

INDIGENOUS LANGUAGE REVITALIZATION

INNOVATION, REFLECTION AND FUTURE DIRECTIONS



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Cover Art

The cover for this issue was designed by Kari A. B. Chew and features the artwork of Namgis First Nation graphic artist Jamin Zuroski. The artwork is a visual expression of Indigenous scholarship for a video project called *Growing the fire within: Creating new adult speakers of Indigenous languages* (<http://hdl.handle.net/1828/12280>).

About the Contributors

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Nathan Brinklow is Turtle Clan Mohawk from the Tyendinaga Mohawk Territory on the north shore of Lake Ontario. He teaches Kanyen'kéha for Queen's University in Kingston, Ontario and works with Tsi Tyónnheht Onkwawén:na Language and Cultural Centre at Tyendinaga. He is an adult learner of Mohawk and PhD student at the University of Victoria.

Jack Kanya Buckskin is a Kurna, Narungga, and Wirangu man, born in Adelaide, who has dedicated himself to learning and sharing Kurna language and culture. He has been involved in the Kurna revitalisation movement for 15 years and continues to contribute to the development and teaching of Kurna language and culture.

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Khelsilem is a Skwxwú7mesh-Kwakwaka’wakw educator and community leader. He is a second-language speaker of Skwxwú7mesh Sníchim with eight years of experience teaching in community-based programs. His work focuses on the development of adult second-language speakers with high degrees of proficiency to aid in the full recovery and vitality of Skwxwú7mesh Sníchim.

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Jaylon Pila Newchurch, as a young Narungga and Kurna man, took Kurna classes in his secondary years at school with Jack Kanya Buckskin. Since then, Pila has worked with Tauondi College and the KWP Team and is now studying towards a bachelor's in media at the University of Adelaide, concurrently placed with the KWP Team on a cadetship.

Sheilah E. Nicholas is a member of the Hopi Tribe and professor in the Department of Teaching, Learning & Sociocultural Studies at the University of Arizona. Her research focus is Hopi language reclamation and Indigenous language teacher education. She is a Co-PI of a national study investigating Indigenous language immersion as an instructional innovation and its potential to benefit a wider population of Native students.

Taylor Tipu Power-Smith is a Kurna and Narungga mother of two. She comes from a line of powerful and inspiring women and is passionate about language and culture. After learning Kurna in 2012, Taylor went on to teach it for a number of years. She's now part of a media team that works to create and produce Kurna resources.

Anjilkurri (Rhonda) Radley is Birrbay/Dhanggati First Nation Australian and currently a PhD student at the Western Sydney University, NSW, Australia. As a leader in the revitalisation of the Gathang Language, Anjilkurri research interests include the usefulness of gesture to teach language and Indigenous pedagogy.

Charlotte Ross nitisithikāson. Montreal Lake Cree Nation ohci nītha. I was raised with Cree as my first language. I am a doctoral student at the University of Victoria specializing in Indigenous Language Revitalization. My current research interests include the use of technology in language learning to support adult silent speakers in language revitalization.

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Chester Schultz is a composer, pianist, BA Honours history. He has worked with Aboriginal cultural revivals around Adelaide for nearly 50 years: with the Centre for Aboriginal Studies in Music since 1973, and with Kurna, Narungga, and Ngarrindjeri language groups since 1990. His publications include *Our Place, Our Music* and KWP's songbook *Kurna Paltinna*.

Wilson de Lima Silva is an assistant professor in the Department of Linguistics at the University of Arizona. He is the director of the MA Program in Native American Languages & Linguistics (NAMA). Dr. de Lima Silva conducts research in the Desano and Siriano (two Tukanoan languages spoken in the Vaupés Region of Brazil and Colombia). Dr. de Lima Silva is engaged in exploring methodologies for language documentation and revitalization, including the training of students and community members in language research activities.

Georgina Tuari Stewart is Ngāti Kura, Ngāpuhi-nui-tonu, and Ngāti Whanaunga, Pare Hauraki. Has a background in Māori medium science teaching; interested in biculturalism and Indigenous research methodologies. Recently completed a Marsden funded research project investigating Māori medium doctoral theses. New book: Māori Philosophy: Indigenous Thinking from Aotearoa (Bloomsbury, 2020).

Tempestt Sumner-Lovett is a 29-year-old Aboriginal Australian Musician from the Ngarrindjeri Nation. Tempestt first began their career in music with their family band as a back-up singer travelling across the country and partly across the globe. Tempestt is mostly known as a solo artist writing their own music and lyrics and performing at various venues and festivals across Adelaide. They are currently a part-time trainee at KWP.

SXEDFELISIYE (Renee J-Sampson) is a SENĆOTEN Language Facilitator at the W̱SÁNEĆ School Board and an Instructor and The University of Victoria.

Kīmai Tocker is Ngāti Tūwharetoa, Ngāti Raukawa, Ngāti Maniapoto and Waikato. A lecturer in Te Kura Toi Tangata-School of Education at the University of Waikato in Hamilton. Kīmai's interests include Māori medium education and Kura Kaupapa Māori. She is working on a narrative approach in collecting stories about Māori experiences in education across generations.

Ferrin Yola Willie Nugwa'am Yola...k̓akut̓lan x̓an Kwak'wale' - I am Yola. . . I am learning Kwak'wala. I am also a mother of three, partner to a fellow Kwakwaka'wakw, and we are learning our ancestral language of Kwak'wala as a family. I am a doctoral student in the field of Indigenous language revitalization with the University of Victoria. I came into this program with intention to create space for learning my language and to explore the connection between language learning and healing. My family and I are currently living and learning on the ancestral lands of the Hul'q'umi'num' language and the Snuneymuxw people.

I,ÍYMET TFE SKÁL ŁTE

(Our language is beautiful)

In preparing to share the collective voices of this Special Issue journal, we begin by grounding ourselves in one of the languages of the homelands on which the University of Victoria sits, where the journal is housed on this day.

HIWESTES ØNES TELEKTES TE NE SKÁLS E TIÁ ÁNEØ. JI,IJEŁ SEN ØNES ČA,I E TFE
XAXE SCÁ ŁTE.

I am honoured to share some words and grateful that I am able to do such sacred work.

SXEDTELISIYE TE NE SNÁ Č,SE LÁ,E ET WSÁNEĆ. MEQ TE NE ŠWELOKE Č,SE LÁ,E
WSÁNEĆ. KÁYES OL I,TOTELNEW NE SKÁL. TES TE NE LOT NENE, FILEĆ SEN LE NE
SOŁ. TIME,SET SEN ØS I,TOTLENEW SENĆOTEN.

My WENITEM,KEN SNÁ is Renee J-Sampson. My family comes from the WSÁNEĆ territory specifically BOKEĆEN and WJOŁŁP. I have been a language learner since my eldest daughter was born in 2004. This is where I began my language journey. I started my journey for my children. My mother calls herself the lost generation, she speaks often of how the residential school, which all grandparents of mine attended, interfered tremendously with the passing on of language and culture. I grew up with this feeling of loss but was not able to articulate it until I was older.

I started working as a SENĆOTEN apprentice in 2009 at the WSÁNEĆ School Board. I was the first teacher at the LE,NONET SCUL,ÁUTW SENĆOTEN survival immersion school. I later became the SENĆOTEN kindergarten teacher for over 8 years in the Immersion stream at LÁU,WEL,NEW School (ŁTS). I graduated in 2014 with my Masters in Education with specialization in Indigenous language revitalization. I am currently a sessional SENĆOTEN instructor at the University of Victoria in the WSENĆOTEN,ISTW language revitalization diploma and I also teach language in the SENĆOTEN Bachelors of Education at UVic. I am currently working as the SENĆOTEN language facilitator for ŁTS and WSÁNEĆ Leadership Secondary School (WLSS). My dream is to see the very first cohort of immersion students graduate in the bilingual program and enter into the WSENĆOTEN,ISTW post-secondary program.

I offer now our purpose, our philosophy, for our children at our SENĆOTEN language survival school. SPEŁAKEN TFE STEŁITKEŁ ŁTE. Our children are our flowers, we must nurture them to grow. My elders have taught me ÁTOL EN ÁLI SNÁTWS - Respect your

beautiful personal gifts. All students have these gifts and strengths, and it is up to us to assist them in expanding their knowledge base in a respectful, caring way. Our Elders also shared that we must remind and root them to the ground, so that they will flower with their ancestors' teachings of respect for all things that walk, swim and fly on this earth. Reciprocal respect is the foundation of creating a healthy and strong community. I believe that instilling a W̱SÁNEĆ worldview is our way of decolonizing ourselves. Learning our ancestral language and in practicing our culture, we will follow a path to healing. When we speak our language to our community and to the children we are demonstrating the importance of holding on to our W̱SÁNEĆ beliefs.

This philosophy reminds us why we do what we do. I share it here in hopes that it may remind you why you do what you do, why you are reading this collection and what we may be able to achieve together or alone when we work hard, and never give up.

SĆÁ, ŁTE ŚWĶÁLEÇEN TTE LE,NONET SCUL,ÁUTW

ĆSE LÁ,E TTE XAXE TTE SKÁL ŁTE.
 U,DOT OL TTE SENĆOTEN ÁLE E TIÁ W̱SÁNEĆ.
 W̱UCIST TTE SKÁLs I, TTE Ś,XENANs ĆSE LÁ,E TTE ÁLENENEÇ TTE W̱SÁNEĆ.
 TE,ITKEN I,U TI TTE S,YESES SU ŚTENIST ÇENTOL E TIÁ ÁNEÇ I, ÇE,ÇÁÇELES E TTE
 ŚW,ĶÁLEÇEN E TIÁ W̱SÁNEĆ.
 SNINU SE TTE I,TOTELNEW I, SIÁM,SET SE TTE EŁTÁLNEW.
 SIÁM ŚWELOKE SU NIŁ.

Our language comes from our sacred one.
 SENĆOTEN is the original language of this emerging land.
 We must teach from the ways and beliefs of our W̱SÁNEĆ homeland.
 We will continue to value our truths, our history and will move forward with contemporary
 education rooted in our W̱SÁNEĆ worldview.
 Our program will model W̱SÁNEĆ disciplines and values to foster respected families.

HÁEQ ŁTE SE:

ŁŁŁŁŁ TTE ÁŁENENEŁ I, ET ŁNINEŁ TTE SKÁL ŁTE. NIŁ ĆELÁNEN TTE SKÁL ŁTE.
U STI ŁTE Łs I,ŁŁŁSILEN TTE SKÁL ŁTE. U, HÍ TTE WILNEW, KEN SU ŁŁŁ, NONET TTE SŁÁ,
ŁTE SKÁL.

I,ÍYMET TTE WILNEW. I,ÍYMET TTE WSÁNEĆ.
NETOLNEW YEW ŁTE OL.
HELIT TTE ĆELÁNEN ŁTE HIT SE E TIÁ TENEW

We must remember:

Our language connects us to our homeland. Our language is our birthright. It is important for us to continue to transmit our language from generation to generation. Only through immersion will our language succeed.

Our WSÁNEĆ people are beautiful. Our WSÁNEĆ Nation is beautiful.
We must be one mind, one heart, one nation.
Let our ancestral rights live long into the future on this land.

SXEDTELISIYE Renee J-Sampson
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INNOVATION, REFLECTION, AND FUTURE DIRECTIONS: AN INTRODUCTION TO THE SPECIAL ISSUE ON INDIGENOUS LANGUAGE REVITALIZATION

Kari A. B. Chew ¹
University of Oklahoma

Onowa McIvor
University of Victoria

Chokma, Kari A. B. Chew saholhchifo. Chikashsha saya. Chikashshanompa' ithanali. Chikashshiyaakni' attali. University of Oklahoma intoksalili. (Greetings, my name is Kari A. B. Chew. I am a citizen of the Chickasaw Nation and a Chickasaw language learner. I live in the Chickasaw Nation and work for the University of Oklahoma.)

tânisi, Onowa McIvor nitisithîkâson. maskêkow-ininiw îkwa moniyaw iskwêw nîtha. kinosao sîpi oci nîtha. nêhithawîwin ê-kiskinohamâsiwin. ləkʷəŋən askiy nîwîkin. (Greetings, Onowa McIvor is what they call me. I am Swampy Cree and Scottish-Canadian. I am from Norway House Cree Nation. I am learning my language—the Cree language. I live on ləkʷəŋən [Lekwungun] territory now.)

We acknowledge and respect the ləkʷəŋən peoples whose traditional territory the University of Victoria occupies and the Songhees, Esquimalt, and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

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We come together as guest co-editors of this 2021 special issue of *WINHEC: International Journal of Indigenous Education Scholarship* entitled, “Indigenous Language Revitalization: Innovation, Reflection and Future Directions.” The aim of this special issue is to bring together diverse voices from many involved in Indigenous Language Revitalization (ILR) from across contexts to share innovations and discuss shared aspirations for Indigenous language work. As we collectively envision future directions in ILR, we center hope and uphold Indigenous sovereignties in language reclamation work.

This issue shares stories and research across generations and spaces related to past, present, and future directions of ILR. Authors who contributed to this special issue come from and/or work with communities across North and South America, Aotearoa (New Zealand), Africa, and Australia. They are scholars, and many are community-based practitioners of ILR. Reflecting the core intention of this special issue to center Indigenous voices in ILR, every article is led or co-led by an Indigenous author or co-authors. Toward engaging in dialogue across contexts, we have organized collections of articles in this special issue around four key themes.

Language Education and Pedagogies in PreK-University Spaces

ILR scholars and practitioners are developing and using innovative pedagogical strategies to support language education. This collection of articles explores efforts in early childhood to higher education educational spaces.

Ontario-based scholars Aleksandra Bergier (Polish settler) and Kim Anderson (Métis) share how Indigenous language education at the university level can embrace a supportive, self-directed learning model aligned with Indigenous pedagogies to accommodate diverse learners, including those who carry intergenerational trauma.

This collective of authors: Jack Kanya Buckskin (Kurna, Narungga, and Wirangu), Taylor Tipu Power-Smith (Kurna and Narungga), Jaylon Pila Newchurch, (Narungga and Kurna), Tempestt Sumner-Lovett (Ngarrindjeri), Paul Finlay, Chester Schultz, and Rob Amery describe a collaboration between a language community and university with the establishment of Kurna Warra Pintyanthi (KWP), a committee of Kurna Elders, language enthusiasts, linguists, teachers, and researchers. This paper shares the work of this committee over the past two decades and the innovative strategies they have developed for language recovery of this small and “reintroduced” language.

Zimbabwean physicist Temba Dlodlo discusses his work translating physics terms into his mother tongue of isiNguni while advocating for the right of Indigenous students to education in their languages. The use of Indigenous African languages in education has profound implications for Africa’s participation in science and technology fields.

Georgina Tuari Stewart (Ngāti Kura, Ngāpuhi-nui-tonu, and Ngāti Whanaunga, Pare Hauraki) and Kīmai Tocker (Ngāti Tūwharetoa, Ngāti Raukawa, Ngāti Maniapoto, and Waikato) provide a holistic overview of Māori medium education in Aotearoa. They offer hope as they reflect on immersion education in te reo Māori, from early childhood to doctoral studies.

Sites of Community-Grounded Innovations

Scholars and practitioners continue innovation in community, the heart of language revitalization work. The following authors represent urban and urban-based Nation's efforts exploring and conveying possibilities for language revival work in differing and various contexts—teaching us that our languages live and can continue in all places and spaces.

Nicki Benson and Khelsilem (Sk̓wx̓wú7mesh-Kwakwaka'wakw) convey the story of Sk̓wx̓wú7mesh language revitalization in the form of a glossary. By exploring words and their context, readers are invited to make connections and reflect on new possibilities for language work.

Lindsay A. Morcom (Ardoch Algonquin First Nation) explores the experiences of urban language learners at the Kingston Indigenous Languages Nest (KILN) in Kingston, Ontario. This research affirms that language revitalization is about more than learning the language; it is also about deepening connection to culture and identity.

Yola Ferrin Willie (Kwakwaka'wakw & Hałtzaqv Nations) surveys the possibilities for urban language learning outside of one's territory. Her analysis extends to the restorative possibilities for language learning when connecting to land, particularly when it is not your own.

Technologies for Language Revitalization

For several decades, various forms of technology have been experimented with and employed in ILR, furthering the reclamation and revitalization work in our field. This collection of papers spans examining Indigenous leadership in technological advancements, using GoPro cameras to record forest walks with master speakers, and language resource website development.

Nathan Thanyehténhas Brinklow (Turtle Clan from Tyendinaga Mohawk Territory) examines Indigenous leadership within the development of language technologies. Walking readers through several examples, he encourages developers and collaborators to take an anti-colonial stance to Indigenous language digital work.

Mary Hermes (Lac Courte Oreilles Ojibwe), Meixi, Mel Engman (descendant of white settlers to the Great Lakes region), and James McKenzie (Diné) take up the intersection of language, land, and story through video-recording intergenerational (between Elders and youth) forest walks conducted in the language. Their paper illustrates the recording of walking and storying together as powerful tools for language reclamation.

Charlotte Ross (nīhithaw iskwīw), Joan Greyeyes (nēhiyaw iskwēw), and Onowa McIvor (maskēkow-ininiw) offer reflections on supporting ILR through technology. They story the development of the Circle of Indigenous Languages website, which provides access to nēhiyaw (Cree), Nahkawe, and Michif languages of Saskatchewan.

Storying Language Work Within and Beyond the Academy

Articles in this collection bring together groups of scholars to reflect on and share stories of pursuing community-engaged language work and research while working or studying at universities.

Storying their collective experiences of language reclamation from within and outside of the academy, Kari A. B. Chew (Chickasaw Nation), Sheilah E. Nicholas (Hopi), Candace K. Galla (Kanaka Hawai'i from Hawai'i Island), Keiki Kawai'ae'a (Keaukaha, Hawai'i of the Kanilehua rain), Wesley Y. Leonard (Miami Tribe of Oklahoma), and Wilson de Lima Silva (originally from Manaus, Brazil) offer a reflection on intentional language research. Their cumulative perspectives as practitioner–researchers–scholar–educators encourage readers to reflect on how and why we research, in ways that can and should benefit Indigenous peoples.

Using the metaphor of the 'a'ali'i shrub native to Hawai'i and the wáhta oterontonnì:'a (sugar maple sapling) native to the Haudenosaunee territory, Ryan DeCaire (Kanien'kehá:ka), Naupaka Damienne Joaquin (Hawaiian), Nicholas Keali'i Lum (Hawaiian), and Ian Nāhulu Maioho (Hawaiian) come together as emerging scholars to reflect on innovations in language revitalization from their respective Mohawk and Hawaiian communities.

Exploring research partnerships and the spaces within and between Aboriginal communities and universities, Anjilkurri (Rhonda) Radley (Birrbay/Dhanggati), Tess Ryan (Birpai), and Kylie Dowse (Gamillaraay) convey the challenges and benefits of decolonizing

universities. They explore their various roles and co-existence as insider-outsiders within their Indigenous language research work

Conclusion and Acknowledgements

We were honored to be trusted by the WINHEC leadership and Editor-in-Chief to host a special issue focused on Indigenous language revitalization. We see this group upholding the values they transmit, as, “dedicated to the exploration and advancement of issues related to Indigenous education, research, culture, and language central to the lives of WINHEC nations and members” (winhec.org/journal). On the eve of the UNESCO-declared International Decade of Indigenous Languages,² this collection offers an opportunity to engage with a diverse array of innovations in the field of Indigenous language reclamation, revitalization, recovery, and maintenance.

We acknowledge the wisdom and knowledges shared by all authors and also acknowledge the authors who shared their work and will continue development towards other forms of sharing—kinanâskomitinawaw, yakkookay iichimanhi, our heartfelt thanks. We would also like to acknowledge the strangeness inherent in insisting on positionality statements with each article to ground the work in person and place, while also enduring blind review. We understand many see this as an anti-Indigenous practice. Peer blind review has its merits, offering valuable and important feedback to authors, while protecting those who selflessly and voluntarily give their time to help improve authors’ work, but can leave the receiving

² <https://en.unesco.org/news/upcoming-decade-indigenous-languages-2022-2032-focus-indigenous-language-users-human-rights>

author feeling exposed and vulnerable receiving disembodied feedback and advice. We tried to mitigate that by owning the advice when it was ours as editors and especially when we agreed (or disagreed) with the reviewer's comments.

We acknowledge the limitations of this special issue. Every collection is but a moment in time and a snapshot of those who were either ready or able. We acknowledge that the papers shared in this collection are also in one settler language. In that sense, this is a collection of innovative papers but not in any way a cohesive reflection of our field. To that end, we encourage you to engage further to fully explore the state and innovations in our field, and especially to engage with resources led and produced by Indigenous peoples such as the Crowshoe et al. (2021) collection, as well as organizations like Natives4Linguistics (<https://natives4linguistics.wordpress.com>).

Finally, we offer our thanks to our collaborators: Editor-in-Chief Dr. Paul Whitinui; UVic Libraries; copy-editing assistance from Madeline Walker; and generous funding from both the President's Chair program at UVic and the Social Sciences and Humanities Research Council whose support assisted this special issue to come to fruition.

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“STEP INTO LEARNING WHEN READY”: TOWARDS A STRENGTH-BASED APPROACH TO INDIGENOUS LANGUAGE EDUCATION IN A UNIVERSITY SETTING

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Abstract

In the midst of nation-wide efforts to forge a path to reconciliation, Canadian universities have been working to transform the academic structures that perpetuate colonial patterns of domination and the erasure of Indigenous knowledges. Indigenization efforts often embrace the transfer of Indigenous languages as one of the critical pieces of Indigenous knowledge rejuvenation. However, for many Indigenous peoples, learning an Indigenous language brings up pain associated with family history and the legacy of residential schools. Language reclamation in a university environment occurs within the ongoing impact of colonial oppression and historic trauma transmission and therefore requires a trauma-informed approach. Based on qualitative research conducted at the University of Guelph with a goal to learn about the current Indigenous language education needs and challenges of the campus community, this paper explores a language revitalization strategy that accommodates different motivations and types of interest in Indigenous language learning as opposed to a “one size fits all” approach. The findings of the study point to a self-directed, non-penalty learning model aligned with Indigenous pedagogies. Within this model, language learning occurs in the right circumstances and at an appropriate time while respecting different levels of motivation and varied capacities for knowledge intake. The paper examines how an academic institution can shape the future directions in post-secondary Indigenous language programming by creating supports that address the impacts of intergenerational trauma and respond to diverse learning needs.

