's (2008) depiction of relational accountability. He articulated, "Relational accountability requires me to form reciprocal and respectful relationships within the communities where I am conducting research" (p. 40). While reciprocal relationships need to be formed within the community of research, it is also important for a reciprocal relationship to be formed between student and supervisor. Liang and Peters-Hawkins (2017) described, "mentorship depended more on shared beliefs and to a less extent compatible personalities" (p. 55). Christine and Kathy each brought their core values to their student-supervisor relationship and discovered many shared values between them.

Having shared values extended beyond the student-supervisor relationship into relationship with community and environment; we are all one, after all. The university funded a research project committed to understanding how the overall learning experience for Indigenous students could be enhanced. In return, Indigenous students offered guidance. One recommendation was for the university community to "cocreate a 'Walk of the Lands' with and by the local Indigenous communities to story the land usage pre-colonization" (Webster, 2019, p. 103; Webster et al., 2019). In this way, values of respect, curiosity and integrity can be furthered, along with collaboration. Collaboration between academic units and Indigenous student support departments connects Indigenous students and university community members in direct engagement with Indigenous peoples and Indigenous places. Having these experiential activities available allows Indigenous students to connect to their own ways of knowing, being and doing, and university community members to engage in relationships with the local Indigenous communities and lands. Thus, advancing a trans-systemic environment for both Indigenous and Western worldviews.

Moving Forward on the Journey

Kovach (2009) encouraged a way of "giving back to community ... [is] by sharing our work so that it can assist others" (p. 11). It is the hope of the authors that through the sharing of our story, Indigenous and non-Indigenous students and supervisors can see themselves within the stories and seek the way of reciprocal mentorship to navigate two-worlds, find a common language, and build upon shared values to not only be successful in the academic research and educational journey, but make an impact in their university and beyond.

Misunderstanding of Indigenous students within the academy, and Indigenous people in general, will continue if there are no change initiatives by academic institutions, such as is being initiated and supported by Royal Road University both intentionally and emergent as happened with reciprocal mentorship. Battiste (2014) noted the first wave of the Indigenous renaissance agenda was "to transform the status quo of educational curricula to more effectively include IK" (p. 91). The second wave "has involved convincing governments and institutions, as well as our own peoples, to acknowledge the unique knowledge and relationships that Indigenous peoples derive from place and from homeland" (p. 93). Perhaps, the third wave will include reciprocal mentorship. Kuokkanen (2007) called for a new relationship between the academy and Indigenous people that utilizes a new paradigm based on the logic of gift; "The logic of gift foregrounds a new relationship — one that is characterized by reciprocity and by a call of responsibility to the 'other'" (p. 2). The work to find ways of inclusion, honouring people, language and stories, and enabling Indigenous students to bring their whole selves into the academy will have exponential benefits to Indigenous students, Indigenous communities, academic institutions, and society. In this way, students and faculty could dream a new world into reality, one in which the strength of Indigenous knowledge and values can coexist and intermingle in a healthier and mutually beneficial way and that will be honoured and respected by all Indigenous and non-Indigenous Canadians.

About the Authors

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References

- Absolon, K. (2011). *Kaandossiwin: How we come to know*. Fernwood Publishing. Archibald, J. (2008). *Indigenous storywork: Educating the heart, mind, body, and spirit*. UBC Press. Atleo, E. R. (2004). *Tsawalk*. UBC Press.
- Battiste, M. (2010). Indigenous knowledge and Indigenous peoples' education. In Subramanian, S. M., & Pisupati, B. (Eds.), *Traditional knowledge in policy and practice: Approaches to development and human well-being* (pp. 31-51). United Nations University Press.
- Battiste, M. (2014). Ambidextrous epistemologies: Indigenous knowledge within the Indigenous renaissance. In Kamboureli, S., Verduyn, C., & Canadian Electronic Library (Eds.), *Critical collaborations: Indigeneity, diaspora, and ecology in Canadian literary studies* (pp. 83-98). Wilfrid Laurier University Press.
- Bessette, L. S. (2015). Reciprocal mentoring: Rethinking the traditional model. Women in Higher Education, 24(1), 18-19. https://doi.org/10.1002/whe.20158
- Bishop, K. (2015) Spinning red yarn(s): Being artist, researcher, educator through playbuilding as qualitative research. [Doctoral dissertation]. University of Victoria. Retrieved from https://dspace.library.uvic.ca/handle/1828/5853
- Cabrera, D., & Cabrera, L. (2015). Systems thinking made simple (2nd ed.). Plectica Publishing. Chilisa, B. (2016, February). Equity in diversity: Indigenous research methodologies [video]. YouTube. https://www.youtube.com/watch?v=B-SYnx8kRFU
- Desai, S., Rao, S. A. & Jabeen, S. S. (2018). Developing cultural intelligence: Learning together with reciprocal mentoring. *Human Resource Management International Digest*, 26(3), 38-40. https://doi.org/10.1108/HRMID-03-2018-0050
- Ferguson, S. (2017). Ask not what your mentor can do for you...: The role of reciprocal exchange in maintaining student-teacher mentorships. *Sociological Forum, 33*(1), 211-233. https://doi.org/10.1111/socf.12406

- Glesne, C. (2016). Becoming qualitative researchers: An introduction (5th ed.). Pearson.
- Harvey, M., McIntyre, N., Thompson Heames, J. & Moeller, M. (2009). Mentoring global female managers in the global marketplace: Traditional, reverse, and reciprocal mentoring. *International Journal of Human Resource Management, 20*(6), 1344-1361. https://doi.org/10.1080/09585190902909863
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations and contexts.* University of Toronto Press.
- Kram, K. (1985). *Mentoring at work: Developmental relationships in organisational life.* Scott, Foresman and Company.
- Kram, K. E. & Hall, D. T. (1997). Mentoring in a context of diversity and turbulence. In Kossek, S. & Lobels, L. (Eds.), *Management diversity: Human resource strategies for transforming organizations.* (pp. 108-136). Blackwell.
- Kuokkanen, R. J. (2007). Reshaping the university: Responsibility, Indigenous epistemes, and the logic of the gift. UBC Press.
- Laszlo, K. (2012). From systems thinking to systems being: The embodiment of evolutionary leadership. *Journal of Organisational Transformation & Social Change*, 9(2), 95-108.
- Liang, J. & Peters-Hawkins, A. (2017). "I am more than what I look alike": Asian American women in public school administration. *Educational Administration Quarterly*, 53(1), 40-69.
- McLeod, Y. (2012). Learning to lead kokum style: An intergenerational story of eight First Nations women. In C. Kenny & T. Ngaroimata Fraser (Eds.), *Living Indigenous leadership: Native narratives on building strong communities* (pp. 17-47). UBC Press.
- Marker, M. (2016). Indigenous knowledge, indigenous scholars, and narrating scientific selves: "To produce a human being." *Cultural Studies of Science Education*, 11(2), 477-480. https://doi.org/10.1007/s11422-015-9660-1
- Mendez, M. (2018). "The river told me": Rethinking intersectionality from the world of Berta Caceres. *Capitalism Nature Socialism*, 29(1), 7-24.
- Ndaba, Z. (2013). Māri women moving into leadership roles: A New Zealand perspective. Proceedings of the European Conference on Management, Leadership & Governance, (pp. 198-204).
- Pidgeon, M., Archibald, J. & Hawkey, C. (2014). Relationships matter: Supporting Aboriginal graduate students in British Columbia, Canada. *Canadian Journal of Higher Education*, 44(1), 1–21.
- Pete, S. (2016). 100 ways: Indigenizing and decolonizing academic programs. *Aboriginal Policy Studies*, 6(1), 81–89. https://dx.doi.org/10.5663/aps.v6i1.27455
- Saldaña, J. & Omasta, M. (2018). Qualitative research: Analyzing life. Sage.
- Scharmer, O. & Kaufer, K. (2013). *Leading from the emerging future: From ego-system to eco-system economies.* Berrett-Koehler Publishers.
- Smith, L. T. (2012). Decolonizing methodologies: Research and Indigenous peoples (2nd ed.). Zed Books.
- Tippeconnic Fox, M. J. (2009). American Indian women in higher education: Navigating the doctorate. *Studies in the Humanities*, *36*(2), 69-76.
- Thomas, R. A. (2018). *Protecting the sacred cycle: Indigenous women and leadership.* JCharlton Publishing.
- Truth and Reconciliation Commission of Canada. (2015). *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada.* http://nctr.ca/assets/reports/Final%20Reports/Executive_Summary_English_Web.pdf

Webster, C. (2019). *Traversing Culture and Academy* [MA. Leadership Thesis]. Royal Roads University. Retrieved from https://viurrspace.ca/handle/10613/12811

Webster, C., Bishop, K., Krause, W. & Hartney, E. (2019). *Buttedahl Skene Fund: Indigenous Alumni Survey (IAS) Final Report* (BSF 18-02). Royal Roads University.

Wilson, S. (2008). Research is ceremony. Fernwood.

Native Americans and Science: Enhancing Participation of Native Americans in the Science and Technology Workforce through Culturally Responsive Science Education

Gregory A. Cajete

ABSTRACT A major issue that directly affects the participation of Native Americans in the science and technology workforce is the lack of preparation in science and math. This lack of preparation has many causes, but one of the most strategically important issues is the lack of culturally relevant curricula that engage Native American students in learning science in personal, social and culturally meaningful ways. This essay explores the needs, issues, research, and development of culturally responsive science education for Native American learners. A curriculum model created by the author at the Institute of American Indian Arts in Santa Fe, New Mexico, from 1974 to 1994 based on Native American cultural orientations is explored as a case study as one example of how to engage Native American students in science learning and become more prepared to participate in science and technology-related professions. As such, it presents a methodology for how trans-systemic work might be approached in building conceptual bridges between Indigenous and Western views of science.

KEYWORDS Native Americans, science education, culturally responsive education

Lack of Native American Participation in Science Related Fields

In January 1975, the American Association for the Advancement of Science Board (AAAS), led by Margaret Mead, passed a resolution that formally recognized the contributions made by Native Americans to the various fields of science, engineering, and medicine. They also supported natural and social science programs in which traditional Native American approaches and contributions to science, engineering and medicine were the subject of serious study and research.

Based on this mandate, Dr. Rayna Greene, director of the project on Native Americans in Science for the AAAS, advocated research and development of culturally responsive science. Through various studies, insights into the unique problems and perceptions of culturally responsive science programs have emerged. Dr. Greene summarized:

The lack of Indian participation in science is as much due to an alienation from the traditions of Western science as from a lack of access to science education, bad training in science, or any other reasons conventionally given for minority exclusion from scientific professionalism. Contrary to the general insistence of Western scientists that

science is not culture bound and that it produces good, many native people feel that science and scientists are thoroughly Western, rather than universal, and that science is negative. (Greene, 1981. p. 8)

A difference in perception exists in a science directly related to the social and cultural nature of the society from which it originates. While the mandate of the AAAS and Dr. Green's (1981) comments were made over 40 years ago, the perceptions among many Native people that Western science is systemically biased in terms of access and practices continue to persist. This must be seriously addressed if Native Americans are to increase their active participation in the field of modern science (Medin & Bang, 2014).

Keith James (2001), in his book *Science and Native American Communities*, summarizes the issues of science for Native communities. He states that there is recognition in Native community that there is a need for all forms of western education and skills. Still, there is also the recognition that western education, mainly related to science and technology as they are taught in schools, often does not align with the needs of the community or are inappropriate and ineffective in the social and cultural contexts of native communities. Native people educated in this form of education are often lured away from the reservation by corporations, governments, and urban centers, leading to what is referred to as the "reservation brain drain." There are economic roots, such as high unemployment levels, even for educated Indians: roots in the physical condition of the communities, such as poor infrastructure and equipment; sociological roots, such as family and community problems that weigh down many Indian students; and, institutional or programmatic roots, such as a history of materials and systems that are culturally inappropriate at best and assimilationist at worst (James, 2001, p. 2).

Other related issues are a long-standing mistrust of governmental and educational institutions, poor individual and community health, polarization and in-fighting between various groups, all of which make for deep struggle of both individuals and communities to emerge from such situations. Added to this is the impact of sometimes exploitive control of federal and corporate entities, which through various political and otherwise self-serving policies perpetuate weak social, governance, and economic structures, all of which add to lack of science participation and technology-related education.

In a statistical research study, Milne (2017) concludes the following:

Education, particularly the attainment of college degrees, is potentially one of the most powerful ways of transforming society. Education increases earning power through access to employment throughout life...Nation-wide in 2016, 32% of adults hold a baccalaureate (BA) degree or higher. Among 22 tribal communities in New Mexico in 2010 the average was 14% with 1,964 fewer degree-holders than expected for the population, equivalent to \$488,090,000 income per year. On that basis, \$22,940,230 of state tax revenue per year was missing that could have funded programs to increase degree completion. Relative to the US norm, the disparity is much higher. There is potential to fill a gap of over 56,000 degrees among New Mexico's 246,400 or more tribal people, which would net over \$4.8 billion earnings and increase per-capita

wealth across the board. Optimism for disrupting the status quo comes from analysis of changes between 2000 and 2010 that reveal a 'structural trap' that limits most tribal communities to just 11% attainment of BAs. The trap could be eliminated by policies that amplify inter-generational, inter-tribal, and inter-institutional networks such as: (a) establishment of family and tribal community-owned college funds; (b) adoption of a life-long, inter-generational learning model throughout the New Mexico education system that enables students to re-enter as needed; (c) universal day-care tied to pre-school programs; and (d) work study programs for students to live and work within tribal communities while enrolled via distance-learning technology. Engagement with tribal communities and leaders in education and government will advance evidence-based solutions and narrow the gap in degree attainment. (Milne, 2017, p. 1)

Milne's research findings related to New Mexico Indian Tribes indicate the lack of degree attainment experienced by other Native Americans throughout the United States (2017). Similar economic and educational losses are characteristic of many Native communities (Medin & Bang, 2014). The lack of attainment of science and technology degrees among Native Americans is even more acute, at the same time as the need for Native American people trained in science-related fields is increasing dramatically (James, 2001).

Research Background

The solution this essay presents advocates for an extension of the cumulative influences of tribal forms of traditional science, cultural-responsive education, and creative strategizing into the teaching and learning of science toward engaging, as opposed to alienating Native American students from science. The insights gained from research in these areas and their implications for how science is communicated to Native American students form the orienting basis for creating a culturally responsive science curriculum for Native American learners.

For Indians, education that is not grounded in tradition cannot succeed. Many studies have shown that incorporating Indian cultural principles and tribal languages into education increases students' success. Even if some individuals get through the standard mainstream education and achieve conventional success, communities still do not thrive. There are no Indians without Indian communities (Medin & Bang, 2014).

Northwestern University researchers Medin and Bang (2014), contend that the very structuring of science education in most educational settings reflects an entrenchment of seeing science as being done in only one true way, with only one true set of values, seeing only one way to work in science, only one true curriculum for science. They believe such a biased orientation must be challenged and transformed toward a paradigm that acknowledges the relational nature of science and creates and supports science education for all.

After a detailed analysis of cultural differences between Native American and Euro-American approaches and practices in biological/ecological thinking and natural understanding the authors posit a solution (Medin & Bang, 2014). They suggest that self-determination through community engagement with, and ownership of, Science and Science education may be the

most crucial outcome for Native communities and Native people to become more engaged in science and technology-related fields.

Medin and Bang (2014) also contend that how science gets done reflects who's doing it. They believe that it is not as simple as everyone doing the same thing but not in the same way. They state that it is instead a matter of different things, done in different ways for different purposes guided by different [cultural and social] values. Contrary to prevailing assumptions, science is slow to self-correct, and entrenchment of the notion of "one truth, one way" continues to dominate. Medin and Bang (2014) argue for diversity and power-sharing within an educational framework designed to produce the best science and undermine research biases correlated to gender, race, socioeconomic status and culture. In other words, as is true in healthy ecological communities in nature, *diversity* strengthens the community and makes it more resilient. Alan Leshner (2011), CEO of the AAAS, writes:

Increasing the diversity of the scientific human resource pool will inevitably enhance the diversity of scientific ideas. By definition, innovation requires the ability to think in new and transformative ways. Many of the best new ideas, ideas that come from new participants in science and engineering enterprises, from those who have been less influenced by traditional scientific paradigms, thinking and theories...than those who have always been a part of the established scientific communities. (Leshner, 2011, p. 15)

Science is social and cultural, and an individual process of thought that has been utilized in some form by every human cultural group (Longino, 1990). The methods and products of science and their intimate relationships with human culture form an important part of education. Research in scientific knowledge transfer in an educational setting by scientists based on a cultural perspective is not extensive. Some of the research concerns the study of the relationship between scientific and artistic thinking in terms of characteristic brain functioning. The research in this area has come not from science educators or scientists but from individuals studying brain patterning characteristics, cultural learning, creativity, art, cognitive psychology, linguistics, holistic health, theoretical physics and cultural anthropology (Sanders, 1986; Hayward, 1984; Dunn, 1983; Capra, 1982; Gardner, 1982; Van Peursen, 1981; Mansfield, 1978; Hall, 1976).

For example, the scope of study in cultural anthropology encompasses all human activities — including science. Cultural anthropology is one of the few Western disciplines that seeks to understand a given aspect of a culture as a whole, both inside and on its own terms. This basic characteristic of the methodology of cultural anthropology lends itself most readily to the understanding of Western culture's realities through the "other's" eyes.

Individual attempts to investigate how cultural processes of classification and perception affect scientific thought were led by anthropologists like Benjamin Whorf and Magorah Maruyama in the 1960s and '70s. Maruyama and Harkins (1978) and others approached science as a cultural system. By examining conventional societal ideas, they began to widen the parameters of general scientific thought and knowledge.

One of the significant insights into the cultural perception of "separate realities" came about due to the 1956 fieldwork of Benjamin Whorf among the Hopi Indians of Arizona. Whorf (1956) hypothesized that thought is intimately related to and even guided by a people's language. Implied is the idea that "realities" are different from one culture to the next. In an authentic sense, we are all wrapped up in our cultural blanket by our language, worldview and reality, and directly perceive and order the world in reference to this schema. Whorf proposed that Hopi terminology for certain aspects of physical reality reflected a better description of that reality than modern Western terminology. Western structuring of reality through language does not represent the exclusive legitimate perspective of reality.

Research indicates a "mismatch" between the perspective from which science is conventionally presented in American schools and the general cultural and individual learning orientations of Native Americans (Medin & Bang, 2014). Hall (1975) adds:

Western science tends to overemphasize the process of classification at the expense of information about the organism...(which) has led Western thought to be predominately preoccupied with specifics to the exclusions of context of knowledge within wholes... ... How can integrative systems of thought be developed from a classification system that fragments and never gets around to putting things together in wholes. (p. 2)

One step further in the application of reductionism in education, is a lack of accepting that there are differences in individuals' learning orientations. Native American learners are a predominately visual group and context-oriented learners (Cajete, 1999). Science in most American schools is heavily oriented toward a learner who is presumed to be analytic, objective, verbal, structured, and parts oriented. Native American students tend to be intuitive, subjective, non-verbal, synthesizing and oriented to wholes (Cajete, 1999). For example, the study of the ethnoscience or cultural sciences and associated traditional ecological knowledge of the Indians of North America is a valuable tool for understanding the cultural influences in science and how Native and non-Natives gain valuable insights about themselves and the unconscious cultural conditioning of their perspectives of natural reality.

The Native or cultural science of each tribe or cultural region is unique and characteristic of that group or geological area in that it reflects adaptation to a certain place. However, "strands of connectedness" and similar patterns of cultural thought begin in the northern polar regions of North America and extend to the tip of South America. The mythical paradigms of the Trickster, the Sacred Twins, the Earth Mother, the Corn Mothers, the Thunderbirds, the Great Serpents, the Culture Hero, Grandmother Spider Woman, and the Tree of Life all exemplify the interrelatedness of Native American cultures. All are extensions of the process of "science" in that they reflect a cultural interpretation based on observation of phenomena and procedures inherent in nature. They represent a very primal and artistically metaphoric way of perceiving — a distinctly Native American way of viewing the world (Cajete, 1999).

Until recently, the arts, hard sciences, and social sciences were presented as totally distinct entities in most American school curricula. Indeed, in many American schools, they still are.

Such an approach has tended to fragment the human cultural systems being examined, thus perpetuating a distorted perspective of the arts, the sciences and culture in many students' minds. This approach has been particularly unfortunate for Native Americans.

The fact that science is presented entirely from the Western cultural perspective in most American schools can create a genuine psychological conflict for students raised in a different cultural tradition. It is this conflict and resulting alienation that forms the basic impetus for this work.

As is true with all primal cultures, science as a perceiving process was and is completely integrated in all aspects of Native American cultural systems. The method of teaching and learning science today becomes a matter of discovering the products and determining how and why these early thought processes evolved into these paradigms within the context of each tribal culture and environment.

When one interprets and translates the symbolic language, art, dance, music, ritual and other cultural wrappings through which these paradigms have been transmitted, one realizes that they reflect perceptive and sophisticated ideas about the essence of nature and the universe. Research by scientists Capra (1982), Bohm (1983) and others into underlying concepts of many ancient philosophies reveals that many primal sciences have incorporated understandings into their systems that are only now being explored by the most advanced research in quantum physics.

Preliminary attempts are underway to explore the philosophical foundations and ecological practices of primal cultures using the perspectives gained from ecology, the creative process, brain research, linguistics, theoretical physics, anthropology and Jungian and archetypal psychology. This re-examination has great potential in that it presents a method of interpretation of these important paradigms of Native America in the context of the 21st century potentially leading to transformation of science education for more Native American success.

Igniting the Sparkle: An Indigenous Science Education Curriculum Model

I am an educator of Native American people. What I have been doing and where I have been doing my teaching provides context for understanding what is meant by Indigenous science and the role I play as a Native American educator. I am a Tewa Indian from Santa Clara Pueblo, one of six Tewa speaking villages north of Santa Fe, New Mexico. Each of these Pueblos is autonomous but is related to others through custom and language.

Based on my experience, when a child grows up in a community with other people of their culture who are related or are living the same way, they don't realize their difference. They don't understand the nature of their cultural differences until they become immersed in mainstream society process and culture. My cultural difference didn't impact me until I began interacting with other cultural groups in college. I then realized how different Native American people were and how we viewed life and education in some very distinct ways. To lessen the impact of these differences, I went to a college that was not far from my home, which allowed me to maintain constant contact with my community (Cajete, 1999).

After graduating from college in 1974 with a degree in biology and sociology, I began to teach high school science at the Institute of American Indian Arts (IAIA) in Santa Fe, New Mexico. The IAIA opened in 1962. The purpose of the IAIA was to evolve a context in which the artistic potentials of young Native American people from all over the United States could be cultivated and expressed. The IAIA was an experiment in cultural education, an experiment using the arts as a primary vehicle, and aimed at helping native young people learn about themselves, their culture and their identity. After its opening in 1962, the IAIA became famous as a model school as UNESCO recognized it as being one of four culturally-based schools of note in the world (see www.iaia.org).

In 1988, Congress enacted new legislation entitled the American Indian Arts and Development Act, which chartered the IAIA as a public/private entity with its own direct congressional funding The Congressional funding of the IAIA remains an experiment because the new legislation is under review. Results of the review will determine if the funding arrangement and sovereign management of the IAIA satisfy both congressional and institutional mandates.

When I started teaching at IAIA, the school had a junior and senior high program as a feeder program for the two-year Associate of Fine Arts degree program in the college. During my first year of teaching, I realized that many of the ways of teaching and approaching science (i.e., textbook science), were not culturally and pedagogically appropriate for my students. Native American students came from all over the United States, and from urban and rural environments. Some were culturally-embedded in terms of their upbringing; others were not. All had a common thread, and that was an interest and a willingness to explore the arts. They also possessed a common alienation from science educational approaches they had experienced in reservation and community schools. Charged with making a program work for these students, I put aside all the textbook methods I had brought with me from the teacher education college and created new curricula based on my own experiences as a Native person. It was pedagogically liberating in that I tried things that would not have been allowed in another school, certainly not in any public school. I explored, piloted, and honed a process that allowed students to learn in ways in which they felt good.

My curriculum evolved over the years from 1974 to 1994. It began with the introduction of ethnobotany in a health science class I was teaching, and it grew into a full culturally-based science program. Its story is a story of creation, of the process of interaction in science, art and culture and the integration of those aspects into the expression of a curriculum — a learning, teaching process that works well for native students who wish to understand and learn about their heritage as it relates to science. The curriculum evolved around the idea that every Indigenous tribe has its own knowledge system and orientation to learning and science, and that the 'epistemological' is metaphorically represented in art forms, stories, ways of community, language, traditional ecological knowledge and positionality in relationship to the natural environment.

I created the curriculum by adapting the Zais Model for Curriculum Research and Design, authored by Robert Zais in 1976. The model uses a rubric composed of four components that sit atop four foundations. The features include: Aims, Goals and Objectives; the Content; Learning

Activities and Evaluation. These components are directly influenced by the foundations of Epistemology, Society and Culture; The Learner and Theory. The components and foundations were explored to design curriculum for dynamic teaching and learning of basic science concepts in creatively engaging and culturally responsive ways. I similarly approached science learning as the learning of art since both have the creative process of learning in common. In every sense, as Reed (1935) said, "Art is the expression and science is the explanation of the same reality" (p.5). I reviewed the history of Native American ethnoscience and incorporated relevant elements into the presentation of science concepts. Through the research of the curriculum using the Zais model, I was able to show students how science can be viewed as a cross-cultural, multi-contextual knowledge system that has relevance to Native culture and experiences. In the presentation of key concepts, I used native language metaphors, stories, symbols, and art forms to tell the history of "Native Science" while at the same time helping students' development of conceptual understandings of Western Science. What evolved was an integrated view and understanding of culture, science and art as a triad of knowledge and as a kind of complex adaptive systems of inter-relationship.

The integrative research process scaffolded ways for students to engage the natural world and the learning of science concepts personally through art, story and culture. This required looking at the teaching and learning of science in a completely different way and redefining science through the lens of Native thought and cultures. I researched historic and ancient forms of Native American teaching and learning and reintroduced them through the curriculum in contemporary ways. I infused the curriculum with projects that engaged their creativity by learning and creating from life, story and nature. It allowed students to learn art, science, visual thinking and cultural history. It developed in students the ability to create and make the learning of science their own. The curriculum facilitated inner experience and self-reliance through bonding, trust, sharing and caring, thereby bringing students back into an empathetic relationship with plants, animals, place and cosmos through art and science. After a time, the original intent of addressing the alienation of students from science was not only addressed but was transformed into the notions that: science can be learned in multiple ways; that it's about connecting to self and a sense for place; about creating an extended family of learning; about making meaningful connections to life and community; about creating and engaging in authentic learning; about sharing and giving voice and expression to our thoughts; it's about immersion, exploration, appreciation and enhancing personal experience, health and leadership.

I want to emphasize that this curriculum is not an *idealized* or *naïve* creation without substance. On the contrary, it is a comprehensively researched and implemented curriculum experienced with positive results by over 2000 students attending IAIA from 1974 to 1994. This case study illustrates that intervention through the design and implementation of culturally-responsive science curricula does make a difference in transforming the alienation that many Native American students feel toward science to a feeling and perception that science can have a place in their lives. This transformation of perception is an essential step in creating a foundation for more participation of Native Americans in science and technology-related field. Indeed, one outcome for the students at IAIA who took courses in the curriculum is

that many later became accomplished in computer-based art production and other uses of science and technology in arts and media. Since that time at IAIA, many other initiatives have incorporated various integrated and cross-disciplinary approaches to science teaching in many school programs and community education projects. Today, these approaches are referred to as Science and Technology Education through Arts and Media (STEAM).

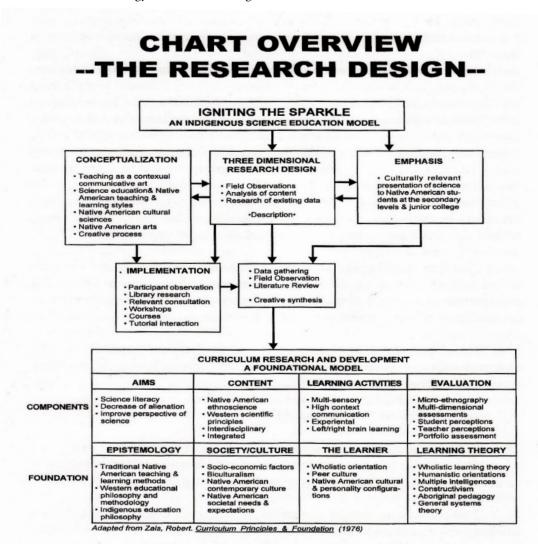


Figure 1. Excerpt from Cajete, 1999, p.22.

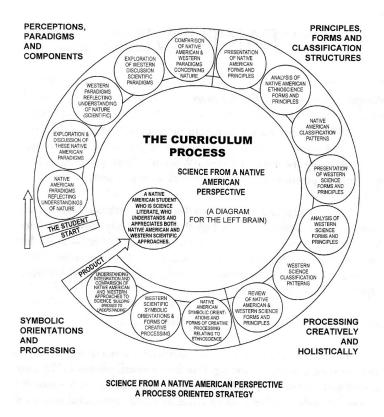


Figure 2. Science as a cross-cultural discipline. Excerpt from Cajete, 1999, p.115.

The Native American Learner

Few studies have seriously explored the unique and culturally conditioned learning characteristics of Native Americans. Until interest in field sensitive vs. field independent orientations (Ovando & Collier, 1985) by some minority group learners emerged, few researchers had focused on the notion that the most effective way to educate was to develop teaching and learning strategies around distinct learning styles. Based on the concept of *cultural deprivation*, the prevailing notion had been to change the learning style through *educational reconditioning* so that students would conform to the mainstream educational system (Cajete, 1999; Burke, 2007). From the earliest missionary attempts through the boarding school era to the present stage of public school education, Native American education has been dominated by attempts at reconditioning Native American learning styles.

In my work, I resolved this focus on reconditioning by developing my lessons using a creative process methodology of insight first (Why), preparation/immersion (What); experimentation (How), and presentation (What If). This four-fold process parallels Native thought and insight inherent in the medicine wheel orientations of the four directions and the application of the

scientific method's application of observation, analogy, experimentation and presentation of results. I taught each of my units using an integration of all three parallel approaches to teaching and learning (Cajete, 1999).

Fortunately, with the introduction of self-determination and the concurrent trend of cultural revitalization in Native education, this inherent focus of reconditioning Native students through Western schooling is beginning to change. To continue such a movement toward a more culturally relevant and learner sensitive education, some critical factors must be considered. Significant learning tends to be directly related to the degree of personal relevance the student perceives in the presented educational material. The basis for such a premise stems from the idea that motivation toward any pursuit is energized by one's own constellation of personal and socio-cultural values. In the Native American social psyche, this constellation of values has very ancient and well-developed roots. It is because of this embeddedness that Native American social personalities remain so durable and relatively visible through layers of acculturation. Understanding and utilization this cultural constellation of values is a key to motivating learning in Native American education.

Since the turn of the century, Native Americans have experienced various levels of acculturation. Acculturation led to new configurations of language and culture characteristic of the changes a particular Native American group underwent. For instance, many Native American students can be classified as "English dominant," which has ramifications for teaching science. For while many are English dominant, they have been exposed, through home and community, to various levels of thought concerning how their particular tribal groups have traditionally viewed the natural world. There is often a real identification with both the cultural and linguistic revitalization of their specific cultural group. This sense of identification with tribal roots can provide a prime source of motivation to learn about science related to an individual's heritage.

In addition to students rediscovering their tribal identities and ancestral knowledge systems, there are more bilingual and bicultural students. These students generally want to continue to learn and live within the context of both knowledge systems. Instruction in transsystemic science for these students constitutes a real enrichment of their attitudes toward science and reaffirms cultural ties and identifications with their tribal groups. Science instruction from two cultural views for these students provides a means of bridging the significant differences in mindset concerning natural phenomena. This approach to science instruction is by its nature a two way approach in that while Indigenous students are learning Western science building from and on their ancestral systems of knowledge, non-Indigenous students are learning and considering other cultural ways of knowing nature that enhances the knowledge gained from Western science.

Knowledge of Native American core cultural values and how such values differ from the values implied in American education is essential in bicultural education (Brandt & Kosko, 2009). The transition of values has a direct effect on their attitudes toward education. Core cultural values of Native Americans and their influences on attitudes and behaviours are relatively submerged since such values tend to operate at the subconscious level.

These values, however submerged, invariably affect the outcome of their educational pursuits. If the student can be made aware of Indigenous knowledges of their people, learning will follow. Showing the student how what is being presented in a particular area such as science is relevant to or enhances the understanding of those cultural values will help him/her to learn. The student's values play a key role as psychological "energizers" for the positive evolution of self-image.

Since the 1940s, the accelerated rate of development has increased the inconsistences in worldview and cognitive fabric of Native American life, resulting in much intrapersonal tension. This conflict has given rise to a variety of emotional and social problems whose ramifications are poorly understood. But a subtle, well-integrated and consistent cognitive map and world view are conducive to healthy concepts of self and positive social adjustment. The opposite is usually apparent when there are acute or chronic inconsistencies and conflicts between the internal constellation of values and those of the external social environment.

Cultural content will facilitate educational goals and the development of students both intellectually and socially. Bringing core cultural values from the subconscious to the conscious sets the stage for the creative synthesis and interpretation of those values in a new and psychologically rewarding context.

Border Crossings

There is an acknowledgement that distinct cultural knowledge systems exist and have always existed through history, which have developed and applied their forms of "science" to their societal needs. Indeed, the notion that Western science is a rational approach to knowing in Eurocentric disciplinary knowledge system presents an inherent bias for all students learning science in Western schools. This realization has influenced mainstream science educators, opening the way for a contemporary Indigenous expression of education through cross-cultural science curriculum tailored to students' needs.

According to Aikenhead (1997), learning Western science requires Native students to cross cultural boundaries, from the familiar contexts of peers, family and tribe, to school, school science and the actual world of science. The notion of border crossings is an anthropological metaphor that implies that students do not leave their home culture behind when they enter this cultural landscape called "School Science." In a sense, they are on a mission to learn about a new territory to gain knowledge and understanding that they may use back home toward their self determined and practical ends. These practical ends include preparing for a career, economic development, environmental responsibility and cultural survival at the community level (Aikenhead, 1997). In interactions between Indigenous cultures and the subculture of Western science, profound conflicts arise. Their orientations differ in terms of survival vs. power over nature and other people; coexistence with the mystery of nature vs. attempting to explain the mystery of nature away; the search for an intimate relationship with nature vs. decontextualized objectivity; and accommodation, intuitive and spiritual vs. reductionist, manipulative and analytical.

Indigenous knowledge of nature tends to be thematic, survival-oriented, holistic, empirical, rational, contextualized, specific, communal, ideological, spiritual, inclusive, cooperative, coexistent, personal, and peaceful (Aikenhead, 1997, p.7). This essential orientation difference challenges Native American students as they attempt to cross the borders into the subculture of western science as represented in schools. If the teaching and learning of science support the student's cultural orientation, "enculturation" results. If the teaching and learning of science is at odds with the student's cultural orientation, the result is "assimilation," forcing students to abandon or marginalize their way of knowing to reconstruct a new (generally dysfunctional) way of knowing. Unfortunately, the latter is more often the case.

The essential question is: How can students from Indigenous cultures learn any subjects like science without being assimilated harmfully by the underlying value structure in the unfamiliar knowledge system used? I posit that First Nations students should develop the facility to cross from everyday sub-cultures of peers, family, community, and tribe into the sub-cultures of school science, science and technology (Pomeroy, 1994). Students and teachers should become "cultural border-crossers" (Pomeroy, 1994, p. 17). Yet, "crossing over from one domain of meaning to another is exceeding hard" (Hennessey, 1993, in Aikenhead, 1997, p. 9). Students generally get very little help doing this kind of border crossing. Few teachers are inclined to assist students, and if they are, they have few resources for being trained in this kind of cross-cultural, trans-systemic negotiation.