Keywords: Indigenous language revitalization, university education, Indigenizing the academy, trauma-informed education, Indigenous pedagogies

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<http://dx.doi.org/10.18357/wj1202120273>. Special Issue on *Indigenous Language Revitalization: Innovation, Reflection and Future Directions*, Guest Co-Editors Drs. Onowa McIvor and Kari A. B. Chew.

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Introduction

Over the last decade, Indigenous and allied scholars have persistently advocated for decolonization of the academy (Battiste, 2013; Brant Castellano, 2014; Gaudry & Lorenz, 2018; Kuokkanen, 2011; Mitchell et al., 2018). “Indigenization,” used as part of this larger project of decolonizing the academy, is an umbrella term addressing a variety of endeavours aimed at integrating Indigenous perspectives and ways of being into the experience and delivery of post-secondary education. It ranges from long-term comprehensive strategies attempting to deconstruct the colonial ideologies and practices that underlie the academy to quick-fix (and much needed) solutions such as boosting the number of Indigenous faculty members.

Language revitalization plays an important role in Indigenization processes. Forty-six percent of the world’s languages are at risk of disappearing and many of these languages are Indigenous (Campbell & Belew, 2018). In order to draw attention to the progressive language loss, the United Nations has declared an International Decade of Indigenous Languages, set to start in 2022. The Los Pinos Declaration [Chapoltepek] (UNESCO, 2020) outlines the key principles, goals, and outcomes of the International Decade, which seeks to mainstream Indigenous languages across public policies including those related to education, culture, media, environment, health care, and employment.

Canada is home to more than 70 Indigenous languages belonging to 12 language groups (Statistics Canada, 2017); however, the majority are in decline with a decreasing number of speakers (Brittain, 2002; McIvor et al., 2009; Shaw, 2001). The Truth and Reconciliation

Commission of Canada (2015) stressed the right of Indigenous peoples to preserve their ancestral languages and urged post-secondary institutions to foster language and culture development in higher education. Recommended actions include creating university and college degree and diploma programs in Indigenous languages and providing funding to educate teachers about integrating Indigenous knowledge and teaching methods into classrooms. A growing number of Canadian universities are now responding to the Truth and Reconciliation Commission of Canada (TRC) Calls to Action (2015) with respect to Indigenous language education by offering programs in Indigenous languages, creating language research and training centres, co-creating language courses through partnerships with Indigenous communities, and supporting immersive, community-based experiential learning (Bliss & Breaker, 2018; Council of Ontario Universities, 2017; Czaykowska-Higgins et al., 2017; Green, 2017; McCue, 2016; McIvor & Anisman, 2018). To our knowledge, no university in Canada offers a PhD program specific to an Indigenous language or languages.

Within the Canadian context, Indigenous language loss is the result of the colonial state's systematic efforts to dismantle Indigenous cultures through genocide, forced relocation, oppressive policies and legal frameworks, the Sixties Scoop and the residential school system (Bombay et al., 2009; McIvor & Anisman, 2018). Contemporary scholarship on language reclamation indicates that Indigenous and minority language use occurs within the ongoing legacy of colonial oppression and historic trauma transmission, which have been deeply detrimental to the holistic wellbeing of individuals and communities (Meissner, 2018; Skrodzka et al., 2020; Whalen et al., 2016). The intergenerational trauma associated with the residential school system, where Indigenous children experienced severe punishment for

speaking their languages and practising their cultures, continues to negatively impact the success of Indigenous students today, pointing to the need for trauma-informed pedagogical approaches (Bombay et al., 2013; First Nations Centre, 2005; Gaywish & Mordoch, 2018; McIvor et al., 2018; Mordoch & Gaywish, 2011; Ontario Federation of Indigenous Friendship Centres [OFIFC], 2016). Gaywish and Mordoch (2018) describe a trauma-informed approach to education as one in which people who are engaging with the students (teachers, program planners, and administrators) understand intergenerational trauma and are able to create responses that facilitate healing.

Acknowledging the effects of trauma and building trust are also fundamental to trauma-informed education. In a study involving urban Indigenous high-school students in Ontario, the OFIFC identified the following practices as necessary for developing trauma-informed education: recognizing Indigenous culture; forming respectful, trusting, and supportive relationships; acknowledging teachable cultural content such as Indigenous languages, histories, and art; cultivating an awareness of how trauma impacts Indigenous students' school experiences; ensuring urban Indigenous peoples are included in trauma-informed educational planning; and using multi-sector approaches to conduct research and create policy on how schools can create trauma-informed environments (OFIFC, 2016). Other key components of trauma-informed approaches may include adopting individualized learning and fostering holistic education through formal and informal pedagogies (Aguiar & Halseth, 2015).

In spite of stressors that stem from historical trauma and interfere with Indigenous peoples' learning as they work towards healing and recovery, academic environments can create unique opportunities for nurturing Indigenous identity and Indigenous knowledge and language revitalization and can contribute to building meaningful settler allyship. Indigenous students, scholars, and Knowledge Keepers increasingly note the potential of post-secondary institutions to spearhead social change and positively impact the health of Indigenous campus community members by becoming meaningful sites for language learning (Czaykowska-Higgins et al., 2017). Post-secondary institutions can be places where many Indigenous learners experience Indigenous ways of being and knowing for the first time (Cull et al., 2018; Mitchell et al., 2018; University of Guelph, Mohawk College, & Six Nations Polytechnic n.d.). Following this strength-based approach, our paper presents the key results of research involving campus community members at the University of Guelph. In our report on the findings below, we start with the current gaps and obstacles with respect to culturally safe Indigenous language programming at the University of Guelph and then offer insights and analysis on future supports needed to create new, exciting venues and mechanisms for Indigenous language delivery.

Methodology and Locating Ourselves

The authors of this paper identify as a Métis scholar, writer, and educator working in the discipline of Indigenous Studies (Anderson) and a Polish settler researcher who has been exploring language revitalization strategies in collaboration with Indigenous communities (Bergier). Together, we embarked on a research journey to learn how the University of Guelph—situated on the Dish with One Spoon territory and the treaty lands of the

Mississaugas of the Credit (and at the time of the study a home institution to both of us)—can facilitate a safe and strength-based environment for Indigenous language learners while addressing a sense of cultural loss and linguistic insecurity.

Our study employed qualitative research methodologies involving thematic analysis of interview and workshop material (Braun & Clarke, 2013) and Indigenous research methodologies emphasizing the value of community engagement towards the revitalization of Indigenous knowledge, attention to relationships, and strength-based vs. deficit approaches (Drawson et al., 2017; Smith, 1999; Tuck, 2009; Wilson, 2008). Our team began with an environmental scan of the current Indigenous language education initiatives, needs, and challenges, and then we sought out stories from the University of Guelph campus community. In collaboration with the Indigenous Student Centre (ISC), we held interviews and conducted workshops using “kitchen table theory and methodology” (Farrell-Racette, 2017) and the Métis notion of “visiting space” (Carrière & Richardson, 2016). Our goal was to collect stories through the use of welcoming working spaces that foster inclusiveness, collective dreaming, connection to land, and creativity. In so doing, we sought to honour Wahkotowin—a Cree principle underscoring the importance of being related to each other and all things in creation (Anderson, 2011; Reder, 2007; Robbins et al., 2017).

We gathered data from 25 interviews with campus community members and through one land-based and one art-based workshop attended by a total of 13 participants. The workshops involved an Elder’s teachings and sharing circles with a focus on Anishinaabemowin. The project engaged both Indigenous and settler campus community

members: students, faculty and staff, as well as Indigenous Elders and Knowledge Keepers who provide supports to the campus community. We conducted one-on-one interviews using a semi-structured questionnaire. The workshop participants were recruited by posters, and the interview participants were invited through our professional contact list or via email using publicly available contact information. We also advertised our workshops through the university's Indigenous Student Society and ISC networks to ensure the participation of Indigenous youth and to provide them with an opportunity to voice their needs and express their diverse identities, relationships, and responsibilities in relation to Indigenous languages. Interview and workshop transcripts were coded thematically using NVivo qualitative analysis software.

A starting place for us was that most buildings at the University of Guelph are named after university senior officials and educational philanthropists, with no reference to the traditional territories Guelph is situated on nor the Indigenous peoples who have occupied them. As part of our land-based workshop, we invited students, faculty, and staff members to take a unique walk around campus and use Anishinaabemowin to symbolically re-name several university buildings with a help of an Anishinaabe Elder and artist Rene Meshake. The Anishinaabemowin word bundles² were gifted by Rene in reference to specific buildings and were inspired by stories the participants shared with us about the everyday campus environments where they live, study, and work. Rene connected these stories with teachings

² As explained by the Anishinaabe Elder Rene Meshake, the process of creating Anishinaabemowin word bundles consists of breaking down words to unpack their meaning through storytelling. See his work in Rene Meshake and Kim Anderson, *Injichaag: My Soul in Story, Anishinaabe Poetics in Art and Words* (University of Manitoba Press, 2019).

about kinship, land use, trapping, and hunting specific to his home territory. The participants shared their thoughts about the walk during a sharing circle combined with a “Soup and Bannock Day” at the ISC.

During our art-based workshop at the ISC, the participants created a collaborative art piece inspired by the concept of Anishinaabe birch bark scrolls. Instead of birch bark, the participants used colourful images torn out of magazines, creatively reconfigured to create a vibrant collage filled with new meanings and the collective understanding of Indigenous language revitalization and stewardship of the land. As the participants were explaining the meaning of their individual art pieces during a sharing circle, Rene gifted them with humorous stories and word bundles inspired by what he saw in the scroll. Both workshops provided for a rich audiovisual documentation and several creative outputs such as digital stories, word-bundle teaching sheets, and students’ artwork.

Indigenous Language Learning Landscape in Canadian Post-Secondary Education

Currently, more than 30 Indigenous languages are taught at Canadian universities (Universities Canada, 2017). Programming varies institutionally and may include courses, certificates, minors, and majors, as well as Indigenous language revitalization undergraduate and graduate programs. Degree programs are relatively rare. Some noteworthy examples include the Mohawk and Cayuga Bachelor of Arts at Six Nations Polytechnic, the Bachelor of Arts and Honours in Cree and Saulteaux at First Nations University of Canada, a three-year undergraduate Anishinaabemowin program at Algoma University, and Simon Fraser University’s Linguistics of a First Nations Language Master of Arts. The University of Guelph’s

School of Languages and Literatures started offering its first-ever Indigenous language (Anishinaabemowin) introductory course in the fall of 2019.

Several post-secondary language revitalization initiatives highlight the importance of reconciliation in action and commitment to serving local Indigenous communities. One example of such an approach is St. Xavier University's decision to offer introductory and advanced Mi'kmaq language classes in response to the call of Mi'kmaq community to help with the revitalization efforts (Association of Canadian Deans of Education, 2011).

Three main strategies in formal adult Indigenous language acquisition are language classes, group-based immersion, and individual, self-directed approaches such as Master-Apprentice Program (MAP) and Accelerated Second Language Acquisition (ASLA) (McIvor, 2015). Immersion has been reported as one of the most effective strategies for revitalizing Indigenous languages and producing fluent speakers (Grenoble & Whaley, 2006; Hermes, 2007; Hinton, 2003), and research has demonstrated that this method has a positive impact on enhancing students' overall academic achievement (Harrison & Papa, 2005; McCarty, 2003; McIvor, 2005). In line with these findings, several post-secondary institutions are implementing or planning to implement partial or full immersion approaches in Indigenous language education. For example, Six Nations Polytechnic commissioned a study about critical paths to second language acquisition of Onkwehón:we languages with the participation of the teachers, learners, students, speakers, and administrators of Six Nations' community language programs. This study defined the components critical to acquiring the Onkwehonwehnéha, created a speaker profile, and examined efficient strategies in

improving language proficiency³ for the purpose of creating a critical mass of second language speakers at Six Nations. The recommendations include establishing and maintaining four-year adult immersion programs within an interactionist approach that offer at minimum 3,600 hours of contact time, necessary to successfully move the learner through the five stages of language acquisition specific to Onkwehón:we languages (Green, 2017).

In some instances, the efforts and priorities pursued by the universities with respect to Indigenous language revitalization appear to be ambiguous and limited to the realm of symbolic recognition. Initiatives such as developing a single language course or creating campus signage in Indigenous languages may be perceived as superficial if not accompanied by multipronged strategies aimed at addressing systemic barriers and designing solid educational pathways for those committed to attaining language fluency.⁴ Certainly, some post-secondary institutions, for example Gabriel Dumont Institute, jumpstarted their language education by building awareness and intellectual curiosity around Indigenous languages as a step towards further educational pursuits such as learning in a community setting (Sterzuk & Fayant, 2016). Others, like the University of Victoria with its sophisticated ladder approach and a comprehensive Indigenous language revitalization degree program, address multiple goals at once by producing language speakers, teachers, planners, and advocates. This is achieved through a system of offerings informed by the Indigenous communities and language stakeholders that allows the students to move through

³ Language proficiency is defined as “the ability to use a language in real-world situations, in a manner acceptable and appropriate to native speakers of the language” (Kahakalau, 2017, p. 3).

⁴ Fluency can be described as a “speedy and smooth delivery of speech without (filled) pauses, repetitions, and repairs” (De Jong et al., 2015, p. 224).

community immersion and a series of certificates and diplomas in order to achieve Indigenous language proficiency and teacher qualifications (Czaykowska-Higgins et al., 2017; Liddicoat, 2018; McIvor & Anisman, 2018; McIvor et al., 2018).

When analyzing the state of Indigenous language delivery at Canadian universities, it is important to differentiate between aspirational reconciliation and decolonial resurgence (Gaudry & Lorenz, 2018). The latter requires the universities to advance a “re/connection to the land, language and people of this land . . . and support those land, language and cultured based organizations that have already been doing indigenization work . . . but haven’t had the financial support” (Gaudry & Lorenz, 2018, p. 224). This differentiation is especially relevant in the view of the findings of the First Peoples’ Cultural Council Report on the Status of the B.C. First Nations Languages, which states that “current Western education models are failing Indigenous peoples; things need to be done differently. Language instruction (ideally immersion) should be the keystone of educational policy” (p. 29). The report urges the universities “to respond to community needs by building programs that work towards building fluency” and “prioritize and support increased language teacher training” (Dunlop et al., 2018, p. 29). As noted by Corbiere (2019), if universities wish to play a leading role in supporting or advancing Indigenous language reclamation, they should create full-time, tenure-track, and tenured positions for Indigenous language teachers; support them in developing urgently needed, comprehensive learning materials; and help implement methods that actively foster continuous exposure to Indigenous languages.

Trauma, Language Loss and Experiences of Indigenous Learners

The population of Indigenous students at Canadian universities is very diverse in terms of professional and educational backgrounds, age, community of origin, residency, mobility patterns, cultural affiliation, and Indigenous language competency (Cull et al., 2018; Environics Institute, 2010). Indigenous peoples who come to post-secondary education may face a wide array of identity-related challenges, such as a sense of disparity and disconnect from communal life and extended kinship system, as well as the need to find viable, culturally appropriate services (Carli, 2012; Cull et al., 2018; Indspire, 2018). Furthermore, these individuals find themselves in different places in terms of exploration of their cultural identity. Coming from diverse backgrounds, members of Indigenous communities represent different levels of cultural awareness. Many do not grow up with opportunities to explore Indigenous teachings and encounter limited options to learn about their ancestry through the school system. They may begin the self-exploration journey in their adulthood and strive to piece together the stories of the past. Such attempts, however, are not always nurtured by a supportive educational environment, especially when the students are tokenized and expected to have extensive cultural knowledge or language that wasn't shared with them (Profitt, 2000; Young et al., 2012).

Intergenerational trauma rooted in colonial oppression, and specifically the trauma associated with the residential school system, continues to severely impact the educational experiences and learning outcomes of Indigenous peoples in Canada, putting them in an extremely vulnerable position when confronted with mounting social and academic pressures. Similar to symptoms suffered by residential school survivors, the subsequent

generation of Indigenous peoples may also be highly susceptible to stressors that originate from unresolved grief such as thoughts associated with the loss of language, land, and culture, and may in turn experience more elevated levels of psychological distress (Whitbeck et al., 2004; Bombay et al., 2013). In addition to having their lives shaped by emotional responses to historic wrongs, Indigenous learners pursuing post-secondary education may struggle with the ongoing effects of trauma “manifested as self-doubt, feelings of incompetence, living with alcohol and addictions, difficult family dynamics, and difficulty coping with the stresses and challenges of being a student” (Gaywish & Mordoch, 2018, p. 11). They are also likely to experience a disrupted sense of belonging and a fear of not having enough knowledge about their heritage (Young et al., 2012). The struggle becomes painfully visible in the classroom setting, where the Indigenous students tend to be singled out for participation under an assumption that they are knowledgeable about Indigenous issues and should therefore eagerly share a “community experience,” such as living on reserve (Borrows, 2010).

Similarly, the fact of not knowing one’s ancestral language or having limited language proficiency can generate profound feelings of loss, shame, personal failure, and cultural incompetency among Indigenous non-speakers as well as dormant or incipient speakers (Albury, 2015; Bergier, 2015). The efforts required to learn an Indigenous language are tremendous. Being asked a seemingly simple question such as “do you speak your language?” can cause members of Indigenous communities to feel ostracized and unfairly judged for not having the knowledge they are expected to have (Dion & Salamanca, 2014). Indigenous youth can perceive language loss as a deeply personal experience, while disregarding structural and long-term colonial processes such as oppressive laws, intergenerational trauma, and

displacement that contributed to language dispossession and shaped their identities as non-speakers, “forgetters,” or “linguistically insecure” individuals (Wyman, 2012, p. 203).

Findings

Navigating the challenges: Personal struggles, institutional barriers and the fear of unsafe learning environments

The troubling experiences described above resonate with stories recounted by several Indigenous participants in our study wherein they indicated feelings of shame and dispossession associated with the inability to speak their ancestral language or with not speaking it well enough. These feelings impact their willingness to pursue or continue Indigenous language learning. Among the Indigenous staff and faculty who shared their language stories with us, this sense of shame and loss was often exacerbated by statements from peers implying that not knowing one’s language is synonymous with not knowing one’s culture. These painful feelings often coexist with a conviction that language revitalization is indeed a vital component of Indigenous resurgence and a significant step in rectifying the wrongs of assimilative policies. However, a fair amount of personal healing and solid institutional and community supports are often needed before an individual is ready to engage in Indigenous language education. It is important to note that the discourse equating not knowing one’s language with not knowing one’s culture points to a narrow purist understanding of what it means to thrive as an Indigenous person. It delegitimizes the wealth of other identity markers and cultural practices that have been kept alive at great cost by Indigenous communities. Contrary to that discourse, several participants asserted that the

ability to speak an Indigenous language is but one of many components of dynamic, ever evolving, and vibrant Indigeneity.

The settler participants' attitudes towards learning Indigenous languages through campus-based activities were also reflective of how their identities might factor into the learning process and how they might position themselves within these initiatives. One settler participant disclosed that they did not grow up with knowledge about Indigenous issues and expressed anxiety about not fitting in/not behaving correctly in an Indigenous language course. Other settler participants discussed the need to embed language revitalization within the broader context of a shared history. They suggested creating preliminary learning opportunities to get a better perspective of the current Indigenous-settler relations and to understand how Indigenous languages were impacted by colonialism.

Most Indigenous and settler participants viewed learning an Indigenous language as a demanding process that requires a great deal of personal sacrifice and a multipronged support structure. Several participants made a distinction between "learning an Indigenous language" and "becoming familiar with an Indigenous language." They saw the former as an intimidating task to be undertaken by a smaller group of committed learners while the latter was perceived as a more general endeavour with the participation of a broader campus community. Participants associated learning an Indigenous language with high levels of proficiency—a challenging goal and one that would be difficult to accomplish by all. Several participants, however, thought that the University of Guelph should offer both a pathway for highly engaged learners to achieve proficiency and, at the same time, opportunities for

students and employees to learn about culturally relevant vocabulary and acquire basic communication skills in an Indigenous language.

There were many comments about challenges related to heavy workload and limited availability to engage in language activities. Students reported experiencing significant pressures in terms of their academic performance and achieving a desirable Grade Point Average (GPA). Some students would welcome an option of taking an Indigenous language as an elective because their current course load allows them to engage in few extracurricular activities. Others preferred an option to pursue Indigenous language learning as additional to their normal course of study. The early career researchers who spoke with us acknowledged that an investment in Indigenous language activities (and other types of Indigenous cultural programming for that matter) might pose a career risk given their teaching, research, and service load. Learning an Indigenous language is not currently considered to be an official upgrade in professional skills at the University of Guelph, although several Indigenous faculty and staff members indicated that a change in that regard would certainly be welcome.

Some Indigenous participants spoke about the lack of respectful acknowledgment of the use of Indigenous languages in their academic work. Although the official university discourse promotes inclusivity, it is not always embraced as an institutional practice. One individual reported receiving pushback after using Indigenous words in their written assignment. Another participant said that in addition to teaching Indigenous languages, the academic

leaders and educators should also respect and encourage the use of these languages in research.

Although most participants agreed that it is important for the campus community members to learn an Indigenous language—at least to some extent—and pointed out that the university has a fundamental role in creating non-elitist and accessible learning options for a variety of audiences, some individuals questioned whether the academic institutions are truly capable of creating culturally safe language programs that follow the holistic principles of contextually rich land-based education. Participants raised concerns about implementing language initiatives without proper consultation and engagement with Indigenous peoples. They questioned promoting an academic understanding of an Indigenous language rather than a community-based one, as academic programming may result in taking the language revitalization leadership and funding opportunities away from Indigenous communities. Some participants were also worried about racist attitudes and potential pushback against Indigenous language initiatives that may taint the experiences of prospective learners. Nevertheless, participants agreed that preserving Indigenous languages in all institutional domains, including academia, is an urgent task. They stated that offering post-secondary opportunities for language learning is a goal that needs to take precedence over the fear of unsafe educational environments, cultural appropriation, and the possibility of mishandling Indigenous content.