Four worlds for student transitions have been identified. These include: a congruent world that supports smooth transitions, a different world that requires transitions to be managed, diverse worlds that lead to hazardous transitions, and highly discordant worlds which cause students to resist transitions and in which they become virtually impossible (Phelan, Davidson, & Cao, 1991).

Costa (1995) divided minority students in science classrooms into a typology:

- 1. "Potential Scientists" cross borders into school science so smoothly and naturally that the borders appear invisible;
- 2. "Other Smart Kids" manage their border crossing so well that few express science as being a foreign subculture;
- 3. "I Don't Know Students" confront hazardous border crossings but learn to cope and survive;
- 4. "Outsiders" tend to be alienated from school so the border crossing in school science is virtually impossible; and
- 5. "Inside Outsiders" find the border crossing almost impossible because of overt discrimination within the school.

Helping students develop the skills for "raiding Western science for practical ends and achieving goals defined by first nations science education" (Aikenhead, 1997, p. 11) must be a key aim in developing a science curriculum for Native students. Determining what kinds of skills and knowledge are appropriate for "First Nations students" to learn concerning economic

development, environmental responsibility, and cultural survival is the next step of developing such a comprehensive process. Sound integrated education that helps students be flexible and adaptable and enhances their ability to train on the job is the most strategic form of science education.

Jenkins (1992) argues that using science in everyday situations requires changing knowledge into new forms that can be applied to emerging issues. Restructuring scientific knowledge into new shapes for Native contexts requires knowledge of both a different cultural orientation and a different approach to teaching and learning science. Essentially, Native knowledge comes already contextualized and ready for use; Western scientific knowledge does not. As this is how Western science is taught in school, it is no wonder that many students cope by developing a view of science as existing apart from their real lives. An approach that weaves scientific, technological and Indigenous knowledge into real-life situations and issues has the best chance of being effective. Participatory research by teachers and students is one way of accomplishing this.

MacIvor (1995) proposes that integrating selected science and technology content in an Indigenous worldview requires coordination with relevant economic, social and resource needs. One might apply a cross-cultural Science-Technology-Society (STS) model used by science educators in third world countries. STS is a dedicated student-oriented, critical and environmentally responsible approach to science, and it decontextualizes Western science in the social and technological settings relevant to students (Aikenhead, 1994).

Applying an anthropological approach from an Indigenous perspective to the teaching and learning of Western science is another possibility since this promotes "autonomous acculturation, (or) intercultural borrowing or adaptation of attractive content or aspects" (Aikenhead, 1994, p. 23). This would be a more constructive and culturally affirming alternative for Native students than assimilating, or enculturating themselves to Western science. Students may act as anthropologists learning about another culture. Like cultural anthropologists, they would not need to accept the cultural ways of their "subjects" to understand or engage in some of those ways (Aikenhead, 1994).

Combining the STS approach with that of "the student as anthropologist" in an Indigenous perspective and community reality can form an ideal foundation for Indigenous students' learning of science. The teacher's role is to learn to act as a cultural broker who assists students in handling cultural negotiation and conflict between views. Students act as "cultural tourists" in a constructive way, and teachers take on the role of "tour guides" and "travel agents" as they help students cross the cultural knowledge borders between science and their own experience.

The development of such a curricular approach can further be facilitated by studying the students' community reality and using that as a foundation for relevant and meaningful themes, then comparing that foundation with Western science's subculture.

Final Thoughts

Western science education is most oft at odds with the diversity of socio-cultural environments from which many Native American students come. For example: Learning to hunt in a traditional Native American society context is a programmed sequence of observations and experiences tied to a process which might include:

- 1. Learning the habits of the animal hunted (mythology, listening and observation);
- 2. Learning to track, read appropriate signs and stalk the animal (observation, intuition and reasoning);
- 3. Learning the proper respect and ritual to be extended to the animal hunted (learning a mindset);
- 4. Learning to properly care for the carcass of the animal once it has been taken (an ecological ethic, technology); and
- 5. Learning to fully utilize the various parts of the animal taken (technology).

These processes require teaching techniques ranging from formal instruction to experiential learning. These teaching/learning situations are directly related to a particular contextual framework necessary for conveying these forms of knowledge. Learning is directly tied to the task. It involves teaching to accomplish a specific goal. One observes and learns from that which one seeks to do. The teachers and situations are many.

Native American cultural education revolves around the problem of learning how to do something. By contrast, modern Western education revolves around frames of reference that prepare students for future needs and tasks deemed important in a modern industrial and technological society. As a result, within most typical American educational situations, what is learned is laid out in a distinct linear pattern. All that is to be known is hierarchically mapped beginning with objectives to be reached in each grade level and moving to more specific units and individual lesson plans, each of which has objectives and associated learning activities. This highly structured and programmed approach is designed for more straightforward teaching of large numbers of students and for consistency in what is learned. Yet if one views this approach in terms of addressing individual student learning styles, many problems become apparent.

Much of modern education imposes a preconceived psychological pattern of the "right and wrong ways to do things." This pattern imposes Eurocentric will on all those who participate in American public education. Indeed, it is a form of bias ranging from structural/systemic racism to cognitive imperialism and epistemic violence. In the process, many students are denied the use of their innate repertory of intelligences and cultural styles of learning drawn from their Indigenous knowledge system. Ability to learn by simply doing, experiencing and making connections will be significantly diminished through such a homogenization of the educational process.

Being positioned how I am as an educator for most of my career has meant I have biases which may have come out in this essay, however, I use my position to invite the sharing of experiences and expertise, and to support joint actions such as combining Indigenous and

Western approaches to science and technology in effective and sensitive ways. This essay asks other educators to do the same. I look to the new generation of educators to continue the advancement of a trans-systemic education culture, and to monitor, using both Indigenous and Western ways, our progress in the coming years.

Notes

- 1. Portions of this chapter have been adapted from a previously published work: Cajete, G. A. (1999). *Ignite the sparkle: An Indigenous science education curriculum model.* Kivaki Press.
- 2. The terms *Indigenous, Tribal, Tribe*, and *First Nations* are capitalized to emphasize and convey an active and evolving identity. The term Indigenous is used as the more extensive inclusive group term, while Tribal refers to specific contexts. Both terms are capitalized as an honourific designation. Native American, Native, or American Indian are used when referring specifically to Tribes that reside in the United States. These terms are not used in Canada, where the preferred terms are *Aboriginal, First Nations* or *Indigenous Peoples*.

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References

- Aikenhead, G. (1997). Toward a First Nations cross-cultural science and technology curriculum. *Science Education*, 81, 217-238.
- Aikenhead, G., & Mitchell, H. (2011). *Bridging cultures: Indigenous and scientific ways of knowing.*Pearson Canada.
- Bohm, D. (1983). Wholeness and the implicate order. Ark Paperbacks.
- Brandt, C. B., & Kosko, K. (2009). The power of the earth is a circle: Indigenous science education in North America. In *The World of Science Education* (pp. 389-407). Brill Sense.
- Burk, N. M. (2007). Conceptualizing American Indian/Alaska Native college students' classroom experiences: Negotiating cultural identity between faculty and students. *Journal of American Indian Education*, 1-18.
- Cajete, G. (1994). Look to the mountain: An ecology of Indigenous education. Kivaki Press.
- Cajete, G (1999). Ignite the sparkle: An Indigenous science education curriculum model. Kivaki Press.
- Cajete, G. A. (1999). The Native American learner and bicultural science education. in: "Next Steps: Research and Practice To Advance Indian Education"; see RC 021 798 URL: https://files.eric.ed.gov/fulltext/ED427908.pdf
- Cajete, G. (2000). Native science: Natural laws of interdependence. Clear Light Publishers.
- Capra, F. (1982). Turning point. Simon and Shuster.
- Costa, V. B. (1995). When science is 'another world': Relationships between worlds of family, friends, school, and science. *Science Education*, *79*, 313-333.
- Dunn, R. (1983). Learning styles at both ends of the spectrum. *Exceptional Children*, 49(6). https://doi.org/10.1177/001440298304900602
- Greene, R. (1981). *Culturallybased science: The potential for traditional people, science and folklore.*London: Proceedings of the Centennial Observation of the Folklore Society.
- Hall, E. T. (1976). Beyond culture. Anchor Books/Doubleday.
- James, K. (Ed.) (2001). Science and Native American communities: Legacies of pain, visions of promise. University of Nebraska Press.
- Hennessey, S. (1993). Situated cognition and cognitive apprenticeship: Implications for classroom learning. *Studies in Science Education*, 22(1), 1-41. https://doi.org/10.1080/03057269308560019
- Jenkins, E. (1992). School science education: Towards a reconstruction. *Journal of Curriculum Studies*, 24, 229-246.
- Leshner, A. (2011). We need to reward those who nurture a dive: Teaching in multiversity of ideas in science. Retrieved from
 - http://chronicle.com/article/We-Need-to-Reward--Those-Who/126591/
- Longino, H. E. (1990). Science as social knowledge: Values and objectivity in scientific inquiry. Princeton University Press.
- MacIvor, M. (1995). Redefining science education for Aboriginal students. In M. Battiste & J. Barman (Eds.), *First Nations education in Canada: The circle unfolds.* (pp.73-98). UBC Press.
- Mansfield, R. S. (1978). The psychology of creativity and discovery. Nelson-Hall.
- Maruyama, M., & Harkins, M. (1978). Cultures of the future. Mouton.
- Medin, D., & Bang, M. (2014). Who's asking? Native science, western science, and science education. MIT Press.

- Milne, B.T. (2017). Dynamics to justify strategies to close the baccalaureate attainment gap in tribal communities of New Mexico. (Unpublished manuscript). April 27, 2017.
- Ovando, C. J., & Collier, V. (1985). *Bilingual and ESL classrooms: Teaching in multicultural contexts.*McGraw-Hill.
- Phelan, P., Davidson, A., & Cao, H. (1991). Students' multiple worlds: Negotiating the boundaries of family, peers, and school culture. *Anthropology and Education Quarterly*, 22, 224-250.
- Pomeroy, D. (1994). Science education and cultural diversity: Mapping the field. *Studies in Science Education*, 24, 49-73.
- Read, H. (1945). Education through art. Pantheon Books.
- Sanders, D. A. (1986). Teaching creativity through metaphor: An integrated brain approach. Longman. Van Peursen, C. A. (1981). Creativity as a learning process in the concept of creativity in science and art. Martinus Nijhoff.
- Whorf, B. L. (1956). Language, thought and reality. MIT Press.
- Zais, R. (1976). Curriculum principles and foundations. Harper & Row.

Ethical Indigenous Economies

Dara Kelly & Christine Woods

ABSTRACT In this article, the authors argue that trans-systemic knowledge system analysis of Indigenous-to-Indigenous economics enables generative thinking toward Indigenous futures of economic freedom. The authors apply a trans-systemic lens to critically analyze persistent development philosophy that acts as a barrier to the advancement of Indigenous economic development thinking. By exploring ways in which colonial discourse entraps Indigenous nations within circular logic in service of a normative centre, the authors clarify the need for a new economic logic. Shifting to trans-systemic knowledge systems analysis to include diverse insights from Māori and other Indigenous economic philosophy, the authors show that it is not profit and financial growth that matters in and of itself. Rather, according to Indigenous definitions of wealth, economic freedom and development are constituted by value creation that aligns with Indigenous worldviews and principles. Indigenous economic knowledge centred on relationship, reciprocity, and interconnectedness fosters Indigenous economic freedom.

KEYWORDS Indigenous economics, trans-systemic Indigenous knowledge, ethical economies, Indigenous economic freedom

According to Mi'kmaw scholar Battiste (2013), trans-systemic knowledge reaches "beyond the two distinct systems of knowledge to create fair and just educational systems and experiences so that all students can benefit from their education in multiple ways" (p.103). Battiste emphasizes new relationships among and between knowledge systems as avenues for transsystemic knowledge to contribute impact and insight. For disciplines less established concerning Indigenous contexts, such as business and economics, we argue that a trans-systemic approach not only requires competence navigating between Anglo-Western and Indigenous business theories, but increasingly calls for navigation among different global Indigenous knowledges. In this article, we expand the application of trans-systemic knowledge systems analysis to the analysis of Indigenous economic development across global Indigenous knowledge systems, including Canada, the United States, and Aotearoa-New Zealand.

Thus, considering Battiste's argument that trans-systemic knowledge comes from 'beyond' two (or more) systems, as we think about trans-systemic knowledge in Indigenous economic contexts, the process of journeying across brings forth a mindset to travel. To travel across time, boundaries, difference and similarity, between communities and nations sparks a process

that invokes memory through collective intergenerational transmission. At a deep level, trans-systemic knowledges may act as a form of repository for what is and is not useful for future generations. In some ways, trans-systemic knowledge analysis illuminates how ancient wisdom lives in the eternal present through shared experience and memory (Cajete, 1994, 1999; Hēnare, 2011). By preserving an intergenerational Indigenous lens, a trans-systemic method of analysis enables us to see incongruence and inconsistency in the emergence of 'new' scholarly discourse by virtue of the fact that innovative thinking inevitably rests on genealogies of knowledge that came before.

Bartlett et al. (2012) present a framework for moving between Indigenous knowledge and mainstream science in a "Two-eyed Seeing" approach. As part of a methodology for Indigenous-led participatory action research, twoeyed seeing is based on partnership principles embedded within the two-row Wampum belts used by First Nations in eastern Canada. The two rows of beads symbolically record specific agreements, events and expectations for conduct by two parties (Bartlett et al., 2012). Similarly, the two-eyed seeing methodology utilizes dual perspectives to ground research design in Indigenous and non-Indigenous epistemologies. By combining two knowledge systems to meet a challenge or task such as climate change, two-eyed seeing advances strength-based thinking from innovative ideas from both Indigenous and Western science systems. The process of engaging in two-eyed seeing is described as weaving back and forth between systems to find new insights to inform a project in complementary and trans-systemic ways. The weaving metaphor captures the essence of process innovation inherent within Indigenous knowledge systems and is common in articulating Indigenous research methodologies. For example, Kahakalau (2004) develops an emergent Indigenous heuristic technique drawing on Moustakas' (1990) six-step heuristic process. Each step



Figure 1. The spiral of the fiddlehead, shown in this image, represents an ethic of reciprocity, interconnectedness and the infinite potential of intergenerational well-being in ethical Indigenous economies.

is Indigenized and incorporates Indigenous ways of being to situate research outcomes by, for, and with Indigenous communities. Kahakalau (2004) identifies the role of time as a resource, which means in research, one allows for periods of "marination" in liminal spaces to develop new insights to occur (p. 29). In the discipline of business, writing from a Māori perspective, Nicholson et al. (2019) employ an ambicultural approach to corporate governance in support of five Māori well-beings. Based on the scholarship of Chen and Miller (2010), who propose ways to understand across an East-West divide in management philosophy, an ambicultural approach in Māori business builds on pluralism as a way to holistically integrate multiple sources of knowledge into ethical decision making in organizations. At its heart,

ambiculturalism encourages intellectual inquiry from a starting place to challenge fundamental or taken for granted assumptions; in the process of simultaneously unlearning and re-learning, an ambicultural approach finds synchronicities in diverse, yet complementary knowledge traditions to generate innovative ways for theorizing.

While there is enormous historical and cultural variance among Indigenous knowledges globally, trans-systemic knowledge systems analysis creates the opportunity for Indigenous nations to imagine what is possible beyond the boundaries of a binary relationship to colonial philosophy. Trans-systemic analysis across Indigenous contexts helps to expand the use of Indigenous-to-Indigenous frameworks for Indigenous economic development. Within the academy, there have been long traditions of global Indigenous knowledge exchanges in education, law, health, and the humanities. In the discipline of business, this work is in nascent stages, not because Indigenous scholars who have been researching in business have not done enough work; instead, because there have not been enough scholars to develop Indigenous perspectives in business across a range of topics. For example, Indigenous entrepreneurship stands out as the area of study within business that has the most empirical and theoretical foundation (Anderson et al., 2006; Colbourne, 2018; Foley, 2003; Henry, 2007, 2017; Maritz & Foley, 2018; Peredo et al., 2004;), though Indigenous business scholarship overall is increasing as the global pool of Indigenous business scholars grows.

We employ a trans-systemic analysis method to discourses framing Indigenous economic development in Canada and consider this alongside emerging research on the Māori Indigenous economy in Aotearoa-New Zealand. We ask the following research question: in the evolving landscape of global Indigenous economic development, how does a trans-systemic knowledge system lens enable an expanded vision toward realizing Indigenous well-being economies? To answer this research question, we trace a 50-year discursive theme that continues to inform industry approaches to Canadian Indigenous economic development, introduce current research and thinking on Indigenous economies emerging from Aotearoa-New Zealand, the United States, and Canada and conclude with discussion about the future of Indigenous well-being economies informed by a trans-systemic knowledge systems approach.

Aiming Low: Participation and Poverty Alleviation as Economic Reconciliation

As we consider Indigenous economies within a longer historical landscape of discourses of Canadian Indigenous development — past, present, and future — we consider Harold Cardinal's (1969) analysis of Canadian federal policy leading up to the infamous White Paper in his book, The Unjust Society: The Tragedy of Canada's Indians. Among the many compelling examples of failed federal policy, Cardinal (1969) highlights a particularly illuminating statement in the foreword to the White Paper that reads: "The Government believes that its policies must lead to the full, free and non-discriminatory participation of the Indian people in Canadian society" [emphasis added] (p. 133). To provide context for this choice of language, before the White Paper, the discourse of federal policy had been decisively discriminatory and segregationist in its relations with Indians, encouraging only assimilation and abandonment of Indian identity as a condition for inclusion in Canadian society. Thus, this invitation for Indian participation

'as you are' might have appeared to signal a considerable shift in perspective. However, this offer was wholly insignificant against the Indian agenda that included such goals as sovereignty, self-determination, compensation for illegal land alienation and reparations for harm done as a result of colonization.

Forty years later, in a 2009 Federal Framework for Aboriginal Economic Development, the Minister for Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians, Honourable Chuck Strahl (2009) introduces the framework as an overview of initiatives to "improve the *participation of First Nations, Inuit and Métis people in the Canadian economy*" [emphasis added] (preamble). Part of the strategy includes removal of "obstacles to Aboriginal Canadians' full *participation in the economy* [emphasis added]" (Strahl, 2009, p. 21). Reading these documents together in 2020, one would be forgiven if you thought there was a template for notices about Indigenous participation in Canada; the consistency of discourse reveals an underlying body of knowledge and related structures of collective memory in Canadian public policy that has changed little over time.

Since 2009, a 'new' iteration of change in the form of the Truth and Reconciliation Commission of Canada (2015) has given rise to an assortment of reconciliation sub-themes, including economic and business reconciliation. In the Business Reconciliation in Canada Guidebook, appeals to corporate Canada are outlined: "Ensuring Indigenous Peoples play a meaningful and substantial role in the economy [emphasis added] is the most relevant and impactful way forward for economic and business reconciliation in Canada" (Canadian Council for Aboriginal Business, 2019, p. 9). Implicit within this statement are several assumptions. Firstly, with no acknowledgement of the extensive Indigenous economic histories that preceded the arrival of settlers to Canada, the document, intentionally or not, supports an assumption that Indigenous nations are latecomers to the game of economics. It falsely suggests that our collective responsibility is to enable Indigenous nations to 'catch up' (Watene & Yap, 2015) with the rest of Canada to support Canadian success within the global market economy. This is particularly troubling as a contradiction to Indigenous communities' deliberate efforts in the present day to rebuild Indigenous economies that were dismantled and outlawed by the federal government, such as formal potlatches and ceremonial feasting where relational economies come to life.

A second assumption is that reconciliation is about inclusion or exclusion of Indigenous peoples indicated by language choice to 'play a role' — language drawn from deficit discourses of development in the 1960s (Newhouse, 2004). However, agency has shifted from the federal government to business and industry proponents as the entities with power to determine the nature and extent of Indigenous inclusion or exclusion in the economy. In a hopeful bid to bring corporate Canada on board with reconciliation, the document assures the risk-averse business person that this process poses no risk to the economic status quo: "Business reconciliation requires a change in mindset away from risk management toward one of shared vision, strategic cooperation and business best practices that *support the broader Canadian economy*" [emphasis added] (Canadian Council for Aboriginal Business, 2019, pp. 9-10). It is further implied that with business best practices guiding this process, what can be assured is that by using

normative business tools for success, reconciliation may even provide a competitive advantage to increase profits for companies that choose to engage in business reconciliation.

What both documents from 2009 and 2019 fail to mention is whether for Indigenous nations, playing a role in and supporting the Canadian economy advances Indigenous objectives akin to what Cardinal outlined 50 years prior toward sovereignty, self-determination, compensation for illegal land alienation, and reparations for harm done as a result of colonization. This is not to say that business reconciliation definitively does not achieve such aims. Still, these documents fail to outline in concrete terms what Indigenous aspirations are as autonomous and self-determining peoples, not solely as actors within the Canadian economy. Furthermore, by not specifying who relevant parties are in reconciliation, one is left to believe that reconciliation happens between the business community and Indigenous people in the business community without mentioning how either layperson Canadians and Indigenous people play a role in economic and business reconciliation. The absence of specified actors, their relationships and accountability to one another is a glaring omission. It leaves too great an opportunity for self-interested interpretations of economic success and extractive thinking to drive business reconciliation.

Additionally, the Business Reconciliation in Canada Guidebook (2019) contains an absence of clear distinctions between Indigenous aspirations and aspirations of the Canadian economy. If an implicit assumption is that the well-being of Canada's economy is the same as or equal to Indigenous well-being, historically, evidence shows that the opposite is true. The motivations for settler development since Europeans' arrival have consistently disregarded the cost to Indigenous well-being as a factor in Canada's construction and its economy as it is today. Key colonial activities sought to allow for the establishment and emergence of the Anglo-Western European economy of exploitation (Hyden, 1980) through overt oppression of Indigenous peoples and their values and fundamental freedoms (Rashbrooke, 2014). In Canada, Indigenous peoples hindered this process:

The Indians in the way were seen as obstacles to be cleared to realize the "National Dream" and, worse, as mere impediments to development and wealth-making. The fate of Indians caught by the western-rolling juggernaut of state, business, and settlement revealed that the goal of assimilating Indians did not signify any serious intent to integrate them as equals in Canadian society. They would be the targets of intense civilizing efforts, not to prepare them for good jobs and lives, but rather to erase their supposedly inferior ethnic traits. (Cunningham, 1999, p. 37)

Evidence of the experienced exploitative nature of settler economics is captured linguistically in changes within the Halq'eméylem language of the Stó:lō nations outside what is now Vancouver. The word xwelítem refers to settlers and translates as "the hungry people," describing the insatiable appetite of settlers for land, food and resources (Blomfield et al., 2001; Carlson, 2010; Stó:lō Nation Lalems ye Stó:lō Si:ya:m, 2003). The uncomfortable reality of 'unceded' and 'stolen land' across Canada continues to unearth deep-seated tensions about the

legitimacy of Canadian prosperity against a backdrop of extractivist economics in a culture of never enough. This discomfort also masks a deeper conversation about the extent to which Canadian prosperity has produced and continues to produce Indigenous poverty as part of its ascent within the global market. Furthermore, to set the economic development bar for achievement at either participation or poverty alleviation is too low to be meaningful for long-term aspirations of Indigenous well-being.

One aspect of Indigenous well-being in practice is the ability to assert Aboriginal Rights (Delgamuukw v. British Columbia, 1997). However, time and time again, conflicts that emerge between Indigenous nations and (usually but not strictly) resource extraction industries concerning over-extraction is precisely due to fundamental disagreement between Indigenous well-being and Canadian economic well-being. Often Indigenous peoples are criminalized and find themselves opposing state police forces when they assert these rights — hardly evidence of industry or Canadian support of Indigenous well-being. To claim that Indigenous and Canadian economic well-being are the same in this form of economic relationship is simply untrue. Cardinal (1969) makes this point, but since 1969, the legal landscape has changed drastically with many successful Aboriginal Rights and Title cases that affirm Indigenous stewardship, longstanding responsibilities to traditional territories and waters, and economic rights to hunt, fish and gather (R. v. Marshall, 1999; UN General Assembly, 2007). Recognizing that the Business Reconciliation in Canada Guidebook (2019) is less a statement of fact, but more about efforts to manifest hopeful discourses of 'right relationship' that one day Indigenous well-being and Canadian economic well-being might align, even as aspirational documents, it hardly aligns with Indigenous advances in law, governance and political science research. The issue arises as to how Indigenous legal advances can and should translate into the world of business so that Indigenous aspirations are not subsumed under the hegemony of Canadian economic well-being.

From a different angle, the most common argument to explain and justify processes, decisions, and policies concerning Indigenous economic development focuses on poverty alleviation. As a progression from deficit discourse outlining the sad facts and figures regarding the state of Indigenous peoples after histories of genocide, attention and resources have shifted to solutions (Minister for Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians, 2009). This line of thinking appears on both sides of the story — Indigenous and federal government — as emerging from a sentiment of "enough is enough" and fatigue in talking about the problems and the costs of Indigenous poverty to the Canadian public.

After many failed attempts by the government to devise and implement public policy and budgets for Indigenous economic and business development, economic development is now typical as a critical program for Indigenous nations to manage "on their own." Economic development committees, departments, corporations, programs, and officers occupy band offices all over the country. But this was not always so. Alongside federally mandated Indigenous management of Indigenous poverty, some access to capital and shifts in political will created economic opportunity in the 1990s. Joint ventures with early corporate opportunists (Anderson

& Bone, 1995; Anderson, 1997), evolving treaty environments (Anderson et al., 2004), the emergence of tribally-owned businesses (Cornell, 2006; Cornell & Jorgenson, 2007), an assertion of sovereignty over lands outside of the treaty process (Anderson et al., 2006), and shifts within the Indian Act such as the ability for nations to pass bylaws and land codes created openings to new possibilities for nations that prior generations had not seen since colonization.

However, what is concerning about economic development as a pathway to poverty alleviation is that common sense logic carries overly simplistic rationale if the solution to poverty is profit. Inherent within this linear equation is an absence of understanding economic development as consisting of both means and ends that ultimately need to be aligned (Zamagni & Zamagni, 2010). Furthermore, poverty alleviation requires a substantive and integrative approach to wealth distribution across multiple layers of society, including health, education, law, and cultural and social norms (Banerjee & Duflo, 2012; Banerjee et al., 2019; Sen, 1999; Stiglitz, 2012). In Indigenous business development, the impetus for businesses and entrepreneurship might start by recognizing the need for poverty alleviation. Still, more often than not, once businesses generate profit, it goes back into business activities for further business growth and development, which is a marker of good business practice. In the case of two-thirds of business start-ups, business failure is counted as a learning opportunity. Unless there is a comprehensive plan for wealth distribution of profits from business activity targeted at poverty alleviation, and this plan is devised in tandem with business development planning, more often than not, profits do not translate into poverty alleviation, even with the best of intentions at the outset. The cycle of wealth creation and accumulation seals itself off from its distributive intentions.

Chickasaw and Cheyenne legal scholar, philosopher, and advocate Henderson (2000) critically analyzes the foundations of Eurocentric thought about human nature by philosophers John Locke and Thomas Hobbes, who consequentially are also philosophers whose thinking permeates modern-day market economics and Anglo-Western capitalism. Henderson and others (Coulthard, 2014; Williams, 2012) warn of the deeply flawed and problematic logic that underpins notions of modernity based on thinking grounded in false assumptions of Eurocentric superiority. Henderson (2000) argues that what is produced under that guise are artificial societies in which Indigenous inferiority is forever constructed and reconstructed in opposition to its dichotomous partner. Derivatives of this logic, including the dominant economic paradigm, serve to elevate, justify and perpetuate Eurocentric rationality and morality through constructs of scarcity and competition that consequently serve to divide and suppress irrational and immoral beings. In Henderson's (2000) critique of human nature's false construction, he advises that a remembering of Indigenous knowledges as not only a force for honouring Indigenous repositioning within human nature but as an honouring of reality and transformative ethical societies once again. Henderson (2000) says:

We must clearly understand the disadvantages of creating artificial societies from wrong assumptions. We should avoid affirming or copying the distorted European views of the state of nature or accommodating their made and imagined 'normal'

social and political constructs. We must continue to see the organization of life in terms of the Indigenous knowledge about living in balance with an ecology. We must use our traditional knowledge and heritage to force a paradigm shift on the modernist view of society, self, and nature. (p. 31)

In circumstances where economic development comes into conflict with Indigenous laws, a popular argument frames Indigenous thinking as anti-capitalist. Iterations of this argument often unfold where extractive industry behaviours clash with Indigenous stewardship obligations. Whether it is the development of oil and gas, forestry, golf courses, fisheries, mining, or any other industry requiring access to Indigenous lands, rivers and oceans, inevitably those in favour of solely industry-driven development use the argument that Indigenous people need the products of extraction as much as anyone else. Therefore, anti-capitalist actions (such as blockades) are hypocritical. This might sound like, "We all use plastic, petrol, paper, etc. Resource extraction is a necessary process for our collective living." While partially true at this moment in time, a statement like this promotes static assumptions about reality — that it is unchanging. If what needs to change are our expectations of the conditions for collective living, then what is framed as necessary development processes now may not be in the future, just as they were not essential in the past either. In fact, what is essential in the future is unknown.

From a discursive standpoint, framing Indigenous opposition through a lens of hypocrisy is a simplistic effort at undermining Indigenous aspirations and rights by placing Indigenous actors within a patronizing narrative of the irrational emotional other (Williams, 2012). It also repositions industry actors at the centre of authority by access to knowledge that presumably informed an economic decision in the first place. This assumption about access to "elite" knowledge (Wade, 2015) reinforces imbalanced power relations in which Indigenous actors cannot have access to the same economic knowledge that industry actors can; and if they did, choosing not to develop proves the theory of Indigenous people as irrational emotional and therefore, inferior beings. Finally, it reinforces another assumption about Indigenous being in the present-day that pits culture and commerce as antithetical. In previous versions of this line of thinking, commerce might have been replaced with variations of 'modernity'. These are old versions of colonial arguments with long legacies that we will not rehash as this work has been argued substantively by decolonial scholars globally.

If one can rise above the emotionality of patronizing language, what this argument fundamentally closes down is the opportunity to engage Indigenous actors in a dialogue about ethical Indigenous economies and methods for achieving Indigenous well-being. The anti-capitalist argument sets up a false polarization between Indigenous and dominant economic thinking. Its overemphasis on 'the rejection' of development as evidence of Indigenous positionality on economics completely bypasses what might be a rejection of process rather than outcome. This is where a great deal of research and ancestral knowledge focused on long-term intergenerational thinking, traditional ecological knowledge (TEK) (Menzies, 2006), sustainability and ecological economics (Trosper, 2009) could come into play if the opportunity for dialogue about industry processes of extraction were on the table as a demonstration of economic reconciliation.

Indigenous knowledge is increasingly available to the 'science' community in language that is recognizable to mainstream scientists. In other words, scholars have been researching and publishing by, for, and with Indigenous nations for several decades now. How Indigenous nations choose to codify this knowledge through language, spirituality, law and culture, and make this available to anyone or decide not to is entirely within the power and authority of those nations. However, because Indigenous knowledge is derived from the natural world, unlike the "science of the elite" in which economics counts itself (Wade, 2015), the fundamental source of Indigenous knowledge is the earth and the universe itself (Cajete, 1994, 1999; Hēnare, 2001). As Aleut Elder, Kuuyux (Ilarion Merculief) states:

Ancient peoples who still maintain their connection to the lands from which their ancestors came for millennia sustained an intimate connection, understand that it's the vibration of that place that actually informs my being and informs how the language is constructed, how it began, and how it has evolved...That vibration, when you are a real human being, you can feel it, it's palpable wherever you are on the land from which your ancestors have lived for thousands of years...The inherent intelligence of the real human being is the foundation and basis for us to live and thrive and communicate and connect with on a profound level with Mother Earth. (Merculief, 2012, p. 5)

The knowledge that Kuuyux refers to is not fundamentally exclusive, meaning that you must be a specific type of person or speak a certain language to understand it. As long as the natural world continues to exist, we can access our inherent intelligence because it comes from communicating and connecting with the natural world. However, if the state of the natural world is at significant risk of becoming inaccessible to the inherent intelligence of humanity due to its systematic destruction, and the cause of this destruction is over-exploitation by extractive industries, then the calculation of risk not just to Indigenous well-being but human well-being, in general, is factored into Indigenous decision-making. Thus, a decision not to support economic development in that form, at that particular time, speaks more to a higher possibility of solutions for alternative development than a lack of understanding development altogether. Seldom are Indigenous nations given the opportunity to spell out these important nuances, and if they are, they fall on deaf ears because what may present as a 'no' might mean 'not right now,' or 'not that way.'

In light of the approach to being and knowing that Kuuyux speaks to ancient societies, this question about whether Indigenous perspectives are deemed to be anti-capitalist or riddled with hypocrisy when analyzed through a trans-systemic Indigenous lens, they illuminate consistent pitfalls of Eurocentric logic. Returning to Henderson's (2000) argument about the self-reinforcing nature of Eurocentric philosophy, one finds that these threads continue to permeate discourses of economic development today to the detriment of meaningful reciprocal dialogue and engagement across Anglo-Western European and Indigenous knowledge systems hindering the potential for transformative insight into alternative approaches to economics and development.

Agency and Choice in Ethical Economies

Trends in global economics look toward solutions beyond eradicating poverty with profit and move toward shifting institutional structures to prioritize human agency, choice and equality as mechanisms to leverage economic freedom (Sen, 1985). In light of the ongoing work to shift discourses around Indigenous economic development (Newhouse, 2004; Wuttunee, 2004), questions arise as to whether current approaches to Indigenous economic development adequately address ways to build economies that: facilitate economics that wholly engage Indigenous knowledge and therefore reflect Indigenous identities as people-centred economies (Hēnare, 2011, 2014; Nana, 2019b; Newhouse, 2004); recognize Indigenous definitions of wealth and existing methods of exchange (Dell et al., 2018; Kelly, 2017); and eradicate or reorganize institutional structures that continue to create Indigenous poverty (Dell, 2017; Hēnare, 2014; Nana, 2018).

In Indigenous contexts, processes of evaluative economic development based on what you are actually able to be and do extends far beyond subsistence measures of poverty alleviation. Economic freedom builds on the assumption that meeting basic needs alone does not generate the conditions for long-term aspirations to be realized because regardless of actual quality of life, the freedom to dream big is unaccounted for (Sen, 1999). Recent legal advances in Aotearoa-New Zealand affirming the inherent agency and legal personhood of the Whanganui river itself protects the river as part of an extended kinship network (Argyrou & Hummels, 2019). In this unprecedented example, the fundamental protections of agency and choice within the everyday human and "more-than-human" experience (Thomas, 2015) lend themselves to community and social entrepreneurship that fosters innovation and well-being. Because of protection from misuse and harm for both humans and more-than-humans, this inseparability of social, spiritual and economic well-being contributes to the enhancement and maintenance of Indigenous measures of wealth and freedom.

Ethical Indigenous Economic Futures

Utilizing trans-systemic Indigenous-to-Indigenous knowledge, we present select examples of Indigenous economic thought's contemporary articulations to lead new economic development directions. We highlight three key areas of insight that currently warrant greater emphasis and attention: 1) making visible the importance of spirituality within the lives of Indigenous people as economic actors, 2) accounting for intergenerational responsibility to ensure Indigenous economies are temporally aligned, and 3) giving priority to undervalued economic processes such as wealth distribution as contributing to the overall enhancement of Indigenous economic freedom.

Spirituality in People-Centred Economies

CEO and Founder of the Indigenomics Institute, Carol-Anne Hilton (2019) states, "We are a powerful people" (p. 110), promoting a shift away from deficit and exclusionary discourses about Indigenous people in Canada. In a refreshing approach grounded in her Nuu-chah-nulth Indigenous identity, Hilton draws on economic knowledge from potlatch traditions of wealth

distribution to promote Indigenomics as an expression of ancient economic continuity — contemporary and future-oriented at the same time. The resurgence of Indigenous economic thought re-centres kinship, intergenerational being and belonging as the drivers for economic development (Wuttunee, 2004). In other words, Indigenous economies position the means of economic development — entrepreneurship, business development, innovation, and financial growth — in service of Indigenous well-being ends (Nana, 2020). Most importantly, in Indigenous economies, the ends remain static and unchanging because philosophically, well-being ends are derived from universal ethics such as love, respect, humility, and reciprocity (Hēnare, 2003; Wuttunee, 2004). On the other hand, economic means are bound only by human agency and choice to determine pathways to well-being. Although it is compelling to believe that the dominant economic system is unchangeable due to the expansive institutions that currently support it, human-created systems are adaptable and changeable no matter how prevalent and persistent.

By and large, the most consistent theme emerging from newly articulated scholarship on Indigenous economies is the truism that at the heart of Indigenous economies are people as the greatest source of wealth and value. Research by Māori business scholar Dell (2017) demonstrates how the effects of alienation from lands and territories are shown qualitatively as negatively impacting Indigenous well-being today. As an economic concern, if the Māori economy represented by relationships to land continue to speak through Māori and Indigenous people as a source of pain and grief due to separation under often violent and dire circumstances (Kelly, 2017), the hidden cost of development is continued intergenerational trauma with each new advancement in land exploitation.

Māori business scholar, Mānuka Hēnare (2011, 2014) has theorized about the Māori economy as an economy of mana characterized by the following:

(a) it emanates from a Māori worldview and is informed by traditional Māori economics; (b) it is inspired by four well-beings—spiritual, ecological, kinship, economic; (c) it is embedded in the ecological system that sustains it; (d) it requires a multidisciplinary approach to its research; (e) it is a system that is capable of reorganising itself to create new futures; and (f) it manifests as reciprocity and gift exchange. (Hēnare quoted in Dell et al., 2018, p. 55)

In Māori philosophy, mana is one aspect of a universal philosophy of humanism (Hēnare, 2001, 2003) and resides in all things animate and inanimate as a potent manifestation of power. As a guiding principle within the economy of mana, a system of relational exchange emerges from the realization of power borne from inherent potentiality resulting from behaviours that enhance or detract from mana (Nana, 2019a). Thus, the purpose of economy for Māori is to facilitate the realization of the inherent power of all things — mana enhancement expressed through support and endorsement of others or mutual generosity. Therefore, mana as an achievement is recognized by the extent to which others can attest to one's generosity of spirit. Dell et al., (2018) contrast how an economy of mana differs from Anglo-Western economics

in that economic decision-making is premised on principles of Māori wealth wherein its distribution ensures that mana is enhanced for everyone: "the economy of mana is stimulated by values of giving and abundance instead of ones that view resources as scarce" (p. 57).

In this version of Indigenous economic philosophy, people as economic actors are not driven by the transactions that occur within the economy; rather, preserving the integrity of both inherent potential power and realized power is given utmost priority. In an economy of mana, as a people- and land-centred economy, economic success results in the enhancement of power of humans and land. Economic downturns would result from unchecked detractors to or threats to people and land. Within the realm of Māori philosophy, mana is an inherently spiritual concept. Therefore, mana's economy is intrinsically spiritual by nature, which poses a challenge when questions arise around metrics and measuring an economy of mana. At the outset, the idea of measuring any aspect of spiritual life might cause discomfort, but with recent advances in development of Bhutan's Gross National Happiness Index for Business (Zhangmo et al., 2017), the release of New Zealand's Wellbeing Budget (New Zealand Government, 2019), and Iceland's Indicators for Well-being (Government of Iceland, 2019), another question arises as to whether spirituality is or can be separated from happiness or other interrelated well-being measures. It also leaves open the possibility that as long as spirituality remains invisible on the economic landscape, it never "counts" within the larger landscape of human well-being. This is an area for future research to contribute to this burgeoning field of Indigenous economies.

Temporal Alignment

One of the arguments that persists in the first half of this article is an implicit statement about the strategic deployment of time in service of particular discursive arguments. In the case of conflicts relating to resource extraction and Indigenous nations, linear time serves to reinforce economic development today without adequate consideration of the impacts on future generations. This leaves little opportunity for Indigenous economic actors to uphold intergenerational responsibilities because presentist arguments emphasize the imminent response needed to act within today's global market. What makes this possible are institutional incentives that reward opportunism and swift decision-making about investment of time and money.

Within the research community, though individual disciplines within management and organization studies research have shown greater propensity to account for long-term thinking and systems analysis, a significant amount of theoretical development continues to house inherent assumptions that we, meaning our current generation, is better, more innovative and learned than past generations. Such discourse promotes advances in theory and practice that are forward-facing and forever at the cutting edge of discovery in leadership, innovation, management, human resources, entrepreneurship, and institutional theory, to name a few. The normative intellectual culture of polarity, competition and comparative research is also aligned with the broader deficit discourse in economics that we have discussed throughout this article. We see a greater need for critical temporal perspectives that challenge overly presentist

thinking in Indigenous business and economic research. A long-term and kin-based view (both metaphorical and literal in the case of Indigenous nations) does not inherently value the prosperity of today's generation over any other generation.

Re-Valuing Wealth Distribution

Moving away from emphasis on wealth accumulation as economic best practice, wealth distribution is a principle of Indigenous economics that is as old as Indigenous institutions (Hēnare, 2011; Kelly, 2017). At a practical level, institutional mechanisms that facilitate collective well-being effectively ensures individual well-being by default, whereas the reverse is not true. Returning to the potlatch system of Indigenous economics mentioned earlier, the literal and metaphorical ethic of feasting as an investment in both individual and collective futures is captured in a quote by the late Stó:lō Chief Richard Malloway who said, "Always feed your guests. When you do that, you will never go hungry" (Archibald, 2001, p. 26). By feeding other people through collective ceremonial and spiritual feasting, nurturing and normalizing the spirit of sharing shifts focus away from the negative effects of competition and exploitation that manifests within self-interest interpretations within neo-classical economics that drive the global market today.

One aspect of the sharing economy that aligns with Indigenous philosophies of wealth distribution is in cooperative organizations (Cheney et al., 2014; Peredo, 2003). Shifting assumptions about default business governance and its structures provide a mechanism to facilitate wider opportunities for Indigenous business ownership in which income distribution achieves greater breadth of impact to its beneficiaries (Findlay, 2018), occurs at an earlier stage of financial success than models of shareholder distribution through dividends, with more consistency throughout the lifespan of a business, and provides mechanisms for economic resilience, particularly in volatile labour market conditions (Zamagni & Zamagni, 2010).

In the economy of mana (Dell et al., 2018), Māori wealth is based on value creation from enhancement of the inherent power of people and/or land. The creation of wealth in Māori economic development is a direct reflection of a Māori philosophy of well-being. It aligns with worldviews and principles that are recognizable in the past, present, and future. This example demonstrates validation of Indigenous economic knowledge centred on relationship, reciprocity and interconnectedness that ultimately fosters Indigenous economic freedom. Villanueva (2018) argues that to decolonize wealth, a re-framing of money is necessary. He challenges assumptions that money is inherently bad as a concept in and of itself and proposes that what needs to change are the structures and metrics of financial systems to better align with how money can be used ethically and responsibly. Fundamental financial institutional change will aid in better ways to distribute accumulated wealth for the well-being and benefit of Indigenous peoples (Villanueva, 2018). Eminent Indigenous singer-songwriter and activist Buffy Sainte-Marie spoke at the inaugural Indigenomics conference gala (Sainte-Marie, 2019) and set forth a reminder of the challenge that Indigenous peoples have always faced — that the institutional systems that facilitated dispossession and alienation from lands are not the systems that will enable Indigenous freedom, reconnection and decolonization. Heeding Sainte-Marie's call to redesign, reconnect, and decolonize Indigenous economies, the work ahead requires creative and generative commitment to centre Indigenous values and people, first and foremost.

Conclusion

Trans-systemic knowledge system analysis across Indigenous knowledges requires depth and considered thinking grounded in the very foundations of Indigenous ontology and epistemology. A trans-systemic knowledge method of analysis across global Indigenous economic knowledge systems facilitates alignment between Indigenous objectives of economic freedom and provides an avenue for collaboration, imagination, and decolonization of Indigenous economies. Part of a trans-systemic approach is exercising the freedom to choose among the philosophies upon which Indigenous aspirations of socio-cultural, spiritual, economic and ecological well-being are built. Engaging with diverse Indigenous perspectives utilizing a trans-systemic method provides insight into overlapping areas that support Indigenous economic thinking toward recovery from colonization and creating ethical economic institutions to support Indigenous aspirations for ethical economic futures.

This article has demonstrated differences in logic grounded in Anglo-Western Eurocentric economic development and explored discursive threads that persist over time in specific examples of reports focusing on Indigenous participation in the dominant Canadian economy. With examples from Indigenous philosophy and scholarship from North America and Aotearoa-New Zealand, we discussed advances in Indigenous economic research that provide alternative ways of framing economies to account for people's inherent power and their relationships to land. We shed light on advances within global economics, focusing on substantive approaches to the eradication of poverty. We see an immediate need to shift economic development discourse in Canada from focusing on profit as an approach to poverty alleviation and see immense potential for a fulsome research agenda to further explore how Indigenous economics can better utilize measures of well-being and happiness in other national contexts as a way to Indigenous economic freedom and prosperity.

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References

- Anderson, R. B. (1997). Corporate/Indigenous partnerships in economic development: The First Nations in Canada. *World Development*, 25(9), 1483-1503.
- Anderson, R. B., & Bone, R. (1995). First Nations economic development: A contingency perspective. *The Canadian Geographer*, 39(2), 120-130.
- Anderson, R. B., Dana, L. P., & Dana, T. E. (2006). Indigenous land rights, entrepreneurship, and economic development in Canada: "Opting-in" to the global economy. *Journal of World Business*, 41, 45-55.
- Anderson, R. B., Honig, B., & Peredo, A. M. (2006). Communities in the global economy: Where social and Indigenous entrepreneurship meet. In C. Steyaert (Ed.), *Entrepreneurship as social change: A third movements in entrepreneurship book* (pp. 56-78). Edward Elgar.

- Anderson, R. B., Kayseas, B., Dana, L. P., & Hindle, K. (2004). Indigenous land claims and economic development: The Canadian experience. *American Indian Quarterly, 28*(3 & 4), 634-648.
- Archibald, J. (2001). *Remembering the sacred time of elders:* 25th annual gathering of First Nations elders silver anniversary souvenir book. Coqualeetza Cultural Education Centre.
- Argyrou, A., & Hummels, H. (2019). Legal personality and economic livelihood of the Whanganui River: A call for community entrepreneurship. *Water International*, 44(6/7), 752-768. https://doi.org/10.1080/02508060.2019.1643525
- Banerjee, A. V., & Duflo, E. (2012). Poor economics: A radical rethinking of the way to fight global poverty. Public Affairs.
- Banerjee, A. V., Duflo, E., & Kremer, M. (2019). Understanding development and poverty alleviation [The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel]. Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2019.
- 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. https://doi.org/10.1007/s13412-012-0086-8
- Battiste, M. (2013). Decolonizing education: Nourishing the learning spirit. Purich.
- Blomfield, K., Boxberger, D. L., Carlson, K. T., Duffield, C., Hancock, R. L., Lutz, J., McHalsie, S., Ormerod, P., Peters, T., Rafter, T., Roburn, A., Schaepe, D. M., Smith, D., & Woods, J. R. (2001). A Stó:lō-Coast Salish historical atlas (K. T. Carlson, C. Duffield, S. McHalsie, L. L. Rhodes, D. M. Schaepe, & D. A. Smith, Eds.). Douglas & McIntyre.
- Cajete, G. (1994). Looking to the mountain: An ecology of Indigenous education. Kivaki Press.
- Cajete, G. (1999). A people's ecology: Explorations in sustainable living. Clear Light.
- Canadian Council for Aboriginal Business. (2019). *Business reconciliation in Canada* [Guidebook]. Canadian Council for Aboriginal Business.
- Cardinal, H. (1969). The unjust society. M.G. Hurtig.
- Carlson, K. T. (2010). The power of place, the problem of time: Aboriginal identity and historical consciousness in the cauldron of colonialism. University of Toronto.
- Chen, M., & Miller, D. (2010). West meets east: Toward an ambicultural approach to management. Academy of Management Perspectives, November, 17-24.
- Cheney, G., Santa Cruz, I., Peredo, A. M., & Nazareno, E. (2014). Worker cooperatives as an organizational alternative: Challenges, achievements and promise in business governance and ownership. *Organization*, 21(5), 591-603. https://doi.org/10.1177/1350508414539784
- Colbourne, R. (2018). Chapter 4: Indigenous entrepreneurship and hybrid ventures. In A. C. Corbett & J. A. Katz (Eds.), *Advances in entrepreneurship, firm emergence and growth* (Vol. 19, pp. 93-149). Emerald. https://doi.org/10.1108/S1074-754020170000019004
- Cornell, S. (2006). What makes First Nations enterprises successful?: Lessons from the Harvard Project (pp. 1-20). *Native Nations Institute for Leadership, Management, and Policy.*
- Cornell, S., & Jorgensen, M. (2007). The nature and components of economic development in Indian country (p. 22). National Congress of American Indians Policy Research Centre.
- Coulthard, G. (2014). Red skin, white masks: Rejecting the colonial politics of recognition. University of Minnesota.

- Cunningham, A. (1999). Canadian Indian policy and development planning theory. Garland.
- Delgamuukw v. British Columbia. (1997). Supreme Court of Canada. No. 23799. https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/1569/index.do
- Dell, K. (2017). Te Hokinga ki te Ūkaipō: Disrupted Māori management theory, Harmonising whānau conflict in the Māori land trust [Unpublished Doctorate of Philosophy]. University of Auckland.
- Dell, K., Staniland, N., & Nicholson, A. (2018). Economy of mana: Where to next? *MAI Review*, 7(1), 51-65.
- Findlay, I. (2018). Chapter 2 Precursors to the Sharing Economy: Cooperatives. In P. Albinsson & Y. Perera (Eds.), *The rise of the sharing economy: Exploring the challenges and opportunities* (pp. 9-28). Praeger.
- Foley, D. (2003). An examination of Indigenous Australian entrepreneurs. *Journal of Developmental Entrepreneurship*, 8(2), 133-151.
- Government of Iceland. (2019). Indicators for measuring well-being. Prime Minister's Office.

 Retrieved from https://www.government.is/lisalib/getfile.aspx?itemid=fc981010-da09-11e9-944d-005056bc4d74
- Hēnare, M. (2001). Tapu, mana, mauri, hau, wairua: A Māori philosophy of vitalism and cosmos. In John A. Grim (Ed.), *Indigenous traditions and ecology* (pp. 197-221). Harvard University.
- Hēnare, M. (2003). The changing images of nineteenth century Māori society: From tribes to nation [Unpublished Doctorate of Philosophy]. University of Wellington.
- Hēnare, M. (2011). Lasting peace and the good life: Economic development and the "te atanoho" principle of Te Tiriti o Waitangi. In M. H. Tawhai & K. Gray-Sharp (Eds.), "Always speaking": The Treaty of Waitangi and public policy (pp. 261-275). Huia.
- Hēnare, M. (2014). The economy of mana. In D. Cooke, C. Hill, P. Baskett, & R. Irwin (Eds.), Beyond the free market: Rebuilding a just society in New Zealand (pp. 65-69). Dunmore Press.
- Henderson, J. Y. (2000). The context of the State of Nature. In M. Battiste (Ed.), *Reclaiming Indigenous voice and vision* (pp. 11-38). UBC Press.
- Henry, E. (2007). Kaupapa Māori entrepreneurship. In L. P. Dana & R. Anderson (Eds.), International Handbook of Research on Indigenous Entrepreneurship (pp. 536-548). Edward Elgar.
- Henry, E. (2017). The creative spirit: Emancipatory Māori entrepreneurship in screen production in New Zealand. *Small Enterprise Research*, 24(1), 23-35. https://doi.org/10.1080/13215906.20 17.1289853
- Hyden, G. (1980). The economy of affection. In *Beyond Ujamaa in Tanzania: Underdevelopment and an uncaptured peasantry* (pp. 18-19). University of California.
- Hilton, C.-A. (2019). Indigenomics gala CEO address [Keynote, 25 June]. Indigenomics conference, Richmond, Canada.
- Kahakalau, K. (2004). Indigenous heuristic action research: Bridging Western and Indigenous research methodologies. *Hūlili: Multidisplinary Research on Hawaiian Well-Being*, 1(1).
- Kelly, D. (2017). 'Feed the people and you will never go hungry': Illuminating Coast Salish economy of affection. [Unpublished Doctor of Philosophy], University of Auckland.
- Maritz, A., & Foley, D. (2018). Expanding Australian Indigenous entrepreneurship education ecosystems. *Administrative Sciences*, 8(2), 20. https://doi.org/10.3390/admsci8020020

- Merculieff, I. (2012). Going to the heart of sustainability: An Indigenous wisdomkeeper's perspective with Ilarion Merculieff [Speaker transcript, 12 May]. Kalliopeia Foundation, David Brower Centre, Berkeley, USA. Retrieved from https://vimeo.com/44699395
- Menzies, C. (2006). *Traditional ecological knowledge and natural resource management.* University of Nebraska.
- Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians Canada. (2009). Federal framework for Aboriginal economic development. Ministry of Public Works and Government Services Canada.
- Moustakas, C. (1990). Heuristic research: Design, methodology, and applications. Sage.
- Nana, G. (2019a). BERL 2019 Wānanga Value or values? Money or mana? Business and Economic Research Ltd. https://www.berl.co.nz/our-foundation/berl-2019-wananga-value-or-values-money-or-mana
- Nana, G. (2019b). Poverty, economics & economists. *Business and Economic Research*. https://www.berl.co.nz/our-foundation/poverty-economics-economists
- Nana, G. (2020). Economics as Kaitiakitanga o Taonga: Can we reverse the narrowing perspective of economics? Business and Economic Research. https://www.berl.co.nz/our-foundation/economics-kaitiakitanga-o-taonga
- Newhouse, D. (2004). The challenges of Aboriginal economic development in the shadow of the borg. *Journal of Aboriginal Economic Development*, 4(1), 34-42.
- New Zealand Government. (2019). The well-being budget. New Zealand Government. Retrieved from https://treasury.govt.nz/sites/default/files/2019-05/b19-wellbeing-budget.pdf
- Nicholson, A., Spiller, C., & Pio, E. (2019). Ambicultural governance: Harmonizing Indigenous and western approaches. *Journal of Management Inquiry*, 28(1), 31-47. https://doi.org/10.1177/1056492617707052
- Peredo, A. M. (2003). Emerging strategies against poverty: The road less traveled. *Journal of Management Inquiry*, 12(2), 155-166.
- Peredo, A. M., Anderson, R. B., Galbraith, C. S., Honig, B., & Dana, L. P. (2004). Towards a theory of Indigenous entrepreneurship. *International Journal of Entrepreneurship and Small Business*, 1(1/2), 1-20.
- R. v. Marshall. (1999). Supreme Court of Canada. 26014 3 SCR 456. https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/1739/index.do
- Rashbrooke, M. (2014). The inequality debate: An introduction. Bridget Williams Books.
- Sainte-Marie, B. (2019). Indigenomics gala keynote: Buffy Sainte-Marie [Keynote, 25 June]. Indigenomics conference, Richmond, Canada. https://youtu.be/3rkDbO2xeoo
- Sen, A. (1985). Well-being, agency and freedom: The Dewey Lectures 1984. *Journal of Philosophy*, 82(4), 169-221.
- Sen, A. (1999). Development as freedom. Alfred A. Knopf.
- Stiglitz, J. (2012). The price of inequality: How today's divided society endangers our future. W.W. Norton & Company.
- Stó:lō Nation Lalems ye Stó:lō Si:ya:m. (2003). *Stó:lō heritage policy manual.* Stó:lō Nation Lalems ye Stó:lō Si:ya:m.
- Thomas, A. (2015). Indigenous more-than-humanisms: Relational ethics with the Hurunui River in Aotearoa New Zealand. *Social & Cultural Geography*, 16(8), 974-990. https://doi.org/10.1080/14649365.2015.1042399

- Trosper, R. L. (2009). *Resilience, reciprocity and ecological economics: Northwest Coast sustainability.* Routledge.
- Truth and Reconciliation Commission of Canada. (2015). *Canada's residential schools: The history, part* 1, origins to 1939 (Vol. 1). McGill-Queen's University Press.
- UN General Assembly. (2007). United Nations Declaration on the Rights of Indigenous Peoples: Resolution/adopted by the General Assembly (A/RES/61/295). https://www.refworld.org/docid/471355a82.html
- Villanueva, E. (2018). Decolonizing wealth: Indigenous wisdom to heal divides and restore balance. Berrett-Koehler.
- Wade, R. (2015). How economists are failing society Reflections on macroeconomics and income distribution. [Keynote, 2 December]. IKA Salon, Auckland, New Zealand.
- Watene, K., & Yap, M. (2015). Culture and sustainable development: Indigenous contributions. *Journal of Global Ethics*, 11(1), 51-55. https://doi.org/10.1080/17449626.2015.1010099
- Williams, R. A. (2012). *Savage anxieties: The invention of western civilization* (1st ed). Palgrave Macmillan.
- Wuttunee, W. A. (2004). *Living rhythms: Lessons in Aboriginal economic resilience and vision*. McGill-Queen's University Press.
- Zamagni, S., & Zamagni, V. (2010). *Cooperative enterprise: Facing the challenge of globalization*. Edward Elgar.
- Zhangmo, T., Wangdi, K., & Phuntsho, J. (2017). *Proposed GNH of Business*. Centre for Bhutan Studies and GNH. http://www.bhutanstudies.org.bt/wp-content/uploads/2017/11/GNH-of-Business-.pdf

Walking Many Paths, Our Research Journey to (Re)present Multiple Knowings: Creating Our Own Spaces

Melitta Hogarth and Kori Czuy

ABSTRACT Indigenous peoples globally are seeking new ways in which to communicate and share our worldviews. Sometimes defined as resistance research, emancipatory research, decolonising research — our research (re)presents the multiple journeys we live and come to know. Emerging Indigenous research methodological approaches are centring Indigenous ways of knowing, being and doing, to privilege Indigenous voices that have been suppressed through colonization. The intricate weaving of Western methodologies with Indigenous knowledges evokes agency in two emerging Indigenous researchers (from Australia and Canada) and weaves a path of reconciliation between their diverse disciplines and the seemingly dichotomous knowledge systems they are challenged to work within. Using metalogue, a way of authentically bringing together multiple voices through dialogue, we discuss the creative and radical Indigenous methodological approaches developed and enacted within our PhDs. The paper will provide insights into the epistemological, ontological and axiological principles that inform emerging Indigenous approaches to research.

KeyWords Indigenous methodologies, decolonization, creative methodologies, creativity, metalogue

Globalization of knowledges through the ever-increasing realms of technology have allowed for the ways in which we communicate to evolve. Indigenous peoples are also involved in this evolution of language. As an act of resistance to the colonizers' language, Indigenous peoples worldwide seek new ways to communicate and share our worldviews. Indigenous poets and activists are finding ways to blend the colonizers' language with their own (see Nga Hine Pukorero, 2019) or refusing to maintain the grammatical and spelling structures through the use of free verse (e.g., Cole, 2006; Czuy, 2021; Four Arrows, 2008; Hogarth, 2019).

Within academia, Indigenous academics also seek ways to disrupt the status quo. Sometimes defined as resistance research, emancipatory research, or decolonizing research — our research (re)presents the multiple journeys in which we live and come to know. Emerging Indigenous research methodological approaches are centring Indigenous ways of knowing, being and doing, to privilege Indigenous voices that have been suppressed through colonization (Battiste & Henderson, 2000; Blair, 2015; Kovach, 2009; Martin, 2003).

In this paper, Melitta and Kori examine the intricate weaving of Western methodologies with Indigenous knowledges that evoke the agency of two emerging Indigenous researchers (from Australia and Canada) and how these actions weave a path of reconciliation between their diverse disciplines despite the seemingly dichotomous knowledge systems they are challenged to work within. They discuss the creative and radical Indigenous methodological approaches developed and enacted within our PhDs. The authors extend their previous yarning circle shared in 2019 (Czuy & Hogarth, 2019), where the innovative approach of metalogue was used (Bateson, 1972), providing insights into the epistemological, ontological and axiological principles that inform their emerging Indigenous approaches to research. While aspects of metalogue remain evident within this paper, we look to enhance our applications by drawing on the examples of Four Arrows (2008); and, in doing so, produce a pseudo virtual reality space created through our imaginings. Here, Melitta and Kori continue their work of circling the square, chipping away at the corners to form a circle (Czuy & Hogarth, 2019).

This paper looks to push further the boundaries of metalogue (Bateson, 1972; Four Arrows, 2008). This paper seeks to present a transcript of Melitta and Kori's interactions as panellists at a conference forum presenting in a virtual reality space. A computer program or form of Artificial Intelligence, known as *EH-EYE*, acts as the Chair of the Panel. The "audience" exists in the panellists' minds' eye where the two nations are brought together into a harmonious space. As with metalogue, where the conversation and interaction of the social actors are cogenerated, this virtual space is also cogenerated. Much like the writing process of this paper, the vast distances between Melitta and Kori are being addressed within a technological space.

Through online discussions throughout 2019, Melitta and Kori discussed the possibilities of seeing each other face to face again and the various barriers faced for this to come to fruition. Technologies have created a space to maintain collegial discussions and writing. As a result, the idea of presenting together and how and what that could look like was explored with enthusiasm. This conversation acted as the driving idea to consider the possibilities and limitations of a virtual reality space. The usual barriers of land-based seminars seemed irrelevant in the virtual reality space as barriers such as insurance, travel, accessibility, time, risk assessments, and so forth were no longer relevant.

Further to the considerations discussed above, the differences in terms of reference and differing lived experiences within our Indigeneity needed further discussions. This was because while the metaloguing sections allow individual voice (Bateson, 1972; Four Arrows, 2008), our voices are silenced in these contextual introductory spaces, and there is a need for the collective voice. While such issues could be resolved, a compromise was necessary at times. These conversations have not been shared in this paper but are worth noting to address any misconceptions of a shared sense of identity or Indigeneity.

However, the excitement of a 'solution,' there was a need to remain connected to Country, Land, and Spirit and privilege one's Indigeneity. But how were the authors to represent both their Countries? How can they speak to their spiritual connection to the land, the animals, the trees? How can they privilege Indigenous ways of knowing, being, and doing? It is anticipated

that as this paper progresses, these very questions may be answered or solutions proffered. The following section sets the scene and describes the panellists view of the virtual reality space to enable and entice the reader to also enter the space.

SCENE 1: The Minds' Eye View of the Virtual Reality Space

This evening gathering occurs as the sun hovers somewhere between dusk and night. The sun sits somewhere above and below the horizon line, floating behind the landscape as it protrudes out of the land telling its own story of longevity. The darkness is slowly enveloping the final rays of the day, and so the firepits begin to be lit by the firekeepers. As the wood crackles, embers escape to dance amongst the burgeoning dark skies. The silence that occurs as day turns to night is breached by the sounds of the land. The sacred fires are here to symbolize connection, gathering, and home — audience members, those with two legs and four, feathers, scales, roots, and leaves begin to gather.

BUFFALO makes a face as MUSKRAT tries to take a place on the log. MUSKRAT doesn't want to argue and takes a place in the back eyeing up the wooden blocks — "Projects for later??!!" A slight breeze tickles and burrows through the leaves of EUCALYPTUS and BIRCH trees. The familiar laugh of KOOKABURRA echoes throughout the growing crowd. Defying gravity amongst the needles of the spruce, CHICKADEEs chirp the tune of their namesake, calling their relatives to gather and learn. Circling overhead is Melitta's ancestor, EMU, with their wings stretched wide. For in her Dreaming, EMU can and always has been able to fly (see Hogarth, 2018b). Silent prayers and songs are heard in the wind — "Thank you to our firekeepers who keep the sacred flames burning."

A hush comes over the audience as the last glimpses of sunlight dissipate and fires become the main source of light until the WOLF TRAIL (Milky Way) and spirits of the AURORA reveal themselves. The evening gathering is about to begin with all eyes, senses and spirits turning towards the holograms standing within the central fire. A voice comes from beyond.

Act 1: Acknowledgement of Land and Country

Unknown Voiceover

Depending on whose lens you are viewing through, certain aspects of Land and Country are more pronounced. From a colonial Australia lens, the virtual space is a reflection reminiscent of the lands in which Melitta grew up. The soil is a rich brown in colour, reminding those who care to notice the story of the lands. The lands are abundant with grasses that sing their subtle song as the wind passes through their long strands. A small creek sits in the background, for it has been many a year since enough rains have fallen to bring it to life. A slight drizzle the evening before has allowed for the smell of eucalypt, lemon myrtle, and wattle flowers to waft across the breeze. In the distance, you can see Boobarran Ngummin, otherwise known as the Bunya Mountains, a significant site where Aboriginal peoples once gathered. The majestic Bunya pines tower and stand guard welcoming those who enter this space. The land is Aboriginal — a deliberate act of resistance to ignore the colonized space but of a time before. In this virtual space, we return to a time or seek a space where our Aboriginality and connection to

Country is privileged. There is no need for explanation nor explication, but it is taken as is. The interconnectivity of the land, the animals, nature and the authors are understood through our connections with one another. We speak a common language and move together with a common goal.

From Turtle Island, the created virtual space is reflective of the lands Kori knows as familiar; the prairies and mountains of Northern and Western Canada, Turtle Island. Called in are the ancestors from the North, the aurora, the dancing spirits that transcend the sky, cosmos, and land. The sounds and smells of cracking sheets of river ice, the silence yet spiritual cacophony of the aurora, and the sense of home created by a winter fire that ground both spirit and this virtual space. The fire colours reflect crisp summer sunrises and fragrant wildflowers, while medicinal grasses of the prairies present their gifts through medicines of stories, songs, healing, and relations. Called in are the healing spirits of the mountains of $\hat{I}y\hat{a}$ rhe Nakoda Territory. Sleeping Buffalo Mountain rests at the confluence of the winds and corridors of the four directions, an ancient gathering place for reconnection with body, mind, spirit, emotion, and ancestors (Powderface, S, recognized Elder from the İyârhe Nakoda Nation, Treaty 7, Oral teaching from Indigenous Wisdom Gathering, personal communication, April 11-14, 2019). Stories of this mountain are again being shared after being hidden for safekeeping from colonization, tokenism, and translation. It is also important to recognize the animals who were also caretakers of these lands. Living within the circle of reciprocity and respect, animals worked together to thrive by teaching and learning from each other. Animals and land and relation to the cosmos have much to teach through passed-on stories from Elders, ancestors in ceremony, and personal experience.

This space allows for a rekindling of connections with the ancestors as stories begin again to swirl amongst the snow and looming chinook winds, dancing amongst disrupted stories and histories, healing through truth. Place and story connect us, as does this virtual space.

Act 2: The Conference Proceedings

The AUDIENCE settles in around the fires. LYREBIRD begins to sing while displaying her opulent feathertails dancing to her own tune. EASTERN WHIPBIRD sounds out his two-part "whip cracks" in unison. EAGLE ruffles its feathers to gather everyone's attention. The voice from beyond introduces themselves as our host for the evening, Artificial Intelligence [AI] who goes by EH-EYE. EH-EYE clears their throat. A silence engulfs the crowd.

EH-EYE:

The idea for this conference was created by Melitta and Kori, with its formatting originally inspired from a previous article written together using metalogue, a methodological writing technique that allows multiple voices to retain their uniqueness while collaborating and engaging with ideas that are reflexive and evolving (Adams et al., 2008). But a recent discovery of Four Arrow's An Authentic Dissertation: Alternative ways of knowing, research, and representation (2008), allowed them to weave together multiple perspectives and experiences but through an Indigenous worldview lens.

Thank you all for coming here today.

The AUDIENCE applauds.

EH-EYE:

Let's begin with an introduction from both Melitta and Kori.

The AUDIENCE applauds with vigour. BEAVER perks its head out of the water in curiosity, as does PLATYPUS.

KORI:

How gorgeous is this virtual space? It's like what I would imagine it would have been like before colonization!

Uncomfortable laughter can be heard coming from RAVEN and CROW. DINGO howls in approval.

MELITTA:

It's exactly how I imagined it to be. In my mind's eye, this is a space we all belong to. It is exciting to see how we can take back and speak to a world we once belonged to and seek to find in today's world.

KORI:

Yes, I agree; this gathering is allowing us to create an open and welcoming space without judgement or resistance.

KORI pauses and inhales the cleansing crisp post-dusk air.

It is a pleasure to be in this space with all of you, although virtual; it allows us to reconnect with those connections and relationships that have been lost through colonization and (re)member the significance of "all my relations."

Although I assisted in creating this virtual space with the land I am trying to thrive on now, I was actually born in Northern Canada, on Treaty 8, in Cree territory. Although my status card says Métis, I recently have understood that these matrilineal roots are actually Cree and English. The ongoing references to "half breed" in my generation's past seems to have melted into a piece of plastic supposed to represent my "status" but actually is a reflection of a deeply racist history. In better understanding this seemingly lost Cree history, I have reconnected with lost ancestors through ceremony and was recently gifted the name Mikho Pihesew (Red Thunder) from a Cree Elder.

MELITTA:

I am a Kamilaroi woman whose cultural lands and heritage is found in the South-West of the state now known as Queensland. Much like Kori, my identity is bound and intertwined with the draconic policies of colonial Australia. Born in Meanjin on the Turrabul and Yuggera peoples' lands, I was raised on the lands of the Bigambul peoples, whose family lines also align with my great-great grandfather, Jack Noble. However, this knowledge was kept from me from birth. Adopted out to a non-Indigenous family at 21 days old, my Aboriginality was kept secret from me, resulting from a closed adoption policy. It was not until later, through the ancestors' interventions, that I was found, and I learnt I was not Greek as my parents had been told, but Aboriginal.

I have never been to my traditional lands. Still, I have both lived and worked on the lands where my Great-Grandmother and Great-Grandfather (in Aboriginal ways — those old people were the brother and sister-in-law of my Great-Grandmother) were relocated in 1927 (see Forde, 1990). There is an internal desire to return to the Country soon to simply "sit" but a hesitation as well, knowing the emotional energy required and paid when it does occur. So, for now, this virtual reality space provides an opportunity to amalgamate my memories and unconscious recall of a land I have never visited but have been given insights from my ancestors through dreaming. We would like to thank everyone for being here. You all represent many different worldviews that challenge us and teach us.

KORI:

Like the tricksters, whose mistakes teach us and allow us to grow and live within the circle!

The RAVEN, DINGO, and COYOTE exchange mischievous looks.

KORI:

Thank you, EH-EYE, or should I thank the programmer(s)? Who are they? Oh, let me guess...

Act 3: Introducing the research studies

EH-EYE acts a bit awkward at the comment but wants to move the attention from themselves and the questioning of their presence within the space.

EH-EYE (hurriedly asks):

You both decided not to use traditional methodologies with your doctorate dissertations. Can you explain why?

MELITTA (turns to face KORI and rolls her eyes):

Be careful, Kori! As a discourse analyst, the very definition of what EH-EYE is meaning by "traditional" needs to be provided to be able to answer this question definitively. It is indeed a loaded gun being placed to trick us into already defining ourselves as "different" from the "norm."

EH-EYE:

No! Please! No ill will was intended. A definition is indeed necessary, and I apologize for my ambiguity. By "traditional," I meant traditional in academic institutions, where knowledge has been housed and validated by empirical methods.

KORI:

I would like to say that I used a "traditional" methodology, the sweetgrass braid, a methodology used by many Indigenous cultures for thousands of years to symbolize community and respective relationships, as taught to me by Kainai Elder Casey Eagle Speaker.