Setting new directions for the post-secondary Indigenous language education: An empowered learner is a self-directed learner with adequate institutional supports

Several Indigenous research participants indicated that pedagogical practices that accommodate personal vulnerabilities could remediate psychological harms associated with self-critical perfectionism or the fear of “not being good enough.” Most of the Indigenous staff and faculty also noted the fundamental importance of cultural safety to a positive post-secondary language learning experience. Overall, the following components were viewed as critical to creating a safe learning environment: kind, gentle, and culturally knowledgeable teachers; a caring space for honest conversations and for the participants to share their challenges and struggles if desired; and a fun, self-directed pedagogical model that rewards all efforts and recognizes that making mistakes is key to learning.

A number of participants considered it essential for language education to be firmly embedded in Indigenous ways of knowing and being; this came up especially among the Elders who repeatedly spoke of the need to build wellness and support the development of a language learner as a whole. Participants who were familiar with the verb-based and action-oriented structure of Anishinaabemowin felt it was imperative for the future students to “learn by doing”; to perform the language through their speech and bodies, preferably in a culturally meaningful context, enhanced by storytelling and seasonal observations. Storytelling would allow the learners to embed the language in the land—connecting it back to the sounds heard in nature—and in relationships with each other. Some of the settler participants echoed the words of Indigenous Elders who often emphasize that there is no real reconciliation without the reconciliation with the land—the source of sustenance for all. They

described reconciliation as deep listening—being attentive to Indigenous concepts that refer to interrelationality and a sense of home.

Indigenous faculty, staff, and Elders raised the idea of a teaching lodge. They envisioned this as an egalitarian, ceremonial space joined together by reciprocity and shared intentions—a community circle where everybody can express their unique gifts and responsibilities regardless of proficiency levels. For example, one Elder described Anishinaabemowin as an expansive language with multiple levels of communication and noted that the learning strategy should reflect this reality through a dynamic back and forth within a circle of practitioners who hold different pieces of language wisdom and are co-creating their learning experience.

Another issue discussed by the participants was the diversity of students' identities and interests in language learning. These individuals find themselves in different roles and places in terms of asserting connection to their cultural practices as Indigenous peoples and fulfilling their responsibilities as allies in the case of the settler learners. When we asked the Indigenous campus community members about their interest and motivation in Indigenous language learning, the responses varied considerably. Some individuals perceived Indigenous language acquisition as a rite of passage, a process that's sacred and fundamental to reclaiming Indigenous heritage, recreating Indigenous homelands, understanding the complexity of ancestral teachings, and revealing the truth of who they are as people. Others saw Indigenous language learning within a university setting as a potential incentive for young people to reconnect with their communities and learn about their culture with a

renewed interest that they can subsequently share with their peers. Some participants didn't see Indigenous languages as indispensable to personal cultural reclamation. To those participants, learning a language would mean enhancing and deepening an already existing understanding of one's culture and responsibilities. Similarly, for individuals who identified as being of mixed Indigenous/non-Indigenous ancestry, language learning was but one component of identity negotiation, although it was seen as helpful in strengthening kinship with the Indigenous side of their family and community. One participant viewed language learning as an intimidating first step in exploration of one's ancestry and preferred to delve deeper into other aspects of Indigenous culture.

When we discussed these issues with the settler participants, many talked about the shared responsibility to honour the land and its original stewards by supporting Indigenous peoples in language revitalization efforts. While recognizing that as settlers they continue to benefit from Canada's colonial past, they also acknowledged the sense of solidarity originating from experiences of displacement, discrimination, and dispossession some newcomer groups share with Indigenous peoples. Furthermore, learning an Indigenous language in a family-oriented intergenerational context would be meaningful to settlers who wish to pass the history of the land, including place and food names, to their children. Other participants brought up their responsibilities as professionals engaged in work with Indigenous communities. These individuals saw picking up some language as vital to relationship building and understanding of Indigenous teachings, but also to professional development.

Without dismissing the importance of earning academic credits for Indigenous language activities, several participants discussed combining the credit system with a non-penalty, strength-based model of language education where learning would occur in the right circumstances and at an appropriate time while respecting different levels of motivation and varied capacities for knowledge intake. For example, the participants suggested an option to take a language course multiple times until both the learner and the instructor agree that the knowledge was grasped to a sufficient extent and in a good way. The non-penalty model also recognizes that knowledge seekers need to step away from their learning commitments if the moment is not right, if they need to focus on fulfilling responsibilities to their families and communities, and for a variety of other individually-focused reasons. Participants stated that taking a break should happen without fear of failing a course/exam and the pressure to achieve a predetermined level of language competency. They pointed out that this approach should be complemented by an access to the community of practitioners—an established support system for the students to fall back on if at some point they choose to resume language learning. Furthermore, the participants thought that learners' performance should be evaluated within open-ended, individually crafted formats that demonstrate a personal level of language understanding and accommodate different learning styles (examples may include making a video, telling a story, presenting art or poetry, or engaging in an experiential activity).

A number of settler and Indigenous participants thought that the access of Indigenous students to language learning opportunities should be made a priority in order to accommodate the needs of those who didn't have the chance to learn their ancestral

languages in a family/community setting or for those who need to apply the language knowledge in their research projects. The participants also acknowledged that some of the environments dedicated to language transfer, and particularly the healing ceremonial spaces, should also understandably prioritize the access of Indigenous peoples.

The research participants made it clear that language revitalization is only one component of a collective decolonization journey. Hence, the institutional supports should not be limited to language development but should encompass greater inclusion of Indigenous knowledges across the university initiatives. This was described by some of the participants as the “incremental process of culture change” that may require, for instance, incorporating a full-time Elders’ council into the university structures and building governance models that give Indigenous peoples control over a broad range of matters that affect their interests within an academic setting, such as the power to make financial decisions about Indigenous language support.

Several participants noted that instead of being restricted to classroom or workshop learning, Indigenous language use should pervade different social contexts on campus. Participants offered several examples of Indigenous language use domains, including digital signage as well as multilingual street signage on campus; inclusion of Indigenous vocabulary in the naming of food items in the cafeteria; as well as in the naming of buildings, offices, gardens, and outdoor kitchens. Other suggestions included creating spaces for immersion such as students’ language houses; pairing the campus and Guelph maps with Indigenous historical place narratives and etymological information; and using Indigenous vocabulary in essays,

research papers, reports, theses, and presentations. For those students and researchers who wish to apply Indigenous vocabulary in their academic work, the participants proposed the creation of a living language database with a list of words and their use vetted by language keepers and practitioners.

Some participants noted that the pathway to Indigenous language revitalization starts prior to implementing language activities on campus. They noted there might be reluctance among Indigenous students to self-identify for fear of potential discrimination and that academic institutions have an important role to play in breaking down barriers, reaching out to Indigenous communities, and building inclusive environments where Indigenous cultures and languages can thrive. The examples they provided included building pathways into degree studies for Indigenous peoples and creating academic bridging courses for mature Indigenous students. Other recommendations focused on the inclusion of Indigenous language components in curriculum throughout the university's academic programs, inviting language keepers to class as guest speakers, and approving Indigenous language courses as electives across all colleges and departments.

The participants pointed out that a university commitment to supporting Indigenous language resurgence ought to involve long-term funding and assistance toward developing teaching resources, including language materials and applications. This could result in a gradual strengthening of institutional capacity to deliver language programming so that it might eventually evolve into a degree program. Several participants saw it as vital that the institution incorporate Indigenous language keepers as tenured academic staff and as

language resource experts, as this would provide support for students who are interested in incorporating languages into their projects. This would also build capacity when paired with succession planning and empower the new hires to take the lead on the curriculum development. The staff and faculty members felt that it would be immensely helpful if the university officially recognized Indigenous language training (adult immersion, language camps, master-apprentice programs) as part of professional development for Indigenous and allied faculty and staff.

Discussion

Language revitalization within the university setting is a significant step towards reconciliation and a critical priority in the implementation of the TRC Calls to Action. Determining the desired level of Indigenous language competency is complex, and although the literature points to the importance of building proficiency and the creation of new adult speakers and teachers (Czaykowska-Higgins et al., 2017; Dunlop et al., 2018; Green, 2017; McIvor et al., 2018), it became clear in the course of our research that the University of Guelph should offer diverse learning options targeting the audiences who wish to reach basic language competency along with those committed to attaining proficiency. Supporting specific language initiatives is not enough to move beyond aspirational reconciliation (Gaudry & Lorenz, 2018). Language revitalization strategies within post-secondary institutions must also focus on removing systemic barriers that prevent students from using Indigenous languages in different social domains on campus, and they must create institutional pathways to increase Indigenous enrolment and nurture inclusivity. Language

use and visibility at the University of Guelph were viewed as key to raising awareness about Indigenous peoples' cultural continuity—an everyday act of resurgence and perseverance.

Within this push to integrate Indigenous language learning in post-secondary institutions, several of those we interviewed shared concerns about the lack of culturally safe environments. They called for spaces where Indigenous campus community members who experience impacts of historic loss in their daily lives can safely express vulnerability, assess personal readiness to learn with the support of peers, and set individually tailored language learning goals. What we heard during our interviews and workshops was that a caring space for language learners to express their needs and build on the skills and interests they already have is as critical as developing an innovative curriculum. Although the participants did not explicitly refer to these practices as trauma-informed, their descriptions of a desired learning environment were generally in line with scholarship on trauma-informed approaches from an Indigenous perspective. Themes such as individualized learning strategies (Aguiar & Halseth, 2015), a focus on cultural safety and Indigenous content (OFIFC, 2016), and the acknowledgment of impacts of intergenerational trauma (Gaywish & Mordoch, 2018) recurred at various points throughout our research. As suggested by McIvor et al. (2018), issues of trauma and pain associated with language loss impact both the Indigenous language mentors and students but may be remediated through targeted approaches such as instructor–learner agreements that describe the supports needed to create a safe environment for language recovery. Based on our findings, such agreements could specify the needs, interests, and motivations of learners and mentors; address their identity and kinship responsibilities; and determine what constitutes a satisfactory level of language

knowledge using individually crafted assessment strategies. Lessons learned in the context of trauma-informed education in urban Indigenous communities, and specifically the importance of building trusting relationships between students and people in positions of authority within the school system (OFIFC, 2016), are certainly applicable to university Indigenous language program design. Trauma-informed education may be enhanced through culturally appropriate, meaningful dialogue between the prospective learners and the university officials, teachers, educational planners, curriculum developers, and administrators.

Navigating the diversity of interests and motivations requires attentiveness to students' language learning histories and connecting teaching strategies to their goals, strengths, preferences, background knowledge, and experience (McIvor, 2015). One way to address diverse learning needs and build on the existing resources and skills of students is to offer a multitude of experiential entry opportunities to language learning. Participants in our study recommended activities such as cooking classes using traditional Indigenous foods; medicine, arts, and beading workshops; storytelling sessions; service and relationship building opportunities in Indigenous communities; land-based programming, for example language hikes or canoe trips; and seasonal camps and family/intergenerational learning activities.

What stands out as being of particular significance—and what may further enrich the current discussion about trauma-informed education within a university setting—is the participants' suggestion to foster a non-penalty model that would allow the learners to take a language course/participate in a language learning activity multiple times. From this standpoint,

strengthening of the institutional capacity around Indigenous language delivery would not be limited to formal offerings within the academic credit-based system, but it would also incorporate semi-formal language initiatives that may or may not be counted towards credits on a case-by-case basis.

In a study about the interplay between trauma and resilience in the post-secondary educational experiences of Indigenous adult learners, Lindstrom (2018) notes that “in suffering we foster our resilience but this resilience is not confined to individual mettle but cultivated in relationships and sources of inspiration which are strewn along our life pathways and nudge us onward” (p. 179). Establishing a core community of practitioners (a teaching lodge) who would share their knowledge of language and cultivate meaningful relationships in a relaxed, land-based and family-friendly setting could potentially manage the threatening aspects of language acquisition, such as self-critical perfectionism and fear of failure. As we completed this work, a group of Indigenous community-engaged scholars put forward a proposal for “Nokom’s House”—an Indigenous land-based research lab and a “grandmother-centred” space that could address several recommendations of our study by facilitating opportunities for creative endeavours, ceremony, visiting, learning, cooking, and language work. This is but one example of how our findings might add to language revitalization efforts undertaken at Guelph and elsewhere.

Conclusion

We set out to investigate the possibilities for integrating Indigenous language learning at the University of Guelph, and in so doing, to add to the scholarship on Indigenous language

learning at a time when institutions are exploring how they might “Indigenize” the experience and delivery of post-secondary education. Our research demonstrates that strength-based, trauma-informed approaches are necessary in order to provide culturally safe learning opportunities for Indigenous language learners. We confirmed that trauma-informed education is a good pathway for Indigenous language learning because of the shame and a sense of cultural dispossession among Indigenous peoples who have lost their languages due to assimilation policies. Building on the tremendous work of language revitalization in other post-secondary institutions, involving course work, group-based immersion, and self-directed learning, our findings indicate that a multi-pronged approach is a must. According to our research participants, Indigenous language learning would ideally involve curricular and extracurricular opportunities, including safe spaces for Indigenous pedagogies and land-based learning. We are hoping that all post-secondary institutions will eventually offer prospective language students a meaningful learning continuum with an abundance of access points to Indigenous languages and that our research may advance this work.

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INNOVATIVE STRATEGIES FOR REINTRODUCING A SLEEPING LANGUAGE: HOW A COMMUNITY–UNIVERSITY PARTNERSHIP SUPPORTS THE REVITALIZATION OF KAURNA, THE LANGUAGE OF THE ADELAIDE PLAINS, SOUTH AUSTRALIA

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Abstract

A collaboration between the Kurna community and the University of Adelaide is long-standing. This collaboration was formalised in 2002 with the establishment of Kurna Warra Pintyanthi (KWP), a committee of Kurna Elders, language enthusiasts, linguists, teachers and researchers. Commonwealth funding enabled KWP to establish a small part-time team in 2012 based at the University of Adelaide to support the reintroduction of the sleeping Kurna language of the Adelaide Plains by producing resources and undertaking research. This paper shares the work of the KWP Team, which is guided by the Kurna concept of *yaityarni-apinthe* “actively Indigenising,” manifested through Kurna icons on playing cards, adaptation of games, adoption of Kurna names, developing Kurna terms for English concepts and so on. In the absence of first-language speakers, Kurna is reintroduced by finding niche uses for the language. In this paper we share innovative strategies used

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alongside long-standing practices, such as song, language classes, and immersion activities to reintroduce a sleeping language within the Kurna community and reach out to an English-speaking audience, both Indigenous and non-Indigenous.

Keywords: language reclamation, decolonisation, Kurna language, collaborative Language revitalization, language and electronic media

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Introduction

A remarkable long-standing collaboration working towards the revitalization of the Kurna language has been forged between the Kurna community and the University of Adelaide over nearly three decades. The Indigenous co-authors of this paper are younger members of the community and were all first employed by the University of Adelaide through Kurna language projects, dating back to 2006 in the case of Jack Kanya Buckskin, 2010 for Power-Smith, 2017 for Newchurch, and 2020 for Sumner-Lovett. These younger members of the team are being mentored in Kurna language work and media production by Amery and Finlay as described in this paper, and in turn, serve as mentors to more recent recruits. Buckskin, Power-Smith, Newchurch, and Sumner-Lovett have taken up the challenge to carry on the Kurna language movement with the passing or retirement of the Kurna language pioneers: Dr Alitya Wallara Rigney, Dr Lewis Yerloburka O'Brien, Stephen Gadlabarti Goldsmith, Cherie Warrara Watkins, Ngarrpadla Josie Agius, and others.

Author Introductions

Buckskin - My Kurna language journey commenced in 2006, following the suicide of my sister. I joined my uncle Gadlabarti's Taikurtinna Kurna dance troupe and he encouraged me to join Kurna language classes. Steve Gadlabarti Goldsmith was the key member of the KWP Team from its establishment in 2012 up until his untimely death in 2017. Gadlabarti was a mentor, role model and visionary. He often spoke of language enabling speakers to "hold their heads high and walk tall" and was a champion of "indigenuity" (combining *Indigenous* and *ingenuity*).

I embraced the Kurna language and made it my own. I wanted to be able to speak it fluently as I had heard it spoken in class. In 2008 I co-taught the Kurna class with Amery and from 2009 taught it myself. I then taught Kurna in schools, getting my head around different teaching styles needed. I needed fluent oral language with younger children who could not read or write. I fell in love with teaching Kurna. In one year, I was teaching all age levels from kindergarten to adults. I was surrounded by Kurna day and night, so by the time I had my own children, I had a good foundation. My children gave me the opportunity to use the language at home as well. I might say *Ipiti-ana padni! Ninku tiyarla wirrkantu!*² (Go and have a shower! Brush your teeth!). My daughter would do it, but then I'd ask her "What's the word for shower?" and she'd have no idea. It's not formal language learning. I tried to embed Kurna in my everyday life, teaching my fellow footballers and poker players key phrases, creating opportunities for them to learn.

Power-Smith - I was tricked into working with KWP by my mother Katrina Karlapina Power who told me that they needed an extra voice to produce a radio show. It would only take a couple of hours I was told. A couple of hours turned into weeks and numerous recording sessions. Initially I was unimpressed (to say the least), but that quickly turned to gratitude once I connected with the team and started hearing language that gifted me a whole new world to explore, only this one felt like home. For me now, at 28 years of age, my vision is clearer than it has ever been. The baton has passed to me, and now it is my time to stand up for all the people that stood before me. It's my responsibility to take Kurna language as far

² Following linguistic conventions, Kurna words are written in italics so that they stand out in the text. The intention is to draw attention to them, notwithstanding the policy of this journal to normalise Indigenous terms.

as I can. Firstly, I want to see Kurna language mandatory in schools. I want it to become the language of the Adelaide Plains and most importantly, I want our babies to grow up speaking their mother's tongue, and I plan to dedicate my entire life to make this dream a reality.

Newchurch - I am doing a cadetship with the KWP Team whilst studying media full-time. Through the cadetship, I can gain practical experience in a range of Kurna media production and develop my Kurna language skills at the same time. I am being mentored by Paul Finlay, who has a wealth of experience in the industry. It is important for us, as Indigenous people, to gain these skills so that we can express ourselves and our culture on our own terms.

Sumner-Lovett - I have joined the KWP Team more recently. As an Indigenous musician and songwriter, I have found the space to express myself and give voice to my culture through song. I have now found a passion for making music centred around culture.

Finlay – I came on board as media mentor when the KWP Team was established in 2012. I work alongside the Kurna language workers providing hands-on training in all aspects of media production, including scriptwriting, filming/recording and editing.

Schultz – I complement the KWP Team as an independent researcher. I first worked with Kurna in 1990 contributing my expertise as a musician and composer to the songwriting workshop held in Ngarrindjeri, Narungga, and Kurna. I have researched local music traditions in-depth. My role with KWP is focussed on historical research of Kurna place names. I regularly attend Kurna Warra Karrpanthi (KWK) meetings to share my expertise.

Amery - I am the lynchpin in the relationship between the Kurna language movement and the University of Adelaide where I am employed as a permanent academic. I have used this position to obtain Commonwealth government funding which enabled the establishment of the KWP Team and ongoing employment of Kurna language workers. In addition to my role as manager of the project, I act as consultant linguist, teach Kurna linguistics, and carry out ongoing research into the use and structure of the Kurna language. My approach to research is action research, involving Kurna people at every step of the way.

Kurna people, employed by the University of Adelaide independent of Amery, have also played a significant role in this work. Professor Lester Irabinna Rigney, son of leading Kurna language pioneer, the late Dr Alitya Wallara Rigney, served as the Dean and Professor of Indigenous Education from 2016 to 2017. More recently, KWK director Rod Midla O'Brien has been engaged by Wirrtu Yarl'u as Cultural Advisor, whilst many other members of the Kurna community have forged their own relationships with the university through Welcome to Country performances, their role in public artwork creation, or engagement in projects of varying kinds. In their own ways they have reinforced the importance of the Kurna language within the tertiary sector and beyond.

Yaityarni-apinhi - Decolonising

The Kurna language movement has always had a decolonising agenda, but as a re-awakening language without native speakers, Kurna people recognise and accept the important role that linguistics plays in the reclamation of their language. As yet, there are no formally trained Kurna linguists with postgraduate qualifications, though Buckskin for one

now has a deep knowledge of the language and a firm grasp of many fundamental concepts in linguistics through working alongside linguists and through his own efforts to learn and teach the language.

Training, mentoring and capacity building, discussed in more detail later, are at the core of the Kurna language movement, so that Kurna people will continue to be in a better position to run all aspects of their language programs in future. Buckskin formulated the term *yaityarni-apintheta* for the decolonising process using his knowledge of Kurna word-forming processes. Yaitya was defined by Teichelmann and Schürmann (1840) as “proper; own; native; fresh” observing the usages *yaitya warra* “one’s own language”, *yaitya miyu* “countryman” and *yaitya kauwi* “proper (i.e., fresh) water” (p. 59), (where *warra* is “throat; voice; speech; word; language etc”, *miyu* “man; person” and *kauwi* is simply “water”). So *yaitya warra* is an “Indigenous language,” *yaitya miyu* an “Indigenous person” and *yaitya kauwi* is “fresh water.” *Yaityarni-apintheta* consists of four morphemes *yaitya* + *-rni* + *-api* + *-ntheta*. The final morpheme *-ntheta* is simply the present tense marking, and its absence would mean that the action took place in the past. The second morpheme *-rni* is the inchoative “to become.” So *yaityarnintheta* would mean “becoming Indigenous” or “becoming proper.” The additional morpheme *-api* is a causative “to make,” invoking agency on the part of the subject of the verb. The entire word then means “making it become Indigenous or proper” or as we have translated it, “actively Indigenising.” The grammatical structure of Kurna differentiates between “Indigenising” where it is a process that just evolves, that is, *yaityarnintheta*, versus “actively Indigenising” as a result of deliberate action, that is, *yaityarni-apintheta*. The latter more accurately reflects the philosophy and practice of KWP and KWK.

The two meanings of the word *yaitya* documented by Teichelmann and Schürmann (1840) is a fortunate happenstance with the strong implication that the Indigenous way is the proper way.