Four CHICKADEES fly down to listen. There is an uncomfortable movement within the AUDIENCE as the Indigenous animals and plants lean closer, recognizing a shift in the temperature.

KORI:

For me, academic methodologies and methods are restrictive and reductive and focus strictly on mental knowledge. Using Indigenous methodologies allow for multiple worldviews to work together and for mental knowledge to be supported alongside knowledge from the physical (the body and senses), the emotional, and the spiritual (interventions and guidance from the ancestors) (Eagle Speaker, C. Elder from the Kainai Nation, Treaty 7, Oral teachings, personal communication, October 8, 2019).

MELITTA (nodding in agreement):

I agree in part with what you have said, Kori. I, too, found the Western methodologies restrictive.

For me, I recognized a gap in the Western methodological approach, Critical Discourse Analysis. Here, I found that the champions of CDA, as Critical Discourse Analysis is often referred to as, were White non-Indigenous peoples such as Fairclough (2015), Wodak (Wodak & Meyer, 2009), van Dijk (1993), and so forth, whose analyses of discourses and their influence in being informed by and informing societal and institutional structures came from an outsider's perspective, moreover, a white lens. That is, our analytical investigations differ because when *we* analyze discourses we are informed by our lived experiences, knowledges, and understandings from both inside and outside.

EH-EYE (raises an eyebrow and then turns head slightly to left with a quizzical look): But wait, what are you suggesting!? I am finding it hard to compute. Like, Kori, isn't your research about mathematics? How can mathematics be physical, emotional, or spiritual?

KORI:

Mathematics has been driven by domination and perpetuation of a worldview dependent upon methodologies, epistemologies, and ontologies that are objective, static, and purposefully void of culture and abstracted from the human experience (Stavrou & Miller, 2017). This universal/standard mathematics (and science) has become unquestionable, thereby becoming the gatekeeper for defining what knowledge is rational and logical, while subsequently defining what knowledge is "pseudo"— soft and more subjective (Snively & Corsiglia, 2001). As mathematics abstracted the experiential, the cultural, and human for the hard, logical, and inherently Eurocentric defined subject, it segregated and discounted an Indigenous way of knowing mathematics. I came about my research topic when I saw a graphic of a body-tally counting system out of Papua New Guinea. EH-EYE, can we bring up this image?

EH-EYE presses a button to their left on a screen. An image of a person with various numbers (Figure 1) attached is made visible to AUDIENCE.

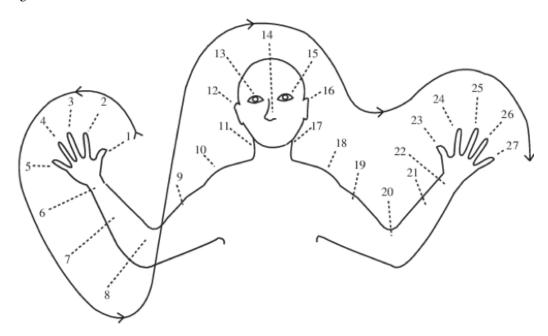


Figure 1. From Saxe, 1981, p. 307

The SABE (bigfoot), standing proud amongst the CEDAR, began to imitate the numbers on its body, nodding in agreement and understanding.

KORI:

Hai hai, thank you. This image made me think back to how I learned mathematics in school; abstract, based on memorization. I wasn't allowed to use my fingers to count, and it didn't seem to be related to anything in my world outside of the math classroom. Leafgren (2001) stated that school overtly separates the student from nature, each other, and their own body, especially in the math classroom. As I researched more, I thought about how learning numbers

through my body could have changed how I learned by creating connections between math and my senses. What if my elbows were always the numbers 8 and 20? How would that have changed my understanding of those numbers, understanding of my elbows, or how would it have changed how I understood how those numbers relate to each other, because each elbow is related?! I remember being asked in my candidacy exam how this could be practically used in the classroom.

MELITTA nods in agreeance as she looks at the image.

KORI:

This question made me think for a moment. Then I realized that the counting systems were as varied in Papua New Guinea as their languages, each community having a slightly different approach, some using only the right or left half of their body, some using body parts from their head down to their belly button or toes (as interpreted from Saxe, 1981, and Wassman & Dasen 1994). Trade, and therefore relationships, were vital to these communities. Thus knowledge of the differences, sometimes subtle, between community counting systems was important in translating between systems of counting for the trade of commodities and knowings. For example, the graphic shown here is a counting system based in 27, but could be trading with a community with a system based in 28 with the addition of their mouth as number 15. Being able to translate between these systems is a skill, of which could be related to the grade 3 math classroom, where students have to learn to tell time, a skill difficult for many students to grasp as it involves translating between different number systems, base 60, 24, and 12.

EH-EYE:

I see you nodding at what is being said, Melitta. Would you like to share?

MELITTA:

I love how Kori speaks of mathematics and, in this instance, the mere act of counting as a language. Despite coming from very different disciplines — English/discourses and Maths — and yet, the intricacies and interrelationality in our work and our ways of doing continue to be located in the weirdest of places.

Policy informs my life, education, identity and so forth. As a result, policy became my subject for analysis. My research study grew out of my Master of Research (Education) (Hogarth, 2015). In my Master's, I had critically analyzed the then-current Indigenous education policy, the Aboriginal and Torres Strait Islander Education Action Plan 2010-2014 (MCEECDYA, 2011) using Fairclough's Critical Discourse Analysis framework (2001). In that instance, I saw the gaps in CDA as a methodological approach for me. I wanted to centre Indigenous voices, and Indigenous lived experiences.

KORI clicks her fingers in agreeance. EMU stretches her neck in pride.

MELITTA:

That rather than Indigenous students being the subject of the study and further perpetuating the deficit discourses when speaking about Indigenous student educational attainment when measured against the coloniser's standards of excellence, I wanted to make the coloniser the subject and investigate just how they are "working" towards addressing the inequities prevalent in education — flipping the focus.

There is always so much talk about addressing the inequities in education and seeking ways to address the educational attainment of Indigenous kids. Still, as a classroom teacher for almost 20 years, I saw that this was just talking. Quite often, the ideas and rhetoric espoused in political discourses were not shared nor enacted. But this had all become normalized within society to the extent that when the same results were reported year in and year out with no notable progress, it was never questioned or queried but seemed to be becoming an expectation. There needed to be ways to counter this.

Language has always been a passion of mine. It's the power to manipulate, inform, explain, and then have the ability to affect people's moods and/or actions — language is just so powerful. With that in mind, it was essential to show the discursive trickery — how policy has the ability to say one thing but mean another or say nothing at all. Policy gives the illusion of action and a desire to effect change but as Fairclough's framework asks: "Does the social order 'need' the problem?" (Fairclough, 2001, p. 238).

As you can see, our lived experiences within society or even within the classroom have informed our phenomena for study.

For me, the policy has informed my identity, but it was only through the ancestors' interventions that I was able to come to know the truth and begin to make the alignments to the perceived déjà vu moments in my life. Only then did things begin making sense.

EH-EYE:

Interesting. Your work, Melitta, derives from a lived experience that I have not had, and it is difficult to compute. However, I would think that it is like my relationship with my programmer who determines my personality and so forth. However, I can relate to Kori's interests in Mathematics because I believe it is like working between binary and other number systems.

MELITTA:

It is interesting to see how you are trying to centre yourself here, EH-EYE. We are talking about our experiences and our research, yet you still seek to focus on your own experiences. So often, this is our experience — that our stories must always be questioned or brought back, so the colonizer is the focus.

Act 4: Interventions of the ancestors

Three GREEN TREE FROGS begin "warking" in support, acknowledging what they see is happening while HOOP PINES shiver to readjust their rings, loosening their built-up tension. EH-EYE shifts their weight and adjusts their tie while looking slightly unnerved.

EH-EYE:

Apologies again. I am afraid my programming has positioned me from a dominant colonizer lens. Shall we continue and, hopefully, I will not put my foot in it again. You have both said you were using Indigenous methodologies. Where does that fit into your research?

KORI:

As I read through these studies from the early '80s in Papua New Guinea, they seemed so disconnected from the culture that was being studied. As common at that time, researchers and anthropologists went into communities to study on and about cultures. They took words and phrases and stories and then interpreted them into their conception of knowledge. I couldn't help but ask, what did the community get from the research? Linda Tuhiwai Smith (1999), a Māori scholar, stated that research has become such a dirty word within Indigenous communities because knowledge has been taken and commodified, reciprocity was never taken into account, leaving communities worse off than before, with knowledge removed, resources taken, stories exploited and commodified. Smith (1999) wanted to support research with the community, where everyone benefits, respect and reciprocity of knowledge and stories are ethical, and community is front and centre.

MELITTA is seen to be clicking her fingers in agreement. EH-EYE listens intently but is uncomfortable, wanting to interrupt but unsure just how to do this.

KORI:

There is power, hierarchy, and dominance that universal, standard mathematics has created for itself (Aikenhead, 2001; Cajete, 1999; Sterenberg, 2013). A worldview of math put itself at the pinnacle, discounting any other mathematical system as inferior to it, almost even discounting them as wrong (Snively & Corsiglia, 2001). As I began to open my mind and heart to understanding mathematics in multiple ways, I realized mathematical pedagogy of abstraction and memorization is a process that forcibly removes the human, spiritual, sensory, and community aspects of mathematics. All of a sudden, my belly button reconnects with my previously abstracted understanding of the number 30 with my body, my senses, and with the spirit and stories of my matrilineal ancestors. This (re)connection, sparked by coming across non-standard counting systems from across the globe, guided me to reconnect with the knowings of my ancestors on Turtle Island and opened up my previously narrow worldview of mathematics...prompting me to question it. This questioning led me on a journey of inferiority and moments of impostor syndrome. I knew something else, something cultural within these seemingly absolute mathematical truths, all of which seemed to push me into questioning myself, my learned "truths," and these seemingly static mathematical ideas. This brought me to use Indigenous methodologies of the sweetgrass braid to bring together multiple ways of knowing through community and openness concepts.

RAVEN hops onto the TURTLE. The animals collectively react; witnessing and understanding the coming together of a trickster with a disrupted truth.

EH-EYE:

I don't want to interrupt, but I have seen Melitta nodding her head in agreement, and I am left wondering how there can be synergies in your ways when you work in such disparate fields? You also used an Indigenous methodological approach in your research, Melitta. Is this correct?

MELITTA:

Much like Kori hinted at just before when looking at the removal of the "human" when looking further into number and its representation in Papua New Guinea, I found an uncomfortableness in my Master of Research (Hogarth, 2015) where the primary focus of the methodological approach was on the Western methodology and in turn, removing myself from the work, removing the "human." Or at least, that is how it felt after the fact and reflecting on that process. In my Ph.D. (Hogarth, 2018a), I knew I had to rectify that situation.

I began hinting at this when I spoke about the lack of Indigenous voice in Critical Discourse Analysis (Fairclough, 2015) before; however, it was more than just that! I knew CDA was not enough for me. I wanted my research to reflect myself, and in doing so, I knew that I needed to centre Indigenous epistemologies, ontologies, and axiologies. Further readings of Indigenous academics such as Rigney (1999), Smith (1999), Battiste (2000) and so forth had me recognize this was missing in my Master of Education (Hogarth, 2015). While I had drawn on Rigney's Indigenist Research Principles and Nakata's Indigenous Standpoint Theory (2007) within that study, the primary informing approach was CDA. I was determined that in the PhD., the Indigenous worldview would be centred.

EH-EYE:

And how did you do that using Indigenous methodologies?

MELITTA:

I recognized that within each layer of Fairclough's CDA (2015) analytical framework, I was always looking through an Indigenous lens. My lived experiences, beliefs, and understandings of the world — otherwise known as members' resources — were consistently informing and forming my interpretations of the text. That is, my Indigeneity and myself were embedded in the analysis.

I intentionally search for Indigenous texts, and it was through an intervention of the ancestors that I was introduced to The Coolangatta Statement on Indigenous peoples' rights in education (Morgan et al., 2006). The fact that I just happened to be sitting in the audience of a conference presentation when there was an off-hand comment made in response to a question asked at the end by one of the presenters mentioning the "Coolangatta Statement"

and something or someone in my head saying "What's that?! Be sure to check it out." *I had no idea what it was or what* its actual name was, but I was determined to find out. So much so that later that evening in a hotel room, I was searching databases and doing random web searches.

Without the intervention of the ancestors, my study would have been very different. The Coolangatta Statement on Indigenous peoples' rights in education (Morgan et al., 2006) became the lens through which I analyzed the National Aboriginal and Torres Strait Islander Education Strategy (Education Council, 2015). It became the guiding document.

EH-EYE leans forward to gain MELITTA's attention halting the conversation.

EH-EYE:

Something I am noting within both your responses is that there seems to be another force that drives your work — a type of spirituality that guides your choice of phenomenon, your direction in research and so forth. Can you share a bit more about that as it is something foreign to me! It does not compute!

EH-EYE chuckles at their joke. Some random bursts of laughter are heard within the AUDIENCE that resemble the cackle of COYOTE. MELITTA and KORI both look out to the audience in the direction of the laughter but cannot spot the individual as the shadows from the fires hides their identity.

KORI:

Like what Melitta stated, spirit also guided me. My ancestors led me on a path to reconnect with my Indigenous roots, which in turn allowed me to experience mathematics and science through an Indigenous way of knowing with Elders and through ceremony. I paid close attention to my intuition, dreams, moments of déjà vu; they became moments of guidance and knowledge. I had to find or create a methodology to allow these worldviews to weave together, without hierarchy or dominance of one worldview over another.

MELITTA:

Within my study, there were several interventions. There was the guiding document, but there was also the formation of the conceptual framework of Indigenous Critical Discourse Analysis itself. The methodological approach was different in that I feel as though it was the ancestors who helped me shape and form the conceptual framework for Indigenous Critical Discourse Analysis (Hogarth, 2018a). Perhaps here, it would be easier if EH-EYE would bring up the framework?

EH-EYE presses a button, and the image (Figure 2) is made available for the audience to view (Hogarth, 2018a, p. xxxvii; p. 167).

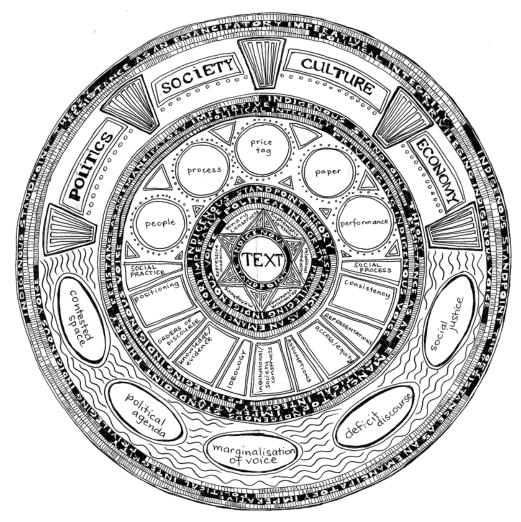


Figure 2. A conceptual overview of Indigenous Critical Discourse Analysis (Hogarth, 2017, p. 25).

MELITTA:

I knew I wanted to use circles rather than squares, but selecting each of the objects within the circles as the framework developed also became symbolic — [EMU]lating components of my lived experience. Even the narrowing of the framework — I had so many ideas circling in my head, but once I began trying to put it on paper — bit by bit, certain aspects became more essential to make explicit while others became implicit. If I recall, the drafting to the final image only underwent three to four versions. The ancestors truly guided me as things progressed.

The AUDIENCE listens and experiences silently. STARS begin falling, marking the night skies.

MELITTA (turns to look at EMU): I acknowledge that I am here today because of them.

EMU spreads her wings and stretches her neck, nodding her head toward Melitta in recognition. BUFFALO stands proud at a distance. Its breath is just loud enough for everyone to notice — rhythmic, relational, and respectful. A few audience members become uncomfortable with the BUFFALO's presence, continuously peering over their shoulders.

KORI (speaking to BUFFALO while touching her heart in respect): *Tanisi*, relative.

KORI pauses for a moment.

KORI:

Alongside Elder Eagle Speaker, we came up with the sweetgrass braid as my methodology. Casey taught me that sweetgrass represents community, each strand coming together to become stronger together than apart. This process allows for each strand to retain its individuality, supporting and being supported by its community, and being allowed to find and use its gifts while making mistakes along the way (Czuy & Eagle Speaker, 2019). These three strands of the braid represent three ways of knowing in general, but more specifically, mathematics. Indigenous way of knowing, the first strand, symbolises knowing from the land, Elders, and community. The second sweetgrass strand represents personal ways of knowing, using our memories and experiences, alongside our bodies, senses and spirit to come to know and (re)connect with the mathematical stories as explored by the first strand, Indigenous knowings. Once these first two strands are truly explored and understood, we can begin to braid in the third strand, Universal standard mathematics, where connections (similarities and differences) can be made between Indigenous and personal ways of knowing with the standard mathematics (Czuy & Eagle Speaker, 1999). This process critically engages initially with the first two strands, which have been disrupted and colonized, bringing equity to learning mathematics. This braid allows for an understanding of mathematics in multiple ways, holistically, humanly, and authentically.

Bringing in this sense of community and personal connectivity to mathematics is genuinely an act of reconciliation. As Melitta mentioned, it allows for multiple experiences and beliefs to inform and interpret. What perspectives, innovations, or a-ha moments are we missing if only a singular worldview, as disconnected from what makes us human (culture, language, experiences, innovation, spirit, curiosity), is supported as valid? Using only rational, objective methods for my research would have left out the understandings I received from dwelling upon the spiritual knowledge and guidance as gifted through ceremony, moments of intuition or $d\hat{e}j\hat{a}$ vu, and dreams. Holmes (2000) described the importance of deeper connections made

through knowledge passed on through spirit, ancestors, and ceremony, a connection I can attest through by paying close attention to these non-standard and subjective methods of knowing within my research.

A roll of THUNDER echoes in the distance. KORI takes a breath to acknowledge her ancestors the THUNDER family.

KORI:

The thunder reminds us of not only the disruption of order but also the connectivity of all. As energy builds up, it creates an imbalance, sparking an event, a release of built-up energy, a bolt of vibration that disrupts and calls together. It is a call to action, sometimes a call to harvest or ceremony, or sometimes a call to something greater, a paradigm shift.

As we move into this new century, divisive politics are separating communities. Still, acts of reconciliation, like using Indigenous methodologies, have the potential to (re)connect spirits, relationships, and openness to the new. I have to hope for these (re)connections, (re) conciliation, (re)conciliACTION; it is a radical hope for the seven generations in the future.

EH-EYE:

This subjective way of knowing is difficult for me to process. Perhaps at this stage, we should open the floor for questions from the audience? Audience members are invited to send their questions via the monitors now being made available.

Act 5: Questions and answers

The AUDIENCE jostle around. Some of the participants shift in their seats while others make their way to the monitors. A solitary DING can be heard ring out in the night air. This is shortly followed by random BEEPS and DINGS, which can be heard as the questions are collated.

EH-EYE:

Thank you. Our first question from the audience is from LYREBIRD, who asks, "Why is creating or writing 'outside of the box' critiqued as being done with less rigour? Why is it often positioned as if we are just doing things a different way to be different?" Would either of the panellists like to respond?

MELITTA:

I would like an opportunity to respond to that one.

EH-EYE nods as MELITTA turns to face the audience.

MELITTA:

And thank you, LYREBIRD, for bringing this up. I believe it is crucial that we do consistently seek to find new ways to (re)present ourselves — as an act of resistance. We have found our voice, and it is important not to conform. I don't want to be the same and write like Others. I purposefully look to go outside the box. Is it without rigour? No — it is bound within Indigenous knowledges, informed by our epistemologies, ontologies, and axiologies. I refuse to enter the arena when the power of our knowledges is questioned. How often do we as Indigenous peoples consistently face the feedback and critique of the Other? Anyone who has submitted to a mainstream journal will know what I am talking about here.

CICADA buzzes, starting an orchestra of melodic tunes throughout the audience.

MELITTA:

The Other becomes the gatekeeper determining who can and cannot publish and whose knowledges are important and valued. These very barriers act as motivators for me to keep on going and continue pushing the boundaries. So, in a way, yes! Yes, I am doing things to be different but with purpose. To resist the status quo and to disrupt. I don't actively protest, but I do this through intellectual activism (Hill Collins, 2013).

KORI:

Absolutely. It is not about *just being different*, but about not conforming, and that being okay. Four Arrows (2008) positioned his book on alternative dissertations around guiding students (and their committees) in working around the limitations of academic writing to allow creativity and the (creative) human aspect of research to be accepted as rigorous, legitimate, and credible ways of representing graduate research. Saying that, I still get push back with academic journals and professors, stating my writing is too narrative and without structure.

EH-EYE:

We have a question here from HOOP PINE, who asks, "What is reconciliation within the academy and within Indigenous methodologies? Or moreover, how do we reconcile this?"

THUNDER begins to rumble in the nearby mountains.

KORI:

The academy has successfully functioned within its borders and gates, thrived in segregation and moments of ignorance, and has done so over centuries. No matter how many intentions to act on calls from the Truth and Reconciliation Commission (2015), guest speakers, inclusive panels, or add-ons to the syllabus, change will still be an idea. A moment of disruption and discomfort has first to happen. It will call to order, break open the built-up wall of "truth," to open minds and hearts to that which has been buried, hidden, and discounted.

LIGHTNING strikes. KORI jumps and giggles in response to the coincidence.

MELITTA:

In colonial Australia, there has been many calls for truth-telling. There is a need to acknowledge the past and no longer whitewash history (Referendum Council, 2017). Perhaps it is a global action throughout Indigenous communities as we seek to find our place within the tertiary institutions.

EH-EYE:

Another interesting question here! This one comes from RAVEN: "Why do we have to 'weave' non-Indigenous methodologies into Indigenous methodologies? Is it to validate our approaches? Can't they stand alone?"

KORI:

Yes, they have to be given space and trust to stand alone.

This is a question and a problem within ethno[mathematics]. I have witnessed teachers excited to learn how to weave Indigenous knowings within mathematics. In the next breath, they get caught up in universal math connections, immediately forgetting the story's roots. As Doolittle (2006) mentioned, a tipi is not just a cone; a discussion took place around 3-D shapes being taught through the token symbol of a tipi, simplified into a perfect mathematical shape. The tipi has significant Indigenous methodological and storied roots, with the shape representing the womb and each pole a sacred teaching. The shape differs based on the land it is on. The four-pole tipi on Blackfoot territory is closer to the ground to anchor it through the harsh Plains winds (Crowshoe, R., recognized Elder from the Piikani Nation, Treaty 7, Oral teaching on tipi building committee sessions, personal communication, July 4, 2018). Here, angles are not just angles but represent generations of experience as passed on through story and apprenticeship. The stories of the tipi as a womb and the teachings that connect with the poles vary between communities and families. They represent the respect of protocol and reciprocity that runs deep within Indigenous ways of knowing.

The depth of mathematical knowledge within Indigenous stories is apparent, but has to be taught as independent of the universal/standard mathematics to retain integrity and authenticity. The understanding and connections made by the participants allow for the weaving together of multiple worldviews.

BUFFALO stands its ground.

EH-EYE:

The following question comes from DINGO: "In your discussions, you have shared how Western methodologies have been used to validate your methodological approaches. Where is the dignity in having to validate Indigenous methodologies through Western methodologies? Why not simply use an Indigenous methodology?"

I think that question has been asked and answered. Shall we move to the next question? The next...

MELITTA raises her hand to gain EH-EYE's attention.

MELITTA:

I would like to answer that question. While I recognise that you want to give all participants the opportunity to engage and while, predominantly the question has been answered in our previous response, is it not up to us to decide whether it is necessary to answer the question rather than silencing us?

EH-EYE raises their eyebrows and looks a bit ashamed but also aghast at this. MELITTA turns to the audience and begins to respond without an answer from EH-EYE.

MELITTA:

I would have loved to use an Indigenous methodology throughout my thesis, but I could not find one that provided me with what I needed. I could not find an Indigenous methodology that focuses on the use of language and discourses and how these are informed and formed by our lived experiences and so forth. This is not a reflection on Indigenous methodologies but highlights how new Indigenous peoples are in the tertiary space. The idea of selecting components of Western and Indigenous methodologies to suit my study enabled me to design and test a methodological approach that drew on several theories. And so, I think there is dignity in such an approach — the purpose is not to validate the Indigenous methodologies used but to build on the work of those who came before us. There is dignity and pride in that.

KORI:

My experience was very similar to Melitta's. I was inspired by existing Indigenous methodologies but found that I needed to create something with Elder Eagle Speaker. I felt it needed to be personal to me and my experiences. The sweetgrass braid reflected methodologies from D'Ambrosio (2001), Kimmerer (2013), and Smith (1999) while connecting to my relationship with Elder Eagle Speaker and my connection to the act of braiding and the sweetgrass medicine.

EH-EYE:

This question comes in from ECHIDNA and is addressed to you, Melitta. The question is, "Why do you refer to your methodological approach as Indigenous Critical Discourse Analysis? Isn't it just Critical Discourse Analysis through an Indigenous lens?"

DINGO cackles. An uneasy silence has come over the audience. The fires begin to spit as a log breaks sending embers into the dark sky.

MELITTA (looks to the sky):

It is okay. I have been asked this question before, and it will not be the last time.

MELITTA brings her eyes down to the audience and sits to the front of the chair.

MELITTA:

The short answer is that Indigenous Critical Discourse Analysis (Hogarth, 2018a) does more than just bring an Indigenous lens to Critical Discourse Analysis (Fairclough, 2015). It centres the Indigenous worldview, our ontologies, axiologies and epistemologies. In doing so, the *insider* analytical lens, as opposed to the *outsider* lens used by others using Critical Discourse Analysis is privileged. I have had minimal application opportunities in applying Indigenous Critical Discourse Analysis thus far, and so there may be limitations I have not yet discovered. But in saying that, this is the very reason I refer to Indigenous Critical Discourse Analysis as a methodological approach. There are no claims to it being anything else but a means by which to analyse data.

The AURORA has settled behind the horizon, passing on its responsibility of light to the WOLF TRAIL.

EH-EYE:

Thank you for all the questions, and thank you to our speakers Melitta and Kori. It seems time is up.

KORI:

Colonial time...

EH-EYE:

I am curious about what that means, but the program is only set to run on pre-determined time parameters.

MELITTA and KORI exchange mischievous looks.

EH-EYE:

It seems this was a success; what do you both think?

MELITTA:

Yes! Interestingly, this project occurs in this time and space when land-based conferences face the challenge of physical presence in the *real world*. I dare say that the ancestors have somewhat intervened again and allowed us to be their enactors! And it is always a pleasure to spend time with and create with Kori.

KORI:

It was great to finally collaborate in a collective space with Melitta, but having the ancestors join us within a space representing both of our lands is truly a gift. I am grateful. *Kinanâskomitin*.

A SHOOTING STAR arcs above as the fires begin to dim. In the silence, you can hear MELITTA and KORI take in a deep breath...

About the Authors

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References

Adams, J., Luitel, B. C., Afonso, E., & Taylor, P. C. (2008). A cogenerative inquiry using postcolonial theory to envisage culturally inclusive science education. *Cultural Studies of Science Education*, 3(4), 999-1019.

Aikenhead, G. (2001). Integrating Western and Aboriginal sciences: Cross-cultural science teaching. *Research in Science Education*, (31)3, 337-355.

Bateson, G. (1972). Steps to an ecology of mind. Bantam Books.

Battiste, M. A. (2000). Reclaiming Indigenous voice and vision. UBC Press.

Battiste, M., & Henderson, J. Y. (2000). Protecting Indigenous knowledges and heritages. UBC Press.

Blair, N. (2015). Privileging Australian Indigenous knowledge: Sweet potatoes, spiders, waterlilys and brick walls. Common Ground Publishing.

- Cajete, G. (1999). Igniting the sparkle: An Indigenous science education model. Kivaki Press.
- Cole, P. (2006). *Coyote raven go canoeing: Coming home to the village*. McGill-Queen's University Press.
- Crowshoe, R. (p.c., 2018) Recognized Elder from the Piikani Nation, Treaty 7. Oral stories from tipi building committee sessions. Teachings on Treaty 7, University of Calgary, Alberta, Canada.
- Czuy, K. (2021). Dear big S Science. *Cultural Studies of Science Education*. https://doi.org/10.1007/s11422-020-09983-7
- Czuy, K., & Hogarth, M. (2019). Circling the square: Indigenising the dissertation. *Emerging Perspectives: Interdisciplinary Graduate Research in Education and Psychology*, 3(1), 1-16.
- Czuy, K., & Eagle Speaker, C. (2019). Critical braiding approach to ethno(mathematics). M. A. Peters (Ed.), *Encyclopedia of Educational Philosophy and Theory*. https://doi.org/10.1007/978-981-287-532-7_648-2
- D'Ambrosio, U. (2001). Ethnomathematics: Link between traditions and modernity. Sense Publishers.
- Doolittle, E. (2006). *Mathematics as medicine*. Plenary lecture delivered at U. Calgary, 2006. In Liljedahl (Ed.), 2006 Proceedings of the Canadian Mathematics Education Study Group.
- Eagle Speaker, C. Recognized Elder of the Kainai Nation, Treaty 7. (p.c., 2019). Oral Teachings-October 8, 2019. Teachings on Treaty 7, Calgary, Alberta, Canada.
- Education Council. (2015). National Aboriginal and Torres Strait Islander Education Strategy 2015. http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/ATSI%20 documents/NATSI_EducationStrategy_v3.pdf
- Fairclough, N. (2001). The discourse of New Labour: Critical discourse analysis. In M. Wetherell, S. Taylor & S. Yates (Eds.), *Discourse as data: A guide for analysis* (pp. 229-266). SAGE.
- Fairclough, N. (2015). Language and power (3rd ed.). Longman.
- Forde, T. (1990). Confinement and control: a history of Woorabinda Aboriginal Community 1927-1990. Honours Thesis, School of History, Philosophy, Religion, and Classics, University of Queensland. https://espace.library.uq.edu.au/view/UQ:266148
- Four Arrows. (2008). The authentic dissertation: Alternative ways of knowing, research and representation. Routledge.
- Hill Collins, P. (2013). On intellectual activism. Temple University Press.
- Hogarth, M. (2015). A critical analysis of the Aboriginal and Torres Strait Islander Education Action Plan. Masters of Education (Research) (Unpublished). Queensland University of Technology. Retrieved from https://eprints.qut.edu.au/89754
- Hogarth, M. (2017). Speaking back to the deficit discourses: A theoretical and methodological approach. *Australian Education Researcher*, 44 (1), 21-34.
- Hogarth, M. (2018a). Addressing the rights of Indigenous peoples: A critical analysis of Indigenous education policy. PhD Thesis (Unpublished). Queensland University of Technology. Retrieved from https://eprints.qut.edu.au/118573/
- Hogarth, M. (2018b). I am the emu. *Cultural and Pedagogical Inquiry, 10(2),* 61-63. http://dx.doi.org/10.18733/cpi29445
- Hogarth, M. (2019). Y is standard oostralin english da onlii meens of kommunikashun: Kountaring White man privileg in da kurrikulum. *English in Australia*, *54*(1), 5-11.

- Holmes, L. (2000). Heart knowledge, blood memory, and the voice of the land: Implications of research among Hawaiian Elders. In G. S. Dei, B. Hall & D. Rosenberg (Eds.), *Indigenous knowledges in global contexts: Multiple readings of our worlds*, (pp. 37-53). University of Toronto Press.
- Kimmerer, R. W. (2013). Braiding sweetgrass: Indigenous wisdom, scientific knowledge, and the teachings of plants. Milkweed.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts.* University of Toronto Press.
- Leafgren, S. (2011). Hands at your side: The severing of body and mind in the elementary school. *Journal for Curriculum Theorizing*, 27(2), 35-50.
- Martin, K. (2003). Ways of knowing, being and doing: A theoretical framework and methods for Indigenous and Indigenist re-search. *Journal of Australian Studies*, 27(76), 203-214.
- Ministerial Council for Education, Early Childhood Development and Youth Affairs [MCEECDYA]. (2011). Aboriginal and Torres Strait Islander Education Action Plan (2010-2014). Retrieved from http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/ATSI%20 documents/ATSIEAP_web_version_final.pdf
- Morgan, B., West, E. G., Nakata, M., Hall, K., Swisher, K., Ahenakew, F., . . . Blair, N. (2006). The Coolangatta Statement on Indigenous Peoples' Rights in Education. In P. Read, G. Meyers, & B. Reece (Eds.), What good condition?: Reflections on an Australian Aboriginal Treaty 1986-2006 (pp. 229-236). ANU E Press.
- Nakata, M. (2007). Disciplining the savages: Savaging the disciplines. Aboriginal Studies Press.

 Nga Hine Pukorero. (2019). Untitled, speech. Word The Front Line Slam: Inter-High School Spoken Word Poetry Slam, 2018 Grand Slam winners, Auckland, New Zealand. Accessed from https://www.youtube.com/watch?v=GiUivy62SCE
- Powderface, S., Recognised Elder of the Îyârhe Nakoda Nation (p.c., 2019). Indigenous Wisdom Gathering. April, 11-14, 2019. Teachings on Treaty 7, Banff, Alberta, Canada.
- Referendum Council. (2017). *Uluru Statement from the Heart*. Retrieved from https://www.referendumcouncil.org.au/sites/default/files/201705/Uluru_Statement_From_The_Heart_0.
- Rigney, L. (1999). Internationalization of an Indigenous anticolonial cultural critique of research methodologies: A guide to Indigenist Research Methodology and its principles. *Wicazo sa review, 14,* 109-121.
- Saxe, G. (1981). Body parts as numerals: A developmental analysis of numeration among the Oksapmin in Papua New Guinea. *Child Psychology*, *52*(1), 306-316.
- Smith, L. T. (1999). *Decolonizing methodologies: Research and Indigenous Peoples*. University of Otago Press.
- Snively, G., & Corsiglia, J. (2001). Discovering Indigenous science: Implications for science education. *Science education*, 85(1), 6-34.
- Stavrou, S., & Miller, D. (2017). Miscalculations: Anti-oppressive and decolonizing discourses in Indigenous mathematics education. *Canadian Journal of Education*, 40(3), 92-122.
- Sterenberg, G. (2013). Considering Indigenous knowledges and mathematics curriculum. *Canadian Journal of Science, Mathematics and Technology Education*, 13, 18-32.
- Truth and Reconciliation of Canada (NCTR) (2015). *Truth and reconciliation: Calls to action*. Retrieved from http://nctr.ca/assets/reports/Calls_to_Action_English2.pdf

Van Dijk, T. A. (1993). Principles of critical discourse analysis. *Discourse & society, 4*(2), 249-283. Wassmann, J. & Dasen, P. (1994). Yupno number system and counting. *Journal of Cross-Cultural Psychology, 25*(1), 78-94.

Wodak, R., & Meyer, M. (2009). Critical discourse analysis: History, agenda, theory and methodology. *Methods of Critical Discourse Analysis*, 2, 1-33.

Radical Acts of Re-imagining Ethical Relationality and Trans-Systemic Transformation

Vicki Kelly

This Indigenous métissage explores my engagement in Indigenous Arts-based Inquiry as a practice of Anishinaabe Ozihtoon or Indigenous making and knowledge generation. Anishinaabe Ozhitoon is a site that unlocks the theoretical potentialities of the intelligences within Indigenous Knowledge practices in contemporary contexts and reanimates Indigenous land-based assurgence. Reviving Indigenous artistic practices, as sites of co-imagining through constellations of co-creation, is part of ecological and community-based reconciliation and healing. Key to this process is the act of reciprocal recognition, a core practice that fosters ethical relationality, helps cultivate our Indigeneity, and honours the circle of life. This Indigenous métissage tracks the Indigenous pedagogical processes and Indigenous art making used in my own praxis and inquiry as a scholar while I worked in a university to create three pathways for trans-systemic knowledge creation: a university-wide President's Dream Colloquium with an accompanying graduate course; a graduate diploma in Indigenous Education: Education for Reconciliation and a master's in Indigenous Education: Truth, Reconciliation, and Indigenous Resurgence; and the Indigenous Research Institute initiation of an Indigenous Ethics Dialogue process as a trans-systemic pedagogical engagement with Indigenous and Western Knowledges, values, and ethics.

KeyWords Indigenous Knowledges, ethical relationality, Indigenous métissage, Anishinaabe Ozihtoon, Indigenous Knowledge practices, Indigenous ethics, reciprocal recognition

"Centering ourselves in this Nishnaabe process of living is both the instrument and the song" (Simpson, 2017, p. 19)

Greetings

Boozhoo, Aaniin, my name is Vicki Kelly and I am Anishinaabe and Métis from Northwestern Ontario, and I love the teachings around the word we use in our way of greeting one another:

Aaniin...the Ah sound places us in a spiritual context, in the context of the Nishnaabeg universe. The Ni is "a taking notice as sound." When put together...how do you see yourself in all this? Or put another way, taking in all the thought and feeling of your journey in the universe, how do you see or recognize yourself? Aaniin...can also mean "I see your light" or "I see your essence" or "I see who you are." To me, seeing someone

else's light is akin to working to see the energy they put into the universe through their interactions with the land, themselves, their family, and their community. Aaniin isn't an observation but a continual process of unfolding; it is a commitment to the kind of relationship where I have to dedicate myself to seeing the unique value of the other life as a *practice*. (Simpson, 2017, p. 281)

Each day I rise on the West Coast, I greet the day "Aaniin," sounding my native flute in salutation and tuning to the Seven Sacred Directions and All My Relations. I do this practice to attune myself to the Indigenously understood sounding multiverse. I do so as one who comes from away, as a visitor on the traditional ancestral and unceded territories of the Coast Salish People, the Səlilwətał (Tsleil-Waututh), Skwxwú7mesh (Squamish), X^wməθkwəýəm (Musqueam), Kwikwəəλ 'əəm (Kikwetlem), qićəəý (Katzie), Kwantlen, and Semyome (Semiahmoo) Nations.

I am an Associate Professor in the Faculty of Education at Simon Fraser University (SFU), and in my work, I have the honour of standing together with colleagues and students as we engage in radical acts of re-imagining ethical relationality and the trans-systemic transformation of our knowledge foundations within institutions of higher learning and in the contexts of community engagement. I am using the word radical here and honouring the etymology of the word, which, in a philosophical sense, acknowledges the Latin word radicalis, "of or having roots," and radix, "branch or root," meaning "going to the origin, or the essential." Thus, the radical acts I refer to are acts of educating and community engagement that follow our roots back to the origins of knowledge, honouring both Western and Indigenous sources of knowledge. This is done by honouring the ethical space created by and fully acknowledging the hermeneutic diversity of the circle of knowledges, and by working respectfully, or in ethically relational ways, such that these processes lead to the capacity of being trans-systemically and trans-disciplinarily literate. Through this capacity, we in the academy are led to new or other ways of imagining or re-imagining ourselves, our educational praxis, and our institutions of higher learning. We work with the collective intention that this knowledge and ethical capacity informs and reforms ethical action within community engagement.

Introduction

What you will encounter in the following is a braided text, told mainly through my perspective, animated through three story threads that weave my various experiences with my emerging understandings generated through a living inquiry over time, and now rendered into this Indigenous métissage. The word métissage comes from the Latin *misticius*, meaning "the weaving of cloth from various fibres" (Mish, 1990, p. 761). It depicts an artful craft, pedagogical practice, and a research strategy. It can also be framed as a disposition that involves the simultaneous tracing of mixed and multiple identities as well as histories, following the often blurred and messy threads of relatedness and belonging by honouring difference while developing a sense of kinship and collective affinity (Hasebe-Ludt et al., 2009). The autobiographical strands I have chosen here represent key moments within an ongoing Indigenous inquiry. Throughout

the writing process of this métissage, I have inquired into the key learnings or teachings I have gained and have paid attention to acknowledge points of affinity emerging within the process. Thus, through my own arts-based autobiographical inquiry, I have been immersed in a pedagogical process, the learnings from which were then offered forward to others through graduate courses and eventually program development. These emerging principles were then applied in my work within the Indigenous Research Institute at SFU to foster greater understanding of Indigenous Knowledges and Indigenous Ethics within community-engaged research.

In their book *Life Writing and Literary Métissage as an Ethos for Our Times*, Erika Hasebe-Ludt, Cynthia M. Chambers, and Carl Leggo (2009) identify the spirit and intent of métissage:

We take métissage as a counternarrative to the grand narrative of our times, a site for writing and surviving in the interval between different cultures and languages, particularly in colonial contexts; a way of merging and blurring genres, texts, and identities; an active literary stance, political strategy, and pedagogical praxis...We braid strands of place and space, memory and history, ancestry and (mixed) race, language and literacy, familiar and strange, with strands of tradition, ambiguity, becoming, (re) creation, and renewal into a métissage. (p. 9)

Dwayne Donald (2012), a member of the *amiskwaciwiyiniwak* (Beaver Hills People) and the Papaschase Cree, has articulated that the intent of Indigenous métissage is to create a scholarly disposition and research sensibility that is both ethical and ecological. Here is his articulation:

One central goal of doing Indigenous Métissage is to enact ethical relationality as a philosophical commitment. Ethical relationality is an ecological understanding of human relationality that does not deny difference, but rather seeks to understand more deeply how our different histories and experiences position us in relation to each other. I use the term "ecological" in association with this concept of human relationality to draw attention to the complex interrelationships that comprise the world....Ecology, in this case, does not refer to concerns about the natural environment separate from the lives of human beings. Rather, human beings are seen as intimately enmeshed in webs of relationships with each other and with the other entities that inhabit the world. We depend on these relationships for our survival. This insight finds expression through philosophical emphasis on the need to honour and repeatedly renew our relations with those entities that give and sustain life. (p. 535)

This disposition has been the focus of my work over the last fifteen years: bringing ethical relationality and ethical action into our relationships with Indigenous Knowledges, pedagogies, and methodologies with the intent that Indigenous values and ethics find a rightful place within our institutions of higher learning. Crucial to this work of ethical relationality is the respectful, reciprocal recognition of the diversity of our communities and acceptance of our collective responsibility to acknowledge the land or places where our institutions are situated. I come to

this work from diverse locations and contexts as a scholar/educator/artist, but have found this vision lives within me in ways that are deeply resonant with others. I humbly walk forward finding kinship or affinity along the way, co-imagining with others a pathway for education and community engagement that honours the hopes of Indigenous Peoples to reanimate their knowledge traditions and practices. I endeavour to enliven the values and ethical foundations of their unique worldviews, and to find hospitality for all of this within institutions of higher learning, such that we honour the next generation's right to encounter Indigenous scholars, knowledges, research methodologies, and Indigenous ethics, as well as Indigenous ceremonies, practices, protocols, and pedagogies. This right to encounter respectfully acknowledges the right to a way of life and a way of being within the diverse complexities of contemporary culture; it honours the right to walk Indigenously on the land and to honour our longing for the reciprocal recognition of our collective responsibilities to *All Our Relations*.

This work is very timely, given our current Canadian context of being called to action by the recommendations of the Truth and Reconciliation Commission of Canada (TRC, 2015), which underscores and upholds the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2008). Given the ever-growing awareness of an ecological crisis, a crisis in human relations, as well as a spiritual crisis within our societies, I am convinced that Indigenous Knowledges, values, and ethical teachings, regarding the need for acknowledging our respectful reciprocal relationship with all of Creation, are more relevant than ever. This work involves the intention to remember to re-member and awaken the living legacy of our ancestors.

Strand One: The Inner Fibres

Intimate relationality in specific contexts and the implicative nature of experience are key aspects...of métissage...as a research sensibility it mixes and purposefully juxtaposes diverse forms of texts as a way to reveal that multiple sources and perspectives influence experiences and memories. Métissage as a research praxis, is about relationality and the desire to treat texts- and lives- as relational and braided rather than isolated and independent. (Donald, 2012, p. 537)

In the following, I share some of my experiences and reflections on the process of living and working as an Indigenous scholar within university settings. I gather the inner fibres that have given rise to the theory and pedagogy of my Indigenous scholarship and practice. I braid them to reveal the patterning of my emerging understanding, sharing a teaching story in the making. I acknowledge, as Mohawk scholar Marlene Brant Castellano (2000) does, that Indigenous Knowledge "derives from multiple sources including traditional teachings, empirical observation, and revelation" (p. 23) and that Indigenous Knowledge is "personal, oral, experiential, holistic, and conveyed through narrative or metaphorical language" (p. 25). To know from an Indigenous perspective is to touch, feel, smell, taste, see, and to live the experience. Indigenous Knowledge "does not flow exclusively from the intellect" (Castellano,

2000, p. 29); it is multidimensional and engages all our senses, which together contribute to our knowing. Willie Ermine (1995) writes,

Those who seek to understand the reality of existence and harmony with the environment by turning inward have a different incorporeal knowledge paradigm that might be termed "Aboriginal epistemology"...The inner space is that universe of being within each person that is synonymous with the soul, the spirit, the self, or the being. (p. 103)

Thus, the capacity or organizing principle of this Métissage is learning how to braid the threads of being and doing in the act of what Anishinaabe scholar Kathy Absolon (2011) calls *Kannadossiwin*, or how we come to know. I humbly share what I have come to know through this Indigenous inquiry process in this Indigenous métissage.

Like many other Indigenous scholars, I live in an ongoing tensioned reality. Collectively, we are trying to facilitate change in our institutions towards a trans-systemic understanding, as well as a trans-disciplinary enactment of knowledge, that honours the wholistic worldviews of Indigenous Peoples.

Indigenous Knowledge is a complete knowledge system with its own epistemology, philosophy, and scientific and logical validity...[and] can only be understood by means of pedagogy traditionally employed by the people themselves...[with] the role of the land or ecology...[as] central and [an] indispensable classroom. (Battiste & Henderson, 2004, p. 41)

As an Indigenous scholar/artist/educator, I admit that it has not been an easy path to walk, and there was a time when I was deeply distressed by this relationship. I realize now that, fundamentally, I was struggling with how to live by an Indigenous cosmology and worldview within an institution founded on another worldview and grounded in a different understanding of knowledge and what it means to be human. In other words, I was struggling to develop the capacity to live well within a trans-systemic and trans-disciplinary understanding of knowledge, research, learning, values, and ethics.

As an Anishinaabe/Métis person, I have always moved between two worldviews, and I have embraced the understanding of Two-Eyed Seeing as articulated by Mi'kmaw elders Albert and Murdena Marshall and professor Cheryl Bartlett (Bartlett et al., 2012). What Albert Marshall calls *Etuaptmumk*, or Two-Eyed Seeing, is described as

the gift of multiple perspective treasured by many aboriginal peoples...[I]t refers to learning to see from one eye with the *strengths* of Indigenous knowledges and ways of knowing, and from the other eye with the *strengths* of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all. (Bartlett et al., 2012, p. 335)

In my work as an Indigenous scholar, I acknowledge that the capacity for living well between worldviews, knowledges, and perspectives of Indigenous, Western, and Eastern worlds leads ultimately from Two-Eyed Seeing to a pathway of Many-Eyed Seeing (Kelly, 2013a). The latter approach acknowledges diverse ways of knowing, multiple perspectives, and the strength of Indigenous, Western, Eastern, and other cultural orientations. It also acknowledges the need for integrative, transcultural, trans-systemic, transdisciplinary, and collaborative approaches to knowledge and educational praxis (Kelly, 2013a). Ultimately, for me, this inquiry led to a transformative praxis involving radical acts of re-imagining my work and my world. Working with Indigenous métissage as a praxis is central to this process, as is honouring the capacity it cultivates.

In my work, I have endeavoured to create classroom contexts or scholarly spaces that honour what *Nehiyaw* educator Willie Ermine (2000, 2007) calls "ethical space." These are spaces or "venues to step out of our allegiances, to detach from the cages of our mental worlds and assume a position where human-to-human dialogue can occur" (Ermine, 2007, pp. 202-203). He indicates that

as a process, the fundamental requirements of the ethical space include an affirmation of its existence. The ethical space cannot exist without this affirmation. The affirmation of the space indicates that there is an acceptance of a cultural divide and a direct statement of cultural jurisdictions at play. The ethical space also requires dialogue about intentions, values, and the assumptions of the entities toward the research process. (Ermine, 2004, p. 21)

In other words, there is a reciprocal recognition (Simpson, 2017) that Indigenous and Western Knowledges have a right to coexist within post-secondary institutions, and it is a question of creating a *Hermeneutic Imagination* (Smith, 1991) that honours the intrinsic nature of these knowledges, their knowledge practices or methodologies, and their ethical orientations to knowing.

As part of my scholarship, I took up my own hermeneutic inquiry into the nature of these diverse knowledges, their knowledge practices, and their ethical dispositions, as well as the possible integrative, transdisciplinary, and trans-systemic implications for research and learning. I became a student of Anishinaabe studies and began to actively reach back into my own Indigenous background. Through this process, I came to the understanding, or teaching, that I had to actively cultivate the act of reaching back to my Anishinaabe Knowledge Traditions and Teachings, and to develop such a deep relationship to them that they animated me to walk with them. They became pedagogical to my way of being, and I learned to carry them in my bundle as I did my work as an Indigenous scholar at SFU. I also realized that in order to thrive here on the West Coast, I had to actively cultivate a relationship to the lands of the people with whom I lived and worked.

I am an artist, so as a part of my sabbatical, I did a two-year apprenticeship in traditional carving at the Freda Diesing School of North West Coast Art in Terrace, British Columbia. I did this to actively engage in the Indigenous cosmologies and knowledges of the West Coast.

And I also wanted to apprentice as an artist in the Indigenous Knowledge practices of the local Indigenous Peoples on their traditional lands. Thus, for two years, I put my head down and carved 8-10 hours a day. I made traditional bent knives, and I carved and painted with other local Indigenous apprentices. I had the honour of working with some of the West Coast's most well-known Indigenous carvers: Dempsey Bob, Stan Bevan, Ken McNeil, Dean Heron, Lathem Mack, Reg Davidson, Sean Hunt, and Roy Henry Vickers. Throughout this time, I also attended many *Nisga'a* ceremonies and cultural events throughout the Nass Valley.

Prior to this time, I had taken up the Native American Flute as a practice and began to follow the traditions of the Wind Clan and to be in the Discipline of Wind (Kelly, 2013b). I took up the acoustic/ecological practice of playing in place, sounding on the land with *All My Relatives*. As part of my inquiry, I travelled into the canyon country of the *Navaho* and *Lakota* People, visited their sacred sites, and played my Native Flute as part of this visiting practice and ecological encounter, learning to dwell well within the acoustic ecologies of place.

What I learned by participating in these two artistic apprenticeships, or Indigenous Knowledge practices, was that in the act of making, I was unmaking and remaking myself. These practices were deeply pedagogical to my way of being and, gradually, through their profound Indigenous pedagogies, I began to perceive the world differently. Through these knowledge practices and the learning of my own traditional stories and knowledge traditions, my imagination and ways of knowing were worked upon. They became porous to the teachings of my own cultural background and to the Indigenous cultures on the lands I was now living. The following quote speaks to this process of naturalizing imagination to the land:

Imagination has a place because imagination is a place, and because everything is connected to everything else, the encounter with the imagination is a living communication within a sentient landscape...where one is has everything to do with who one is...When mind, spirit and land...my are understood to be as they have always been, as coevolutionary, there emerges a principle that guides imagination in its duty to integrate nature's realities and ensure the perpetuation of those realties and so all of Life. (Sheridan & Longboat, 2006, p. 370)

Thus, over time, by reaching back to my Anishinaabe Creation Stories and by being on the land of my people, I became resonant with, and porous to, the teachings of the land of my people and *All My Relations*. Additionally, by taking up the artistic practices of the Northwest Coast, by learning the Creation Stories of their place and being on their land, I gradually became more naturalized to the West Coast. The following quote speaks to both these processes:

Without being able to follow our footprints back to a Creation Story that accounts for where we and all the beings and all the elements that are Creation come from, we have no way to understand how that ecology of Creation is asking us to develop an intelligence that is symmetrical with all of Creation. When all things spoke to all things, ecology and story were simultaneous and symmetrical expressions of each other. (Cajete, 2015, p. 377)

Over time, I was aware that my cultural imagination and my understanding of Indigenous knowledges were morphing. My engagement with land-based practices and artistic knowledge practices was enacting a profound participatory pedagogy, and I felt that the hermeneutic imagination through which I was perceiving the world (Donald, 2012; Smith, 1991) was changing, undergoing a radical metamorphosis. My eyes and ears were being rinsed and washed. I was being transformed by integrating these processes, as well as traditional ceremony, into my daily life. As David Suzuki (2006) notes in *The Wisdom of the Elders*, Mayan stories are understood as an *ilbal*-, a precious seeing instrument, or lens, with which to view sacred relationships. He suggests that such stories may offer us a corrective lens for our times. I now understand that Indigenous stories are rich in wisdom and knowledge, teachings that may also help re-animate our relationship with *Mother Earth* and *All Our Relations* through the pedagogy of an Indigenously imagined cosmology.

After reading Robin Wall Kimmerer's (2013) *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants,* I came to understand that I was not alone in my efforts of journeying back into the teachings of my culture. Many of my Indigenous scholar colleagues are also engaged in walking back toward their Ancestors and bringing forth to current contexts the ancient offerings from their Ancestors.

The People of the Seventh Fire do not yet walk forward; rather, they are told to turn around and retrace the steps of the ones who brought us here. Their sacred purpose is to walk back along the red road of our ancestors' path and to gather up all the fragments that lay scattered along the trail. Fragments of land, tatters of language, bits of songs, stories, sacred teachings—all that was dropped along the way. Our elders say that we live in the time of the seventh fire. We are the ones the ancestors spoke of, the ones who will bend to the task of putting things back together to rekindle the flames of the sacred fire, to begin the rebirth of a nation. (Wall Kimmerer, 2013, pp. 367-8)

Having been on this journey for some time now, I believe we stand within a moment in time, a space where we are being invited to encounter and enter fully the ecologies of the world in ways that are deeply respectful of all beings dwelling within them. We are being asked to honour their inherent right to exist as the implicit sovereignty of the natural world and *All Our Relations*. In the Anishinaabe Creation Stories, as part of our becoming human, we are invited to wander the world with profound reciprocal recognition and ethical relationality, such that through reverence and wonder we are gifted the name, essential essence, or quality and the wisdom teachings of each and every being in Creation. The responsibility of learning to be fully human requires us to create profound resonances within our being: physically, emotionally, mindfully, and spiritually through a participatory pedagogical process that informs our being. This process helps teach us through the creation of an elegant symmetry within our imaginations. Thus, the land animates our traditional, cultural, and spiritual cosmologies, as an act of imagination within place. This act of imagining is also the act of reciprocal recognition that is so essential to Indigenous Knowledge traditions. The rendering

of these wisdom teachings into imaginative or mytho-poetic landscapes (Cajete, 1994) is how we story our ethical relationality into an Indigenously understood multi-verse. How we hold knowledge has everything to do with who we have learned to become. The ethical relationality of learning how to be, and to hold knowledges in ways that are resonant with the law of the land, invites us to create human dispositions and, yes, institutions that are resonant or porous to being endogenous or Indigenous to our places.

In the Indigenous inquiry praxis described above, we are invited into a profound participatory pedagogy that leads to transforming ourselves and re-imagining our worlds in ways that radically re-animate our relationships to who we are as human beings and what it means to live ethically and responsibly with All Our Relations. We return to the teachings and to ourselves. What has emerged for me is: How will we hold such knowledges ethically and in ways that acknowledge the right of young people to engage with Indigenous Knowledges and worldviews, as well as the right of children to explore their Indigeneity and honour being endogenous to Mother Earth? For Indigenous Peoples around the world, the right to engage in and explore their cultural identity and to protect their cultural knowledge is fundamental to the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP, 2008), and essential for our collective responses to Canada's Truth and Reconciliation Calls to Action (TRC, 2015). Will we honour the right to encounter Indigenous Knowledges, worldviews, and ethics in our universities? What are the real and radical implications of UNDRIP and the TRC for our post-secondary institutions? What are the pedagogies of Indigenous Knowledge practices, and what is their relevance in creating a Many-Eyed Seeing disposition as a capacity for community engagement? Can, and will, our institutions create ethical spaces, or foster ethical relationality that leads to ethical action and becomes response-able to the rights of *All* Our Relations? And what is needed to reanimate our imaginations so we can participate with resonance with the world in the spirit of right relations?

Through my inquiry, I am reaching for a vision that informs my work as an Indigenous scholar, educator, and artist. I am learning why it is important to have one hand reaching back and one hand reaching forward, as is the Coast Salish tradition and the teachings of Vince Stogan of the Musqueam Nation. Wall Kimmerer (2013) describes this process:

What does it mean to be people of the seventh fire, to walk back along the ancestral road and pick up what was left behind? How do we recognize what we should reclaim and what is dangerous refuse? What is truly medicine for the living earth, and what is the drug of deception? None of us can recognize every piece, let alone carry it all. We need each other, to take a song, a word, a story, a tool, a ceremony and put it in our bundles. Not for ourselves, but for the one yet to be born, for all our relations. Collectively, we assemble from the wisdom of the past a version for the future, a worldview shaped by mutual flourishing (p. 371).

Strand Two: The Story Threads

In this section of my Indigenous métissage, I braid dialogically some of my experiences and reflections on the process of enacting my emerging vision by introducing Indigenous Knowledge practices, ceremony, and Indigenous pedagogies through cultivating Many-Eyed Seeing and creating ethical spaces within a Canadian institutional context. I will share a description of three practical examples as story threads. The first story thread tells of introducing Indigenous Knowledge, Knowledge Holders, and ceremony into a university context through the 2016 SFU President's Dream Colloquium called *Returning to the Teachings: Justice, Identity and Belonging.* The second story thread tells of a program, founded on community engagement with two Indigenous communities and a local school district, that offers practicing teachers an Indigenous pedagogical pathway meant to lead to profound transformation and healing through the co-exploration of Indigeneity. Within this program we understood that

Indigeneity...is the process of fine-tuning your presence in an ongoing dialectic with the places you inhabit...Indigeneity involves the open-ended cultural work of striving to integrate the storytelling animal into the shifting depths of the living terrain... Indigeneity describes the lived quality that is possible anywhere, any time. More than that, it describes a quality of participation with Earth that is necessary for any community, if they wish to endure within the storied unfolding of the fully animate, living planet. (Mueller, 2017, pp. 194-5)

It was the aim of the program to introduce Indigenous Knowledges and Knowledge practices as the active foundations for the enactment of Indigenous pedagogy, and to demonstrate that engaging in these processes helps us to understand our Indigeneity. Ultimately these processes transform us such that we become available to the teachings from *All Our Relations* and learn about being fully human in our place.

Finally, in the third story thread, I share more current explorations of and key learnings from a process weaving Indigenous Knowledges and ethics into university research and community engagement contexts. By honouring the exploration of Indigeneity in our institutions, we are also actively supporting the transformation of our institutions.

It has become clear to me that how we live, how we organize, how we engage in the world — the process — not only frames the outcome, it is the transformation...Engaging in deep and reciprocal Indigeneity is a transformative act because it fundamentally changes modes of production of our lives. It changes the relationships that house our bodies and our thinking...If we want to live in a different present, then we have to centre Indigeneity and allow it to change us. (Simpson, 2017, pp. 19-20)

First Story Thread: An Emergent Vision

After returning from my two-year apprenticeship at the Freda Diesing School of Northwest Coast Art, I and another colleague began introducing Indigenous Knowledges and ceremony into the SFU context. The process began in 2016, when we hosted the President's Dream

Colloquium, Returning to the Teachings: Justice, Identity and Belonging, with the intention of addressing Reconciliation and the TRC's 94 Calls to Action. This process was powerful because we engaged in conversations with members of the local Squamish, Tsleil-Waututh, Musqueam, Katzie, Qwantlen, and Métis Nations. We began with a gathering of Knowledge Holders and Elders from these communities and shared the invitation to co-host the Dream Colloquium. Collectively, we asked the question, "What would it look like if Indigenous Knowledges and Knowledge Holders were put in a place of honour and hosted a series of speakers with ceremony?" Knowledge Holders and scholars Chief Robert Joseph, Michael Nicoll Yahgulanaas, Wab Kinew, Manulani Aluli-Meyer, Stephen Reicher, Rupert Ross, Jennifer Llewellyn, John Borrows, and Wade Davis were invited as keynote speakers. The conversations led to the creation of an All Nations Circle of Elders who guided the Dream Colloquium. It was decided that each Nation would host two of the ceremony/lecture events following their own protocols and involving their respected Knowledge Holders and community members. I would like to acknowledge that the Squamish and Tsleil-Waututh Nations Knowledge Holders took on important leadership in this ceremonial process. Simultaneously, at SFU, we had 30 graduate students who participated in an accompanying graduate course. People were invited into twohour events where "the work" of the session was facilitated through ceremony and the sharing of knowledges through knowledge practices. During this time, scholars and Knowledge Holders were celebrated and blanketed while sharing their teachings and visions for the generations to come. This 12-week journey became a participatory pathway for us to gather, to engage in hosting ceremonies and feasts, and to work in ways that had profound effects on us all. It lifted us up, whether we were participating in the pedagogical process of ceremony or called to witness it, and whether we were members of the Indigenous community, the graduate student community, the wider SFU community, or the community at large. We were all deeply moved by participating in the process of ceremony. Throughout, I heard many testimonials that spoke to experiences of profound personal transformation. And still today, I am told by my doctoral students that it was the most profound learning experience of their lives. The Dream Colloquium nurtured our collective right to dream and has forever transformed us.

Ultimately, it also changed SFU as an institution, since it had a lasting effect on our university community, specifically through the inclusion of ceremony and the pedagogy of ceremony within the larger university context and in specific graduate programs. The Dream Colloquium was important for the re-imagination of what is possible, and it became a living example of the enactment of trans-systemic knowledge practices and protocols within the institution. An example of the influence on the larger SFU context is the creation of a Ceremony and Feast for Reconciliation with the Squamish and Tsleil-Waututh Nations when the Aboriginal Reconciliation Council gifted the SFU President their final report and Calls to Action, *Walk This Path With Us*, in 2017. This important event was witnessed by the local Indigenous communities as well as the SFU community. Another example is the use of consultation and Indigenous ceremony to begin particular Faculty of Education programs held on various Coast Salish territories with the Musqueam, Squamish, Tsleil-Waututh, Katzie, Kwantlen, and Stó:lō Nations. A third example is the inclusion of ceremony in our university gatherings, such as

the *Return of the Salmon People* event held annually within the Faculty of Education teacher education program. Further articulation of this story thread can be found in "Ceremony as a Pathway to Reconciliation and Indigenous Resurgence" (Kelly, 2019).

Second Story Thread: A Vision Becomes a Pedagogical Pathway

During the same time as the Dream Colloquium, I was also working on a proposal for a Graduate Diploma in Education (GDE) in *Indigenous Education: Education for Reconciliation*, with the vision to fashion a program that was based on Indigenous Knowledges, pedagogies, and ceremony. The local Indigenous Nations would be included in the co-visioning of the program. Although we had begun to imagine this GDE in Indigenous education prior to the Dream Colloquium, we now had the courage to build upon the Dream Colloquium and the work of the All Nations Circle of Elders. We held meetings with the North Vancouver School District about their involvement with the new program, and we began to speak to and envision with the Squamish and Tsleil-Waututh Nations. We created a Curriculum Council and began to sit in circle to talk about how we might support district teachers. We asked ourselves, "What would the program look like?" "How should it evolve?" "What should be the key aspects of the curriculum and pedagogical process?" Thus, we began to lean into a co-visioning from the ground up. Together, we explored questions of, "How would this all emerge?" and most importantly, "What were the Nations hoping for as far as their vision of the program and the needs of the teachers?" "What capacities did they hope the teachers of their children would have?" and "What would be the community's involvement in the curricular enactment of the program?"

Our first orientation week in August 2017 was co-designed by the Tsleil-Waututh and Squamish Nations. They hosted the week in their communities, they facilitated the activities, and they were the Knowledge Holders and facilitators of the pedagogical pathway. Through this process, it became very obvious that we were walking this pathway as a family that included members of the local Indigenous communities, the 24 teacher-learners, the North Vancouver School District, and the Faculty of Education at SFU.

We began the first orientation week together with a ceremony. The process of ceremony was the beginning of our walking our path together, through a portal or doorway into the longhouse, and our collaborative learning journey. Through that opening of ceremony, all our work unfolded. Angela George of the Tsleil-Waututh Nation brought the idea that we should begin the program with a Naming Ceremony, and, thus, Gabriel and Angela George began a lengthy process of trying to find a name, a name that could be held by the Tsleil-Waututh and Squamish Nations in their respective languages. We also began the process of co-imagining what this first ceremony would involve and how we should enact it. The teaching was offered that in naming of the program we were not naming a *thing*; rather, we came to the understanding that community members would carry the name within the community and that this name would have a long life, a living legacy carried by two individuals within each of the two Nations. What we were trying to initiate within our collective family was the acknowledgement that we are all responsible for enacting this living legacy — a legacy that

will gift us with its real fruits only in the future. As a result, the names *Sta?*əlnamət & Ste! númut (deep inner learning) were bestowed on two members of the Tsleil-Waututh Nation (an elder and a young boy) and two members of the Squamish Nation (two educators). Thus, this program began the first steps in enacting a living legacy that will continue within our collective communities far into the future.

The teacher-learners arrived on that first morning, gathered in a circle around the fire in the Longhouse, and introduced themselves. Over lunch they acted as co-hosts to the feast, and by the afternoon they were actively part of a family enacting a Naming Ceremony and witnessing work that was deeply serious for the communities attending. The Elders and Residential School Survivors, as witnesses to the naming, stood up and spoke at great length about what it meant for the communities to be hosting and co-imagining this program. Every one of us felt a sense of reciprocal responsibility as we began this process, and we still do as we have continued to walk this learning pathway together. This journey and ceremonial process has proven to be incredibly powerful. The intensive first week within the communities invited the teacher/learners to radically open themselves to a process of deeply participating in a profound pedagogy. On that first day, which was also the day of the solar eclipse, we stepped into the middle of a very transformative journey. Collectively, we learned how to focus all our energy on the work, and it has been an honour to paddle in the same canoe with the teacher/learners, the Tsleil-Waututh and Squamish Nations, and the North Vancouver School District.

Over the next two years, this ceremonial pathway continued with ceremonies and celebrations of learning being held each term. These powerful events were facilitated with Traditional Cultural Protocol through Ceremonial Speakers and witnessed by the Name Holders and members of the Tsleil-Waututh and Squamish Nations. The program ended with an *Honouring and Gratitude Ceremony* held again in the Seymour Longhouse two years later. The Nations, Knowledge Holders, teacher/learners and their families gathered to celebrate, stand up, and honour the teachers for all their good work. Witnesses stood and raised their hands, lifting the teachers up and speaking to their learning and transformation. They acknowledged that they were now carrying a vision for Indigenous education that would be important for future generations of children. At the ceremony, each student wore a garment and headband they had woven and a silver blanket pin they had made. Both were created with the teaching and help of Traditional Coast Salish weavers and carvers.

It became very clear that the pedagogical processes of making, whether it is making traditional medicines or engaging in traditional artmaking or drumming and singing, were deeply transformative for the teachers. Through the participatory pedagogies of land practice, the Indigenous Knowledge practices, and their own Indigenous inquiry processes, the teachers changed, and with them their educational practices, in profoundly important ways. The metamorphosis of their person and transformation of their educational practice also deeply affected the children and students in their classrooms, and it affected conversations and relationships within school communities. I believe, in a humble way, it changed the educational landscape of the North Vancouver School District, and I know it has powerfully informed our work in the Faculty of Education at Simon Fraser University. Through our presentations and

sharings, it has also begun to inform conversations across this country. Further articulation of this story thread can be found in "From Reconciliation towards Indigenous Cultural Resurgence: A Métissage on the Co-Imagining of *Sta?*əlnamət & Stel númur" (Kelly & Rosehart, 2019).

This program has continued on into a Masters of Education in Practioner Inquiry in *Indigenous Education: Truth, Reconciliation, and Indigenous Resurgence.* A core group of thirteen teachers were joined by seven other educators to journey on with their Indigenous inquiry. Each weekend, we wove together Indigenous Knowledge practices and pedagogies with Indigenous scholarship and ceremony. The students each took up a land practice, an Anishinaabe Ozihtoon or Indigenous making process, and they also did life-writing and engaged in métissage as a curricular and research practice. By working with autobiography as a critical point of departure, the students explored métissage making in various ways. Donald (2012) states:

Having theorized métissage as a curricular practice that can be used to resist the priority and authority given to official texts and textural practices. This curricular form of métissage shows how personal and family stories can be braided in with larger narratives of nation and nationality, often with provocative effects. Thus, rather that viewing métissage as solitary research, this form of métissage relies on collaboration and collective authorship as a strategy for exemplifying as text and research praxis, the transcultural transdisciplinary and shared nature of the experience and memory. (p. 339)

When métissage making in a collaborative way, different authors' words are woven to work "collectively to juxtapose their text in such a way that highlights difference (racial, cultural, historical, socio-political and linguistic) without essentializing or erasing it, while simultaneously locating points of affinity" (Chambers et al., 2008, p. 142). Honouring these points of deep affinity allowed the students to support each other as family in ways I have seldom witnessed within my classes at the university.

Thus, by reaching back and reaching forward through weaving together the above story threads, I find the teachings of my own reaching back into the Indigenous Traditional Knowledges and practices of my Ancestors in reciprocal relationship with the land. I enacted or offered forward a pedagogical process that I knew from my own experiences with Indigenous stories, land practice, Indigenous Knowledge practices, and Anishinaabe Ozihtoon, or Indigenous making and ceremony. In reaching forward, this process created the ethical space and ethical relationality that enabled us all to envision ecologies in which these pedagogies of land and ceremony, as well as the Indigenous pedagogy of making, are part of a lifelong learning process and the capacity for ethical action. What I witnessed, in what emerged from the program, were examples of transformations similar to those I had personally experienced in my own journey of inquiry, but now as educational practices enacted within institutional contexts. These processes created ecologies of engagement and change within the schools, School Districts, and SFU through all those involved in the process. Just as Leanne Simpson (2017) acknowledges:

Indigenous internal, reciprocal self-recognition is a mechanism through which we reproduce and amplify Indigeneity. When another Indigenous person recognizes and reflects back to me my Nishnaabeg essence, when we interact with each other in Nishnaabeg way...my Nishaabewin deepens. When my Indigeneity grows, I am more connected, I fall in love with my homeland, my family, my culture, and my language, and more in line with the thousands of stories that demonstrate how to live a meaningful life, and have more emotional capital to fight and protect what is meaningful to me. (pp. 182-3)

The descriptions shared in the above braids are articulations of my experiences with Indigenous Knowledges, Anishinaabe Ozihtoon, and Indigenous inquiry, as well as Indigenous ethics, and they have become sites for change in the trans-systemic transformation of our institution. They have also become teaching stories for the enactment of faculties' community engagement in the future, with the intention that we create learning ecologies for the next seven generations that lift up the offerings of our Ancestors for the children yet to be born, and engage in the re-imagination of what it means to be human and live in harmony with *All Our Relations*.