The concept of decolonisation is one that has been promoted by numerous writers including Indigenous linguist Leonard (2017) and Fitzgerald (2018). Stebbins et al. (2018) refer to a decolonising linguistics. For the Kenyan writer Ngugu wa Thiong'o, decolonisation begins with reclaiming language.³

Language Reclamation

The term language reclamation is used variously by different writers in different contexts. In South Africa, the term was used by black militant writers in the final years of apartheid to reclaim their right to speak Afrikaans with pride as their personal language and as the "language of liberation" (Van Heerden, 1991, p. 12). Afrikaans had been linked strongly with the white Afrikaner ruling class and specifically with the hated apartheid policies prior to the African National Congress winning power in 1994. Leonard (2017) uses language reclamation as part of a decolonising strategy, stating that language reclamation is an "effort by a community to claim its right to speak a language and to set associated goals in response to community needs and perspectives" (p. 19). In Australia the term has been used in relation to sleeping or awakening languages that no longer had speakers where the language was being reclaimed or retrieved from historical records. In the Australian Indigenous Languages

³ Mekanaka Tuwe, "Why Decolonisation Starts With Reclaiming Language" 8 June 2018 https://www.vice.com/en_nz/article/9k8zja/why-decolonisation-starts-with-reclaiming-language.

Framework, language renewal was used for languages where a significant amount of vocabulary, phrases, and expressions were known and used within the community, though the language was no longer spoken fluently. The term revitalisation was used for languages where there were at least some remaining fluent speakers, though the language had diminished in its usage and efforts were needed to bring the language back into full usage. Leonard (2017), for one, uses the term reclamation for these situations where the Australian Indigenous Languages Framework (AILF)⁴ uses revitalisation, whereas in North America revitalization is used more broadly.

The Kurna Language of the Adelaide Plains

Kurna is the original language of land now occupied by the city of Adelaide, the capital of the state of South Australia, and the surrounding area called Adelaide Plains. With colonisation by England in 1836, Kurna lands, though never ceded, were taken by the alien invaders, who were at first regarded by Kurna people as the returned spirits of their ancestors. Europeans were referred to as *pinti miyurna* (men/people of the grave). Kurna people bore the brunt of colonisation in South Australia, despite initially keeping their distance from the colonists, perhaps because of earlier activities by sealers kidnapping their women. Two colonists, James Cronk and William Williams, each went out of their way to make contact with Kurna people, persuading several groups to visit the English encampment at Pathawilya (Glenelg). The first time Kurna people were in a court of law, they were there as the plaintiffs when two sailors Hoare and Moon stole their belongings.

⁴ The national Australian Indigenous Languages Framework has enabled the introduction of accredited Aboriginal and Torres Strait Islander language programs at senior secondary level since 1994.

Through the sealer Cooper, who served as their interpreter, the Kurna men asked that the accused be let off. The newspaper article at the time (*South Australian Register*, 1837, p. 4) portrayed the unnamed Kurna men in very positive terms.

The initial years of colonisation were relatively peaceful, with Kurna leaders appointed as honorary police constables and attending regular meetings with the chief of police. However, it wasn't long before Kurna people were pushed aside, and the relationship soured. The Kurna population plummeted as a result of introduced diseases including smallpox, syphilis, typhoid, and influenza. Despite the establishment of a school in 1839 by German missionaries where the Kurna language was used as the medium of instruction, the Kurna language was silenced within three decades. It was no longer used on an everyday basis. The few remaining speakers were dispersed. The Kurna school at Pirltawardli was closed by Governor Grey in 1845 and the children were sent to the English-only Native School Establishment. With the establishment of Poonindie Mission near Port Lincoln in 1850, Kurna children were sent far away from their homeland to distant Barngarla lands.

With the closure of Poonindie Mission, the residents were sent to Point Pearce and Raukkan. But it wasn't until after the 1967 referendum, whereby Aboriginal people were included in the national census and the Commonwealth parliament was given the power to pass laws with respect to Indigenous Australians, when numbers of Aboriginal people were able to return to the Adelaide Plains from the Point Pearce and Raukkan missions in Narungga and Ngarrindjeri country, though some, such as the respected Kurna Elder Auntie Gladys Elphick, were brought to Adelaide during World War II to work in munitions factories.

Upon returning to Adelaide, some Nungas⁵ began re-establishing connections with their country. At first, Kurna people were most concerned with protecting their sites, such as the freshwater springs along the coast to the south of Adelaide and making a connection through material culture. Efforts to revitalise Kurna language and culture came later. In 1980, Kurna-Ngarrindjeri woman Auntie Leila Rankine named Warriappendi Alternative School. *Warriappendi* (to seek; pick up; find) was taken from Teichelmann and Schürmann (1840, p. 54) and several Kurna people expressed their desire to bring back the language as a spoken language in the mid-1980s. In 1989, the late Alitya Wallara Rigney obtained funding through the National Aboriginal Languages Program (NALP). Amery, a non-Aboriginal linguist, and Schultz, a non-Aboriginal musician, were recruited to work alongside local Nungas, most of whom have since passed on or have moved out of the area. In early 1990 a songwriter's workshop was held at Tandanya Aboriginal Cultural Institute in Adelaide with a focus primarily on Ngarrindjeri and Narungga songs, but at the insistence of the now deceased Kurna Elder, Josie Agius, Kurna was also included, these being the languages with which most local Nungas identified. Seven of the 33 songs written were in Kurna or included some Kurna language (see Ngarrindjeri, Narungga, and Kurna Languages Project, 1990). This was the first time that any novel Kurna sentences had been constructed since the language went to sleep.

⁵ Nunga is the word for Aboriginal person used to refer to Indigenous people from southern South Australia. It is the counterpart of Koorie used in eastern Australia.

Kurna Language Reclamation

The Kurna language has often been cited in curriculum documents both at national and state levels as a good example of a reclaimed language or of a language reclamation program (see Australian Curriculum, Assessment and Reporting Authority, 2015; Department of Education, Training and Employment, 1998; Senior Secondary Assessment Board of South Australia, 1996). Reclaiming Kurna language means going back to the archive, retrieving whatever has been written in, on, and about the language and meticulously collating and interpreting those records to develop a workable language for use today. In the Kurna case, there are no historical sound recordings of Kurna speakers, so the foundation for the reclaimed language today relies solely on written sources.

Kurna Warra Pintyanthi (KWP) and Kurna Warra Karrpanthi (KWK)

Throughout the 1990s many requests for Kurna names and translations were sought. Amery found himself in receipt of many of these during the course of his doctoral research. He would often consult with Kurna Elders or provided the information and referred the requestor to seek permission from Kurna Elders before they used it, but was seldom certain that they had actually followed through in doing so. Uncomfortable with this situation, together with Kurna Elders Dr Lewis Yerloburka O'Brien and Dr Alitya Wallara Rigney, Amery helped form KWP in 2002 whilst at the University of South Australia. O'Brien was also based there as an Honorary Fellow. Kurna Warra Pintyanthi was a small committee of Kurna Elders, linguists, teachers, and Kurna language enthusiasts that met at the university monthly to promote the Kurna language, provide direction for Kurna language projects, and address the numerous requests for Kurna names and translations, now well

in excess of 100 annually. The status of KWP is somewhat ambiguous (see Amery & Rigney, 2007; Amery & Buckskin, 2013). It is not an incorporated body, but neither is it a university entity. Kurna Warra Pintyanthi's finances were initially managed by the University of South Australia and since 2004 by the University of Adelaide, though neither university has ever made any direct financial contribution to KWP. The small grassroots committee known as KWP has always maintained its independence and right to use its own branding, despite strong pressure to conform to University of Adelaide branding.

In 2013, KWK was formed as an incorporated Aboriginal organisation under the Office for Registration of Indigenous Corporations (ORIC). Kurna Warra Karrpanthi was established as a sister organisation to KWP comprising essentially the same people. All directors of KWK are Kurna people, though several non-Indigenous people play an important role in sharing their expertise and experience. They remain associate members without voting rights or decision-making privileges. Kurna Warra Pintyanthi continues to be based at the University of Adelaide focussing on research and production of resources. Kurna Warra Karrpanthi is based at Tauondi Aboriginal Community College and deals with the requests for Kurna names, translations, and information. Kurna Warra Karrpanthi took over the partnership with the South Australian Department for Education, which had previously been with KWP, and takes the lead in promoting the Kurna language.

Over the years, applications were lodged to Commonwealth government funding bodies to support the work of KWP including mentoring a Kurna language worker, writing a Kurna learner's guide, a Kurna dictionary project, Kurna postcards, and so on. A number of

Kaurna people have been employed by the University of Adelaide over the years to work on these projects. In 2012, ongoing funding was gained to employ a small team of part-time language workers at the University of Adelaide to produce Kaurna media. Whilst all members of the KWP Team are employed or engaged by the University of Adelaide, KWK maintains oversight of the project, and regular progress reports are provided at KWK meetings. This paper focusses on the work of the KWP Team.

The Work of the KWP Team: Innovative Strategies for Reintroducing Kaurna

Research

Kaurna lexicographic research and research into Kaurna grammar has been ongoing over the last three decades and underpins efforts to reclaim and reintroduce the Kaurna language. Some 20 observers in the mid-19th century, plus three others in the early 20th century wrote down what they heard from the mouths of Kaurna speakers, but unfortunately made no sound recordings. Most of the wordlists are very limited in scope, and the ability of these observers to capture the sounds of Kaurna varies considerably. Apart from the very short wordlist by Black (1920), two German missionaries Clamor Schürmann and Christian Teichelmann were the most skilled and most consistent in recording the Kaurna language, and their documentation is by far the most comprehensive (Teichelmann, 1857; Teichelmann, 1858; Teichelmann & Schürmann, 1840). They were the only observers to write a sketch grammar, and they included hundreds of phrase and sentence examples that allow further analysis of the grammar beyond their 24-page description. All in all, around 3,000 to 3,500 distinct Kaurna words were recorded in primary sources, though many of these, such as *taulta* (a species of fungus) or *tiara* (a kind of shrub) are under-defined, and

consequently not very useful in a revived spoken language unless we go the next step and ascribe a more specific meaning to these words. Lexicographic work entails making detailed comparisons of recordings by the same observer, between different observers, and, most importantly, making comparisons with cognates from neighbouring languages. By contrast to English, the Kurna language has three contrasting r-sounds and several t, n, and l-sounds. Teichelmann and Schürmann (1840) and other early observers seldom made the difference between these sounds explicit in their early records of the language, but they have been painstakingly analysed and reclaimed where possible.

A composite Kurna wordlist was compiled, and numerous editions produced over the years as this wordlist was refined and expanded with the inclusion of neologisms, such as *mukarntu* (computer), *warraityati* (phone), *tadlipurdi* (soap) and so on. Initially Teichelmann and Schürmann's (1840) spellings were employed in all resources produced, but in 2010 a spelling reform was agreed upon at the insistence of Buckskin, the main teacher of Kurna at the time. Rather than having to constantly check with resident linguists as to what kind of r or t-sound was present in a particular word, the adoption of a consistent, systematic phonemically-based spelling system allowed him and others to operate independently, once the decision was made on the best phonemic representation of the vocabulary based on the available evidence. Lexicographic work is culminating in a comprehensive Kurna dictionary, both print-based and online to be published in 2021.

One of the main aims of Kurna lexicography is the pursuit of an Indigenous epistemology. The historical record is viewed through the lens of other Indigenous languages and cultures

(see Montoya et al., 2020, p. 475). It is evident that the primary seat of emotions in Kurna is the *tangka* (liver) with secondary centres in the *kuntu* (chest) and *wingku* (lungs). There are many expressions involving these organs such as *tangka mampinhi* (to mourn or fret) (literally, liver wavering), *tangka marnirninhi* (to alter the mind for the better) (literally, liver becoming good). The heart is unimportant, occurring only in the expression *pulhawilta* (brave; courageous) (literally, hard-hearted). See Amery (2020) for a full discussion. Embracing these Kurna emotions allows Kurna people to begin to feel emotions in the way that Kurna ancestors did and break free from an English mindset. Similarly, Hinton and Ahlers (1999, pp. 63–65) describe how the Hupa people of California have drawn on traditional patterns of metonymy and metaphor in the development of new terminology.

Kurna place names research builds on the 2007 Southern Kurna Place Names Project, a collaboration between KWP, the South Australian Geographical Names Unit,⁶ Kurna Tappa Iri, four local councils south of Adelaide, and Beanstalk Services. An interactive website (<http://kaurnaplacenames.com>) was established where place names are attached to precise points on a GoogleMap image and pop-up windows give brief summaries of the information. The intertwined relationship between language and culture is undisputed, and this is reflected in the motto of the project, which was formulated between senior Kurna people and KWP (*Pulthunhari payama, ngadlu yarta tampinhi* – When we understand the place names, we recognise the land).

⁶ Now under the Department of Transport & Infrastructure.

Schultz retrieves primary cultural information about the traditional named places of Kurna language country, especially the region around Adelaide from Gawler to Fleurieu Peninsula and Encounter Bay. This project contributes to the cultural mapping of significant places whose Kurna names were imprinted by the Dreaming. Much of the content is revisionist, often ground-breaking, sometimes controversial. Each essay seeks the original moment when someone recorded the name and place from Kurna people still living in their traditional culture (see Schultz, n.d.).

Only a very small proportion of the original names survive, a majority are garbled, often shifted from their original place, and many are overlaid with public misinformation. In order to assemble the best available knowledge and approach their original Kurna reality, they need multi-disciplinary research and analysis in geography, history, linguistics, anthropology, archaeology, and where possible Kurna oral tradition. It is an ongoing work-in-progress, directed especially to Aboriginal stakeholder researchers (now and in the future) who can interpret and critique the findings, both from their oral traditions and in collaboration with other specialists. Schultz continues to look for such persons (preferably Kurna) who could learn how to continue the work in their own ways and carry it deeper into the Kurna community. Though none has emerged so far, we believe they are coming in the new generations.

Print-Based Resources: Kurna Learner's Guide

Kulurdu Marni Ngathaitya (Sounds Good to Me) (Amery & Simpson, 2013) is the Kurna language learner's guide which sits alongside *Warra Kurna Yalaka* (Kurna Language Today) (Amery, 2017), the Kurna vocabulary, *Kurna Alphabet Book* (Buckskin et al, 2013) and *Kurna for Smarties* (Gale et al, 2020). In conjunction with the *Tirkanthi Kurna* (Learning Kurna) CD and social media videos, these resources essentially provide a complete package for learning at home or as the prescribed materials for the vocational level courses.

Kulurdu Marni Ngathaitya grew out of Kurna language courses delivered to adults over a number of years and a series of workshops with members of the Kurna community dedicated specifically to finding suitable ways to introduce Kurna grammar to those without a background in linguistics. The learner's guide was the culmination of years of research into aspects of Kurna grammar. It was divided into two parts. Part A was designed to get people to use the language. It included chapters on talking with children, talking with Elders, fishing, football and so on. Part B was an attempt to explain Kurna grammar. Participants in the Kurna learner's guide writing workshops likened Part A to the driver's manual, whilst Part B was likened to the mechanic's handbook explaining what went on "under the bonnet."

It was important that *Kulurdu Marni Ngathaitya* was designed through a collaborative process involving a number of Kurna Elders, all of whom have a profile at the beginning of the text to acknowledge their contribution and allow them to express their feelings toward

the language, but also to ensure that Kurna community members know who was involved in the process and that it has been fully supported by Elders since conception.

The resource is comprehensive in regard to having a plethora of example sentences and conversational style dialogues; however, the content is familiar and relatable to Kurna community members, using topics such as football and family gatherings in the example material. Illustrations are also relatable with, for example, a Kurna Elder providing one of her family photographs to explain Kurna kin terms. This is in stark contrast with the majority of textbooks or print media that Kurna people encounter on a daily basis, most of which are Eurocentric in appearance and content, reflecting the values, priorities, and self-image of the dominant society from which many Kurna people feel wholly or partly excluded (Smith, 2012).

Print-Based Resources: Kurna Funeral Protocols

In 2002, workshops were held with Kurna community members to develop resources for the conduct of funerals based on historical accounts, but also integrating contemporary practices embedded within the Christian tradition. This project resulted in a book of funeral protocols accompanied by a CD (Amery & Rigney, 2006). It features Kurna translations of the Lord's Prayer, well-loved hymns, and Bible verses within a liturgy in the Kurna language that also includes what is known of traditional funerary practices such as the use of white ochre and the lighting of a fire on top of the grave. The KWP Team updated this book with revised spelling in 2020.

The funeral protocols book recognises that there is now a cultural and religious diversity within the Kurna community that did not exist prior to colonisation. Most, if not all, Kurna people can relate back to “station” or the mission that their family was sent to, leading to a new blended tradition. Even prior to the establishment of missions, missionaries, such as Teichelmann and Schürmann, were already working with Kurna people to record vocabulary and grammar, as well as teaching Kurna youth within a Christian-based school environment, a subvert form of colonisation in itself, albeit under the guise of natural enquiry and preservation. This resource therefore strives to blend elements of traditional Kurna funeral practices with elements of Christianity, which will be equally familiar for many Kurna people. The hymns and suggested Bible verses, however, have been translated into Kurna language, in effect bridging the gap between the two sets of beliefs and essentially starting to decolonise some of the newer Eurocentric traditions, which are often underpinned by Christianity. This is an attractive entry point into the language and some of the cultural beliefs for those community members from devoutly Christian backgrounds who may feel uncomfortable engaging in cultural practices and protocols otherwise—this resource reconciles both pathways in a way which is respectful and palatable to a range of beliefs.

Print-Based Resources: Song Books

Kurna Paltirna brings together a collection of songs which are either translated into Kurna or are original compositions in English by community members that have then been translated into Kurna. This resource draws maximally on the little that is known of Kurna song traditions. Two short songlines belonging to Kurna leaders Mullawirraburka and

Kadlitpinna (Teichelmann & Schürmann, 1840, p. 73) have been embellished and incorporated into song by Schultz. A CD is also included with the book to enable pronunciation and learn the melody of the original compositions. Songs and dance have always had an important role in Kurna culture around the transmission of information including practical knowledge, history, and correct ways of living (Attwood, 2011). It therefore makes sense that the use of songs and music would be seen as a beneficial method of introducing Kurna language to members of the Kurna and broader community, such as the song *Madlala*, which talks about the different names in language for each grandparent, as well as the reciprocal relationship term for grandchildren that belongs to each. Additionally, the songs convey some of the historical experiences and figures that the younger generation in particular may not be familiar with or aware of, for example Kadlitpinna's song *Pirrki Pirrki* "peas," which protests against the rations distributed.

None of this information will be attainable for the majority of people through the education system or even within their own families due to the impacts of colonisation and dispossession; therefore, songs such as these also hold a significant place in cultural revitalisation, not just language revitalisation (Attwood, 2011). Many younger people, as well as adults, will sing along to the songs without even necessarily understanding the specific words, building confidence in pronunciation and aural exposure without even realising it at the time. It is now common for kindergarten children in metropolitan Adelaide to sing the *Niina Marni* song at their mat time at the end of the day, so it is not impossible to imagine that Kurna language versions of nursery rhymes and other children's songs could

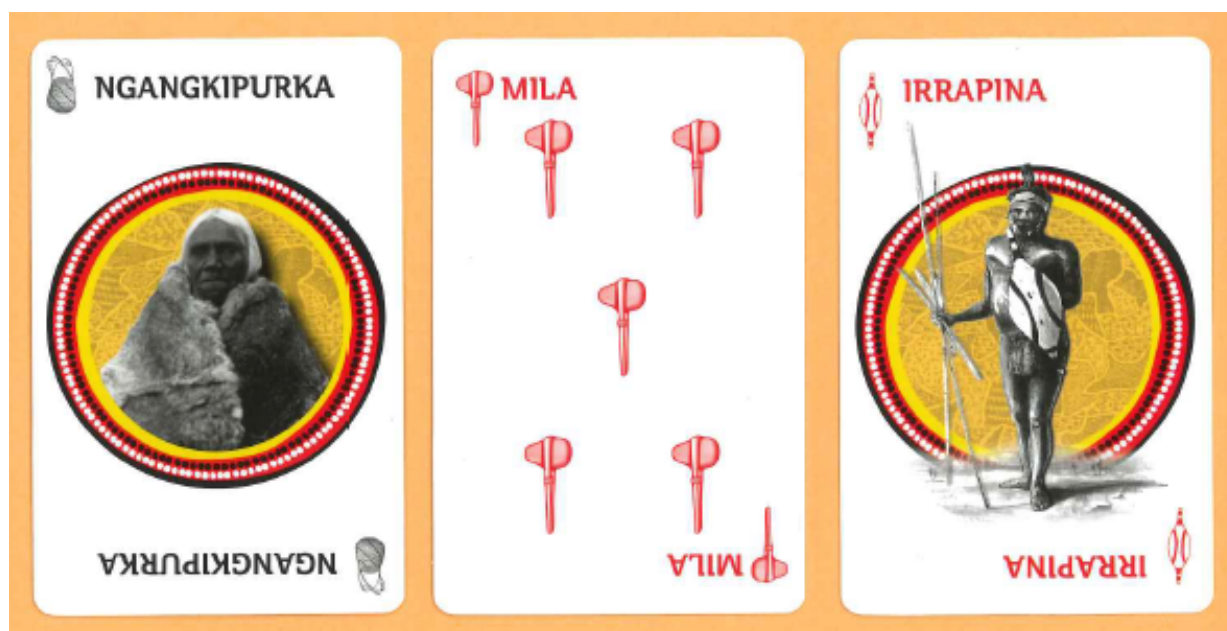
become the new normal in Adelaide-based early childhood centres in the not-too-distant future.

Print-Based Resources: Kurna Playing Cards

Recognising the role of fun and games in language learning, KWP have developed Kurna playing cards (see Figure 1), enabling community members to participate in an everyday pastime but with the addition of iconography of influential Kurna people, for example, *Ivarrityi* instead of a queen; cultural symbology, for example, *murlapaka* / Kurna shield instead of hearts; and Kurna numbers, for example, *purlaityi* instead of 2. Many community members will not be aware of these words and symbols. These cards will therefore prompt them to find out more, as well as instilling a sense of pride and identification with people portrayed on the cards, in contrast to the usual Eurocentric constructs, such as kings and queens, belonging to a colonial history (Smith, 2012).

Figure 1

Kurna Playing Cards



Note: Ngangkipurka (female Elder) featuring Ivarrityi (equivalent to Queen of Spades), Mila (five) Tamiaku (stone axe) (equivalent to 5 of Diamonds) and Irrapina (warrior) featuring Kadlitpinna or Captain Jack (equivalent to Jack of Hearts).