Third Story Thread: The Teachings Become a Pedagogy and Methodology

In my current work, I am braiding or weaving the pedagogical process of the first two story threads into the creation of the third. In other words, I am working with the participatory pedagogies of Indigenous ceremony, Circle and Indigenous dialogue, as well as place-based pedagogies to explore Indigenous Knowledges and Indigenous ethics. In collaboration with colleagues and Knowledge Holders, we are asking "How can the pedagogy of Indigenous dialogue and ceremony inform understanding and reciprocal recognition of Indigenous Knowledges, research methodologies, and ethics within the university?" "How can dialogue with Indigenous Knowledge Holders create ethical spaces that ultimately inform and transform our understandings of knowledge and ethics?" and "How can this ethically relational process create trans-systemic and transdisciplinary understandings that can be integrated into ethical action within our post-secondary institutions, and what are the implications for community-engaged research?" In actualizing all this, "What are we learning about reconciliation, Indigenous resurgence, and the right to encounter Indigenous Knowledges and ethics for the next generations?" Ultimately, we are asking "How can these teachings re-animate our imaginations such that we become respectful relatives with *All Our Relations?*"

These questions form the ethical foundations of a new initiative I lead as director of the Indigenous Research Institute and co-envisioned with the Office of Vice President Research and International, along with the Office for Research Ethics. The work invites a respectful, meaningful, and practical awareness of developing Indigenous ethics within the SFU community. In this vision, ethics is understood as not only a part of academic research, but an integral component of all of the university's stated priorities in research, education, and community engagement. Our initiative aims to create a new dialogic or ethically relational

space of engagement and act as a catalyst to connect the University's three existing priorities into an integrated wholeness. It proposes a transformative inquiry and a participatory pedagogical process to help prepare the ground, cultivate culturally safe and hospitable spaces, and cocreate respectful, ethically relational ways forward. It is based on an expanded understanding of knowledge and its ethical foundations, such that it offers a necessary transformation of explicit and tacit infrastructures that support SFU's stated commitments to reconciliation and ultimately Indigenous Resurgence.

The initiative invites *ethical* reconciliation with Indigenous Peoples and begins with the Nations on whose territory SFU is located. Essential to this process and pedagogy, then, is *learning from the land and peoples of the land* where SFU is located in order to inform the work that we are doing individually and collectively. Indeed, we hold that this is the very *ethos* with which the work must be undertaken. The initial phase of the work, inspired by the *All Nations Circle of Elders* created as part of the 2016 Dream Colloquium, involves creating a *Circle of Traditional Knowledge Holders* from the region to advise, share Traditional Knowledge and ethical teachings, lead ceremony, and to assist in the development of Ethical Guidance and Protocols that align with the Local Indigenous values and priorities, and support implementation of SFU's commitments to Indigenous Ethics and Ethical Reconciliation.

The sharing and exploration of Indigenous Ethical Teachings will happen through a series of *Ethics Dialogues* involving the *Circle of Traditional Knowledge Holders* with selected well-known scholars, to be witnessed by the wider SFU Research community. The process and outcomes of the *Ethics Dialogues* will be documented to help inform SFU ethics protocols and approaches to Indigenous research and research in partnership with Indigenous communities. The *Ethics Dialogues* are intended as educative and pedagogical to the institution of SFU and its Offices, Faculties, and Departments. They aim to facilitate respectful recognition and the development of capacities for institutional change within SFU. The *Ethics Dialogues* are intended as key *sites of learning*, informed and inspired by the Bohm dialogue principles (1991), Indigenous applications of Bohmian Dialogues, and the deep dialogic work of Indigenous scholar Gregory Cajete. Cajete (2015) notes:

A true circle of dialogue is the key. By true, I mean that the sharing cannot be superficial or just interesting conversation or even scholarly discourse. The dialogue must be from and of the heart...Community dialogue is not a onetime event but stimulates an ever-growing spiral: shared thoughts lead to informed actions, which lead to new knowledge, understanding, competencies, and effectiveness, all of which motivate the community to keep engaging in dialogue. The process generates an ever-evolving spiral of inquiry, action, and knowledge creation. (p. 215)

Through this co-creative, reflexive process that recognizes and honours both Western academic as well as Indigenous Knowledges and ethical traditions through a Many-Eyed Seeing approach, we seek to actively engage at the intersection of diverse knowledge systems, ethics, and values, and to cultivate *respectful ethical relationality, reciprocal recognition, accountability, and the*

responsibility to take ethical action as the essence of sustained mutually-respectful relationships and their living legacy.

Not only is it important, through our process, to foster the capacity for understandings of different worldviews and knowledges, we seek also to create understanding of how Indigenous Knowledges are held ethically and relationally, and how we learn to become porous and available to receiving such knowledges over a lifetime. Our ultimate goal is to weave a new basket of understanding for holding Indigenous Knowledges, Indigenous ethics, and Indigenous research methodologies within the SFU community and with Indigenous communities in our region and beyond. Creating intentional spaces for deep dialogue, and supporting the weaving together of Indigenous, Western, and other knowledges and practices, has the potential to meaningfully and powerfully inform practice and policy for post-secondary institutions. Ultimately, our aim is to create a living legacy for future generations.

What are the lessons learned?

In this Indigenous métissage, I have explored my personal engagement in Indigenous Artsbased Inquiry as a simultaneous practice of Anishinaabe Ozihtoon or Indigenous making and knowledge generation. I described how my experiences of Anishinaabe Ozihtoon have taught me about the potential of these practices to unmake and remake us by unlocking theoretical possibilities and offering access to the intelligences within Indigenous Knowledges. They helped me understand and generate the reanimation of Indigenous land-based practices as a pedagogical pathway towards my own Indigenous assurgence. I explored the potential of reviving Indigenous artistic practices as sites of co-imagining through co-creation in graduate courses, and I showed how these practices can be sites for both ecological and communitybased reconciliation and healing. I presented my experiences of how the act of reciprocal recognition, as a core practice, fosters ethical relationality, the flourishing of our Indigeneity, and the honouring of the circle of life and All Our Relations. This Indigenous métissage tracked the Indigenous pedagogical processes and Indigenous art making used in my own praxis and inquiry as a scholar while working in a university and how, when offered forward, these pedagogical practices afford a similar potentiality for teacher/learners. I described my efforts to create three pedagogical pathways for trans-systemic knowledge creation: a university-wide President's Dream Colloquium, Returning to the Teachings: Justice, Identity and Belonging and its accompanying graduate course; graduate programming, including a graduate diploma in Education for Reconciliation and a Master of education in Indigenous Education: Truth, Reconciliation, and Indigenous Resurgence; and the Indigenous Research Institute's initiation of an Indigenous Ethics Dialogue process as a trans-systemic pedagogical engagement with Indigenous and Western Knowledges, values, and ethics. Central to this métissage is the recognition of the capacity-forming arch - from the creation of an ethical space through reciprocal recognition and the act of ethical relationality, to the potentiality of ethical action that is radically rooted as a living legacy of our ancestors and our living connection to All Our Relations.

Closing Thoughts

Finally, I would like to acknowledge that I understand this work as the work of the *People of the Seventh Fire*. The Elders tell us that in our time, we stand before a fork in the pathway of humanity. This fork is a choice between the charred road of materialism that threatens the land, the people, and the green path of wisdom, mutual respect, and reciprocity that is held in the teachings of our Ancestors and the first fire at the beginning of time. It is said that if the people choose the green path, then all races will go forward together to light the *Eighth Fire*, the final fire of peace and brotherhood, forging the great nation of humanity that was foretold long ago (Wall Kimmerer, 2013). Many of us are asking what it will take to support the lighting of this Eighth Fire, and what is the role of our Institutions of Higher Learning in this process? Perhaps there are lessons in the practice of *making fire* traditionally that will help us now, teachings offered by the people of the *Seventh Fire* and *Mother Earth* herself.

The Earth provides the materials and humans must do the work of holding the knowledge and wisdom of how to use the power of fire for the good of *All Our Relations*. The spark itself is part of the *Great Mystery, Spirit in Our Times*, but we know that before the fire can be lit with the bow drill, we have to gather the tinder, the thoughts, and the practices that will nurture the flame. We need to hone our skills in making to develop capacities, and learn the ways of being through the pedagogy of ceremony and by lighting the fire. We may struggle with our bow drill to achieve reciprocity, to find a way that knowledge and the learning of body, emotion, mind, and spirit can all be brought into harmony, to harness gifts of being human and to create a gift for *Mother Earth* and *All Our Relatives*.

Here *shkitagen* is our helper. It is the firekeeper fungus, also known as chaga. It lives on the being of the birch tree, the tree of life for the Anishinaabe People. It is the holder of the spark that cannot be extinguished. Thus, many of us are taking courage and going back to the land and the wisdom that lives with the Indigenous People of this land. We offer ceremony, like tobacco, as a gift for all that has been given and shared so generously by the Knowledge Holders. So much depends on the spark that is nurtured between us and *All Our Relations* as we gather the generous offering of golden *shkitagen* to be kindled. So much depends on the air, the nest of tinder, the reciprocity of bow and drill, and Creator's breath to make it glow – breath as wind to fuel the flame so that together we hold in our hands the fire of the future. I have seen and witnessed this awakening to be useful in myself, my students and colleagues, and in the young people I meet.

The following words of Robin Wall Kimmerer (2013) speak to the urgency of the work ahead. It is an important time that we are living in. As we are leaning into this work and reaching for a vision, I think her words honour the spirit of our intent and its possibilities of enactment.

As the seventh fire people walk the path, we should all be looking for *Shkitagen*, the ones who hold the spark that cannot be extinguished. We find the firekeepers all along the path and greet them with gratitude and humility that against all odds, they have carried the ember forward, waiting to be breathed into life. In seeking the *shkitagen* of

the forest and *shkitagen* of the spirit, we ask for open eyes and open minds, hearts open enough to embrace our more-than-human kin, a willingness to engage intelligences not our own. We'll need trust in the generosity of the good green earth to provide this gift and trust in human people to reciprocate.

I don't know how the eight fire will be lit. But I do know we can gather the tinder that will nurture the flame, that we can be *shkitagen* to carry the fire, as it was carried to us. Is this not a holy thing, the kindling of this fire? So much depends on the spark. (Wall Kimmerer, 2013, p. 373)

It is my hope that the work described herein will enable the nurturing of just such a spark, a sacred flame to greet the seven generations to come.

"As we learn together, the journey offers the sacred gift of humility." (Iwama et al., 2009, p. 7)

Chi Miigwetch.

All Our Relations

ALL OUR RELATIONS!

About the Author

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References

Absolon, K. E. (2011). Kaansossiwin: How we come to know. Fernwood Publishing.

Bartlett, C., Marshall, M., & Marshall, A. (2012). Two-Eyed Seeing and other lessons within a colearning journey of bringing together Indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies*, 2, 331-340.

Battiste, M., & Henderson, J. Y. (2004). *Protecting Indigenous knowledge and heritage: A global challenge*. UBC Press and Purich Publishing.

Bohm, D., Factor, D., & Garrett, P. (1991). *Dialogue; A Proposal*. http://www.david-bohm.net/dialogue/dialogue_proposal.html

- Brant-Castellano, M. (2000). Updating Aboriginal traditions of knowledge. In B. L. Hall, G. J. S. Dei, & D. G. Rosenberg (Eds.), *Indigenous knowledges in global contexts: Multiple readings of the world* (pp. 21-36). University of Toronto Press.
- Cajete, G. (1994). Look to the mountain: An ecology of Indigenous education. Kivaki Press.
- Cajete, G. (2015). Indigenous community: Rekindling the teachings of the Seventh Fire. Living Justice Press.
- Donald, D. (2012). Indigenous métissage: A decolonizing research sensibility. *International Journal* for Qualitative Studies in Education, 25(5), 335-355.
- Ermine, W. (1995). Aboriginal epistemology. In M. Battiste & J. Barman (Eds). *First Nations education in Canada: The circle unfolds* (pp. 101-112). UBC Press
- Ermine, W. (2000). A critical examination of the ethics in research involving Indigenous peoples. M.Ed. Thesis. University of Saskatchewan.
- Ermine, W. (2007). The ethical space of engagement. *Indigenous Law Review*, 6(1), 193-203.
- Ermine, W., Sinclair, R., & Jeffery, B. (2004). The ethics of research involving Indigenous Peoples. Report of the Indigenous Peoples Health Research Centre to the Interagency Advisory Panel of Research Ethics. http://iphrc.ca/pub/documents/ethics_review_iphrc.pdf
- Iwama, M., Marshall, M., Marshall, A., & Bartlett, C. (2009). Two-eyed seeing and the language of healing in community-based research. *Canadian Journal of Native Education*, 32(2), 3-23.
- Kelly, V. (2013a). Integrating Indigenous pedagogical practices. *One World in Dialogue: Social Studies Council Journal*, 2(2), 17-27.
- Kelly, V. (2013b). In the discipline of the *WIND*. In W. Hurren & E. Hasebe-Ludt (Eds.), *Contemplative curriculums* (pp. 221-231). Routledge Books.
- Kelly V. (2019) Ceremony as a Pathway to Reconciliation and Indigenous Resurgence. In: Peters M. (eds). *Encyclopedia of Educational Philosophy and Theory.* Springer. https://doi.org/10.1007/978-981-287-532-7_643-1
- Kelly, V., & Rosehart, P. (2019). From reconciliation towards Indigenous cultural resurgence: A métissage on the co-imagining of *Sta?əlnamət & Stel númut. Canadian Journal of Native Education*, 40(2), 59-84.
- Hasebe-Ludt, E., Chambers, C., & Leggo, C. (2009). Life writing and literary Métissage: As an ethos for our times. Peter Lang.
- Mueller, M. (2017). Being salmon being human: Encountering the wild in us and us in the wild. Chelsea Green Publishing.
- Mish, F. (Ed.). (1990) Webster's ninth new colligate dictionary. Thomas Allan & Sons.
- Sheridan, J., & Longboat, R. H. C. t. S. D. (2006). The Haudenosaunee imagination and the ecology of the sacred. *Space and Culture* 9(4), 365–381.
- Simpson, L. (2017). As we have always done: Indigenous freedom through radical resistance. University of Minnesota Press.
- Smith, D. G. (1991). Hermeneutic inquiry: Hermeneutic imagination and the pedagogic text. In E. Short (Ed.), *Forms of curriculum inquiry*. SUNY Press.
- Suzuki, D., & Knudtson, P. (2006). Wisdom of the elders: Native and scientific ways of knowing about nature. Greystone Books.
- Wall Kimmerer, R. (2013). Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants. Milkweed Editions.

Exchanges $\nabla_x \neg \triangleleft g \nabla \cap$

Exchanges

In the Exchanges, we present conversations with scholars and practitioners of community engagement, responses to previously published material, and other reflections on various aspects of community-engaged scholarship meant to provoke further dialogue and discussion. In this section, we invite our readers to offer their thoughts and ideas on the meanings and understandings of engaged scholarship, as practiced in local or faraway communities, diverse cultural settings, and in various disciplinary contexts. We especially welcome community-based scholars' views and opinions on their collaborations with university-based partners in particular and engaged scholarship in general.

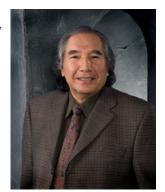
In this issue, we present a discussion between **Sa'ke'j James Youngblood Henderson** and **Dr. Leroy Little Bear** from November 2020.

Coming Home: A Journey Through the Trans-systematic Knowledge Systems

Sa'ke'j: Thank you for agreeing to this interview, Leroy. We are deeply honoured to have this interview in the *Engaged Scholar Journal*, as many of the scholars in this edition have referenced you and have been inspired by your work. Would you begin by relaying where you are located and telling the readers about your background and territory and position?

Leroy: That is hard for me to do because I am nomadic. [chuckles, then begins in the Blackfoot language]

I was just introducing myself as in my Blackfoot name, Lowhorn, and I am from the Small Ropes Band of Kainai



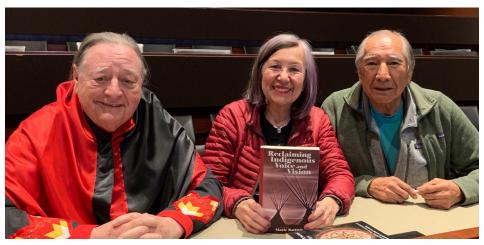
Lerov Little Bear

of the Blood tribe, and we belong to the Blackfoot Confederacy, and we are located in southern Alberta. Our traditional territory runs from Northern Saskatchewan River to what is Edmonton today to Yellowstone of Montana, and the eastern continental divide in the Rockies and into what is now Saskatchewan. Evidence of the Blackfoot are in Wanuskewin, outside of Saskatoon, and in the Cyprus Hills and so forth. That's my people's traditional territory in Alberta.

I am a long-time believer in education, and what guides me is a saying of my Uncle Bernard. It was at the beginning of the Indian residential school era, and although he never did learn to read or write, I remember he was able to sign his name on documents if it required him to do so. One day, he told me, "I want you to go to school, and I want you to complete your schooling, because look at me, and the kind of work I do. Like the old saying, sweat at the brow, I do a hard, laborious type of work for the little money I get." He didn't have a steady job. But he emphasized, "Don't ever forget your people." So, that is what has been on the back of my mind. I kept that in my mind through schooling, college and university and so on. Along with that, I think about those lessons and the advice my relatives and elders used to tell me. I would listen to those teachings and the relatives on my reserve who used to talk to me because I didn't go to school until I was ten years old. Others went to school at age 6 or 7. So I had some time with those guys then, and when I think back now, I wish I had spent more time with them because many others, old people, would come to visit my great grandfather Heavyhead. They would tell me, "Come in and sit in here; you need to hear this." Other times they just wanted me to get wood or water. When I think back, I should have been listening and recording, as if I had a recorder.

Those were the foundational bases I had in Native thought. When I did finish high school, I thought to myself, "That is enough!" I think I wanted to roam around a bit. I found myself in the States for a while, but eventually, home was calling me. I came back. But the turning point was when I was working in a vegetable cannery, and I was in charge of a machine with sharp blades. If you moved your hand two inches in one way, you could lose your hand. But I was good at it. I could look the other way and not need to worry and think about other things. One day, I was sitting with the machine, and I had a picture of myself as a trained monkey, and I was just part of the machinery. I thought I am just a trained monkey! So I decided to do something else because I was just becoming part of this machine. I called the foreman on hand, and I waved him over, and I told him, "You get a guy to run this machine. I'm done," and he smiled, and I said, "I mean it. I'm going to walk off." I said, "I am really done. Go get a guy." I then walked off, and that is where my going to the university started. When I got the hang of it, I was thinking...there is someplace here [in the university] for our people. But I didn't see very many things that we could identify with. That is where my thoughts about Indian people, Indigenous people, started. That got me thinking about Indigenous studies. There was a catalyst by the name of Meno Bolt, who was from Southern Alberta, outside of Lethbridge in a smaller town called Coaldale. He had just gone across the country as part of his graduate work at Yale University. He interviewed all the leaders across the country on the notion of governance and included people like Harold Cardinal. He was very much interested in learning more. So between us, we started saying, "Hey, wouldn't it be great to have something like this at the University of Lethbridge?" And that's where it started. We started working on it.

In the meantime, Law got my attention, and I went to the University of Utah, but [I] initially want[ed] to go to the University of New Mexico. They didn't quite have a place for me over there. The dean told me: "I was talking to the dean over at the University of Utah, and they got spaces over there. Why don't you go over there for your first year, and then you can come down here. Our schools are very comparable, and I'll give you full credit for that year at the University of Utah at Salt Lake City." I thought that was a good plan. But once I got settled in at Utah, I stayed. I completed it because I knew the people and I liked it. In the meantime, I kept working on the notion of Native American Studies, as it was called then. We opened our doors at the University of Lethbridge in 1975. They took our proposal without changing a word, and we got funded through the provincial government and the Ministry of Advanced Education. They eventually accepted it whole, with a little bit of argument, but not much, and it was funded as a Native Studies Department at the University of Lethbridge. July 1st 1975, we opened our doors, and it has been 43 some years now at the University of Lethbridge in their infrastructure.



Above: Sa'ke'j Henderson, Marie Battiste and Leroy Little Bear

Sa'ke'j: In most of the articles we are reading for this journal, your name keeps popping up as one of the most distinguished Indigenous scholars on the continent who has advanced Indigenous knowledge in Law, Education, Human Rights and Science. To these second-generation scholars, you are more of a living legend or a model of reconciliation who has generated and walked the road of reconciliation and transsystematic knowledges. This generation of scholars is looking to you as the first founding director of Native American Studies at the University of Lethbridge and then director of [the Native American program at] Harvard University. Can you tell us how these innovative studies have transformed over the years? Can you relay some ways it has moved from the Eurocentric western disciplinary study of Indians to study from

Blackfoot or Kainai knowledge studying of Eurocentric knowledge? That is the basis of trans-systematic knowledge. When we were college and Law students Eurocentric knowledge was considered as universal, yet we talked about it as two worlds. Not like the moon and earth but two cognitive worlds and we really couldn't find the word to describe our sensibilities toward these ways of knowing that haunted us. Many residential school students failed to move over this bridge between two knowledge systems and they got stuck somewhere in-between both systems. Our generation were the first ones that became known as the split heads, who could manage both systems. But even today it is difficult to see how you can learn an knowledge system and language in an Indigenous worldview, and also be able to translate the confusion and complexity of the Eurocentric system at the same time. The new generation wants to translate between the knowledge systems and languages, but they often have only one language and that is English or French.

Leroy: Right. Very interesting question. I am glad you've asked me to talk about that. One of the courses we offered as a seminar was about looking at white society from a Blackfoot perspective. Like Indian anthropologists looking at white people. In the course outline, we had used a whole bunch of regular readings from textbooks. It was in the middle of the semester, I got a call from the dean's office. When I got there, here was an anthropologist from the University of Lethbridge sitting there. He told me to sit down. The dean told Keith the anthropologist, "Well, Keith, express your concern." So he said, "We noticed that you are teaching this course, and it is supposed to be from a native point of view, but when you look at the syllabus, you are using western sources for the course." He said: "If you are going to teach this type of course, maybe you should find material from and written by native people." And so on. When he was done, I said, "You are right. But I will tell you something. Because most of the students in the course are non-native students, though we have a good number of native students, there is no way they can relate to a Blackfoot point of view. So I am using these coursebooks." It is like saying this is western society's way of telling the story, their interpretation of history from a western point of view, and after they read that, then I tell them, "now that you have heard that, this is the other part of the story." Let me tell you the rest of the story. We talk from the oral traditions, and if you were looking at these issues, this is how it would look. And then I go to the Blackfoot point of view and perspective and say, this is what it would look like. The students will have something to relate to and be able to transcend the boundaries, crossing the boundaries, the trans-systematic. Instead of throwing things at them, I take them to both. Of course, we offered a course in native thinking and philosophy, and this how Blackfoot, Cree and Navajo and others look at it. To this day, I am still taking that approach. I am more specific now. I am making people look at the paradigms, the metaphysics they operate from. If you can begin to realize that, these metaphysics are really your interpretational tools for reality structuring.

I give them the example of the Nobel Prize-winning quantum physicist Steven Weinberg. He says if you are going to talk about objectivity, true objectivity, there should be no human beings in the picture. But of course, we can't do that. As soon as a human enters the picture, it becomes an interpretation of that objectivity, that objective picture. So, where does that interpretation come from? It comes from interpretive tools that a society, a culture, uses to interpret reality, that objective world. What I am emphasizing to students and other audiences is that I want you to understand that what you think is truth, like "This is the way it is!" Walter Cronkite's saying, remember him? It is really not the way it is, but it is your reality based on your interpretations. So once they know that, they can say, oh, western interpretation is based on western interpretive tools. Hey, maybe we can look at Blackfoot, Cree, Mi'kmaq and so forth. That they have interpretative tools too. Maybe if we put those side by side, hey! We will have a much better look at that objective reality; more knowledge. But right now, we fight wars over those interpretive tools. That's what we do. Just think about Christianity, for instance. They have their interpretive tools, and just about all the wars are Christian wars. See, if we realize they were just interpretive tools, maybe we won't have wars anymore.

Notions of racism won't be there anymore because what they're using for the basis of racism are interpretive tools. See, that is what we have been telling people. That is the approach we are using in Native American studies, which is now Indigenous studies. Slow but sure, the University of Lethbridge is realizing that and slow but sure, they get a Blackfoot name for official functions and talk about their Blackfoot name. They are starting [to have] Blackfoot signs all over, and major buildings have Blackfoot names. The University now has its own medicine pipe, so when they have an official function, they ask the Blackfoot elders to come and do a smoke ceremony using their own pipe. They have their own honour song. At every official function, they ask me and Billy Wadsworth to come sing the university honour song. Slow but sure. And the latest development: they set up task forces, unit task forces, and [are] asking every unit what they are doing with regard to Indigenous people, called Indigenization. They will put it together and have better coordination of all of their efforts [in relation] to our people. Slow but sure, it is happening. TRC was a shot in the arm toward that step and now COVID-19. What is traditional ecological knowledge? What about medicines, etc. The university has responded at first slowly, and [is] now more appreciative and starting to incorporate [traditional ecological knowledge] in their work.

Sa'ke'j: That is a very impressive achievement, Leroy. It needs to be duplicated in many educational institutions. One of the things that comes up in our discussions all the time is what...the opportunities or challenges [are] for how learning interpretations can be used to create a cognitive symbiosis between Eurocentric western thought and Indigenous knowledge systems. We want to have this Indigenous knowledge for ourselves. But we also want to pass it on to other generations and create a cognitive sharing with tools that honours both knowledge systems at the same time or at least comes from one knowledge system coming to another.

Leroy: What I have been telling the university, going way back — you know my good friend, my brother — is I've told them and tried to push them a little bit. I use the example of our iPhones and smart phones, computers, and gadgets and so on. I say to them, "I have an iPhone that is a Mac, you know an Apple." I said, if you go to an Apple store, and I have an iPhone 10, the Apple people there will tell me, you got to get an iPhone 12! See.

If we were to go back now to the metaphysics paradigms of the Western system using today, the ideas behind them are not new. They have been talked about way back. And so forth. They coalesced in the age of reason and the enlightenment era. Those ideas coalesced. In science, rationalization and methodology in science developed out those paradigms...from the enlightenment era. The idea of measurement came into existence and, consequently, mathematics. Anything you cannot measure is thought to be not scientific, not science.

So things like love, intuition, and dreams can't be measured, and then they can't be scientific. Hey, you can't measure those! So they are not scientific. Well, if we did the jump over, transcended the boundaries between that and Native Science, to Cree, Blackfoot, Anishinaabe, Mi'kmaq, and so on — hey, we find that relationships are the foundational base of Native science. See, to the point...if it is not about relationship, it is not science from a Blackfoot point of view. And so when I talk to scientists, I say, wouldn't it be great if we could bring your idea about measurement and we brought in the notion of relationship, and combine those two to do science and development, we could do a methodology that would include both relationship and measurement. If you can do that, we would have a much broader spectrum to work from than you do today. It would open new science doors. See.

Sa'ke'j: How would you speculate that Native science and the Eurocentric social science and humanities are basically the same thing from different knowledge systems and their learning skills and tools?

Leroy: Very good question, very important point. The thing is that the [scientific] methodology in Western science is such that if you can picture a container, like a box, in that box was God's formula about the theory of everything. In other words, God's creation [is] in that box. The attempt by Western science, with all their magic formulas and so forth, is trying to penetrate the box, trying to penetrate the walls of the box, see? That's what they are doing with all their scientific formulas. They are trying to penetrate that wall of the box to discover God's formula, the theory of everything. Whereas when we Native people look at those, we say it is about the flux, consequently using our friend Rupert Ross from Kenora, Ontario, remember he picked up from our talks the idea about surfing the flux. The whole notion of surfing the flux in Blackfoot, Cree, Mi'kmaq and so on, the world is surfing the flux, we are looking for those regular patterns that occur that we can hang our hat on, so to speak, as reference points. By surfing the flux, see, the whole culture is about that surging the flux. That's why you can't separate science

knowledge from the Indigenous culture. Because it is the knowledge system that is trying to put order in the flux. Consequently, you can't separate culture from science. In Western science they distance themselves from any culture aspects, only objective measurement is what they look at, you see. Well, Blackfoot science can't separate these. If we adopt Einstein's science, his definition of what science is all about, he defined it as the search for reality. Science is seen as a search for reality. If this is so, surfing the flux is the search. I told old people that I was a scientist before it was cool!! You can't separate because the whole culture is about trying to find those regular patterns. Consequently, you can't separate culture from science as the Western world does.

Sa'ke'j: One of the difficulties in comprehending this approach for many of our authors and the younger generation is that Indigenous knowledge systems are verbal or oral, which means they are supposed to [be] renewed or they disappear and vanish generation to generation. They are having their deepest problems with the principles in moving between English or French and Indigenous languages. Many are now becoming instructors and are working with curriculum, and ask how do they manage that? One of the great insights was in Western science is that they relied on Mathematics rather than English or German or French or [other] European languages. As some... scientists observed, when you write the formula on the blackboard and turn around, you have to explain the formula in a language. You have two competing languages, one is a mathematical language of relationships, and then you have another relationship that is verbal and sometimes written. But how do they intersect with this or that in a spectrum or gradation of knowledges when they want to use one or the other and somehow feel they don't have the right tools or the right interpretive principles or guidelines to do that. What kind of advice can you give them on that?

Leroy: Well, I guess, I would say language, to begin, is a repository of knowledge. Maybe it is not the total knowledge and culture of the people, but to a very large extent, language is a repository of knowledge. So like I told David Bohm, in discussion with him, all that stuff we were talking about — that magic formula in science and quantum physics, if you want to understand them, why don't you just learn Blackfoot? Blackfoot can describe that. Cree and Mi'kmaq can describe that. Our languages are processoriented languages, action-oriented, as opposed to nouns, not stagnant in nature. The whole notion about movement and stagnation — hey, that's what they are trying to transcend through Mathematics. English is a stagnant type of language. It is incapable of bringing about or talking about movement in a very good way, not a good language about emotions or actions. And so the Native languages are better equipped for that because they have a better capacity to deal with the whole notion of movement and action-oriented processes. To me, this linguistic shortcut, even if it takes a lifetime, is the best way to go to learn about those processes.

Because we Native people draw from such a broad spectrum, whereas in Western thought, we only draw our information from a narrow perspective, a narrow spectrum of awakeness, when we are awake, see? That is why it is among our people; we draw on dreams, signs on the land, signs from animals and so on. We take those as our data intake and from our rich knowledge base that we have. So to a large extent, our language is the shortcut to that. If you begin to think in Blackfoot, you would better understand, you can begin to see the relational networks and the holistic approaches. We often get frustrated with our leadership. Well, sometimes it is because they are looking at the big picture. And to look at the big picture, it is saying if I say this, or if I do this, how does it affect the relational network? It takes a little bit of time to think about that. Consequently, in school, our students were being classified as slow thinkers and couldn't think in the abstract. But in reality, it is because we have a broad spectrum from which we draw our data than they do with Western thought.

Sa'ke'j: In your innovative approach to Indigenous Studies (what was called Native American Studies originally), and its reputation in Canada and the US — do you feel a Blackfoot teaching or androgyny is the best way to adequately apply the Blackfoot ways of knowing in the Eurocentric university?

Leroy: I think the younger generation is much more accepting of these different ways. And for the Western students, white students, I think it is because their society is about individualism, and [they] have not been as loyal to their older traditions or as the older generations have been. Because of this individualism, they are open to other ways and so forth. It [is] speeded by modern technology, like the Google world, Facebook, and... social media. Of course, they hear about all the different cultures; in other words, we have more immigrants in the country. This influx increases the speed of the decline of Western modes of thinking. So yes, I think this is a very opportune time especially, as I said, with truth and reconciliation. You and I have been working at this for a long time. From way back to, let's say, constitutional talk days and so forth. So when the constitution affirmed Aboriginal and Treaty rights as the supreme law of the law, people hemmed and hawed, and there were significant reports like Royal Commission on Aboriginal Peoples (1996) and so on. Still, they were ignored. But for some reason or other, the Truth and Reconciliation Commission reports caught on, and the larger society is beginning to listen. Even now, COVID-19 is acting as a catalyst for people to change their ways of thinking and...the whole notion of normal, what used to be normal to them. They are starting to realize there is not going to be normal anymore.

So yes, I see this as an opportune time for people in young Canada are going through. Like I tell audiences, I am going through a mid-life crisis, because in a midlife crisis people ask themselves loaded questions like "Who am I? What is this all about? I am in this job for 20 years. Where is this job taking me? But I am stuck in it." They say, "I have a house and kids to send to school!" and so on. In other words, when people

are going through a mid-life crisis, they reflect and rethink foundational bases and thinking processes and how they manifest into actions and behaviours and so forth. So this what I mean when I say this is an opportune time to bring new metaphysics, new paradigms to look at. At our gathering of the Congress of Humanities and Social Sciences in Calgary four or five years ago, I said, Blackfoot metaphysics are waiting in the wings. Mi'kmaq metaphysics are now in the wings, but now they're starting to look at them and take them seriously.

Sa'ke'j: As we both know and [as] I have experienced, it seems the university continues to get trapped by creating methodologies about interpretation of reality, whatever that is. That every year someone comes up with a new interpretive scheme, sometimes it is quantitative, sometimes it is qualitative, or sometimes, different versions of those, [like] two intersecting or blended research methodologies. The question that keeps coming up is to what extent has the methodology changed, especially from the Western knowledge system? As each of their methodologies fails to reveal what they are looking for in terms of the box of reality, how is that changed by Indigenous research and the gathering of knowledge from communities?

Leroy: In a science book by Gary Zukav, called Dancing Wu Li Masters: An Overview of the New Physics (1979), was an exploration of modern physics and the phenomena of the quantum realm that used metaphors taken from the Asian spiritual movement. Like a Wu Li Master who would teach us to wonder about the falling petal before speaking of Newtonian gravity — Native thought overlaps with the quantum realm. But there was a place in the book, it said, at one time, it was the church that was supposed to tell us what life is about. Over time it could not give us the answer. Individual scientists came into the picture, which I would say [in] the way the scientists would put it: we have now sent out the scientists to go find out what it all was about. They are coming back, 300-400 years, and they are saying, "We really haven't found out the answer, we think the answer is in you." You know? If that is true, then, where subjectivity was ruled unscientific, from the days of the enlightenment era and the days of measurement? But if the answer is in us, as Dancing Wu Li Masters says, hey, [then] native science includes not just an attempt at an objective, but subjective aspects from that spectrum. [It] is also included from which we draw. So the thing about subjectivity is included, and that's why quantum physicists say, hey, the observer and the observed are one and the same. They affect each other. Hey, as native people, we have always known that. We base our knowledge on those kinds of knowledge bases.

Sa'ke'j: I'd like to turn to dialogues, to another part of your vast legend. For decades, you created and sustained innovative dialogues based on the Blackfoot knowledge system and [that] transcended some the Bohmian dialogues and discussions with scientists and Indigenous scholars and leaders. How would you advise instructors to use

dialogues in course development or as pedagogy in the university, especially when you are grappling with Indigenous thinking and learning relationships with Eurocentric and Western knowledges?

Leroy: Well, very, very good question. I am glad you asked that. I talk to teachers many times at their conventions or professional development days. What I tell them in a nutshell [is that] here in Alberta, [it] is probably [like] in Saskatchewan. If you go into any classroom, you will not find a unicultural classroom. Yet, our universities, the education faculties, are still turning out teachers as if they are going into a unicultural setting.

Well, the notion of pedagogy is really the science of teaching or the art of teaching. If you wanted to be an effective teacher, you need to know a little bit about the multicultural classroom. By knowing a little bit about, and you don't need to know everything, but if you knew about the culture of their students and little bit about their history, you could make much better connections, and they will listen to you. What you say will resonate, and so on. In fact, the students of the other cultures will say, that's interesting, my ways don't tell me that, and you have started to have a cultural exchange, and therefore, a much better connection. The same goes for colleges and universities: if you know a little bit about those in the room, where they come from, and, if you say you are from Lethbridge or Crow Pass [or] Saskatoon, I know about that, there are things we can talk about. They will start a communication. In the process, we throw out a few Blackfoot words.