Newchurch took the lead with the production of the Kurna playing cards, canvassing feedback on the designs and liaising with the printing firm, Print Junction, which itself is an Indigenous family business. Buckskin features as the *Nikupina* (joker).

The cards enable games to be played using at least some Kurna words, whether it is by adults and the older generation playing their usual games of poker or solitaire, or the younger generation when playing memory games. Buckskin has developed a specialised Kurna lexicon, such as *purtu* (full house) (from the suffix *-purtu* “full of”) and *manma-*

manmantu! (Shuffle!) (from *manku-mankunthi* “to make short drafts with the glass knife when sharpening or pointing a spear” involving a similar hand action), for playing poker. Cards are a gentle and informal way to start extending language use to two- or three-word phrases such as moving from saying *mila* (five) to *waa mila?* (Where’s the five?) or *ngai milatidli* (I have a five) in keeping with the Formulaic Method (Amery, 2009). Resources such as these are also valuable for both formal and informal teaching without a significant financial investment by the purchaser, enabling numbers to be practised, leading into some basic grammar, such as the addition of suffixes for duals and plurals. The successful uptake of Kurna cards by both Aboriginal and non-Aboriginal community has now led to exploration into how other games can be enriched with Kurna language and will eventually lead to a *Kurna Games Book* which would be useful for many settings, particularly schools and kindergartens, providing a viable alternative to activities currently practised in English.

Kurna Media

In post-colonial Australia, English is the dominant language, and this is reflected in its almost exclusive use in media and social media (Verdon & McLeod, 2015). Even for those who may speak another language at home, the language that will predominantly appear in social and other media is English, reinforcing that other languages will not be understood by a broader audience and therefore creating a continuing cycle of English-only use (De Bruin & Mane, 2016; Verdon & McLeod, 2015). By utilising a range of social media platforms such as YouTube, Instagram and Facebook,⁷ Kurna Warra Pintyanthi are developing a sustained

⁷ See the Kurna Language Hub for the various KWP uploaded videos and playlists at https://www.youtube.com/channel/UCh00YOnJuEeydJK0QjN_Fpw/featured

and consistent presence that begins to normalise the appearance of Kurna language in these spaces, an approach supported by a number of researchers, including Howell (1992) and De Bruin and Mane (2016). Videos and social media posts are easy to share and feature Kurna community members who are known within the community, resulting in quick, cost effective, and efficient transmission of accurate spelling, grammar, and pronunciation. It is also easy to provide short, targeted lessons that prevent learners from being overwhelmed in the difficult journey of language learning, as well as providing a free resource that can be accessed at any time either alone or with family and friends. This last point is especially important as it must be recognised that Kurna people will come to learning language from a wide spectrum of prior knowledge, and that there can be a significant degree of shame associated with their lack of knowledge or a sense that learning their own language is impossible.

Social media is not just a passive information sharing platform; it is also a public forum where people from any walk of life can share thoughts and knowledge on the topic and, in the context of language learning, can potentially create a micro-community, which can support and mentor each other in the learning journey (Ifes, 2009). This is especially important for languages such as Kurna which are being reintroduced and have a relatively small pool of learners, let alone fluent speakers (Tsunoda, 2006). Being able to interact with each other, even if only to express pride in the video or post, can be immensely helpful in combatting isolation or frustration, as well as provide what may be the only opportunity to practise the language learned (Tsunoda, 2006).

More evidence is becoming available around the importance of the “first 1,000 days” of a child’s life, particularly in regard to how neural pathways may form during this developmental stage in response to various stimuli, including language (Guthridge et al., 2016; Jones et al., 2012). With this in mind, KWP produce the *Pirltawardli* puppet show aimed at preschool and primary-aged children. The puppet characters are not all fluent speakers of Kurna. *Kurraka* “magpie” speaks only Kurna. *Kuula* “koala” tries to speak Kurna but often makes mistakes, creating humour. *Pirlta* “possum” speaks both Kurna and English and mediates between the two. This reflects the diversity in language attainment present in the contemporary Kurna community and importantly normalises the range of fluency present without stigma or shame. The show introduces vocabulary and has been effective in disseminating larger chunks of Kurna language, such as nursery rhymes, to the Kurna and broader community. Characters are all native Australian animals, reflecting the Kurna environment, as opposed to other introduced animals, and which are therefore relatable to Kurna children watching the show, some of whom may share a totemic name or association with the animals. Episode themes are relatable for Kurna children, revolving around topics such as birthdays, games, and natural environmental events, albeit with a Kurna twist, such as learning how to sing “Happy Birthday” in Kurna language. Vocabulary in the episodes is therefore practical and more likely to be utilised and practised by children and families in their everyday lives, vital when considering the role of intergenerational transmission in language learning (Verdon & McLeod, 2015).

Pirltawardli is frequently used as a teaching aid in primary schools, demonstrating the interest of students and willingness of teachers to integrate Kurna language where possible,

rather than abandoning the attempt in the face of limited availability of Kurna language teachers. Twenty episodes are now available on the Kurna for Kids YouTube channel.

The first *Pirltawardli* scripts were written by Finlay, but current scripts are written primarily by Power-Smith, whilst Power-Smith, Newchurch, and Sumner-Lovett all manipulate and speak for a puppet each. They are all engaged in filming and editing. Sumner-Lovett contributes primarily through writing and performing music and songs for the video clips. Through on-the-job mentoring all Kurna members of the team are learning all aspects of video production. Power-Smith, who has been with the team longest, undertakes the more complex and demanding editing tasks and often directs the filming. She has also made entire video clips from start-to finish with her 11-year old daughter for the *Kurna with Tiya* series.

Recently, *Friends of Pirltawardli*, the brainchild of Jack Kanya Buckskin, has been developed as an offshoot of the *Pirltawardli* show, where *Tarnta* (male red kangaroo) interviews various local community members about their professions, teaching them the Kurna words for their professions and elements associated with their jobs. Although this is another fun avenue to teach language, it is perhaps as importantly an opportunity to showcase local Aboriginal community members working in a range of areas and demonstrating to the younger generation the career pathways that can be available to them that they might not otherwise think of pursuing or consider themselves capable of. Recognising that compared to the non-Aboriginal community, there are lower levels of educational attainment, employment, and higher rates of socio-economic disadvantage within the Aboriginal

community and that much media coverage of Aboriginal people is negative, initiatives such as this play a key role in influencing the perspectives and aspirations of young people through the provision of a positive counter-narrative (Australian Bureau of Statistics, 2010; Hartley, 1997).

Kurna Language Immersion

In addition to physical and social media resources, it is vital to develop meaningful relationships and partnerships with community members and organisations (Ifes, 2009). Principles of self-determination, choice, and control mean that community members should be able to access both culturally specific services, as well as mainstream services, and feel that their cultural beliefs are not only respected but welcomed. Many mainstream organisations in South Australia, particularly government agencies and those with a Christian faith-based origin, often have a history of not working well with the Kurna community, having been complicit in various detrimental and discriminatory practices and policies, such as the forced removal of Kurna people from their traditional lands to missions, and the Stolen Generations. This has naturally developed into mistrust between community members and organisations, which requires meaningful engagement on the part of organisations, as well as a willingness to listen and adopt alternative lenses of practice and service (Ifes, 2009). By supporting mainstream organisations and programs through the provision of an advisory role, KWP is in effect contributing to the decolonisation of the broader community services system, demonstrating that it is possible to expand the scope of existing services without requiring completely new programs or significant additional funding.

A current example is the ongoing relationship between Relationships Australia SA (RASA), Cirkidz, KWP, and Kuma Kaaru Cultural Services through the delivery of the Circus Gig program. This program is delivered in selected primary schools and works to develop improved emotional regulation, well-being and resilience through students engaging in circus skill-based activities facilitated by Cirkidz staff whilst having emotional and social well-being support through RASA staff. Although this program has been established for a number of years, the decision was made to pilot the inclusion of Kurna language within the program, substituting frequently utilised words and phrases, such as commands, numbers and body parts, into the usual delivery of the activities. Despite partially occurring during the most severe period of Covid-19, a 6-month pilot proved successful, with the utilised social and emotional self-efficacy scale demonstrating self-reported improvements in resilience, connection to culture, and well-being outcomes. This has resulted in the current model of delivery being granted an additional 12-month funding period for another two schools and has led to further opportunities to support and guide another RASA program, Rize Above.

In May 2020, Cirkidz held a series of performances, titled *Placship*, attended by school groups within the Dream Big Festival.⁸ Power-Smith worked intensively with the curators in forming their artistic concept to be maximally Kurna-centric and with the performing artists tutoring them in Kurna language. She also took a central role within the performances directing the attention and movements of the children and introducing them to Kurna words, phrases, and expressions.

⁸ <https://www.dreambigfestival.com.au/>

Kurna Warra Pintyanthi, through partnerships with KWK, is also providing Kurna language immersion opportunities particularly, but not exclusively, targeted at those undertaking certificate level studies in Kurna. These are combining cultural knowledge and skills, such as working with animal skins or crafting tools, with a Kurna language-rich environment, providing additional opportunities for learners to practise not only using the vocabulary and grammar that they have learned thus far, but to practise hearing, aurally processing, and reacting to Kurna language, an experience that very few will have the opportunity to experience outside of classes. The Kurna language immersion activities have been led by Buckskin whilst he and other Kurna persons have been engaged to teach the manufacture of Kurna artefacts.

Training and Mentoring

All the way along, training and mentoring has been key to our *yaityarni-apintha* philosophy. From the outset, efforts to reclaim and reintroduce Kurna has been an active collaboration between members of the Kurna community and linguists, researchers, and specialists in various fields with a constant aim to build capacity within the Kurna community. Initial efforts began with a songwriting workshop in 1990, and community-focussed workshops have been a constant feature ever since, focussing variously on developing words and expressions for talking with babies and young children, Kurna Dreamings, Kurna place names, Kurna welcome and acknowledgement speech-giving, artefact-making and in the writing and preparation of resources of various kinds.

Mentoring of KWP and KWK employees has been undertaken in not only developing Kurna language knowledge and skills, but also in a range of other skills such as scriptwriting, filming, editing, interviewing, and songwriting that are useful for language work. In 2012–2013, Mary-Anne Gale delivered an accredited Certificate III course “Learning an Endangered Aboriginal Language (Kurna),” which she had written and delivered with a Ngarrindjeri focus a few years earlier. This was followed by a Certificate IV course “Teaching an Endangered Aboriginal Language.” Our goal is to establish recognised and well-remunerated career paths for both Aboriginal language workers and teachers of Aboriginal languages and to establish a sustainable language movement.

A new Certificate III Kurna course commenced at Tauondi College in 2019 and was taught in the evenings. In 2020, a second Certificate III Kurna course taught during the day commenced, providing training and professional development for Aboriginal teachers and community education workers involved in Kurna language programs in schools. There were 12 Certificate III graduates in 2020. Kurna Warra Karrpanthi is working towards establishing its authority as the Kurna Teachers Registration Board, such that those delivering Kurna programs will need to register with KWK and provide information regarding their knowledge, skills, training, resources used, and links with the Kurna community to ensure high standards and allow some measure of control by the Kurna community over the teaching of their language. Work is still needed to ensure that the Department for Education recognises these qualifications and implements incremental remuneration tied to training outcomes.

The importance of training, mentoring, and capacity-building is being increasingly recognised and embraced by linguists (see Czaykowska-Higgins, 2009; Fitzgerald, 2018; Poetsch et al., 2019; Stebbins et al., 2018). The divide between linguists and community is becoming increasingly blurred with numbers of Indigenous people, such as Wesley Leonard, gaining formal qualifications in linguistics and with linguists engaged in long-term collaborations with community such that the two are learning from each other (Leonard & Haynes, 2010).

Discussion

The term “reclamation” in the context of the Kurna language movement refers to more than the linguistic aspect of reinstating the language from a sleeping or dormant state. It also refers to taking the language back from the colonial gaze, of being viewed as an object to preserve as a historical curiosity in the face of determined and deliberate attempts to eradicate language and culture (Smith, 2012). Furthermore, it refers to returning control of the language back to the Kurna community, who for so long had their inherent rights to speak their own language denied through both deliberate governmental practices and the casual racism of dominant society (Smith, 2015). Younger members of the Kurna community are now feeling a sense of pride in being able to master their own language, from being able to speak it openly and proudly at large events through the provision of Welcome to Country, to being able to look in their cupboard at home and name everyday items in both Kurna and English. It is now being seen as a distinct possibility that future generations of the Kurna community will be able to grow up knowing their own language as a matter of

course, rather than having to come to it in their later years with the knowledge that they are the next in a line of generations which have been denied that right.

Yaityarni-apinthe is the foundation for all the resources and partnerships that have been discussed. Reintroducing Kurna language to the Kurna and broader community has become more than simply a language movement, it has become a broader decolonisation movement which has been built from the grass roots with a largely volunteer base. Due to the extremely limited number of speakers and the fact that the revitalisation still has a long way to go, even the loss of one key person has a hugely disproportionate effect; however, those still involved continue to keep the course through their love for the language and respect for those who have come before. Despite the loss of several prominent leaders over recent years, the younger generation is gaining skills and has maintained momentum.

Avenues are being explored to ensure the Kurna language is accessible and relevant for this and future generations. This includes considering how to best integrate technology to improve access and opportunities for current and future learners, as well as capacity building and training for current and emerging leaders. The demand for Kurna language teachers continues to increase as more people in the Kurna and broader community become aware of the language, leading to demand outstripping supply.

Despite the high demand for teaching and resources, the impetus remains to ensure that the concept of *yaityarni-apinthe* is not lost in the chaos. There is a temptation to rush the development of resources to meet requests and provide a simplified version of the language

to enable ease of learning or access, particularly when requests for translations are received. Although the language needs to evolve to incorporate new concepts and vocabulary if it is to one day become an everyday language again, the timing and thought processes should not be necessarily those that are convenient to the dominant society and its expectations. This often requires more effort around relationship building and dialogue; however, the rewards of challenging the dominant status quo and providing education around Kurna ways of thinking and history are generally worth the additional effort.

Conclusion

Undoubtedly, some truly innovative resources have been developed over the years, and will continue to be developed, particularly as momentum increases around increasing access to Kurna language in schools and pre-schools. Although the reclamation of Kurna language, in both senses of the term, initially relied heavily on the evidence left by non-Aboriginal recorders, as well as the interpretation and analysis by non-Aboriginal linguists, the leadership and control of the movement is now firmly in the hands of the Kurna community. There will likely always be a need for a strong, respectful relationship between the Kurna community and non-Aboriginal specialists, such as linguists; however, the ideological inspiration and practical realisation of the movement, including the distribution of resources, are occurring under Kurna direction. Kurna Warra Karrpanthi meetings involve everyone, but only Kurna people have the right to make decisions and all non-Indigenous associate members are fully supportive of this. Public lectures, conference presentations, and academic papers are often co-presented and co-written by Kurna and non-Indigenous team

members, providing complementary knowledge and perspectives. The composite is more than the sum of its parts.

With the planned next steps, it is only a matter of time before the oversight of Kurna language teaching is in Kurna hands, as well as the majority of the teaching. Although the movement is still fragile due to the small number of speakers, the movement has already had a significant impact on not only its own community, but on other Aboriginal communities across Australia as they seek to support or reintroduce their own languages. There is immense resolve and passion within the language movement leadership and the Kurna community alongside an excitement for future developments.

Glossary

gadlabarti [kardlaparti] *native bee*

ipiti-ana padni! *go to the shower!*

irrapina *warrior*

Ivarrityi [iparrityi] (lit. misty rain) – name of ‘last speaker’ of Kurna known to authorities in Adelaide as Princess Amelia.

Kadlitpinna [kadlitpina] (lit. *father of dingo*) – *name of Kurna leader known to the colonists as Captain Jack*

kanya *rock*

karlapina *lover of fire*

Kurna *name of the language of the Adelaide Plains, South Australia*

Kurna paltirna *Kurna songs*

Kurna Tappa Iri [Kurna Tapa Irdi] – *name of the partnership agreement between the Kurna and four southern councils (local governments)*

Kurna Warra Karrpanthi (KWK) (lit. *supporting Kurna language*) – *name of the incorporated Kurna language body established in 2013*

Kurna Warra Pintyanthi (KWP) (lit. *creating Kurna language*) – *name of the Kurna language committee formed in 2002*

kauwi *water*

kulurdu marni ngathaitya *sounds good to me*

Kuma Kaaru (lit. *one blood*) – *name of Jack Kanya Buckskin’s dance troupe*

kuntu *chest*

kurraka *maggie*

kuula *koala*

madlala *grandfather (father's father)*

manku-mankunthi *to make short drafts with the glass knife when sharpening or pointing a spear*

manma-manmantu! *shuffle!*

midla *woomera or spearthrower*

mila *five*

miyu *man; person*

mukarntu *computer*

murlapaka *dry bark shield*

Murlawirraburka [murlawirrapurka] (lit. *old man of the dry forest*) – *name of Kurna leader known to the colonists as King John.*

Narunga *name of the language of Yorke Peninsula, South Australia*

ngai milatidli *I have a five*

ngangkipurka *female Elder*

ngarrpadla *auntie*

Ngarrindjeri *name of the language of the Lower Murray River, South Australia*

niina marni? *are you good?*

nikupina *joker*

ninku tiyarla wirrkantu! *brush your teeth!*

Nunga *Aboriginal person from southern South Australia*

Pathawilya (lit. *swamp gum foliage*) – *Kurna name for Glenelg/Holdfast Bay*

pila *a species of eagle*

pinti miyurna *Europeans*

pirlta *brushtail possum*

pirltawardli *possum home – Kurna name of the site of the Native Location, Adelaide*

pirrkipirrki *peas*

pulthawilta *brave*

pulthunhari payama, ngadlu yarta tampinhi *when we understand the place names we recognise the land*

purlaityi *two*

purtu *full*

tadlipurdi *soap*

taikurtinna [taikurtirna] *family*

tamiaku *axe*

Tandanya [tarntanya] (lit. *male red kangaroo rock*) – *national Aboriginal Cultural Institute, Adelaide*

tangka *liver*

tangka mampinhi *to mourn or fret*

tangka marnirninhi *to alter the mind for the better*

tarnta *male red kangaroo*

tipu *spark*

tirkanthi Kurna *learning Kurna*

waa mila? *where is the five?*

walara *clear-headed; intelligent*

warra *throat; voice; speech; language; word*

warra Kurna yalaka *Kurna language today*

warraityati *telephone*

warrarra *healer*

Warriappendi [warri-apinhi] (lit. *to seek; pick up; find*) – *name of a school in Adelaide*

wingku *lungs*

Wirangu *name of an Aboriginal language from the west coast of South Australia*

Wirrtu Yarl (lit. *sea eagle*) – *name of the Indigenous programs unit, University of Adelaide*

yaitya *Indigenous*

yaityarni-apinhi *actively Indigenising*

yerloburka [yarlupurka] *old man of the sea*

About the Authors

Jack Kanya Buckskin is a Kurna, Narungga, and Wirangu man, born in Adelaide, who has dedicated himself to learning and sharing Kurna language and culture. He has been involved in the Kurna revitalisation movement for 15 years and continues to contribute to the development and teaching of Kurna language and culture.

Taylor Tipu Power-Smith is a Kurna and Narungga mother of two. She comes from a line of powerful and inspiring women and is passionate about language and culture. After learning Kurna in 2012, Taylor went on to teach it for a number of years. She's now part of a media team that works to create and produce Kurna resources.

Jaylon Pila Newchurch, as a young Narungga and Kurna man, took Kurna classes in his secondary years at school with Jack Kanya Buckskin. Since then, Pila has worked with Tauondi College and the KWP Team and is now studying a bachelor's in media at the University of Adelaide, concurrently placed with the KWP Team on a cadetship.

Tempestt Sumner-Lovett is a 29-year-old Aboriginal Australian Musician from the Ngarrindjeri Nation. Tempestt first began their career in music with their family band as a back-up singer travelling across the country and partly across the globe. Tempestt is mostly known as a solo artist writing their own music and lyrics and performing at various venues and festivals across Adelaide. They are currently a part-time trainee at KWP.

Paul Finlay has worked as a freelance camera operator, director, editor, and producer on a variety of film and TV productions for over 40 years. He was head of educational technology at the University of Adelaide for 8 years in the 1980s. In 2005 he was appointed SA state manager of the Australian Film Television and Radio School, (AFTRS) until 2011. He is currently working as a media production mentor for Kurna Warra Pintyanthi at the University of Adelaide.

Chester Schultz is a composer, pianist, BA Honours history. He has worked with Aboriginal cultural revivals around Adelaide for nearly 50 years: with the Centre for Aboriginal Studies in Music since 1973, and with Kurna, Narungga, and Ngarrindjeri language groups since 1990. His publications include *Our Place, Our Music* and KWP's songbook *Kurna Paltinna*.

Rob Amery is head of linguistics, University of Adelaide. Rob completed a PhD in 1998 (published 2000; 2016) on Kurna language reclamation. For more than 30 years he has worked closely with Kurna people and their language, drawing on earlier experience in Central Australia and Arnhemland to develop teaching programs, produce language resources, and implement strategies to reintroduce the awakening Kurna language. rob.amery@adelaide.edu.au

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TRANSLATING SCIENTIFIC TERMS ACROSS EUROPEAN AND AFRICAN LANGUAGES—PHYSICS IN NGUNI II

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Abstract

The use of European languages as languages of instruction in education continues in many Sub-Saharan African countries, in spite of several decades of political independence. This is also the situation in science teaching. Several studies have shown that children learn best when taught in their own mother languages. Teaching in these languages necessitates translation of science terms and concepts into Indigenous languages. Using quantum mechanics, a field in modern physics and my mother tongue, isiNguni, as an example, I have developed translation strategies and suggested practical approaches to create science vocabulary in isiNguni. It is shown that it is feasible to apply direct borrowing with localisation and semantic extension in developing new physics vocabulary. Several examples of translated science terms and concepts in isiNguni are provided. Selected paragraphs on electron spin from a frequently used undergraduate physics textbook are translated into isiNguni. In the Appendices, the Compton effect experiment is presented in three languages accompanied by a vocabulary. African countries need to revise their language and education policies so that maximum use of the Indigenous languages and the future relevance of these languages in science and technology are ensured. Teaching physics and other science subjects in the mother tongues of both teachers and students will improve science literacy, comprehension, and interest in the field. Africa should embrace science and technology to contribute to new knowledge.