Let me give you an example: I was teaching a class, and I noticed in a couple corners how some students were way back there, and they were starting to fall asleep. They were tired. They were not paying attention to the lecture we were giving. I purposefully called on them. I said, "Remember in the last class, we talked about a Blackfoot word that translates into English, *I'm going to lay down*. But actually, the real Blackfoot translation is I am going to make myself thin." To think about that — what are some of the ramifications that come out of that? Well, it begins to say, when I am up, there are lots of energy forces that are going hit me or go through me. But if I make myself thin, not as many forces come through or penetrate me [and] I can have a better rest. So even throwing things like Blackfoot words and explaining those and what they mean, of sleep from a western point of view; this [is the] notion of teaching methodology and knowing a little bit about the audience [and] the students' culture. You make much better, good connections with them, and you develop resonance within the classroom.

Sa'ke'j: One of the eternal enduring comments of younger Indigenous scholars and students is they feel like they are on a tightrope walking between two knowledge systems. One of the things they keep asking in the university is how did we learn to trust the journey? What advice can you give about how to trust the journey to wholeness in the flux, not standing still, especially when the wire is always moving in the wind?

Leroy: Hmmmmm. We don't stand still here in southern Alberta because it is so windy. Some invisible force blows you all over the place. But, let me use, as an example, literature from native authors and English writers when they write a novel. Usually, the English writer and English novel are about somebody [who] finds themselves in their home territory, and now they are going to go explore and are leaving home. The story by native writers is usually about the character who left home and has gone someplace else and is now coming home to find more about themselves and their culture and so on. That is the difference.

If we were to advise students, and they find themselves, as you say, "on the tightrope, walking the tightrope," that is because they have been looking at things from a Western perspective. That is where the language and thought process come in. Remember the old example I always give, hey — in English, [if] I were to say good and evil, saint and sinner, the division between the saint and sinner is a watertight division in Western thinking. You are always either-or. That is what these students find themselves in. And because they think of themselves from an English point of view, it is always either-or to them. A lot of them run into a lot of mental turmoil trying to straddle that watertight division.

If you were thinking from or looking at it from a Mi'kmaq perspective, a Sioux perspective, a Blackfoot perspective, it takes you back to the flux. The flux is happening all the time. And we may have boundaries, but they are not watertight, and we can always come back home. Like the main character who left home in English novels to discover the world, in Blackfoot, you can always come back home. In novels written by native writers, the main character begins as having left home and is usually out someplace and finally finds their way and is now coming home. Hey, if they understood that, they will always feel good about where they are and about coming home. Don't be scared to cross those boundaries. In fact, crossing those boundaries will always bring you more knowledge. But use your home knowledge, the knowledge that comes from your home territory, as the foundational base. I think that is what my Uncle Bernard was telling me. Go to school, I want you to go to school, but don't forget your people. Come home.

Sa'ke'j: This has been a fabulous interview, Leroy. Thank you so much for walking the path of knowledge reconciliation with knowledge, dignity and integrity.

About the Contributors

Professor Emeritus Dr. Leroy Little Bear, BASc, JD, DASc (Hon), LLD (Hon), was born and raised on the Blood Indian Reserve (Kainai First Nation) near Lethbridge, Alberta. He began his academic career as the founding member of Canada's first Native American Studies Department and creation of Canada's first Bachelor of Management in First Nations Governance at the University of Lethbridge. Upon his official retirement in 1997, he served as founding Director of the Harvard University Native American Program (1998-99).

Beyond his wide influence on students and teaching at Banff's Indigenous Leadership Program, Little Bear's advice has been widely sought by national and regional organizations, First Nations, and government commissions and boards. His lifetime of accomplishment includes the most important political achievements for Indigenous peoples in Canada and beyond. He has participated in constitutional reforms affirming aboriginal and treaty rights and the Charlottetown Accord for the Assembly of First Nations, on the UN Declaration on the Rights of Indigenous Peoples, and Royal Commission on Aboriginal Peoples, Alberta's Task Force on the Criminal Justice (1990-91). Also, he has provided advice on significant issues in Indigenous science, quantum theory, land claims, treaties rights, Indigenous rights, self-determination, and hunting and fishing rights. He is a member of the Indigenous Wisdom Advisory Panel that provides advice to Alberta's Chief Scientist about how to incorporate Indigenous perspectives and traditional ecological knowledge into environmental monitoring. In recent years, he has been a member of the Banff Centre for Arts and Creativity board of governors and involved in bringing together the Buffalo Treaty: A Treaty Cooperation, Renewal and Restoration (2014), an agreement between First Nations in the United States and Canada, to protect and restore bison herds to the wild. In honour of his achievements, Little Bear has been awarded the prestigious National Aboriginal Achievement Award for Education (2003), the highest honour bestowed by Canada's First Nations community, Alberta Order of Excellence (2016), and the Order of Canada (2019). He is recognized as an Eminent Scholar by the Kainai Nation, awarded honorary doctorates from University of Northern British Columbia and University of Lethbridge, and currently is the Distinguished Nitsitapie Scholar at the University of Lethbridge focused on breaking the boundaries between Indigenous and Eurocentric (Western) sciences. Email: littlebear@uleth.ca

Sa'ke'j James Youngblood Henderson was born in Oklahoma to the Bear Clan of the Chickasaw Nation and Cheyenne Tribe in 1944. In 1974, he received a Juris doctorate in Law from Harvard Law School. He became a Law professor who created litigation strategies to restore Aboriginal sovereignty, knowledge, and rights. During the constitutional process in Canada (1978-1993), he served as a constitutional advisor for the Mi'kmaw nation and the NIB-Assembly of First Nations. He has continued to work in aboriginal and treaty rights, treaty federalism in constitutional law, and international human rights. For his achievements, he has been awarded the Indigenous Peoples' Counsel (2005), the National Aboriginal Achievement Award for Law and Justice (2006), and Honorary Doctorate from Carleton University (2007) and fellow of the Native American Academy (2000) and Royal Society of Canada (2013). Email: sakej.henderson@usask.ca

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Generative Learning and the Making of Ethical Space: Indigenizing Forest School Teacher Training in Wabanakik

Katalin Doiron Koller & Kay Rasmussen

ABSTRACT This reflection on community-driven research in process is written from the perspective of graduate student co-researchers collaborating with Wabanaki community coresearchers on a pilot project involving a Wabanaki and a non-Indigenous organization. Three Nations Education Group Inc. (TNEGI) represents three Wabanaki schools and communities in Northeast Turtle Island. The Child and Nature Alliance of Canada (CNAC) offers a Forest and Nature School Practitioner Course (FNSPC) for educators seeking to operate forest schools. These diverse organizations have developed a pilot FNSPC training for a group of TNEGI educators, with the purpose of Indigenizing the FNSPC. This is necessary to address the Eurocentric forest and nature school practices in Canada, which often fail to recognize the herstories, presence, rights, and diversity of Indigenous Peoples and places. TNEGI educators envision a land-based pedagogy that centers Wabanaki perspectives and merges Indigenous and Western knowledges. In the FNSPC pilot, the co-researchers generated course changes as they progressed through the pilot, decolonizing the content and format as they went. Developing this Indigenized version of the FNSPC will have far-reaching implications for the CNAC Forest School ethos and teacher training delivery. This essay maps our collaborative efforts thus far in creating an ethical research space within this Indigenous/non-Indigenous research initiative and lays out intentions for the road ahead.

KEYWORDS Indigenous, land-based pedagogy, community-driven, Indigenize, training, ethical space, generative learning

Transmitting knowledge through real-life experiences on the land, whether through observation, modelling, experimentation, ceremony, or storytelling, is central to Indigenous cosmologies and worldviews (Simpson, 2017; Tuck et al., 2014). In Canada, Indigenous knowledge transmission has faced tremendous pressure from colonial policies intended to disrupt intergenerational teachings, languages, cultures, and identities. Even now, when First Nations schools have greater power over education, communities are still beholden to assimilative policies stemming from the Indian Act's control of education. First Nations operating community-based, community-run schools receive their rightful operating funding from the federal government only under comparability to the provincial school system (Koller, 2015). Therefore, educators in Wabanaki First Nations schools often feel an implicit pressure to follow provincially mandated curriculum, instructional hours, and subjects using the Western

pedagogies that informed their creation. This makes authentically practicing Indigenous land-based pedagogies in "provincially-comparable" school contexts challenging.

All too often, in this context, Indigenous educators find themselves feeling "stuck" in a four-walled building, within a rigid academic calendar, separated from the land and traditional teachings that invigorate Indigenous knowledges and worldviews. Indigenous Peoples of Turtle Island know that the land is our first teacher and that settler-colonial policies, particularly in education, work to sever Indigenous Peoples from their land-based identities to suppress Indigenous collective rights to the land (Battiste, 2013; Green, 2014; Simpson, 2017). Further exacerbating this purposeful suppression of Indigeneity is the lack of respect Western education systems implicitly and explicitly exhibit for play-based, student-led, experiential teaching, instead favouring industrial models of education that produce a 'standardized' model citizen (Simpson, 2017).

However, across Canada, there is a growing movement for outdoor education and Forest and Nature Schools (see Appendix A) that has become stronger throughout the pandemic. Although this form of education provides the framework for Canadian educators to take children on the land, we question how and if Euro-Canadian notions of outdoor, place-based education are compatible with Indigenous land-based pedagogies? The Wabanaki community-driven project discussed herein seeks to unpack just what affinities and tensions exist when two diverse cosmologies converge in the context of land-based teaching. Are Euro-Canadian outdoor education programs attuned to Indigenous herstories, or do they continue to perpetuate colonial myths of *terra nullius*? What might a trans-systemic pedagogy of land-based education look like in the context of First Nations education in Wabanaki communities?

These were questions of interest for Three Nations Education Group Inc. (TNEGI) and their three-member schools. TNEGI is a regional management organization (RMO) and an alliance representing Elsipogtog, Esgenoopetitj, and Negotkuk First Nations' educational interests, the three largest Wabanaki communities in the colonial province of New Brunswick, Canada. In recent years, TNEGI teachers have expressed interest in land-based teaching to meld traditional ecological knowledge and experiential teaching methods with provincial curriculum requirements. Potentially, mainstream outdoor education discourses might be harnessed to help integrate the use of traditional Indigenous teaching approaches in ways compatible with Euro-Canadian curriculum. However, mainstream outdoor education might also be problematic, as it does not always adequately attend to colonial herstories, animated Indigenous presence, and reconciled futures. In other words, taking students outside is not equivalent to decolonizing or Indigenizing Canadian education systems (Tuck, et al., 2014). Alternatively, TNEGI envisions the revitalization of land-based pedagogy such that ancestral Wabanaki teachings are propagated on equal ground with Euro-Canadian environmental science, critical for co-creating new ways of living together (Kimmerer, 2013). TNEGI's understanding of land-based pedagogy reflects Simpson's (2017) view of the land as a teacher, the land as context, and the context as the curriculum. This theoretical and methodological conception of land as pedagogy informs TNEGI's efforts to Indigenize and reclaim outdoor education for their Wabanaki students, families, and educators.

With this goal in mind, in 2019, TNEGI negotiated a partnership with the Child and Nature Alliance of Canada (CNAC) to pilot an Indigenous-led Forest and Nature School Practitioners Course (FNSPC), hereafter referred to as 'the Pilot.' The partnership stemmed from an agreement on the need to decolonize the FNSPC content to create a model conducive to Wabanaki lifelong learning. Both groups conceptualized this joint effort as a pilot to Indigenize the FNSPC teacher certification process and to provide an opportunity for community-driven, collaborative action-research. The process of Indigenization "centres a politics of [I]ndigenous identity and [I]ndigenous cultural action" to disrupt Eurocentric paradigms (Smith, 1999, p. 146). Importantly, the process of Indigenization cannot merely be an "adding on" to what already exists; rather, it must break down that which is pre-existing and in its place rebuild anew using an authentic balance of Indigenous and Western knowledges as a foundation. In other words, Indigenizing the FNSPC certification process required that Indigenous voices be privileged in the deconstructing of the Euro-Canadian premise of the course in favour of a pluriversal paradigm that recognizes many diverse ways of experiencing, understanding, and living in the world.

Below the co-authors working as co-researchers with the pilot introduce themselves. Then, transsystemic ethical space in this community-driven context is defined, and protocols for co-creating research with Indigenous schools, communities, and organizations are discussed. We then outline the pilot's design, including our research questions, methods, and progress to date. In the final sections, we juxtapose land and place based education, summarize CNAC's ongoing efforts to decolonize, and map-intended directions for ongoing collaborative research activities.

Kay

Boozhoo. Waabishki Binesikwe anishinaabe-izhinikaaz Atik dodem. Wiisaakodewikwe. Wabanaki onjibaa. Wauzhushk Onigum onjibaa. My name is White Thunderbird Woman of the Caribou Clan. My English name is Kay Rasmussen. I am a mixed-race woman of Mi'kmaq, Acadian, and European heritage. I grew up in Wauzhushk Onigum unceded territory within Treaty Three, also known as Kenora, Ontario. I hold a Master of Education for Change in Sustainability and Environmental Education from Lakehead University. Besides my work conducting community-based research, I teach for Seven Generations Education Institute within the Early Childhood Education diploma program, and I am an FNSPC facilitator with CNAC.

Katalin

Woliwon wela'lioq kösz merci Thank you, my name is Katalin, and I am a Programs and Services Manager with TNEGI. As a non-Indigenous, critical feminist scholar and an environmental justice activist, I too am intimately aware of the necessity of locating oneself in relation to other peoples and communities. I have lived in Wabanakik for most of my life. My matriarchal ancestors are French-Acadian settlers, and my patriarchal ancestors are Hungarian immigrants. I have been working with Wabanaki communities since 2009 and am also a doctoral candidate in the geography of societal change program at Carleton University.

My privileged location requires an iterative, critical self-reflexivity as I travel the path of decolonizing my mind, body, and professional practice concerning the communities with which I collaborate. As coordinator of the TNEGI land-based education portfolio and a contributor to our research programme, I am in a position of power that necessitates careful attention to how I may inadvertently impact project directions, co-researcher experiences, and research findings with my own biases. To ensure I retain accountability to all my relations therein, I listen first and then listen some more before taking the next steps. Practicing listening as method is critical as we move collectively toward the shared creation of an "ethical space" within which the TNEGI Pilot occurs.

Creation of "Ethical Space" Protocols

The need for ethical space within research arises from the validity of contrasting viewpoints about the world. Ethical space is the concept of a neutral meeting place between contending worldviews and knowledge systems where respectful, reciprocal engagement can occur (Ermine, 2007). Such space allows for the collective uncovering of how values, behaviours, and intentions are primarily influenced by covert mainstream powers. Further, ethical space fosters a setting where individuals can move beyond their mental worlds and position themselves in respectful, reflective dialogue with others. This positionality is necessary because when research is founded on Eurocentric assumptions, standards, and methodologies, Indigenous knowledges and traditions are often marginalized, relegated to the sidelines, or made invisible altogether (Battiste, 2013; Donald, 2009). Generating ethical space within our community-driven collaborative research is an essential step in unsettling the work of colonization and creating a safe space of sharing and connection that respects and values all knowledges equally.

Decolonizing colonial hierarchies of knowledge is particularly important to education, and Mi'kmaw scholar Marie Battiste (2013) calls on educators and researchers to generate ethical spaces that "confront the in-between space that connects Indigenous and Eurocentric knowledge systems" (p. 105). Identifying what has been excluded by colonial thought is an important starting point as it helps us to better understand underlying assumptions and places of potential merging. Ethical space challenges educators and researchers to develop "transsystemic analysis and methods — that is, reaching beyond two distinct systems of knowledge to create fair and just educational systems and experiences" (Battiste, 2013, p.103). For harmony to be achieved between Indigenous and Eurocentric thought, where one has often been held up as dominant or hegemonic and the other relegated to the margins through colonial violences, anti-colonial space must continually be held open for the resurgence of alternative ways of knowing. From this perspective, it is essential that research conducted within Indigenous communities by community and non-community members working as co-researchers be attuned to specific ethical protocols.

Protocols that informed the creation of ethical space for our collaborative research team include the principles of OCAP — Ownership, Control, Access, and Possession — which centre Wabanaki communities as the drivers and benefactors of the research (FNIGC, 2020). Additionally, the "4R's" of community-based participatory research with Indigenous Peoples

— Respect, Relevance, Reciprocity, and Responsibility — are present as the pre-existing foundation of our longstanding working relationships, deeply embedded as we are with one another through our commitment to education, our schools, and our communities (Castleden et al., 2012, p. 162). As the organization in common, co-researchers agreed for TNEGI to hold and protect all "primary data." Research design and activities were decided upon and undertaken jointly by co-researchers, who include educators and Principals from TNEGI First Nations' schools, First Nations' Directors of Education, and First Nations' Chiefs. This is the first formal research project TNEGI has participated in; however, it has collaborated for many years to decolonize provincial curriculum and teacher training. Given this, an anticipated biproduct of this work is the formation of a TNEGI Research Ethics Protocol informed by the experience of community and non-community members in the pilot. To ensure accountability to First Nations' extended community members and leadership, the collaborative research team regularly reports research activities to the TNEGI Executive Board.

The Three Nations Education Group Inc. Pilot

Before entering this research partnership, TNEGI's Early Years Connections initiative had offered professional learning on land-based teaching for several years. Interest in land-based education peaked in 2018 when TNEGI educators began talking about the FNSPC. In response, TNEGI initiated discussions with CNAC about hosting a practitioner's course in one of their member communities. It was important to TNEGI that facilitators of Indigenous ancestry teach a course about land-based learning in the participating educators' spaces and that a sustained community of practice be nurtured based on trainer/trainee relationships. CNAC agreed and confirmed that they would respond to the unique needs of TNEGI participants when assessing outcomes. Furthermore, prior learning would be recognized and valued in performance measurements and could include community advocacy work.

Both organizations concluded that such a modified approach of the FNSPC was more appropriate as a pilot, and this research project was born. In addition to the initial five-day intensive training in May 2019, TNEGI approved funding to support the group's request to gather together regularly to workshop the course content, learn from knowledge keepers, and continue to build a community of land-based practitioners. For fifteen months following, we — the educator and graduate student co-researchers or TNEGI "Forest Family", as we have aptly named ourselves — met regularly via monthly conference calls and intermittent two-day gatherings. Since the onset of the pandemic, we have been unable to meet in person, yet we have continued to support one another through individual and group mentoring via video conferencing. In one case, the pandemic restrictions created an opportunity for those that had finished their FNSPC certification to open a land-based extra-curricular program in their community. Those still in the process of completion benefit from the lived experience of those who are successfully practicing amid strenuous Covid-19 restrictions.

From the beginning, the partners and co-researchers were interested in the following questions:

- 1. How do we, as TNEGI educators/researchers, interpret the appropriateness of CNAC's Forest and Nature School Practitioners' Course format and content concerning integration of Wabanaki worldviews in land-based learning settings?
- 2. What methods, practices, and perspectives do we as Wabanaki educators/ researchers utilize while engaging in the process of decolonizing the Forest and Nature School Practitioners' Course? What do we, as TNEGI educators/ researchers create, reclaim, and dismantle in the decolonization process?
- 3. How can TNEGI Forest School Practitioners' experience contribute to the decolonization of pedagogy, curriculum, and school environments for First Nations students? How do these contributions relate to self-determination in education?

These questions arose naturally among the Forest Family and extended group of coresearchers. A critical, safe, ethical space was nurtured by all so that individual and group observations and experiences could be shared free from judgement. This safe space was possible in large part because of the existing relationships and communication pathways among us as co-researchers and our mutual respect for all voices around the circle.

As we embarked on the Forest and Nature School Practitioners Course, we reflected on the possibilities for change and the co-creation of alternative teaching options that would embrace Wabanaki perspectives *and* meet Western course expectations. We identified and implemented the adaptations we felt necessary to center our needs and values as Wabanaki learners and Non-Indigenous educators of Wabanaki students. This generative learning method in community education foregrounds knowledge co-construction and diffuses power over content and implementation among co-researchers, while confronting established assumptions and biases (Ball & Pence, 2006). Generative, collective learning enabled us to recognize the need for, and enact the change required, to create a safe, trans-systemic space in the moment of encounter. For instance, we decided we needed to be permitted to study the course materials and submit the corresponding assignments *as a peer group*, given the collective nature of our Wabanaki cosmologies related to knowledge creation and transmission.

We also identified changes to the FNSPC performance assessment methods that we felt would better allow us to demonstrate our collective knowledge and abilities. For instance, instead of individual, written essays, we concluded that individual or group personal reflections on our practice using audio, video, photography, storytelling, and/or prose would be equally valuable demonstrations of our capabilities. Similarly, we allowed each other space and autonomy to identify which outcomes our schools and communities might benefit from and responded to assignment requirements in those unique ways, rather than following standardized criteria more reflective of non-Indigenous, individualistic learning environments. Therefore, we adapted the format of learning and how our comprehension was measured to better correspond to the needs of ourselves as learners and educators in Wabanaki communities.

Likewise, generative steps towards Indigenizing the FNSPC content began with the fiveday, in-person, intensive training, which precedes the coursework and assignments. We gathered in the fields, sheltered in the forests, and healed together on the beaches of Esgenoopetitj First Nation in Mi'kma'ki. The Child Nature Alliance of Canada co-facilitators were both of Indigenous backgrounds and imbued each day with stories of their lived experiences teaching students on Treaty lands. Importantly, we worked hard to provide comfort to community knowledge holders and Elders who joined us on the land despite the cold, windy weather. As a result, the oral herstory and Mi'kmaw language of Esgenoopetitj were continuously present, as community members shared numerous stories within which we centred our learning reflections.

The five-day intensive was by far the most impactful experience of the course for our group. Afterward, many expressed a paradigm shift in understanding how educational outcomes might be accomplished outside a building's walls. In the months that followed, we workshopped the content of the FNSPC teachers' guidebook, collectively identifying concepts that might be enriched with Indigenous voices and expanding upon them with in-depth discussions about colonialism, Indigenous sovereignty, and community well-being. Although the pandemic has prevented us from meeting in person the past year, when we can, we plan to come together again on the land to share and reflect upon our interconnected FNSPC journey. In particular, we will unpack how we have proceeded to integrate our land-based teaching approaches in the Westernized educational environment and what has been the result of our recentring of Wabanaki land-based pedagogies toward colonial curriculum outcomes. We hope to use narrative methods for capturing these reflections, including storytelling, sharing circles, and meditative group nature walks.

Our collective knowledge generation is a living endeavour framed by relational accountability to the land and all our relations. As we examine below relational accountability is core to our ongoing work as we strive to balance Euro-centric place-based education with authentic, Wabanaki land-based pedagogies.

Land and Place in the Child and Nature Alliance of Canada Teacher Training

Creating an ethical space for the intersection of Euro-Canadian place-based education and Indigenous land-based knowledge systems is to unsettle the work of settler colonization. Challenging and provocative questions must be considered which counter the business-asusual of everyday life and environmental education practice (Ashton, 2015; Taylor & Pacini-Ketchabaw, 2015; Tuck & Yang, 2012). An ethical space that welcomes reinhabitation, refiguring presence, and restorying can help develop an understanding of colonial identities relative to land (Calderon, 2014; Greenwood, 2011; Gruenewald, 2003; Nxumalo, 2019). In turn, this space encourages settler-dominant organizations, like CNAC, to begin to understand their own identity within place. Before the pilot with TNEGI, CNAC had done little to consider the pedagogical ways in which the FNSPC failed to teach about the land through an Indigenous lens to counter settler-colonial narratives of place. Although the name 'Forest and Nature School' implies that learning only occurs within a forest area, Indigenous land must be viewed as all-encompassing. No matter where people are in Canada, they are on Indigenous lands. With each step we take in life, we walk with and on the land. The land is alive, and its teachings are not confined to place.

Although the current FNSPC in Canada has undergone multiple revisions since its release in 2013, in 2021, the course content remains heavily colonial and Euro-Canadian. There are ways in which the Euro-Canadian knowledge of the FNSPC comes alongside Indigenous knowledges in a compatible way, such as the use of sharing circles and storytelling to build understanding. However, based on the current Forest and Nature School model in Canada, the two knowledge systems are still disconnected, leading to tensions. For example, the CNAC ethos encourages Canadian educators, primarily of settler heritage, to access and use Indigenous lands without recognizing Indigenous epistemologies in a meaningful way (CNAC, 2019).

Therefore, we listen as Battiste (2013) calls on educators to consider what is excluded within the far-reaching assumptions of Eurocentric curriculum. Considering how an Indigenous narrative of land and place has been excluded from CNAC's FNSPC makes apparent how the content is contributing to the continued colonization of land and place within Canada. We acknowledge that although the FNSPC content has been heavily Eurocentric up until now, CNAC is currently taking essential steps towards decolonizing their practice. Such steps include building relationships with Indigenous communities, calling on and listening to the guidance of Indigenous Elders, Knowledge Holders, and staff through the formation of an Indigenous advisory committee, implementing staff training that centers Indigenous land-based pedagogies, decolonizing hiring processes through the holding of space for diverse peoples and ways of knowing, and altering funding models to reflect adequate pay and honoraria for Indigenous Elders and Knowledge Holders. The ethical space that CNAC is working to define has been significantly influenced by TNEGI and the Forest Family's voices.

The Path Ahead

Co-researchers continue to analyze the information garnered through the generative learning model. However, much of the pilot's qualitative data collection was planned to take place in the spring and summer of 2020 through land-based group reflection within the Forest Family's ethical space. Due to the onset of the global pandemic, in-person gatherings are on hold to mitigate the disproportionate risk of coronavirus transmission and trauma posed to Indigenous communities. Once this risk has passed, in-person knowledge sharing will resume, and narrative experiences from the pilot will be documented and analyzed by the co-authors for review by the co-researchers. In the interim, several Forest Family members have already begun the process of educational resource development with TNEGI's support, the outcomes of which will be shared widely, potentially contributing to the FNSPC's Indigenization.

Once the research is completed, a report of findings and recommendations will be made to extended co-researcher relations, including schools, communities, and organizations. Upon receipt of the research report, it is anticipated that project partners will continue to build on the pilot's efforts to further Indigenize land-based teaching in Indigenous contexts. TNEGI will harness the findings to continue developing Wabanaki land-based pedagogy in provincially comparable schools and to aid the Forest Family in mentoring other educators. CNAC will gain insight into how it might further decolonize its teacher training and pedagogical content. At the same time, both partners will continue to work together to sustain a community of Wabanaki

land-based practitioners led by the Forest Family. These united efforts could have far-reaching implications that disrupt the transmission of coloniality and revitalize Indigenous pedagogies.



Figure 1. Three Nations Education Group Inc. educators at Esgenoopetitj First Nation pow-wow grounds during the in-person intensive portion of the FNSPC pilot.

Photo credit: Katalin Koller

Appendix A: Forest and Nature School in Canada

Forest and Nature Schools formally started in Denmark in the late 1950s and have now expanded worldwide to include Canada (Cree, 2018; CNAC, 2014; Knight, 2009; Robertson, 2008). Forest and Nature Schools employ a delivery model where children spend anywhere from a half-day to a full day outdoors in local woodlands or green spaces on a part-time or full-time basis (CNAC, 2014). Families have traditionally accessed forest and Nature Schools with children in the early years and Kindergarten (Cree, 2018; Cree & McCree, 2012). The defining principles of this type of nature-based education are regular and repeated access to the same natural space, as well as emergent, experiential, inquiry-based, play-based, and place-based learning (CNAC, 2014). The first Forest and Nature School in Canada was founded in 2007 by Marlene Powers in Ottawa, Ontario (MacEachren, 2013). Powers found Forest School Canada (FSC) as an education initiative of CNAC in 2012 (MacEachern, 2013). In 2020, FSC grew into a national organization with staff working to develop a Canadian Forest School model. Within Canada, there is currently no governing body or regulation ensuring best practices within Forest and Nature Schools, but CNAC is working towards an accreditation model.

In 2013, FSC offered two pilot Forest and Nature School Practitioners' Courses (FNSPC) led by Jon Cree, the Forest School Association president in the United Kingdom (MacEachren, 2013). The first FNSPCs in Canada were heavily influenced by the European model. Since the first pilot courses in 2013, the FNSPC has shifted to being delivered by trained Forest and Nature School Practitioners from Canada. The FNSPC in Canada is a five-day intensive course followed by a year of online course work mentored by a course facilitator through an online documentation platform called Storypark.

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References

- Ashton, E. (2015). Troubling settlerness in early childhood curriculum development. In V. Pacini-Ketchabaw & A. Taylor (Eds.), *Unsettling the colonial places and spaces of early childhood education* (pp. 81-97). Routledge.
- Ball, J., & Pence, A. (2006). Supporting Indigenous children's development: Community-university partnerships. UBC Press.
- Battiste, M. (2013). Decolonizing education: Nourishing the learning Spirit. UBC Press.
- Battiste, M., & Henderson, J. Y. (2019). *Indigenous and trans-systemic knowledge systems*. Retrieved from https://esj.usask.ca/index.php/esj/announcement/view/371
- Cajete, G. (1994). Look to the mountain: An ecology of Indigenous education. Kivaki Press.
- Calderon, D. (2014). Speaking back to manifest destinies: A land education-based approach to critical curriculum inquiry. *Environmental Education Research*, 20(1), 24-36.
- Castleden, H., Morgan, V. S. & Lamb, C. (2012). "I spent the first year drinking tea": Exploring Canadian university researchers' perspectives on community-based research involving Indigenous Peoples. *The Canadian Geographer*, 56(2), 160-179. https://doi.org/10.1111/j.1541-0064.2012.00432.x
- Child and Nature Alliance of Canada (2014). Forest and Nature School in Canada: A Head, Heart, Hands Approach to Outdoor Learning. Retrieved from https://childnature.ca/wp-content/uploads/2017/10/FSC-Guide-1.pdf
- Child and Nature Alliance of Canada. (2019). *Strategic Plan 2019-2024*. Retrieved from http://childnature.ca/wp-content/uploads/2019/08/CNAC-2019-Strategic-Plan-14-Web.pdf
- Cree, J. (2018). Forest School Association History. Retrieved from https://www.forestschoolassociation.org/history-of-forest-school/
- Cree, J., & McCree, M. (2012). A brief history of the roots of forest school in the UK. *Horizons: Professional development for outdoor practitioners, 60,* 32-34.

- Donald, D. (2009). The curriculum problem of Indigenousness: Colonial frontier logics, teacher resistances, and the acknowledgment of ethical space. *Brill*, 23-41.
- Ermine, W. (2007). The ethical space of engagement. Indigenous Law Journal, 6(1), 193-203.
- FNIGC. (2020). The First Nation Principles of OCAP. Retrieved from https://fnigc.ca/ocap
- Green, J. (2014). From colonialism to reconciliation through Indigenous human rights. In J. Green (Ed.), *Indivisible Indigenous human rights* (pp. 18-42). Fernwood Publishing.
- Greenwood, D. A. (2011). Why place matters: Environment, culture, and education. *Handbook of Research in the Social Foundations of Education*, 632-640.
- Gruenewald, D. A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*, 32(4), 3-12.
- Kimmerer, R. W. (2013). Braiding sweetgrass: Indigenous wisdom, scientific knowledge, and the teachings of plants. Milkweed Editions.
- Knight, S. (2009). Forest schools and outdoor learning in the early years. Sage.
- Koller, K. (2015). *Towards a political economy of on-reserve Indigenous education in Canada: Problematizing Bill C-33* [Unpublished master's thesis]. Carleton University. https://doi.org/10.22215/etd/2015-11202
- MacEachren, Z. (2013). The Canadian forest school movement. *LEARNing Landscapes*, 7(1), 219-233.
- Nxumalo, F. (2019). Decolonizing place in early childhood education. Routledge.
- Robertson, J. (2008). I ur och skur. Retrieved from http://creativestarlearning.co.uk
- Simpson, L. B. (2017). As we have always done: Indigenous freedom through radical resistance. University of Minnesota Press.
- Smith, L. T. (1999). Decolonizing methodologies: Research and Indigenous Peoples. Zed Books.
- Taylor, A. & Pacini-Ketchabow, V. (2015). Introduction: Unsettling the colonial places and spaces of early childhood education in settler colonial societies. In V. Pacini-Ketchabaw & A. Taylor (Eds.), *Unsettling the colonial places and spaces of early childhood education* (pp. 1-18). Routledge.
- Tuck, E., & Yang, K.W. (2012). Decolonization is not a metaphor. *Decolonization:* Indigeneity, Education & Society, 1(1), 1-40.
- Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1-12. https://doi.org/10.1080/13504622.2013.877708

Mi'kmaq / Non-Mi'kmaq Conversational Turn-Taking

Stephanie Inglis

ABSTRACT Turn-taking during verbal interactions is a linguistic and cultural pattern that regulates who is to speak during a conversation and when. Conversational turn-taking includes the length of time that occurs after the speaker says something and before the person spoken to responds (Ryan & Forrest, 2019). Within the academy at this current time of 2020, diverse knowledge holders, both Indigenous and Non-Indigenous, are actively trying to share and merge knowledge epistemologies across culture and across language. Though sharing is now actively taking place much more frequently between these two groups of scholars within Canadian universities, full comprehension of what is being communicated is not always realized by both parties. This is not due to any fault on the researchers' part, but because many times two turn-taking paradigms are being used in a conversation instead of one.

KeyWords Mi'kmaq, conversation, turn-taking, Indigenous, cross-cultural, academic discourse

I am a non-L'nu, first-language English speaking linguist with a research focus on the structure of the Mi'kmaw language. I have been teaching Mi'kmaq Studies courses in Mi'kmaw linguistics at Cape Breton University for thirty years. Cape Breton University is located in Sydney, Nova Scotia, on Cape Breton Island (Unama'ki). Most of my students are L'nu¹ and drive to the university daily from one of the five Mi'kmaw First Nations located in Unama'ki. During the thirty years that I have been teaching L'nu and Non-L'nu students and working collaboratively with L'nu colleagues, I have been struck by what happens when two turn-taking paradigms are used in a conversation instead of one.

The L'nu/Cape Breton University Initiative

For over forty years, there has been a partnership between the L'nu of Unama'ki and Cape Breton University (CBU).² The L'nu/Cape Breton University relationship began in the early

¹ L'nu is the word used by the Mi'kmaq to refer to themselves in their language. Mi'kma'ki is the nation territory of the L'nu and includes, in Canada, the provinces of Prince Edward Island, Nova Scotia and parts of Newfoundland. Mi'kma'ki goes as far as the Gaspé Peninsula in Quebec, the north shore of New Brunswick and inland to the Saint John River watershed. Mi'kmaw unceded territory extends into eastern Maine in the United States and incorporates the French islands of St. Pierre and Miquelon (Johnson, 1996, p. 376-8).

² Cape Breton University was formerly known as the University College of Cape Breton and before that the College of Cape Breton.

1980s and was grounded in a vision to create for Mi'kmaw students a robust and rigorous university experience. The objective was to create an academic environment where Mi'kmaw students would be challenged, excited, invigorated, and empowered by learning linguistic and historical details relevant to their history and Indigenous knowledge. The educational goal was to create Mi'kmaw thinkers and innovators who would be able to research, study, and engage in debate about Mi'kmaw Indigenous knowledge and to be able to enter into discussions as equal players with Non-Indigenous academic researchers and Canadian governmental bodies concerning a vision for what would come next for Mi'kmaw children. The key to the success of the integration of Mi'kmaw scholarship at Cape Breton University was the focus on the Indigenous knowledge of one nation, the L'nu of Mi'kma'ki. Forty years ago, this was unique within Canada.

More than one thousand Mi'kmaw university graduates have left the doors of Cape Breton University with degrees in arts, business, science, nursing, hospitality and engineering (Indigenous Affairs — Cape Breton University, 2020). These CBU graduates have gone on to further study in law, social work, and education, as well as other graduate studies in Masters and Ph.D. programs. This has happened over a forty-year period, during which these graduates have returned to their communities. It is their children and grandchildren who we are now welcoming as students to CBU.