Keywords: Indigenous languages, creating science terminology, translation, Africa

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Introduction

In Sub-Saharan Africa, establishment of institutions, such as schools, hospitals, and justice systems, resulted in the introduction of new concepts and hence new terms into the vocabularies of African languages. Many new words were developed using direct borrowing and localisation, for example, in isiNguni:² teacher = uthisha, nurse = unesi, doctor = udokotela, and police = ipholisa. While it can be argued that such subjects as mathematics, biology, chemistry and physics have scientific terms that needed to be created in the Indigenous languages, there is no explanation why non-science subjects, such as history, law, social studies and others, are still taught in European languages.

Science nomenclature had to be developed in European languages, for example, in English. To illustrate this point, a description of Michael Faraday's struggles to create terms for the then new phenomena connected to the discovery of electricity (Sutton, 1992) is included here:

[We] talk of *anodes* and *cathodes*, and even of *ions* . . . without knowing anything of the struggles that Michael Faraday had in 1833–4 to decide how to express his ideas about this topic. He asked William Whewell . . . what words would be most helpful. . . . Whewell drew on his mastery of Greek to favour “*anode* and *cathode*” (the way up and the way down) for what Faraday was trying to express, rather than “*eisode* and *exode*” (the way in and the way out) and certainly rather than “*eriod* and *occiod*” or “east-ode and west-ode” which came from Faraday's thoughts about electricity and the earth's magnetism. Faraday had tried “*electobeid*” (“electrical goer”) . . . and Whewell

² Nguni languages are one of the largest language groups of southern Africa.

suggested simply “ion” to allow “cation” at the cathode and “anion” at the anode.
(p. 15)

The same needs to be done in the Indigenous languages of Africa to ensure their wide use in every sphere of life and their continued development and relevance. It has also been shown (Bamgbose, 1984) that children taught in their mother languages learn better than children taught in their second language. It follows that it is essential to develop strategies for development of science vocabulary in the Indigenous African and other languages in spite of doubts expressed by some researchers as to “the translatability of academic discourse from English into an African language” (Wildsmith-Cromarty, 2008, p. 147). It is also noted that in countries such as Russia, China, and Japan, students learn about, for example, the Compton effect in their own mother languages written in the non-Roman alphabet. This is the same physics of the Compton effect that African students must learn in the European languages of the past colonialists, yet they cannot articulate it in their own mother languages.

This paper aims to i) stimulate debate on the feasibility of the use and promotion of African languages for science education in schools and universities and ii) demonstrate possible strategies to develop science and technology terminology in the Indigenous languages. Translation of selected terms that one encounters in the study of modern physics in the form of quantum mechanics from English to isiNguni will be discussed, and improvements on previous strategies will be made (Dlodlo, 1999).

An English–isiZulu–English dictionary (Doke et al., 1958), an isiZulu dictionary (Nyembezi, 1992) that explains the meanings of isiZulu words in isiZulu, an isiNdebele dictionary (Hadebe, 2001) that explains the isiNdebele terms in isiNdebele, and a dictionary of physics that explains the English physics terms in English (McGraw-Hill, 2002) have been used.

The paper has four tables listing selected science concepts that already exist in isiNguni and showing examples of different translation strategies. Two paragraphs of a physics textbook that has been read at some universities over the years are translated from English to isiNguni to demonstrate use of the proposed approaches. In Appendix A, to show that scientific text can be translated from European to Indigenous languages without loss of meaning, a scientific text is presented in two European languages where the Dutch language of the Netherlands is the source language for the translation into isiNguni. isiNguni is then made the source language for the translation into the English language. Appendix B summarises the key vocabulary used in translating the Compton Effect in three languages.³

The Translation Strategies

About Nguni Languages

The Nguni languages (isiNguni) include Ndebele, Swati, Xhosa, and Zulu and are spoken in southern Africa by approximately 30 million people (“Nguni people,” 2020). They are recognised as official languages in South Africa, Eswatini, and Zimbabwe and are used, for example, in mass media. However, they are not used as languages of instruction in schools and universities, except during early years of primary education. The language of instruction

³ Appendix B serves, together with other translation charts throughout, in place of a Glossary for this article.

is English, and teaching in the African national languages is offered as a subject, like European/“foreign” languages. It follows that the Nguni languages could be considered “vulnerable,” that is, spoken by most children and their use restricted to certain domains (UNESCO, 2020).

Nouns are grouped into eight classes according to their prefixes in the Nguni languages. Prefixes are not indicative of gender. Concord, that is a word subordinate to a noun must show its agreement with the class of that noun, is essential. There is a high development of verb tenses and many verbal derivatives. All Nguni languages employ click sounds (Nyembezi, 1978). There are five vowels, and the consonants exclude “r.”

Proposed Approaches of Creating New Physics Terms and Examples

Certain science vocabulary already exists in isiNguni (Table 1). These and other existing words could be put into immediate use.

Table 1

Examples of Science Concepts That Exist in isiNguni⁴

English Term	Nguni Term	English Term	Nguni Term
Force	udli, indlovula	Width	ububanzi
Energy	isidlakadla	Speed	ijubane
Power	amandla	Velocity	isivinini
Strength	isidladla	Acceleration	isiqubu
Length	ubude	Photons	inhlamvu zelanga = particles of the sun

⁴ Examples of isiNguni noun prefixes in Table 1 include “u,” “ubu,” “i,” “in,” “isi,” and “a.”

It is necessary to create new science words in isiNguni. This can be done through the use of direct borrowing with localisation and semantic extension. It is proposed that direct borrowing with localisation be used sparingly because it results in “meaningless” words and that it be employed only for names of particles and equipment. Some examples are shown in Table 2.

Table 2

Examples of Direct Borrowing with Localisation for Creating New Nguni Physics Terms

English Term	Nguni Term	English Term	Nguni Term
Electron	i-elekthoni	Fermion	ifemiyoni
Photon	ifothoni	Boson	ibosoni
Neutron	inutloni	Phonon	ifononi
Proton	iplothoni	Atom	i-ithomu
Ion	iyoni	Molecule	imolenkulu
Vector	ivektha	Entropy	i-entophi

There are many words for new concepts that have been introduced into the isiNguni vocabulary through semantic extension, for example, isibuko = mirror (from buka = admire/look at); umabonakude = television (from bona = see; kude = far). Semantic extension can also be used to create new Nguni physics terms by combining existing words to create one word or simply using a word in a science context by creating verbs out of nouns or nouns out of verbs. Examples are shown below and in Table 3:

- For:
- i) Physics = infundanvelo, the words are infundo (knowledge) + invelo (nature) = learning of nature.
 - ii) Interaction = inzelana, the word is enzelana (do for/unto one another).
 - iii) Quantum mechanics = infundanyakazo yobuqanyana, the

combined words are infundo (knowledge) + unyakazo (motion),

yobuqa- (of quanta) and -nyana (is a suffix for infinitely small).

iv) Polynomial of z = inhlanganiswa yeziya zika z , the combined words

are inhlanganiswa (the sum) + yeziya (of the functions) + zika z (of z).

v) Degenerate energy level = izinga lesidlakadla elisesithenjini, the

words are izinga (the level) lesidlakadla (of energy) elisesithenjini

(that is in multiple/polygamous relationships).

Table 3

Examples of Use of Semantic Extension for Creating New Nguni Physics Terms

English Term	Nguni Translation	The Nguni Words	English Literal Translation
Physics	infundanvelo	infundo = knowledge, invelo = nature	learning of nature
Mechanics	infundanyakazo	infundo = knowledge, nyakazo = motion	learning of motion
Quantum mechanics	infundanyakazo yobuqanyana	infundanyakazo = mechanics, yobuqa- = of quanta, -nyana is a suffix for infinitely small	learning of the motion of quanta
Mathematics	infundazibalo	izibalo = numbers	learning of numbers
Matter field	iguma lebumba	iguma = area, ibumba = matter	an area where matter is located
Wave function	isiya segagasi	iya = it goes as, igagasi = wave	the function of the wave
Hydrogen	indalamanzi	dala = create, manzi = water	creator of water
Oxygen	impilisa	impilo = life, health	sustainer of life
Nitrogen	isihitsha	ukuhitsha = suffocate	that which suffocates
Nucleus	umongo we athomu	mongo= core, we athomu = of the atom	the core of the atom
Polynomial of z	inhlanganiswa yeziya zika z	inhlanganiswa= sum of, yeziya = of the functions, of z = zika z	the sum of the functions of z
Power series of z	udwendwe emandleni ka z	dwendwe = que/file	a series of terms in powers of z

		emandleni ka z = in powers of z	
Potential box	udliki oluyisifu	udliki= potential, isifu = trap	a potential that is a trap
Potential barrier	udliki oluyisivimbelo	udliki = potential, oluyi = that is, isivimbelo = a barrier	a potential that is a barrier
Equilibrium separation	ibanga eliyi nhlukanisa kungena nyakazo	ibanga = distance, eliyi = that is, nhlukanisa = a separator, kungena = in the absence of, nyakazo = motion	a separation—distance with no motion
Symmetry/ (anti-symmetry)	ukufana xathu kwenhlangothi/ (-zifulathelene)	fana xathu = identical, kwenhlangothi = of sides /zifulathelene = turned back on back	like pairs/like pairs turned back on back
Degenerate energy level	izinga lesidlakadla elisesithenjini	izinga = level, isidlakadla = energy, esisesithenjini = polygamous/belonging to more than one state	an energy level that is in a polygamous relationship

Children are taught at school in English that air is a mixture of nitrogen, oxygen and other gases and that water is a compound of hydrogen and oxygen. Interestingly, in Dutch, oxygen = zuurstof (the stuff of sourness), hydrogen = waterstof (the stuff of water), and nitrogen = stikstof (the stuff that suffocates), and the same approach has been applied here for isiNguni terms of impilisa for oxygen, indalamanzi for hydrogen, and isihitsha for nitrogen.

Table 4 presents Nguni physics terms formulated from words to which scientific meaning has been attached. Some words or parts of the word may already exist but may not have been used in a science context.

Table 4

Examples of New Nguni Physics Terms Based on Words to Which Scientific Meaning Has Been Attached

English Term	Nguni Term	English Explanation of the Nguni Term
Potential	udliki	udli = a force, from which udliki = potential is created
Momentum	isivungudla	from isivunguzane = whirlwind from which isivungudla = momentum is created
Moment	isivungu	from isivunguzane = a strong wind (whirlwind) capable of lifting objects
Dipole	imbelo	two poles that are a very short distance apart
Electric dipole moment	isivungu sembelo yegetsi	imbelo is an arrangement of two poles, a short distance apart. So that isivungu sembelo yegetsi = electric (+/-) dipole moment
Magnetic dipole moment	isivungu sembelo wobuwonga	imbelo is an arrangement of two poles, a short distance apart. So that isivungu sembelo wobuwonga = magnetic (N/S) dipole moment
Model	infanisela	that which is imagined to be/has a resemblance to/a picture of
Theory	infunisela	that which one wants or hopes could be or is/thought process
Angle	inkomba	that which indicates a direction

Text box 1 below presents a verbatim translation of two paragraphs of Section 3.7 of a physics textbook: *Fundamental University Physics III* (Alonso & Finn, 1968, p. 135) from English to isiNguni applying the above-mentioned strategies for creating new science vocabulary.

Text Box 1

Translation from English to isiNguni of Two Paragraphs of Section 3.7 of a Physics Textbook: Fundamental University Physics III (Alonso & Finn, 1968)

<p>Electron Spin</p> <p>Let us recall, that the earth in addition to <i>its orbital motion</i> around the sun, has a <i>rotational or spinning motion about its axis</i>. Therefore, the total <i>angular momentum</i> of the earth is <i>the vector sum of its orbital angular momentum and its spin angular momentum</i>. By analogy we may suspect that a <i>bound electron in an atom</i> is also <i>spinning</i>. However, we cannot describe the electron as a <i>spherical spinning particle</i> because of our ignorance of its <i>internal structure</i>. Thus we cannot compute the spin angular momentum of the electron in the same way that we compute the spin angular momentum of the earth <i>in terms of its radius and angular velocity</i>. The idea of electron spin was first proposed in 1926 by G. Uhlenbeck and S. Goudsmit to explain certain features of the <i>spectra of one - electron atoms</i>. If S is the spin angular momentum of an electron and L is the orbital angular momentum, the total angular momentum $J = L + S$. For given values of L and S, the value J depends on <i>their relative orientation</i>, and we may expect this to be <i>reflected in certain atomic properties</i>; this indeed is the case. The existence of electron spin is borne out by a large accumulation of experimental evidence. For an example, electron spin is manifested in a very direct way by the Stern–Gerlach experiment, first performed in 1924. Because the electron is a charged particle, electron spin should result in an intrinsic or spin magnetic dipole moment M_S of the electron. If the electron could be described as a rotating rigid charged body, the relation between M_S and S would be the same as between</p>	<p>Ushwilizane lwe elekthoni</p> <p>Masikhumbule ukuba umhlaba ngaphandle <i>konyakazo lwawo uzungeza</i> ilanga, <i>unonyakazo lokushwiliza</i> noma <i>olokumpininiza ngogalo lwawo lomkhathi</i>. Yikho iqoqo <i>lesivungudla senkomba somhlaba siliqoqo lama vektha awo, elenzungezane neloshwilizane</i>. Sifanisela singacabanga ukuthi <i>elekthoni elikhulekelwe ku athomu yalo nalo liyashwiliza</i>. Kodwa singeke sichaze elekthoni njengo hlanjana <i>olushwiliza luyi ndilingana</i> ngoba singasazi <i>isakhiwo salo</i>. Ngalokho singeke sasibala isivungudla senkomba soshwilizane lwe elekthoni njengalokho sibala isivungudla senkomba yomhlaba <i>ngokwazi ugalo lwendilinga nesivinini senkomba</i>. Umnakano wokushwiliza kwe elekthoni wasongozwa ngo 1926 ngu G. Uhlenbeck no S. Goudtsmit ukuze kucace okuvezwa <i>zinxuku zenvama zama athomu asa-ndalamanzi</i>. Uma S kuyisivungudla senkomba yoshwilizane lwe elekthoni njalo L kuyisivungudla senkomba senzungezane, iqoqo lesivungudla senkomba yileli $J = L + S$. Ngalinye lamanani ka L no S, inani lika J liya ngomelwana lwawo, okuyikho okumele <i>kuvezwe ngezinye impawu zama athomu</i>; njalo yikho okutholakalayo. Ukubakhona koshwilizane lwe elekthoni kufakazwa yizilinga eziningi. Ngomzekelo, ushwilizane lwe elekthoni luvezwa obala yisilinga esithiwa yi Stern-Gerlach esenziwa ngokokuqala ngo 1924. Ngenxa yokuba elekthoni liqukethe inhlati, ushwilizane kumele luveze isivungu sembelo yewonga M_S se elekthoni. Uma elekthoni liyisibunjwa esiya she esiquketheyo njalo esizungezayo, ubuhlobo obukhona phakathi kuka M_S no S kumele bufane nalobo obukhona phakathi kuka M_L no L. Kodwa akunjalo, kumele sibhale:</p> $M_S = -g_s \frac{e}{2m_e} S,$
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<p>M_L and L. However, this is not so, and we must write:</p> $M_S = -g_S \frac{e}{2m_e} S,$ <p>where g_S is called the gyro-magnetic ratio of the electron. The experimental value for g_S is 2.0024. For most practical purposes we can make $g_S = 2$. Therefore, the <i>total magnetic dipole moment of an orbiting and spinning electron</i> is:</p> $M = M_L + M_S = \frac{-e}{2m_e} (L + 2S) \quad 3.33$ <p>and depends not only on the magnitude of L and S, but also <i>on their relative orientation</i>.</p>	<p>lapho g_S luqathaniso lombelo wentsalane nesivungudla senzungezane ye elekthoni. Inani lika g_S elazuzwa kusenziwa izilinga yileli 2.0024. Kodwa sizasebenzisa $g_S = 2$. Yikho, <i>iqoqo lesivungu sombelo wobuwonga we elekthoni elizungeza njalo lishwiliza yileli:</i></p> $M = M_L + M_S = \frac{-e}{2m_e} (L + 2S) \quad 3.33$ <p>njalo kaliyi kuphela ngobukhulu buka L no S, kodwa nango <i>melwana lwazo</i>.</p>
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Discussion

This paper suggests that it is feasible to create new terms in, for example, quantum mechanics, in Indigenous languages using isiNguni as an example and proposes strategies for their development. In certain instances, direct borrowing is appropriate. To enhance meaningfulness of the new terms, it should be kept to a minimum, and semantic extension could be a more proper approach. It is possible to use words and combinations of words of everyday language, assign new scientific meaning to them, and create new terms.

“Word-order difficulties” (Strevens, 1976, p. 56) are a necessity if the translation is to be accurate, for example, magnetic dipole moment = isivungu (the moment) sembelo (of the poles) yewonga (of a magnet). The resulting new term is more appropriate than direct borrowing with localisation (maginethikhi dayipolu momenti) because the latter is meaningless, as none of these three words exist in isiNguni. At times, long phrases are

required to translate complex concepts, for example, g : g_s = gyro-magnetic ratio constant is g : g_s = yisimanjalo esilugathaniso lwesivungu sembelo yewonga loshwilizane nesivungu senkomba soshwilizane, that is, the ratio/comparison of the spin magnetic dipole moment and the spin angular momentum, in English, rather than igayiro-maginethikhi reshiyo, which would be very unhelpful.

Ademowo (2010) has defined the Pragmatic Approximating Process (PAP) proposed by Owolabi (2006) as the “process of painstaking thinking, discussing, explaining, and approximating new words in translating scientific concepts and theories from foreign to Indigenous languages without any possibility of loss in meaning occasioned by cross-cultural translation” (p. 58). The goal of the PAP strategy is stated to be that of “evolving a manual that will make scientific terms intelligible in the native/indigenous languages” (p. 59). The goal of this paper is rather to advocate for development of science terminology and literature so as to facilitate teaching sciences in Indigenous African and other languages, that is, in mother tongues of both students and teachers, as is done in Europe and Asia.

Conclusion

The English language continues to be used extensively not only in places of learning but also at work and home in the ex-British colonies in Sub-Saharan Africa several decades after the countries gained independence. Lack of use of the Indigenous languages in education, commerce, and administration makes them vulnerable and poses a threat of their use becoming limited to selected domains. One of the first steps of expanding the use of Indigenous languages should be education where they should become the mediums of

instruction. Learning in one's own mother tongue will improve comprehension of science subjects among students and increase pass rates when students are able to understand the concepts. Their teachers can provide eloquent explanations when everyone is using their mother language.

Creating science nomenclature in the Indigenous languages is feasible and Indigenous languages around the world can be used for all communication, including scientific discourse. It requires political will, resources, and training of terminologists and subject specialists who are competent in both the source and Indigenous languages. It also requires multisectoral engagement to review existing language and education policies to ensure the place that the Indigenous languages deserve.

Africa must realise that for the continent to make strides in economic development, it must participate in the advancement of science and technology and contribute new knowledge. If the use of African languages in education is not promoted, there will be no growth in learning science and no corresponding growth in the development of science and technology terminology. This is likely to limit the use of Indigenous African languages and let their speakers remain illiterate in science. Creating new scientific vocabulary in the Indigenous languages will result in the development and continued relevance of these languages.

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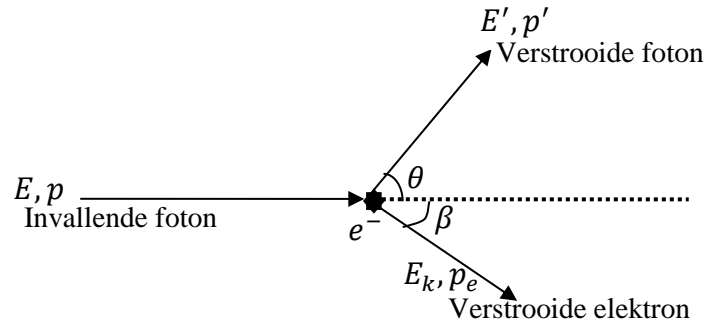
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Appendix A

The Compton Effect in Three Languages

1. *Nederlands (Dutch)*

Laat men een elektromagnetisch straling vallen op, bijvoorbeeld een blok grafiet, dan neemt men een electromagnetisch straling waar die zijdelings uit het blok treedt, zogenaamd verstrooide stralling. De golflengte van de verstrooide straling is groter dan die van de invallende straling. De golflengteverandering $\Delta\lambda$ is groter naarmate de verstrooiings hoek θ groter is. Een verklaring van dit verschijnsel op basis van de klassieke golftheorie is onmogelijk. Compton liet echter zien dat de verstrooiing invoudig te begrijpen is, als deze beschreven wordt als een botsingsproces tussen een foton en een stilstaande vrij elektron.



Figuur 11: Verstrooiing van een langs de x-as invallend foton $h\nu$ aan een stilstaande en vrij elektron. Volgens de wetten van behoud van energie en impuls: $E_k = E - E'$ en $p_e = p - p'$, met $p = p' \cos\theta + p_e \cos\beta$ and $p' \sin\theta = p_e \sin\beta$

Toepassing van de wetten van het behoud van impuls en energie levert, dan als p, E de impuls en de energie van het invallende foton en p', E' de impuls en energie van het verstrooide foton is:

$$p = p' + p_e \quad \text{met} \quad p_e = p - p' \quad 11.5$$

$$E + mc^2 = E' + \sqrt{m_0^2 c^4 + p_e^2 c^2} \quad 11.6$$

de terugslag impuls van de elektron. Kwadrateer $p_e = p - p'$ en uit 11.5

$$p_e^2 = p^2 + p'^2 - 2pp'\cos\theta; \text{ met } p = \frac{E}{c} = \frac{h\nu}{c} = \frac{h}{\lambda},$$

$$\text{en } p' = \frac{E'}{c} = \frac{h\nu'}{c} = \frac{h}{\lambda'} \text{ krijgt men } p_e^2 = \frac{1}{c^2} (E^2 + E'^2 - 2EE'\cos\theta) \quad 11.7$$

$$\text{Uit 11.6 volgt } p_e^2 = \frac{1}{c^2} [E^2 + E'^2 - 2EE' + 2(E - E')m_e c^2] \quad 11.8$$

Vergelijkingen 11.7 en 11.8 tonen dat:

$$E - E' = \frac{EE'}{m_e c^2} (1 - \cos\theta), \text{ zodat met } E = h\nu = \frac{hc}{\lambda}, \text{ krijgt men}$$

$$\lambda' - \lambda = \lambda_C (1 - \cos\theta) \quad 11.9$$

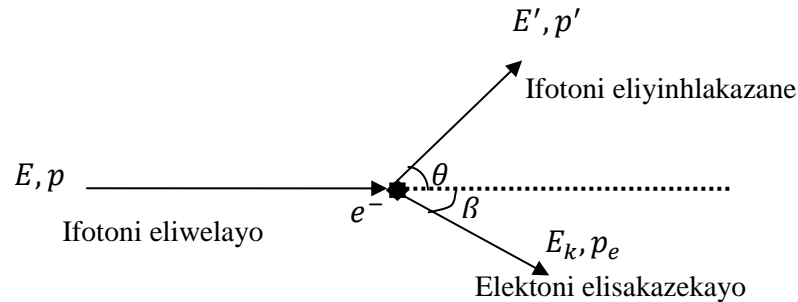
$$\lambda_C = \frac{h}{m_e c} \text{ de zogenaamd Compton golflengte.}$$

Opgave: Beschouw een bundel fotonen met $\lambda = 0.1\text{nm}$ en een met $\lambda = 0.002\text{nm}$. Als de straling door vrije elektronen verstrooid wordt over 90° , hoe groot is dan de golflengteverandering in elke van deze gevallen?

2. IsiNguni

Singathatha inkanyiso yewongagetsi siyiwisele ebusweni besibunjwa esinjengomkhumence sizabona enye inkanyiso yewongagetsi eyinhlakazane ivela eceleni komkhumence. Sizananzelela ukuba ubudebegagasi lenkanyiso eyinhlakazane bukhulu kunalobo obenkanyiso ewelayo. Umehluko wobude bamagagasi la $\Delta\lambda$ uya ukhula ngokhula kwezinga lenkomba θ yenkanyiso eyinhlakazane. Isimanga lesi kasichasiseki ngenfundavelo yamagagasi yendulo. Noma kunjalo Compton watshengisa ukuthi ukubakhona

kwenhlakazane yenkanyiso yewongagetsi, kuchasiseka lula uma kungathathwa njengongquzulwana lwe fothoni nohlanjana oluyabuzela lundawonye.



Isifanekiso 11: Ukuhlakazwa kwefotoni $h\nu$, eliwela ngogalo - x ku elektoni eliyabuzela ndawonye. Kulandelwa imithetho yokongeka kwesidlakadla nesivungudla : $E_k = E - E'$ njalo $p_e = p - p'$ no $p = p' \cos \theta + p_e \cos \beta$ futhi $p' \sin \theta = p_e \sin \beta$

Singasebenzisa imithetho yokongeka kwesivungudla nesidlakadla, uma p, E kuyisivungudla nesidlakadla sefothoni eliwelayo njalo p', E' kuyisivungudla nesidlakadla sefothoni eliyinhlakazane, sizathola lezi izibalo:

$$p = p' + p_e, \text{ njalo } p_e = p - p' \quad 11.5$$

$$E + mc^2 = E' + \sqrt{m_0^2 c^4 + p_e^2 c^2} \quad 11.6$$

Kusibalo 11.5 $p_e = p - p'$ yisivungudla elekthoni elikhwincika ngaso.

Lapha $p_e = p - p'$ angaphiwa amandla kabili sithola lokhu:

$$p_e^2 = p^2 + p'^2 - 2pp' \cos \theta; \text{ njalo } p = \frac{E}{c} = \frac{h\nu}{c} = \frac{h}{\lambda},$$

$$\text{no } p' = \frac{E'}{c} = \frac{h\nu'}{c} = \frac{h}{\lambda'} \text{ yikho } p_e^2 = \frac{1}{c^2} (E^2 + E'^2 - 2EE' \cos \theta) \quad 11.7$$

$$\text{Kusuka ku 11.6 kulandela: } p_e^2 = \frac{1}{c^2} [E^2 + E'^2 - 2EE' + 2(E - E')m_e c^2] \quad 11.8$$

$$\text{Izilinganisa lezi 11.7 no 11.8 zitshengisa lokhu: } E - E' = \frac{EE'}{m_e c^2} (1 - \cos \theta).$$

$$\text{Njengoba } E = h\nu = \frac{hc}{\lambda}, \text{ sithola lokhu:}$$

$$\lambda' - \lambda = \lambda_C(1 - \cos\theta) \quad 11.9$$

$$\lambda_C = \frac{h}{m_e c} \text{ wubude begagasi obuthiwa ngobuka Compton.}$$

Isibonelo

Cabanga inxuku ezimbili zamafothoni anobude bamagagasi $\lambda = 0.01\text{nm}$, $\lambda = 0.002\text{nm}$. Uma inkanyiso ehlakazwa ngama elektoni ayabuzela endawonye iphanjulwa ngenkomba 60° , mkhulu okunganani umehluko wobude bamagagasi amafothoni, eliwelayo neliyinhlakazane kuzo zombili izenzeko?

3. English

If I let electromagnetic radiation to be incident on, for example, a block of graphite, I observe another electromagnetic radiation being emitted out of the side of the block - the so called scattered radiation. It is found that the wavelength of the scattered radiation is longer than that of the incident radiation. The difference in the wavelengths of incident and scattered radiations $\Delta\lambda$ increases with the increase in the angle θ , that the scattered radiation makes with the direction of the incident radiation. An explanation of this phenomenon on the basis of the classical wave theory is not possible. However, Compton showed that the scattering could easily be explained if the phenomenon is described as a collision process that is taking place between a photon and a free but stationary electron.

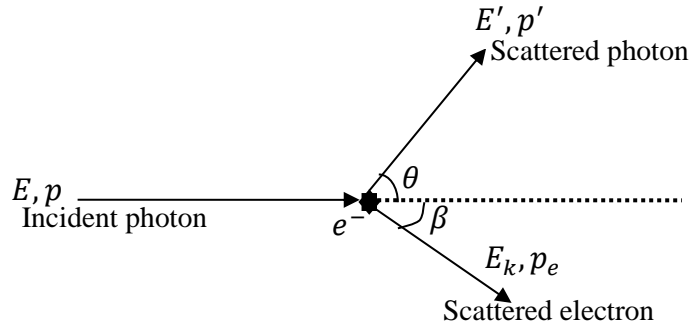


Figure 11: The scattering of a photon that is incident along the x – axis by a free and stationary electron. According to the energy and momentum conservation laws: $E_k = E - E'$ and $p_e = p - p'$, with $p = p' \cos \theta + p_e \cos \beta$ and $p' \sin \theta = p_e \sin \beta$

If we apply the conservation laws of energy and momentum, with p, E the momentum and the energy of the incident photon respectively, while p', E' are the momentum and energy of the scattered photon respectively, we find that:

$$p = p' + p_e \quad \text{and} \quad p_e = p - p' \quad 11.5$$

$$E + mc^2 = E' + \sqrt{m_0^2 c^4 + p_e^2 c^2} \quad 11.6$$

where $p_e = p - p'$ is the recoil momentum of the electron.

If we square 11.5 $p_e^2 = p^2 + p'^2 - 2pp' \cos \theta$; and with $p = \frac{E}{c} = \frac{h\nu}{c}$ en $p' = \frac{E'}{c} = \frac{h\nu'}{c}$

$$\text{we obtain: } p_e^2 = \frac{1}{c^2} (E^2 + E'^2 - 2EE' \cos \theta) \quad 11.7$$

$$\text{From 11.6 follows: } p_e^2 = \frac{1}{c^2} [E^2 + E'^2 - 2EE' + 2(E - E')m_e c^2] \quad 11.8$$

$$\text{Equating 11.7 en 11.8 shows that: } E - E' = \frac{EE'}{m_e c^2} (1 - \cos \theta) \quad 11.9$$

Since $E = h\nu = \frac{hc}{\lambda}$, 11.9 can be expressed thus: $\lambda' - \lambda = \lambda_C (1 - \cos \theta)$

where $\lambda_C = \frac{h}{m_e c}$ is called the Compton wavelength.

Example: Two beams of photons having wavelengths $\lambda = 0.1\text{nm}$ and $\lambda = 0.002\text{nm}$ are each scattered by free electrons. If the scattering angle is $\theta = 60^\circ$, what is the magnitude of the difference in wavelengths of the photons before and after each has been scattered?

Appendix B

Vocabulary in Dutch, isiNguni and English for Appendix A

Nederlands (Dutch)	isiNguni	Literal Translation	English
electromagnetisch straling	ucwazima lowongagetsi	the radiation of electromagnetism	electromagnetic radiation
verstroide straling	ucwazima oluyinhlakazane	the radiation that is spread about	scattered radiation
golflengte	ubude begagasi	the length of a wave	wavelength
golflengteverandering $\Delta\lambda$	umahluko wobude bamagagasi $\Delta\lambda$	the difference in the lengths of the waves	the wavelength difference $\Delta\lambda$
verstrooiingshoek θ	izinga lenkomba θ yenhlakazane	the degree of the scattering θ	the scattering angle θ
verschijnsel	isibonakaliso	that which is observed	phenomenon
klassieke golftheorie	infunisela yendulo ngamagagasi	that which was thought to be about waves	classical wave theory
botsingsproses	isenzeko songquzulwana	the process of colliding	collision process
sfoton	ifothoni / uhlanvulwelanga	photon/a particle of the sun	photon
stilstande vrij elektron	elekthoni eliyabuzela lindawonye	electron that wonders around the same location	free and stationary electron
toepasing	ukusebenzisa	if we use	if we apply
vetten van behoud	imithetho yokongeka	laws of conservation	laws of conservation
impuls en energie	isivungudla ne sidlakadla	that which blows forcefully and energy	momentum and energy
invallende foton	ifothoni eliwelayo	the photon that falls onto	incident photon
terugslag impuls van een elektron	isivungudla elekthoni elikwincika ngaso	the momentum with which the electron recoils	the recoil momentum
kwadrateer p_e	uma p_e angaphiwa amandla kabili	if p_e is powered twice	if p_e is squared
vergelijking	isilinganisa	that which equates	equation

TE TUPU O TE RĀKAU: STAGES OF GROWTH OF MĀORI MEDIUM EDUCATION

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Abstract

Over the past 40 or so years, a small sub-sector of state-funded education has developed in Aotearoa New Zealand, in which the language medium is te reo Māori (the Māori language). Te reo Māori became an endangered language as a result of British colonization and schooling from about 1800 onwards, declining by the mid-1970s to a point where intergenerational transmission had almost completely stopped. Today, Māori medium graduates and their children are growing up as new generations of Māori people, equipped with skills to contribute positively to Māori society and futures and the wider world. The efforts required to support these developments reflect the strong aspirations of Māori people for the survival and restoration of te reo Māori and Māori culture for future generations. This article presents a high-level overview of Māori medium education and its contribution to the revitalization of te reo Māori by focusing on four sequential stages of its growth and evolution: early childhood, school, tertiary, and doctoral studies.

Keywords: Kōhanga Reo, Kura Kaupapa Māori, Māori medium education, Te reo Māori, Wānanga

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Introduction

The term “Māori education” has been part of the national educational discourse of Aotearoa New Zealand from its very beginnings, but in recent decades the meaning of “Māori education” has been transformed from the colonizing, assimilatory meaning of “education *of* Māori” to a new, decolonizing, emancipatory meaning of “education *for* Māori” in which Māori medium education is central (Durie, 1999).

In the latter part of the twentieth century, Māori education took a new direction in the creation of Te Kōhanga Reo, total immersion Māori language settings for preschool children. Te Kōhanga Reo introduced an educational approach that repositioned Indigenous Māori culture and language as legitimate in provisions now called Māori medium education. (Hohepa & Paki, 2017, p. 97)

This new direction followed over a century of colonial “education” in which “Māori language and culture were positioned as obstacles to educational progress and denied space in the education system” (Hohepa & Paki, 2017, p. 96). A recent reversal in the logic of policy discourse for Māori in English medium or “mainstream” education reflects the success of Māori medium education: After a century of *blaming* te reo Māori for the underachievement of Māori students in school, contemporary education policy attributes intransigent inequity for Māori learners to the *lack* of te reo Māori in schools (Durie, 1999). These observations highlight the *political* nature of Māori medium education in reflecting dominant national thinking and how it changes over time.

Māori medium education is a complex practice, much more than a “simple” matter of translation (Malmkjær, 2010). Māori medium education harnesses Māori energy and passion for language and culture and yokes these to education policy drivers such as equity, the Treaty of Waitangi, choice, and innovation. Māori medium education is an outstanding success of Māori identity politics in the contemporary post-colonial period and a way for the state to be seen to be “doing the right thing” to deliver equity for Māori in education and protect the future of te reo Māori overall. Te reo Māori is recognised as a leader in the international networks of Indigenous language revitalization. The successes of Māori language revitalization have been closely associated with Māori medium education and social values of tolerance and equality, as expressed in the classic Kiwi slogan of giving everyone a “fair go.”

This research looks through the lens of “stages of growth” in order to achieve breadth across the sectors, since most small-scale educational research is confined within one sector. Both authors have lived through the evolving stages of growth of Māori medium education as parents, teachers, teacher educators, and researchers. Both authors are members of the language “hinge” generation: our parents were native Māori speakers who learned English on going to school, and our children were born at a time when Māori medium options had become available (Tocker, 2017). But for Māori people like us, born between about 1950–1980, the language of home, school, and the public sphere was normatively English. To write this article, we weave together our combined experiences and previous research with critical commentary based on research literature.

The near loss of the Māori language, which is the embodiment of Māori identity and central in the Māori way of life, was the outcome of over a century of language suppression as part of the assimilationist policies administered by successive governments (Penetito, 2010). National surveys of Māori language use in the 1970s called attention to the moribund state of the language. Richard Benton (1978) reported that there were few remaining native speakers of Māori, and few children could speak the language, so it was fated to die out if drastic measures were not taken to ensure its survival. Benton's report raised the alarm among Māori, who agitated for Māori language recognition in education and law. This period of activism gave rise to new forms of Māori immersion education: Kōhanga Reo at pre-school level and Kura Kaupapa Māori at primary-school level (Nepe, 1991). These Māori-medium learning environments were attempts to preserve and rekindle Māori language and culture and provide a Māori education that validates traditional Māori knowledge and pedagogy: all values that must be struggled for on a daily basis in New Zealand (Olsen-Reeder et al., 2017).

The phrase "kaupapa Māori" denotes a position in which Māori language, values, culture and ways of being are viewed as "normal" and central, therefore giving credence to a Māori world view. A kaupapa Māori stance provided the springboard for the group of Māori pushing at the political level for the right to a Māori language and Māori-centred education for their children. The main aim of Kura Kaupapa Māori is to enable children to "live as Māori." According to Mason Durie (2003, p. 199), the goal of enabling Māori to live as Māori should be an objective of educationists when preparing Māori children for the future. However, the notion of "living as Māori" is a very complex idea, not least because New Zealand is a society

governed by the English language and a set of values and social structures that are far removed from the traditional world of Māori.

The social results of Māori medium education have encouraged a new high level of national support and acceptance of te reo Māori in Aotearoa New Zealand (Albury, 2016; Stephens, 2014). Language revitalization research is radically interdisciplinary and defies conceptualization; the complete picture is impossible to grasp from one position (Day et al., 2016). For those less familiar with education in Aotearoa New Zealand, the list below summarises the sectors of Māori medium education discussed in this article, with the decade in which each was established shown in brackets. The following four main sections focus in turn on Māori medium education in early childhood, school, tertiary, and doctoral studies, to paint a picture of the growth of the stages of Māori medium education.

List of Māori Medium Education Sectors/Stages of Growth

Early childhood:	Te Kōhanga Reo (1970s)
School:	Kura Kaupapa Māori (1980s)
	Wharekura (1990s)
Tertiary:	Wānanga, for example, Te Wānanga o Awanuiārangi (1990s)
	Polytechnic courses, for example, Te Wānanga o Ngāpuhi (1990s)
	Private Training Establishment (PTE), for example, Te Kura Takiura (1990s)
	University: Māori Studies as a local discipline (1950s)
	Māori Initial Teacher Education, for example, Te Huarahi Māori (1990s)

Māori Medium Early Childhood Education: He kākano i ruia mai i Rangiātea

The decolonial genius of Māori medium education was the creation of early childhood education centres, known as Kōhanga Reo (literally, language nests), in which mostly kuia (female elders) became teachers of mokopuna (Māori infants), speaking only in their first language, te reo Māori: their home language and the birthright of all Māori people. These elders, born before 1945, shared common life experiences of having been forced to become bilingual, learning to speak English on turning five, and going to school (Blank, 1968). That generation had learned to curb their mother tongue, reserving te reo for the marae and private times amongst themselves, speaking only their second language, English, to their children, hoping they could have less traumatic school experiences (Selby, 1999).

The work of the elder teachers of Kōhanga Reo in those early years was politically radical and culturally transformative community language activism that transgressed the norms and rules they had followed for decades (May, 1999). At the collective Māori level and from the theoretical perspective of language policy and planning, the initiation of Kōhanga Reo was a deliberate sociolinguistic strategy to rescue and revitalize te reo Māori, bypassing the lack of te reo fluency of the parents, who were of the urban Māori generations born since 1960 and had grown up without their language (Spolsky, 2003).

Kōhanga reignites intergenerational language and culture transmission processes and enables whānau (family) to pass Māori language on to their tamariki (children) through culturally preferred socialisation practices, even when parents are not fluent speakers. (Hohepa & Paki, 2017, p. 98)

Taking a wider view, Te Kōhanga Reo had immense impact on Māori society overall, and hence on Aotearoa New Zealand as a nation (Smith, 1990, 2003), over and above its influence on the mokopuna themselves of the Kōhanga generations. Te reo Māori started to be “ideologically tolerated by the majority” (Albury, 2016, p. 298): Suddenly, it seemed, it became socially acceptable to hear and use Māori in public spaces, including media, arts, sport, law, health, and others (Stephens, 2014).

Kōhanga Reo was more than a language nest. It was more than a childcare centre.

Today it has become a social, economic, health, educational, spiritual, political and cultural renaissance for Māori. (Royal Tangaere, 1997, p. 43)

But in 1990, as part of the wide-ranging reconfiguration of the national public service under neoliberal policy influences, control of Kōhanga moved from Māori Affairs, which was abolished, to the newly reconfigured Ministry of Education:

The devolution of the Department of Maori Affairs in 1989 lead to the decision by the Minister of Education and the Minister of Maori Affairs that the newly formed Ministry of Education would be the most appropriate government department to oversee kōhanga reo. The reasoning was that kōhanga reo, like the early childhood sector, would be eligible for funding through the Ministry of Education. (Royal Tangaere, 1997, p. 43)

This change in policy effected a neoliberal state takeover of what had begun as a community-initiated movement for te reo revitalization. It was a key moment in the history of Māori medium education, and although the early childhood sector continues to embrace a

“bicultural” narrative, the reality for Kōhanga Reo was the advent of sharp declines, as shown by this summary of national statistics:

The first kōhanga reo opened in 1982. Growth in the number of children that attended continued throughout the 1980s, and peaked in 1993 with over 14,000 enrolments. At this time kōhanga reo were responsible for close to half of all Māori enrolments in early childhood services. By 2001, enrolment numbers had declined to around 9,500, where they remained until 2012. (Statistics New Zealand Tatauranga Aotearoa, 2020)

Today, the decline of Kōhanga Reo seen in the 1990s has slowed, but national numbers are stagnant: 2019 statistics show a total Kōhanga Reo roll of approximately 8,500, a level that has remained steady for the last several years according to Ministry of Education statistics (<http://www.educationcounts.govt.nz>).

For some years now, Māori medium graduates have been becoming parents and bringing their own children to Kōhanga Reo. This second generation of Māori medium learners contributes to the resumption of inter-generational transmission of Māori language and culture, a key element of language revitalization that was not seen in a 2003 study that reported that “20 years of activity have produced no more than a handful of new speakers who might be expected to ensure natural intergenerational transmission to their own children” (Spolsky, 2003, p. 569). Fifteen years later, we see growing numbers of Māori-speaking couples and families in the community. A recent statistical report on Māori medium education notes that “with over 60,000 Māori having attended Kōhanga Reo since its

inception, these institutions continue to play a crucial role in reviving te reo Māori” (Statistics New Zealand Tatauranga Aotearoa, 2020, p. 21).

The proverbial phrase “he kākano i ruia mai i Rangiātea” (a seed sown in the heavens) is used in the section title above to reflect the immense symbolic significance of Kōhanga Reo to the modern Māori renaissance and because the Kōhanga Reo movement sowed the seeds of language regeneration of te reo Māori, which later grew in diverse ways and places that could not have been fully anticipated. Without Kōhanga Reo, the other stages of Māori medium education would not have been able to develop, so Kōhanga Reo is like the mātāmua (first born) of the sectors and hence a leader of Māori medium education.

Māori Medium Schooling: Te Waonui a Tāne

Tāne is the Māori deity of both humankind and the forest, and “te waonui a Tāne” depicts the verdant growth of Māori children in Māori medium schools: a category that includes all immersion and bilingual school programmes where te reo is spoken at least 50 percent of the time. Kura Kaupapa Māori were legally established in 1989, and legislation also provides for the creation of other “special character” schools. Over time, other types of Māori medium programmes have developed, both whole schools such as Kura Taiao and Kura-a-Iwi, and units within schools, both full immersion and bilingual. Given this diversity in the Māori medium school sector, this section focuses mainly on Kura Kaupapa Māori, the original and largest type of school offering immersion in Māori language and culture across the school span, from Year 1 (mostly 5-year-olds) to Year 13 (mostly 18-year-olds), consisting of a brief statistical snapshot, below, followed by a discussion of its aims and achievements.

Statistical Snapshot of Kura Kaupapa Māori

The number of children attending Kura Kaupapa Māori has slowly increased by about 5 percent each year, from 3,226 in 1996 to 8,060 in 2019. Meanwhile, growth in other Māori medium school types such as Kura-a-Iwi (kin group-based schools) and Kura Taiao (environment-focused schools) means that by 2019, these types have combined student numbers nearly equal to those of Kura Kaupapa Māori. The number of students in bilingual programmes has remained steady at around 4,000, adding up to the total of 21,489 students reported in Māori medium schooling, which corresponds to 11 percent of the Māori roll, and 3 percent of the total school roll. The table below compares the relative sizes of the national roll in the first and last years of school, Year 1 and Year 13, for three cohorts: all students, all Māori students, and all Kura Kaupapa Māori students (<http://www.educationcounts.govt.nz>).