The point of my story

I have shared the above with you so that you can position the following story of a recent CBU teaching experience. Thought this is a recent experience, it is one that I have had over and over during the last 30 years.

I was supervising a research collaboration with two colleagues from another Maritime university. We partnered two senior CBU students fluent in Mi'kmaq and who needed to do a final senior undergraduate project with three English-speaking Non-L'nu graduate students from my colleagues' university who also needed a final graduate project. Both groups of students were interested in the comparative linguistics of Mi'kmaq and English child language acquisition. The two student teams worked as a collaborative group using a research methodology based on talking circles to gather information from each other about child language acquisition in Mi'kmaq and English. The research collaboration was very successful with the five students doing a poster presentation of their work at a graduate seminar (Alex et al., 2018).

When the teams were doing their talking circles and synthesizing the information they had collected, communication took place through different mediums: in-person talking circles, video conferencing research meetings and Facebook chats. The Facebook page was a closed working group which the students set up among themselves. As one of the supervisors, communication seemed to me to flow most coherently when the students exchanged their research findings on their Facebook page. The five students were all female, with the graduate students being a bit older than the undergraduate students. The CBU research team members where first-language Mi'kmaw speakers who had grown up in Mi'kmaw speaking households with parents and several grandparents who held university degrees. The graduate student

research team members were all first-language English speakers who had a least one university degree. One might think that there would not have been too much of an impediment for these two groups to work together. There was, however, one noticeable thing that occurred: the length of time it took for a person to begin to speak after another person had just spoken varied within the two groups of researchers. The first-language English speaking student researchers exhibited a faster conversational turn-taking time than the turn-taking time being used by the first-language speaking Mi'kmaw student researchers. The conversational turn-taking time employed when all the researchers talked together as one group was not in sync.

Conversational Turn-Taking

Conversation is an everyday process, and one about which we seldom think. It is governed by several principles, one being turn-taking (DeVido, 2014, p. 123). During verbal interactions, turn-taking is a linguistic and cultural pattern that regulates who is to speak during a conversation and when. Turn-taking refers to the length of time that occurs after the speaker says something and before the person spoken to responds (Ryan & Forrest, 2019).

Stivers et al. (2009, p. 5), in their comparative study of turn-taking in ten very diverse languages found "that turn-taking in informal conversations is universally organized so as to minimize gap and overlap..." However, they also found that "the regimentation of [turn-taking] tempo within a culture is tight, and that we come to expect a particular interactional rhythm..." Slight departures from the expected turn-taking creates an emotional unease in the speaker. "Speakers become hypersensitive to perturbations in timing of responses, measured in 100 ms or less" (Stivers et al., p. 5).

Returning to the senior CBU L'nu speaking students who teamed with the non-L'nu graduate students to do research, what happened was that the conversational turn transition speed for the Non-L'nu students was faster than that of the L'nu students. It was only a slight difference in response time, and as the students were not researching conversational turntaking, quantitative measurements of turn-taking gaps were not taken. None the less, the difference was observable within the dynamics of face-to-face conversations. There was a subtle enough difference in conversational response timing that the L'nu students felt as if they were being cut off just as they were about to respond to a non-L'nu speaker. Once we had a group discussion with all the student researchers about conversational turn-taking theory, it was interesting how quickly the information-sharing became more balanced. It was only by discussing conversational turn-taking transition speed and making what had hither to been unconscious conscious that more in-depth information sharing began to emerge between the research teams. The L'nu students realized that the Non-L'nu students were not trying to cut them off but were only trying to ease what they perceived to be conversational tension. After our discussion on turn-taking the Non-L'nu students tried to wait a little longer after they had spoken before beginning to speak again, thus, giving their L'nu research colleagues time to respond and engage.

Suppose we as L'nu and Non-L'nu scholars learn from each other's knowledge epistemologies and work as team academics. In that case, we have to be sensitive to each other's conversational

turn-taking rules. Some of us might have to force ourselves to "wait a little bit longer," perhaps to the point of emotional discomfort, to allow the person addressed to respond before we, the speakers, begin to speak again. Some of us need to be aware that our colleagues are not consciously trying to cut us out of the conversation by seemingly cutting us off just as we are about to respond. Perhaps this is why Indigenous information sharing was often grounded in a talking circle which, in actuality, is a listening circle; while keeping a "speakers list" during Euro-centric academic meetings was developed as a way to avoid "over talk," i.e. conversations with zero turn-taking transitions. In zero turn-taking transitions, the next speaker starts talking before the first speaker has finished.

Conclusion

As we begin to decolonize the academy, it allows for academics from many different cultures, language backgrounds, and epistemological positions to be heard within the same "research conversation." As academics, we first have to consciously become aware of the sociolinguistic patterning that each of us brings to the "act of having a conversation." The rules of verbal discourse used to transmit Indigenous versus Euro-centrically framed knowledge are not the same.

To share information verbally within a group so that all in the group understand the content of the information, speakers within the group need to be following the same conversational paradigms. As we strive in academia toward creating a trans-systemic Indigenous knowledge system that will stand on its own as a recognized epistemology and will take the best of both Indigenous and Euro-centric thought, we have to learn to communicate effectively; otherwise not all voices are heard. Little Bear (2009) states that, "epistemology speaks to theories of knowledge: how we come to know. How we come to know, in essence, is a methodology or a validation process. For Aboriginal peoples, knowledge is validated through actual experience..." (p. 10).

It is the experiential process of face-to-face dialogue that occurs between Indigenous and Non-Indigenous academics, in real-time, that will create trans-systemic Indigenous knowledge. The challenge then becomes how to make one set of conversational turn-taking rules which can be used to ground our real-time, face-to-face conversations.

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I want to thank the two anonymous reviewers for their constructive editorial comments. This article is not a quantitative research report on conversational turn-taking, nor is it a qualitative study. The article is a personal narrative of repeated lived experience involving Mi'kmaq/Non-Mi'kmaq conversational turn-taking within academia.

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References

- Alex, L., Denny, S., Ernst, S., Johnston, A., & Lenahan, S. (2018). Mutual learning about speech and language development: Conversations between L'nu speaking senior university students and non-L'nu speech Language Pathology Students. Poster session presented at Research Project Presentations: Dalhousie University School of Communication Sciences and Disorders, Halifax, NS.
- DeVito, J. (2014). Essentials of human communication (8th ed.). Pearson.
- Indigenous Affairs. Cape Breton University. (2020, November 13). https://www.cbu.ca/indigenous-affairs/
- Johnson, P. (1996). Micmac. In F. E. Hoxie (Ed.), Encyclopedia of North American Indians (pp. 376-8). Houghton Mifflin.
- Little Bear, L. (2009). *Naturalizing Indigenous knowledge: Synthesis paper*. University of Saskatchewan, Aboriginal Educational Research Centre & Calgary First Nations and Adult Higher Education Consortium.
- Ryan, J., & Forrest, L. (2019). 'No Chance to Speak': Developing a pedagogical response to turn-taking problems, *Innovation in Language Learning and Teaching*. https://doi.org/10.1080/175 01229.2019.1687709
- Stivers, T., Enfield, N. J., Brown, P., Englert, C., Hayashi, M., Heinemann, T., ... Levinson, S. C. (2009). Universals and cultural variation in turn-taking in conversation. *Proceedings of the National Academy of Sciences*, 106(26), 10587-10592. https://doi.org/10.1073/pnas.0903616106

Book Reviews $b \triangleright \ \geq \nabla_V \triangle \nabla^\circ$

Research and Reconciliation: Unsettling Ways of Knowing through Indigenous Relationships by Shawn Wilson, Andrea V. Breen, Lindsay DuPré (Eds). Toronto, ON: Canadian Scholars, 2020.

I read this book while involved in the University of Saskatchewan's 4th Annual māmowi *āsohtetan* (let's cross this together) Truth and Reconciliation Forum in the Spring of 2021. A resounding message from the keynote speakers was that meaningful reconciliation cannot be attained without addressing barriers to respectful relationships: inequities, racism, oppression, discrimination, elitism, and heteropatriarchy. Next, I heard that hope lies within Indigenous knowledges, which have teachings that inspire respectful relationships (e.g., all my relations, seven generations, medicine wheel teachings). These same messages emerged as I read and re-read *Research & Reconciliation: Unsettling Ways of Knowing through Indigenous Relationships* (Wilson et al. 2019).

This collection of 17 essays, which are edited by Shawn Wilson (Opaskwayak Cree), Andrea Breen (Western and Eastern European heritage), Lindsay DuPré (Métis), are directed towards Indigenous and non-Indigenous students, professors, administrators, and practitioners from all disciplines. As the subtitle suggests, the contributing authors pronounce critical unsettling positions to reconciliation and boldly share their insights and experiences in creative ways. In the introduction, Breen, Wilson, and DuPré comment, in the context of research, "We have understood [reconciliation] to mean many different things to people" and "We have also understood this word to be associated with exploitation and ongoing colonialism" (p. xi). The authors express that reconciliation is a word that needs unpacking because of its seemingly elusive nature and the tensions that have come to embody the concept. The engaging and impactful chapters provide an array of perceptions and experiences related to reconciliation and research through diverse forms of sharing knowledge: conversations with colleagues and trickster, photos, prose, satire, news clips, a love letter to youth, a 12-step program to reconciliation through instagram, poetry, song, drawings, and a community graffiti mural. The relationship between reconciliation and Eurocentric and/or Indigenous forms of research is demonstrated in thought-provoking ways, and the complexity of this relationship is made apparent by the many contributors in the book. I appreciated that reconciliation was examined from global perspectives — beyond Canada and beyond the Truth and Reconciliation 94 Calls to Action — and that the concept of reconciliation was made richer by the diverse Indigenous voices in the collection (e.g., Akearok & Sallaffie, pp. 229-239; Anderson & Mashake, pp. 241-253). I also appreciated the last section of the book, "Learning to Walk", because it provided examples of how research can support reconciliation, which includes addressing injustices, if the processes are respectful, genuinely participatory, and truly uplifting of Indigenous knowledges.

Significant themes emerged as I read the chapters, such as the range of intense emotions that accompany reconciliatory dialogue and actions and how racism, power, and privilege can

be disguised as reconciliation. For example, Whitlow and Oliver note that cultural bridging for reconciliation is difficult and can be very frustrating for Indigenous people that are expected to effectively translate relevant Indigenous cultural teachings in ways that non-Indigenous people can understand (p. 206). Much is lost in translation during this process. Throughout the book, questions are also raised about invisibility and the erasure of Indigenous voices, and the posturing of people with disparate positions and intentions. Breen asks settlers to reflect on their power and privilege, and the personal and professional changes they are making (if any) to support meaningful engagement with Indigenous peoples (pp. 49-58). She encourages settlers to ask: "in what ways do I benefit, historically and in the present, from White supremacy, colonialism? and what people are calling reconciliation?" (p. 55). Without respectful inclusion, engagement, and consultation in research processes, Indigenous peoples are left to feel that they are "hidden in plain sight" (Montgomery Ramirez, p. 66) and once again left with symbolic and tokenistic gestures. One group makes a strong call for more training in active listening and the reframing of research as competitive to collaborative and co-operative (King, Brass, & Lewis, p. 135) for university ethics boards, funding agencies, and those who are engaged in research that is reconciliatory in design.

Indigenist approaches to research are beautifully described and illustrated throughout the book. Indigenist research approaches are "based on an understanding that reality is relationships" (Wilson & Hughes, p. 8), and the methodologies are emergent (p. 9), experiential, and there is a responsibility to share the discoveries. Various authors throughout the book indicate that Indigenous methodologies require one to remember, be action-focused, engage in a cultural journey, resonate, care, walk with integrity, reciprocate, attend, be present, connect to spirit. This orientation to research locates land as teacher (aki gakinoomaagewin) and as a methodology (Ray, Cormier, Desmoulins, p. 75). The learning is multi-sensory, physical and spiritual. Whitlow and Oliver state, "Contrary to what Canada might think, we are not creating new Indigenous frameworks, we are simply introducing you to them. They might be new to the academy, but they have been in operation on our lands for tens of thousands of years. They are ancient" (p. 207). Indigenist researchers understand and respect these authentic and highly credible knowledges (Wilson & Hughes, p. 15).

Reconciliation makes many relational appearances in the book. It is embodied in a fish fry with colleagues, described as "sakihewaywin – love in action" (Wilson & Huges, p. 17), and framed by philosophies such as "indinawemaagaanidog – all my relations" (Anishinaabe) (Ray, Cormier, & Desmoulins, p. 81), and tentsitewaten-ronhste – we will become friends again (Mohawk) (Whitlow & Oliver, p. 206). The reader learns that reconciliation can also be enacted through Indigenous frameworks and models such as the the Piliriqatigiinniq model, "working for a common cause or we're all working toward a common good" (Inuktituk)(Akearok & Sallaffie, p. 232). Importantly, as many of the authors communicate, Indigenous approaches to research and reconciliation emphasize Indigenous self-determination and transformation. The reader is also provided with examples of reconciliatory research between Indigenous and settler people that begins with proper protocols and an invitation into territory, as is done in the edge

of the woods ceremony (Aluli-Meyer, Armstrong, Belanger, Carter, Derickson, Fogal, Kelly, Kenny, Magnat, Naytowhow, Ulehla, & Wuttunee, p. 159). From Indigenous perspectives, research in all forms should help us grow as human beings.

Story is recurringly identified as an ontology, epistemology, methodology, as a method, a means to reconciliation, and a force. Over the course of the reading, story is also described as having the power to change lives and societies, to initiate the reclamation of sovereignty, to liberate, carry, and release truth, to be testimony, and to heal and restore. As I read the collection I reflected on my stories, and I was reminded that these stories directly influenced who I have become. Wilson and Hughes recommend, "In the spirit of moving toward balance, it is necessary to reclaim a privileged space for these Stories and appreciate the sensitive political context which this communication takes space" (p. 12). We learn that language is limiting for story and much can be lost in translation. Penak (p. 141) explained the challenges related to adapting oral and performative versions of story into the written word. She reminds readers about the importance of having an active relationship with, and be stewards of, story and storytelling.

The contradictions and messiness of reconciliation also surface in the book (Whitlow & Oliver, p. 204). Penak cautions that reconciliation efforts can also delay, steer-away and make disappear "conversations of Indigenous self-determination" (p. 149) and the necessary systemic restructuring work that supports reconciliation that needs to happen. Breen comments that there are spaces sacred and exclusive to Indigenous peoples, so non-Indigenous people who frame their work as reconciliatory should respect and recognize that there are "spaces that are not for [settlers]. [Settlers] should not expect to have access to every aspect of knowledge, every tool, and every ceremony" (p. 154). Settlers are also asked to stand alongside Indigenous peoples to advance justice and challenge systemic barriers such as grant applications that do not acknowledge other ways of leading, organizing, and conducting research (DuPré, p. 3; Whitlow & Oliver, p. 199). Helferty encourages settlers to research their own experiences (p. 190) to further reconciliation. non-Indigenous researchers are also encouraged to asked hard (perhaps painful) questions that demand introspection and answers before projects with Indigenous communities begin: Who benefits from reconciliation? (Breen, p. 55); "[O]n whose terms is reconciliation (research) being based? Whose processes and values? Who has the power to decide the priorities of this work/relationship and whose language is being used?" (Wilson, p. 88); Do we concile or reconcile, and with whom? (Minton & Lile, p. 219); Who is doing the giving? Who is doing the work — Indigenous or non-Indigenous people? (King, et al., pp. 118-137; Whitlow & Oliver, p. 206).

As the subtitle suggests, this research and reconciliation book does unsettle traditional Eurocentric/Western ways of knowing and of "doing" research by bringing forth, in resounding ways, Indigenous perspectives on relationships. By reviewing these essays, I see how the book demonstrates a trans-systemic approach, showing respect for diverse perspectives and letting co-creation guide the engagement processes of research so reconciliation can be experienced in deeper forms. In all of this, the "how" (how we do things) is key to beginning and sustaining relationships between Indigenous and non-Indigenous peoples, which will contribute to research

that is trustworthy and mutually beneficial. The book is refreshing because creativity, honesty, and truth appear on every page. Through it, I have been inspired, captivated, rejuvenated, and provoked into anticipation of the future of research. How will research embody and initiate reconciliation between peoples and creation? Can it? I am hopeful. ni-gichi naennimak ni-tiniwaymahgunuk/ in honour of all my relatives.

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Treaty 6 territory & the homeland of the Métis

From the Editor f > 0 4 $\nabla d \Delta \supset 0$

Editor's Reflection on the Indigenous and Trans-Systemic Knowledge Systems Issue

Lori Bradford

As editor of the Engaged Scholar Journal, I, along with our generous reviewers, have been privileged with reading a variety of submitted articles over the last year. In these manuscripts, authors penned their knowledge and experiences of engaged scholarship with the hope that their work would appear in an upcoming issue. I get to experience the authors' joy when the manuscripts are accepted and shared with a community who will take up those learnings and build on them. I feel pride because our scholarship is dynamic, evolving, and synergistic.

As I read the submissions for this particular issue, I recognized my much deeper responsibilities as a well-educated, cis-gendered, white settler Canadian woman sitting in this editorial role. I am reminded that a larger societal shift is happening at this time; more countries are signing on to the United Nations Declaration



Lori Bradford Image credit: Victoria Schramm

on the Rights of Indigenous Peoples (UNDRIP). Even so, there are deeper questions, such as how UNDRIP, as a tool, is already being manipulated; whether adopting UNDRIP in some locations would constitute a step backwards; and whether adopting it, and other agreements like it, is ultimately a form of tokenism that will not compel restorative actions? Without enough Indigenous expertise in UNDRIP conversations globally, expertise shared so generously by the authors that contribute to this special issue, people privileged with white settlerhood, like me, don't know what we don't know about Indigenous lives. In this special guest edited issue, I initially relegated myself to quality control, to reader, to learner, thinking that it was not my place to regulate any part of this issue. And yet, Drs. Marie Battiste and Sákéj Henderson invited me in. They told me they wanted my voice, my experience, my language represented here too — as a trans-systemic contribution. If only all of us could convey that kind of mutualism. I challenge all of us to do so — and I share some ways how at the end of this reflection.

I have a duty, as the leader and decision-maker for ESJ, to ensure that the institution of publication that we belong to is more responsive for *all*. It is not enough to integrate (oh that word!) Indigenous Knowledge into ESJ's conventional form. In fact, it would be colonizing. That is why we came to decide on redesigning the whole issue. From the start, Marie and

Sákéj drove the processes for this issue. They customized the guidelines for peer review, which was something we had never done at ESJ. We also removed the Western formatting: our cover art would normally be picked from a selection of Canadian artists, overlaid with titles, dates, and hints at contents, and background coloured how I saw fit. Instead, we hired a young Métis woman, Ms. Kennedy Halcro, who is an artist and educator from Saskatoon, to design the layout. We also left my words to the end, so as not to front-load the issue with a Western perspective. In my reflection, I try to model allyship instead of Editorial power. Here, rather than priming readers on what I think they will find valuable, I share what I learned. In compiling this issue, I:

- 1. Experienced a pluriverse of teachings, as Koller and Rasmussen put forward. I learned how Indigenous Knowledge is ignored by many landbased learning pedagogues. I did not know what I did not know about this, but the authors modelled how to be honest about the limitations of my knowledge so I can improve learning for all, regardless of the context. In doing so, I confronted truths, narratives, and silences that were missing in my formal education, yet are required for our continued adaptation to a changing world. These missing stories are made vitally clear by McDermott and her colleagues. In the Exchanges section, Sa'ke'j and Leroy Little Bear give us insights into maneuvering around Eurocentric worldviews. I had not considered the many ways Indigenous colleagues did so before. As a result, I commit to honesty about what I have ignored in the past, and I commit to including multiple perspectives in my teaching and research practices from now on. I commit to inviting Indigenous peer review on my courses and manuscripts, at a time and in a way that is led by the reviewer, not me.
- 2. Learned, through Cajete's elegant teaching, that Native American culturally harmonized education has evolved around the problem of embracing *how* to do something in a way you have not done it before. He exemplifies that challenge with a graphic illustrating the curriculum process for Native American students. That figure counters the idea that education ought to be designed by self-defined experts conveying theoretical preparations for future situations that *may* occur in students' life or work experience. This resonated with me as a social scientist. I'm becoming more concerned with modeling to students that they may not know what they don't know; modeling who to ask and how and where to look for unknowns; and showing them how to practice reflexivity. I want my students to feel comfortable being uncomfortable in their self-appraisals, rather than making students memorize chapters of textbooks. I commit to teaching more about noticing ourselves and about the different *hows* of doing research and being in the classroom.

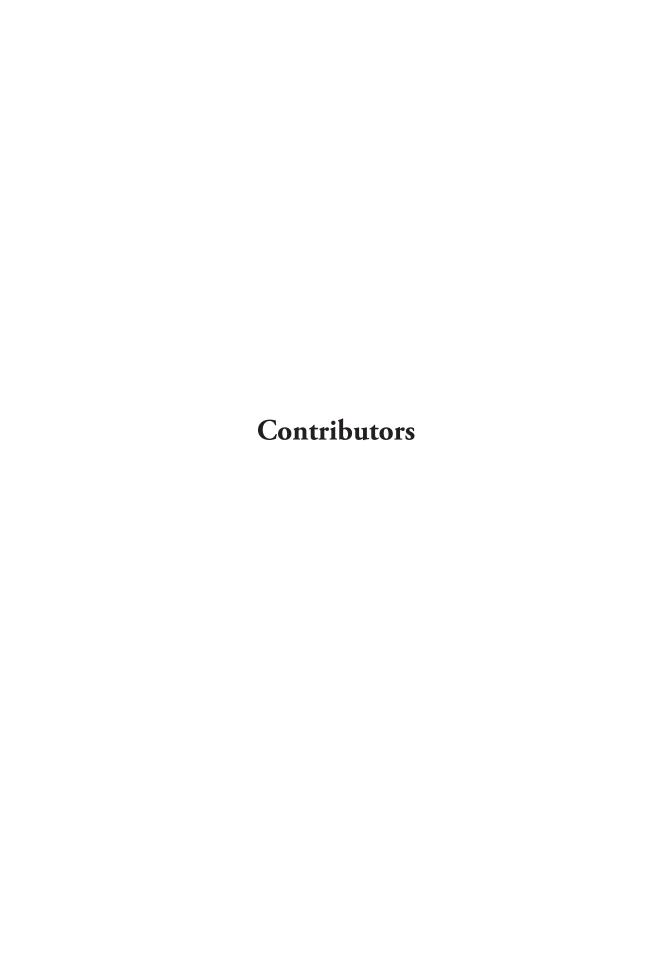
3. Learned that language is knowledge and learning a language is, as put by Whiskeyjack and Napier, reclaiming sovereignty, ceremony, and balance. I also need to learn to take my turn, as Inglis points out. To be a better ally, I commit to enrolling in an Indigenous language course in the Fall semester, and to encourage others to do the same. I commit to listening using all my senses.

I have a story to share about an incomplete act of allyship and doing better. With colleagues Lalita Bharadwaj and Karl-Erich Lindenschmidt, I published a paper in Society & Natural Resources in 2016 revealing that a number of major journals for natural resource management put up barriers to community members publishing their work. The paper grew out of multiple rejections one author had received when submitting papers with northern Indigenous individuals and groups as co-authors. We surveyed 11 natural resource management journal editors for their views on community-based scholars and citizen scientists being recognized as authors, and then built a typology from those results. It was disappointing how few of those editors could suggest a way that these authors could be included. Most said they should simply be listed in the acknowledgments section of the published papers, which, as a response, conflicted with international conventions of scientific authorship. While we provided alternatives and recommendations in the paper, I can now see how important it is for me to follow up and hold those journals/editors accountable to decolonizing their venues. Now that I have been the recipient of so much knowledge from this issue, I realize that other editors, like me, just don't know what they don't know when it comes to Indigenous Knowledge systems and insights. I commit to repeating that study, now that it is five years later, to monitor advances, applaud and raise awareness about venues that are adapting, and hold accountable those that have not even started conversations on their decolonization. I commit to doing this work with Indigenous colleagues so that they are listened to.

I have also learned some strategies for allyship from the papers in this special issue and from interacting with guest editors, authors, and peer reviewers in email exchanges and phone conversations. ESJ's community of reviewers gave us insights on the recursive process that occurs in the trans-systemic space, as the Indigenous ideas and thinking build, weave, blend, and contrast with Western Science, which in turn creates new ways of thinking about engaging with Indigenous communities. Through these interactions, ESJ's community breaks down barriers by enacting the lessons in this issue. First, we do so by listening to Indigenous people. The front cover's syllabics translate to "Listen to Us" and I hope all our readers will be open to the knowledge shared in this issue. Second, we overcome barriers in our own thinking by recognizing privileges. Practice listing your privileges. Do so out loud when introducing yourself, in papers, in class, or in the field, so others can help you recognize if there are privileges you are missing in your engaged scholarship, teaching, and practice. Say them out loud so your students and partners have a model to follow. Third, in this issue Kelly teaches us to honour the diversity of knowledge systems, and to do so by deliberately expanding the ones you rely on for your work. The benefits that accrue from being led to new ways of knowing improve the

lives of individuals and ultimately increase ethical actions in society, such as global evolution in the implementation and ethical adaptation of UNDRIP towards benefitting Indigenous peoples. I will honour the diversity of knowledge systems by giving Indigenous and transsystemic systems more time and attention, regularly. I will use sites like www.citeblackauthors. com to find authors I would not generally find on mainstream databases. I will use inclusive syllabus checkers, like that of Kim Case found at https:www.drkimcase.com/resources/, to make regular adjustments to my teaching practices. I also ask our readers to invest time and money into having Indigenous peer review of engaged scholarship. Another suggestion is to take time to learn a few words and their pronunciation related to your engaged scholarship in an Indigenous language, then learn how to use those words meaningfully in your research, scholarly, and artistic works and teaching. We can each take these small steps. I encourage white settler readers to take these steps, and I will report on my progress in the coming issues, as well.

I'm deeply grateful to the guest editors, Drs. Marie Battiste and Sákéj Henderson, for their teachings during the editorial processes and building of this issue. I'm deeply grateful to all those who contributed knowledge, who reviewed and shaped that knowledge for our readers, and who continue to share knowledge out there which may not be represented in these works, but is dynamic and evolving, just as we hope we are here at ESJ. I am also deeply grateful to our readers for your feedback. Please feel welcomed to email me at editor@esj.usask.ca to provide me with your advice and concerns. Thank you.



Kathleeen Absolon is *Anishinaabe* from Flying Post First Nation, Treaty 9, Nishnawbe Aski Nation. She is an Associate Professor in the Indigenous Field of Study and the Director of the Centre for Indigegogy in the Faculty of Social Work, Wilfrid Laurier University.





Kathy Bishop is a Scottish and European descent woman, an academic supervisor, and an associate professor and MA Leadership program head at Royal Roads University. She received her Ph.D. in Interdisciplinary studies. She is a passionate scholar-practitioner who has published on collaborative leadership, ethics, creativity, and action-oriented research.

Kori Czuy is Cree/Métis English/Polish. She was born on the Peace River banks in Treaty 8, Northern Alberta, Turtle Island, but grew up amongst the mountain ancestors in Treaty 7. Kori recently completed her Ph.D. in storying mathematics at the University of Calgary and has recently begun her journey at the Calgary Science Centre, opening up science to multiple ways of knowing and experiencing.



A *Tewa* Indian from Santa Clara Pueblo, New Mexico Gregory Cajete is an educator whose work is dedicated to honouring Indigenous knowledge foundations in education. He has worked for 21 years at the Institute of American Indian Arts in Santa Fe, New Mexico and also and is the former Director of Native American Studies and Emeritus Professor in the Division of Language, Literacy and Sociocultural Studies in the College of Education at the University of New Mexico.





Marie-Eve Drouin-Gagné is a postdoctoral researcher at the Institut national de la recherche scientifique (INRS) in Montreal. Her doctoral research focused on Indigenous higher education and decolonization. Her research interests include land-based pedagogy as a decolonial tool. Her postdoctoral research is about Montreal/*Tiohtià:ke* as an Indigenous place, using participatory cartography methodologies.



Melitta Hogarth is a *Kamilaroi* woman who is the Assistant Dean (Indigenous) and Senior Lecturer at the University of Melbourne. Melitta's interests are in education, equity and social justice. Her Ph.D. work, titled *Addressing the Rights of Indigenous Peoples in Education: A Critical Analysis of Indigenous Education Policy*, was awarded the Ray Debus Doctoral Award for Research.

Mike Holden is a Doctoral student at Queen's University and served as the Youth Leadership Facilitator for the Werklund School of Education at the University of Calgary. His research interests include assessment, teacher education, and equity. His professional interests include enhancing how we prepare emerging teachers and developing stronger collaborative networks between teacher educators in Canada.



Stephanie Inglis is Professor Emeritus in *Mi'kmaq* Studies and Linguistics at Cape Breton University. She has done research on the grammar and semantics of the Mi'kmaw language for over thirty years and is the founding Director of the *Kji-keptin* Alexander Denny *L'nui'sultimkeweyo'kuom*, the Mi'kmaw Language Lab of Cape Breton University.





Dara Kelly is from the *Leq'á:mel* First Nation, part of the *Stó:lō* Coast Salish. She is an assistant professor at the Beedie School of Business, SFU. Her research contributes to gaps in the literature on economic concepts and practices of the Coast Salish to build Indigenous economic theory.



Vicki Kelly is *Anishinaabel* Métis Scholar in the Faculty of Education at Simon Fraser University. She works in Indigenous Education and Ecological Education. Her research focuses are: Indigenous knowledges, practices, pedagogies, healing, cultural resurgence. She is an artist who plays the Native American Flute, is a visual artist, carver, and writer.

Eun-Ji Amy Kim is a former high school teacher and a curriculum consultant for Indigenous communities across Canada. Amy has collaborated with an Indigenous community (*Kanien'kehá:ka*) in developing a land-based K-11 science curriculum. She is a lecturer at Griffith University (Australia), School of Education and Professional Studies. Her current research focuses on Indigenous-settler relations, allyship education and land-based teacher education.



Katalin Doiron Koller is Acadian-Hungarian living in unceded *Wolastokuk*, New Brunswick, Canada. She is the owner of Earthonomical Policy Solutions and has worked with *Wabanaki* communities for over a decade. She is a doctoral candidate in human geography at Carleton University studying spaces of cross-cultural solidarity.





Sandra-Lynn Kahsennanó:ron Leclaire is a graduate student in the History Department at McGill University. Her thesis research focuses on the historical memory and the Indigenous oral history surrounding the *Beothuk* of Newfoundland. She currently works in education as a curriculum consultant in her home community of *Kahnawà:ke*, Quebec.



Professor Emeritus Leroy Little Bear was born and raised on the Blood Indian Reserve (*Kainai* First Nation) near Lethbridge, Alberta. He was the founding member of Canada's first Native American Studies Department and Canada's first Bachelor of Management in First Nations Governance at the University of Lethbridge, and the founding Director of the Harvard University Native American Program. He is recognized as an Eminent Scholar by the *Kainai* Nation and as a Distinguished *Nitsitapie* Scholar at the University of Lethbridge focused on breaking the boundaries between Indigenous and Eurocentric (western) sciences.

Jennifer MacDonald is a Doctoral candidate in the Werklund School of Education. Emerging from experiences as an outdoor environmental educator, Jennifer's research focuses on holistic ways of knowing and the dynamic meaning-making that can arise through lived experiences with the land. She is also a sessional instructor of Indigenous Education.



Mairi McDermott is Assistant Professor and Chair in Curriculum and Learning at the Werklund School of Education, University of Calgary. Her research broadly queries what kinds of teaching and learning can push us beyond the existing habits and assumptions of colonial ways of knowing, being, and relating in schools and society.





Jennifer Markides is an Eyes High Postdoctoral Fellow in the Werklund School of Education at the University of Calgary. She is Métis, and an Indigenous educator, researcher and activist. Her graduate research analyzed stories told by youth who transitioned from life-in-school during the 2013 Alberta floods through a holistic lens.



Kyle Napier is a *denelnêhiyaw* métis from Northwest Territory Métis Nation who has dedicated himself to Indigenous language reclamation. He worked with his nation for four years, and is now a graduate student through the University of Alberta.

Jacqueline (*Paquachan*) Ottmann is *Anishinaabe* (Saulteaux) from Fishing Lake First Nation in Saskatchewan. As of October 1st, 2017, Jacqueline became Professor and the inaugural Vice-Provost Indigenous Engagement at the University of Saskatchewan. She is as an international researcher, advocate, and change-maker whose purpose is to transform practices inclusive of Indigenous leadership, methodologies and pedagogies.



Kay Rasmussen is a mixed-race woman of Indigenous and European heritage. She holds a Master of Education for Change in Environmental and Sustainability Education from Lakehead University. Kay is also an education consultant working to support Indigenous land-based education in the early years.





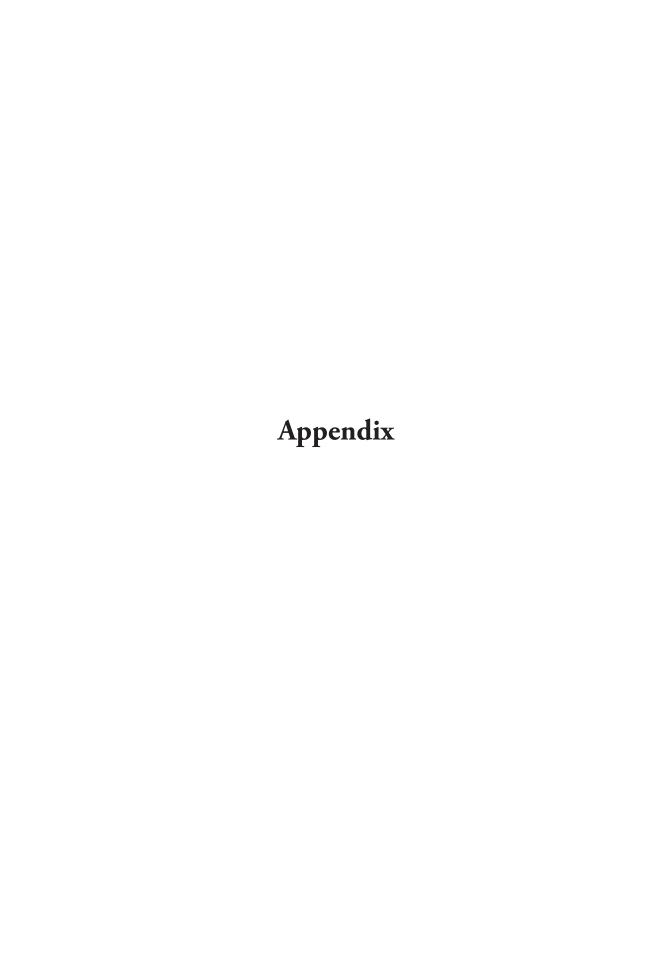
Christine Webster is a *Nuu-chah-nulth* woman from the Ahousaht Nation. She recently completed the Master of Arts in Leadership degree from Royal Roads University and is a doctoral student at the University of Victoria. Webster's current interest is in exploring Indigenous leadership and Indigenous-non-Indigenous relationships in higher education.



Lana Whiskeyjack is a treaty *iskwew* (woman) from Saddle Lake Cree Nation and is an assistant professor in the Faculty of Extension at the University of Alberta. In 2017, Lana completed her *iyiniw pimâtisiwin kiskeyihtamowin* doctoral program at University *nuhelot'ine thaiyots'inistameyimâkanak* Blue Quills.

Christine Woods is an associate professor in entrepreneurship and innovation in the Faculty of Business & Economics at the University of Auckland. Her research interests are in SME and family business, social entrepreneurship, and Māori entrepreneurship and entrepreneurial education. She is the founding director of Māori Maps (www.maorimaps.com).







L"PV"∆bへ / cahkipēhikana Plains Cree Syllabics

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- to promote and support reciprocal and meaningful co-creation of knowledge among scholars, educators, professionals and community leaders, in Canada and worldwide
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