Comparing National, Māori, and Kura Kaupapa Māori Rolls at Year 1 and Year 13

<i>2019 School Roll Statistics</i>	<i>Year 1</i>	<i>Year 13</i>	<i>Attrition: 100-(Y13/Y1)%</i>
National total roll	61,517	47,599	23%
Māori roll (% of national)	15,375 (25%)	8,232 (17%)	46%
Kura Kaupapa Māori roll (% of Māori roll)	834 (5%)	218 (3%)	74%

These data reveal two concerning trends: First, about half of all Māori students are no longer in school by Year 13, a much higher rate of attrition than for all students; and second, around three-quarters of students who enter Kura Kaupapa Māori at Year 1 leave before completing

Year 13, with many migrating to English medium schools during their secondary (high) school years.

Schooling in Aotearoa New Zealand is compulsory, whereas early childhood and tertiary forms of education are non-compulsory: a crucial distinction in terms of policy and the “bottom line” of the state’s commitment to fund Māori medium schooling as part of the legal language rights of Māori people in Aotearoa New Zealand. This basic difference between compulsion and choice impacts on all aspects of development of Māori medium education in the various sectors and the strategies open to them in negotiations with the state.

Aims and Achievements of Kura Kaupapa Māori

Kura Kaupapa Māori provide an education system in which primary (elementary) school children are immersed in the Māori language and culture. In its goal to enable children to live as Māori, this unique Māori immersion learning environment fosters the educational growth of bilingual, bicultural children. Kura Kaupapa Māori aims to create adults who will strive to attain academic achievement while carrying Māori language and knowledge. There is also an expectation that children will be taught the skills and knowledge that will enable them to adapt and live at ease in a variety of situations domestically and globally, for it is crucial that Māori students are well-prepared to advance into the world and the international domain as active and contributing citizens.

During Kura Kaupapa Māori schooling, students learn facets of Māori ways of behaving that help them in later life as adults. The practice of standing to deliver a mihi (greetings) or

whaikōrero (speech), and to perform waiata (song) and haka (type of dance) helps the young people to gain confidence in their abilities to address large groups of people. The Māori immersion, whānau-oriented education in Kura Kaupapa Māori instills confidence in the graduates and a sense that they have the ability to enter any kind of work. Kura Kaupapa Māori graduates have no difficulty in finding employment. Armed with the Māori language, a strong identity, and a sense of being able to achieve whatever they aspire to, early graduates were employed in Māori media and Māori medium teaching. Others from the first cohorts of graduates from Māori medium education undertook university study; one became a doctor, another a psychologist (Tocker, 2014).

The graduates provide insight into how Māori medium education has provided guidance and support in their lives. Upon their graduation from school, it has been the maintenance of Māori language and values that has given them the strength and mechanisms to cope in a world that is often at odds with the Māori worldview that nourished them during their schooling. In upholding values such as manaakitanga, whanaungatanga, and aroha, the graduates give life to traditional Māori cultural practices and Māori tikanga and, in the modern contexts of kapa haka groups, sports clubs, and social venues, have a sense of being wherein it is normal to be Māori.

With their knowledge of te reo Māori and tikanga, the graduates are aware of their responsibilities towards whānau, hapū, and iwi and the expectations of possible leadership roles in the future for their people. Thus, they exemplify the vision of those who gave birth to Kura Kaupapa Māori and Te Aho Matua.

In utilising the value of whanaungatanga, Kura Kaupapa Māori graduates nourish a strong connection to the kura whānau and to their own kura friends and classmates. The bond and identification to Kura Kaupapa Māori is about identity. Graduates proudly identify as ex-students of Kura Kaupapa Māori and wharekura (secondary forms of Kura Kaupapa Māori) and most importantly, see each other as family. The elements of manaakitanga and aroha (love, respect, and understanding) are embodied by the graduates in their lived experiences of tikanga Māori. The concept of whanaungatanga (relationships) is crucial in te ao Māori, where whanaungatanga refers to relationships informed by whakapapa (Mead, 2016), which literally means genealogy, but also has additional, deeper meanings. The whakapapa that binds the Kura Kaupapa Māori graduates is made up of their shared experiences at school. The graduates in Auckland are a whānau (extended family) who socialise and play sport together and have formed a renowned kapa haka group. Some have married and now have their own children growing up in a kaupapa Māori environment (Tocker, 2014).

The graduates of Kura Kaupapa Māori are strikingly different from most of the previous generations of Māori school leavers, as described in a story that hits precisely the link between education, equity, and Māori-Pākehā social relations, told by Iritana Tawhiwhirangi, a founder of the Kōhanga Reo movement:

Those children who did not succeed left the education system disillusioned and angry. Many joined gangs, became "antisocial" and rejected society. Of the small percentage of Maori children who succeeded many went to university but many still left the education system—disillusioned and angry. This was the start of the Nga Tamatoa (a vocal university-based Maori political movement). The two

groups left the education system-disillusioned and angry. One group were able to articulate their anger while the other physically demonstrated their anger. One group were able to critically analyse government policies and identify the inequity. The other group were barely literate. (as recounted in Royal Tangaere, 1997, p. 41)

Through the practice of whanaungatanga and the maintenance of Māori language and cultural values, the graduates are normalising the use of Māori language and ways of being outside of traditional Māori domains. In adhering to Māori values, the graduates know that they must take care of the taonga (treasures) of the Māori language, culture, and traditions acquired through their education; there is a cultural expectation for them to return to their homelands and share their Māori knowledge with their own communities. Armed with this knowledge and understanding and a strong identity and self-belief, a number of graduates have become leaders in their professions and are not afraid to put forward viewpoints that represent a Māori worldview to New Zealand society and challenge its predominance of Western values and ideologies.

Māori Medium Tertiary Education: Te Tihi o te Maunga

The 1998 Hawke report on the tertiary sector “advocated the decentralisation of post-compulsory education and training, and also recognition of Māori claims to education under the ‘principles of the Treaty of Waitangi’” (Walker, 2005, p. 4). Decentralisation was implemented and led to the current tertiary scene, made up of four sub-sectors: universities, polytechnics, private training establishments (PTEs), and Wānanga; but universities struggle

to respond to the challenge of “Māori claims to education” as seen by the debates about incorporating Māori/Indigenous knowledge in the university (see, for example, Cram et al., 2014). Māori participation in tertiary education overall remains limited in terms of proportionate number of students and skewed in terms of being concentrated in restricted areas of study, mostly pre-degree level te reo (Māori language) or tikanga-based courses (Earle, 2007). In 1997, it was found that “there were few courses available at the tertiary level taught through the medium of Māori other than some teacher training courses and Māori language courses” (Durie, 1999, pp. 74–75), and this finding is still relevant in 2021. Nevertheless, Māori medium education has infiltrated all four forms of tertiary in different ways and extents, resulting in an extremely complex picture. What follows is a brief sketch, first giving examples of Māori medium education in polytechnics and PTEs, then more extended discussion of Māori medium education in Wānanga and universities.

Most polytechnic education is at pre-degree level, with one relevant example from NorthTec based in Whāngarei, which has taught certificates and diplomas of regional Māori language and knowledge for 25+ years (<http://www.northtec.ac.nz/programmes/te-reo>). The diploma level courses include spoken and written Māori medium assessments and integrate language learning with history, iwi politics, research skills, and marae leadership roles. Such programmes highlight the overlap between “learning of the language” and “learning in the language” (Earle, 2007, p. 2). These two orientations cannot be seen as entirely separate and defy analytical and funding categories. This fuzzy overlap is inherent in all tertiary Māori medium education and is a key aspect of its complexity.

Private Training Establishments are privately-owned businesses that generally offer industry-specific training. Accredited courses and their students receive government funding. Te Wānanga Takiura o ngā Kura Kaupapa Māori o Aotearoa (<http://www.twt.ac.nz>) is a PTE based in Auckland that offers Māori medium initial teacher education and te reo Māori courses, as one significant example of Māori medium education in the PTE sub-sector of tertiary education.

The Wānanga sector comprises three Māori tertiary institutions established by 1990 legislation that marked success following a long struggle by, among others, Whatarangi Winiata (as recounted in Walker, 2005). Wānanga are structurally Māori institutions, so, in this sense, are the tertiary equivalent of Kōhanga Reo and Kura Kaupapa Māori. Each Wānanga has distinctive characteristics, but in relation to meeting the criteria of the New Zealand Qualifications Authority (NZQA) and fitting within the systems of funding, all face “a problem arising out of their special character regarding ‘*āhuatanga Māori*’” (Walker, 2005, p. 7, emphasis in original). The problem arises from “extension of the field into iwi/hapū (tribal) studies and whakapapa (Māori epistemology, equivalent to Foucault’s genealogy of knowledge)” (p. 7) and is exacerbated by proposals written in te reo, “complete with cultural values such as wairua, (spirituality) aroha, (love, compassion) whanaungatanga (kinship, relationships) and manaaki (care for, support, hospitality)” (Walker, 2005, p. 8). One empirical study of adult literacy provision in a Wānanga discovered this problem, describing the Wānanga as needing to navigate the tensions created when “major but contrasting policy goals such as Māori particularism and economic universalism are simultaneously pursued”

(Zepke, 2011, p. 440). These wording choices and terms showcase the philosophical nature of the problem, which therefore logically cannot be resolved by technical solutions.

The phrase “te tihi o te maunga” means “the top of the mountain,” with reference to the Māori metaphor of achievement as climbing uphill, which evokes the academic pathway of graduates of Māori medium schooling who proceed to university as young adults. The significance of Māori medium university education can be apprehended only by comparison with the previous century or more of deliberate strategies to lock te reo Māori outside the university gates (Durie, 1996; Walker, 1999). In 2021, Māori medium university education remains restricted to departments of Māori studies and degrees in initial teacher education (Lee-Morgan et al., 2019; Stewart et al., 2018), as was noted in 1999. The idea of teaching a “full undergraduate degree programme through the medium of Māori” (Durie, 1999, p. 75) remains hypothetical and looks set to be so for the foreseeable future. The workaround has been to adopt a fairly uniform policy in all eight universities that gives students the right to submit work written in te reo for any assignment, with provisos regarding the language fluency of the student and the ability of the department concerned to make appropriate marking arrangements.

For graduates of Kura Kaupapa Māori who have grown up all their lives in Māori culture and language, arriving at university is a major culture shock, daunting yet exciting (Stewart, 2018). Te reo Māori is their “safe” mode, their natural language of communication, and they carry it with them, as shown in these quotes from graduates:

Sometimes I actually – there were a few assignments where I would write it in Māori and try and translate it. (Reported in Stewart, 2018, p. 11)

There was no question of which language do you choose. When I started varsity in the Māori department as soon as I found out that they took assignments in te reo I was like, great, I'm writing in that. (Reported in Stewart, 2018, p. 12)

To use te reo at university is a legal right, given the official language status of te reo Māori (May, 2012). Writing in te reo at university is a strategic deployment of the power of the written word in the politics of Māori language revitalization and mana motuhake (Māori rights) under the broader intellectual project of kaupapa Māori. Thus, Māori medium university education is a form of epistemological “border work” that deals in the liminal space of the no-man’s-land between cultures and languages: the abysses and bridges that separate and traverse European and Indigenous knowledge forms and bases (Andreotti et al., 2011).

Māori Medium Doctoral Graduates: Ngā Raukura Kairangi

The first doctoral degree for a thesis written wholly in te reo Māori was awarded in 2000 (Black, 2000); in 2020 there were a total of 20 Māori medium doctoral graduates, from five of the eight universities in Aotearoa New Zealand (Stewart, 2019). As well as the eight universities, there is a ninth doctoral awarding institution, Te Wānanga o Awanuiārangi, where it is normal to write assignments in te reo Māori.

The first Māori medium doctoral completion by a graduate of the Kura Kaupapa Māori school system was recorded in 2010 (Mahuta, 2010). Two further Kura Kaupapa Māori graduates reached this achievement in 2013 (Martin, 2013) and 2015 (Poutū, 2015). Among the graduates of Kura Kaupapa Māori are numerous academic success stories, including some who have graduated with doctoral degrees written in English and many who have completed undergraduate and postgraduate qualifications. Every doctoral completion is a taonga to the graduate and their whānau and iwi. But it is difficult to overstate the symbolic success for the Kura Kaupapa Māori movement and Māori medium education more generally, of the achievement of these three special raukura kairangi (doctoral graduates) who have gone all the way through the formal education system, from pre-school to doctoral thesis, entirely in te reo Māori. “The years of commitment you make as a parent, it’s worth it when they can go all the way to do whatever they want, and the language is there alongside them” (a Māori professor, quoted in Stewart, 2019, p. 82).

A doctoral thesis is a theorization of a field of practice, so it makes sense that all the Māori medium doctoral theses written to date are in Māori Studies and Māori Education, which are the main fields of existing Māori medium practice. In future, Māori medium doctoral theses are likely to appear in fields where a Māori practice has begun, such as architecture, the arts, environmental science, health sciences, literature, media studies, and psychology. Better national coordination would be beneficial for all those involved in Māori medium doctoral studies as supervisors and senior managers. Universities cannot control future decisions by students about writing doctoral theses in te reo, but could be proactive in developing systems to support future initiatives. The most important steps a university can take to encourage

Māori medium doctoral studies are to have appropriate systems in place that can be flexible while upholding academic standards and are underpinned by a welcoming attitude towards Māori language and culture.

Conclusion: Ngā Hua o te Kaupapa

The word “hua” literally means “fruit”—also commonly used to mean “outcomes” or “children/descendants” as in the “fruits of one’s labour/loins.” “Ngā hua o te kaupapa” refers to the achievements of decades of lifework by many Māori people in tending the growth of the fruits of the tree of Māori medium education. These fruits include the systems and structures, physical and discursive, that have grown around the obstacles as best they could, resisting the winds of policy and funding changes. The ends of all that effort are the most important fruits of the kaupapa: those human beings who have grown up and become magnificent, now carrying the kaupapa forward into the future. In conclusion, four whakataukī (proverbial sayings) are used below to introduce four key themes or insights concerning the current status of the Māori medium education system. These inspirational proverbs are widely heard in the Māori medium education community and some have already appeared in titles, above. They are all reflected in the underlying philosophy of the kaupapa Māori approach in education (Stewart, 2020).

He tangata i ākona ki te whare, tūnga ki te marae tau ana

A person who is taught well at home can operate confidently in the outside world. This whakataukī represents how Māori medium education prepares graduates to achieve highly in both the Māori world and the wider world. The adult graduates of Māori medium education, especially those who have grown up in Kōhanga Reo, Kura Kaupapa Māori, and Wharekura,

are achieving across many societal domains, educational and otherwise, while also repopulating the community leadership positions of the marae and iwi around the country. Māori medium education has not hampered the achievement of graduates in the wider English-speaking world.

E kore ahau e ngaro, he kākano i ruia mai i Rangiātea

I will never be lost, for I am a seed sown from the celestial realms of Rangiātea. This whakataukī recalls the unbroken thread of language and culture from past, to present, to future, and the vital importance of te reo Māori to the goal of living as Māori. Māori medium education is one significant part of a larger story of the revitalization of te reo. This whakataukī speaks to the contributions of the stages of Māori medium education, and above all to the power of grandmothers talking to infants in Kōhanga Reo, an act of grace that seeded the renewal of intergenerational Māori language transmission.

Te piko o te māhuri, tērā te tupu o te rākau

As the sapling bends, so the tree grows. Māori medium education has developed and grown in different ways at each stage, according to the context and its affordances, opportunities and challenges. Māori medium education develops within a wider social environment that both supports and obstructs its success. Māori medium schooling supported and was supported by the concurrent growth of Māori television, radio, and print media and by the expansion of kaupapa Māori initiatives into other domains beyond education. These became career pathways for Māori medium graduates, in addition to Māori medium teaching and Māori language translation services. New technologies such as digital publishing and the

ubiquitous ability to record and share video footage change language norms in ways not yet fully understood. Māori medium education and the te reo movement is well positioned to take up the opportunities offered by the post-digital age of education (Reader et al., 2020).

One example of the wider effects of Māori medium education is the regeneration of the town of Ōtaki, on the west coast of the North Island, about an hour's drive north of Wellington. This was the site of the efforts by Winiata, mentioned above, to establish a strategic plan to regenerate te reo and culture among his people, with Māori medium education playing a key role. This story of social reclamation is told by Mereana Selby (2016), who has been integral in its success.

Whāia te iti kahurangi, ki te tūohu koe me he maunga teitei

Strive for the highest peak of achievement; if you should bow your head, let it be to a lofty mountain. Against the odds, and overcoming many difficult challenges, three students, who began learning as infants in the early years of Kōhanga Reo, kept going all the way through Kura Kaupapa Māori for their primary, intermediate, and secondary schooling, then on to university and undergraduate, postgraduate, and finally doctoral studies, writing and defending their doctoral theses in te reo Māori. The significance of their achievement cannot be overestimated. As well as the immense value to the graduates, their family, iwi, and peer groups, and as models for others to follow, this result crowns the success of Māori medium education by demonstrating the possibility of growing an entire system of immersion education in the medium of an endangered Indigenous language, from early childhood to doctoral studies, in one generation.

Glossary of Māori Words (*as used in this article*)

āhuatanga Māori	Māori circumstances
aroa	nearest equivalent Māori word to “love”
hapū	smaller kin group (often called “sub-tribe”)
he kākano i rūia mai i Rangiātea	seed(s) sown from the heavens
iwi	larger kin group (often called “tribe”)
kapa haka	cultural performance group
kaupapa	philosophy, movement, topic, principles, (political) cause
kōrero	to speak, utterance
kuia	female elder
Kura Kaupapa Māori	schools based on Māori language and philosophies
Kura Taiao	environment-focused Māori medium school
Kura-a-Iwi	kin group-based Māori medium school
mana motuhake	Māori rights
manaaki	make welcome, host, care for
Māori	ethnicity name for Indigenous peoples of Aotearoa
marae	Māori community centre
mātāmua	first born in a family
mātauranga Māori	Māori knowledge
mokopuna	grandchild(ren); also used for children in a Kōhanga Reo
ngā hua o te kaupapa	the fruits of the movement
ngā raukura kairangi	the doctoral graduates
Pākehā	New Zealand European

tamariki	children
taonga	treasure, valuable
Te Kōhanga Reo	Māori medium early childhood education, lit. “language nest”
te reo Māori	the Māori language
te tihi o te maunga	the peak of the hill
te tupu o te rākau	the growth of the tree
te waonui a Tāne	the forest of Tāne
wairua	spirituality
Wānanga	Māori form of tertiary institution
whakapapa	nearest equivalent Māori word to “genealogy”
whakataukī	proverbial saying
whānau	family, wider family, also used for a school community
whanaungatanga	relationships
wharekura	secondary (high-school level) Kura Kaupapa Māori

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A GLOSSARY OF SKW̱WÚ7MESH SNÍCHIM REVITALIZATION: THE WORK OF ADULT INDIGENOUS LANGUAGE EDUCATION

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Skw̱wú7mesh-Kwakwaka'wakw educator

Abstract

In determining if and how successful practices in Indigenous language revitalization (ILR) can be replicated or adapted, it is critical to understand the context in which such practices have shown success. In this article, the authors experiment with a glossary approach (Hurren, 2014, 2018; Tuck & Ree, 2013) to present the context of Skw̱wú7mesh Sníchim, a language that has seen a dramatic increase in the number of speakers since the introduction of an adult immersion program in 2016. Through a list of selected key words and phrases related to Skw̱wú7mesh language revitalization, the authors explore this effort in a creative and thought-provoking way. As the story of Skw̱wú7mesh Sníchim emerges through the words, both common and unique elements of the context are revealed, inviting readers to reflect on connections and possibilities in ILR. While the glossary provides insights for researchers interested in learning about and from the case of Skw̱wú7mesh Sníchim, it is also an example of how scholarly writing can be done in an interesting and accessible way to reach a wider audience. The glossary is not a prescriptive list of definitions, but rather a creative twist on qualitative writing that tells a story of ILR from a particular perspective at a particular time. This article provides insights into this case and hopes to prompt reflection for others engaged in this work.

Keywords: Indigenous languages, language revitalization, adult language learning, immersion education, qualitative writing

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Introduction

This glossary presents a partial list of words and phrases related to the revitalization of Skwxwú7mesh Sníchim, the Squamish language. It has been compiled with the intention to help familiarize others with the field of Indigenous language revitalization (ILR), the specific issues facing Skwxwú7mesh Sníchim, and the innovative approaches the Skwxwú7mesh people are taking to protect and strengthen their language. Heeding Richardson and St. Pierre's (2018) call for qualitative research writing that is less "boring," we experiment with a glossary approach to present this information in a creative way that is both reader-friendly and academic. The result is a snapshot of Skwxwú7mesh language revitalization at a particular moment, with adult learning at its core, told from the authors' perspectives. It is intended to be revised collaboratively as the context changes and the story evolves in the years to come.

Sharing Stories of Indigenous Language Revitalization

Language revitalization is a pressing priority for Indigenous Peoples. Attempts by colonial governments to eradicate Indigenous cultures and languages have been deliberate and pervasive (Pine & Turin, 2017). Canada's colonial history saw centuries of violence, racism, and assimilation efforts by churches and governments that actively sought to eliminate Indigenous Peoples and cultures (Truth and Reconciliation Commission of Canada, 2015). The impact of this violent dispossession is evident in the low number of speakers of many Indigenous languages today and the continued marginalization faced by Indigenous Peoples in Canada and around the world. Despite these challenges, Indigenous Peoples have shown incredible resilience and a commitment to their cultures. They have been working to

revitalize and strengthen their languages for decades, utilizing a wide range of innovative strategies (McIvor & Anisman, 2018), often with extremely limited resources.

As Indigenous communities work tirelessly to create new speakers, they look to one another for strategies and support. McIvor (2015) has identified the need for more ILR success stories to be made available, in particular to inspire and motivate adult Indigenous language learners. In telling such stories, however, it is critical to share contextual information so that others seeking to learn from best practices can determine if and how these might be replicated or adapted to their own contexts.

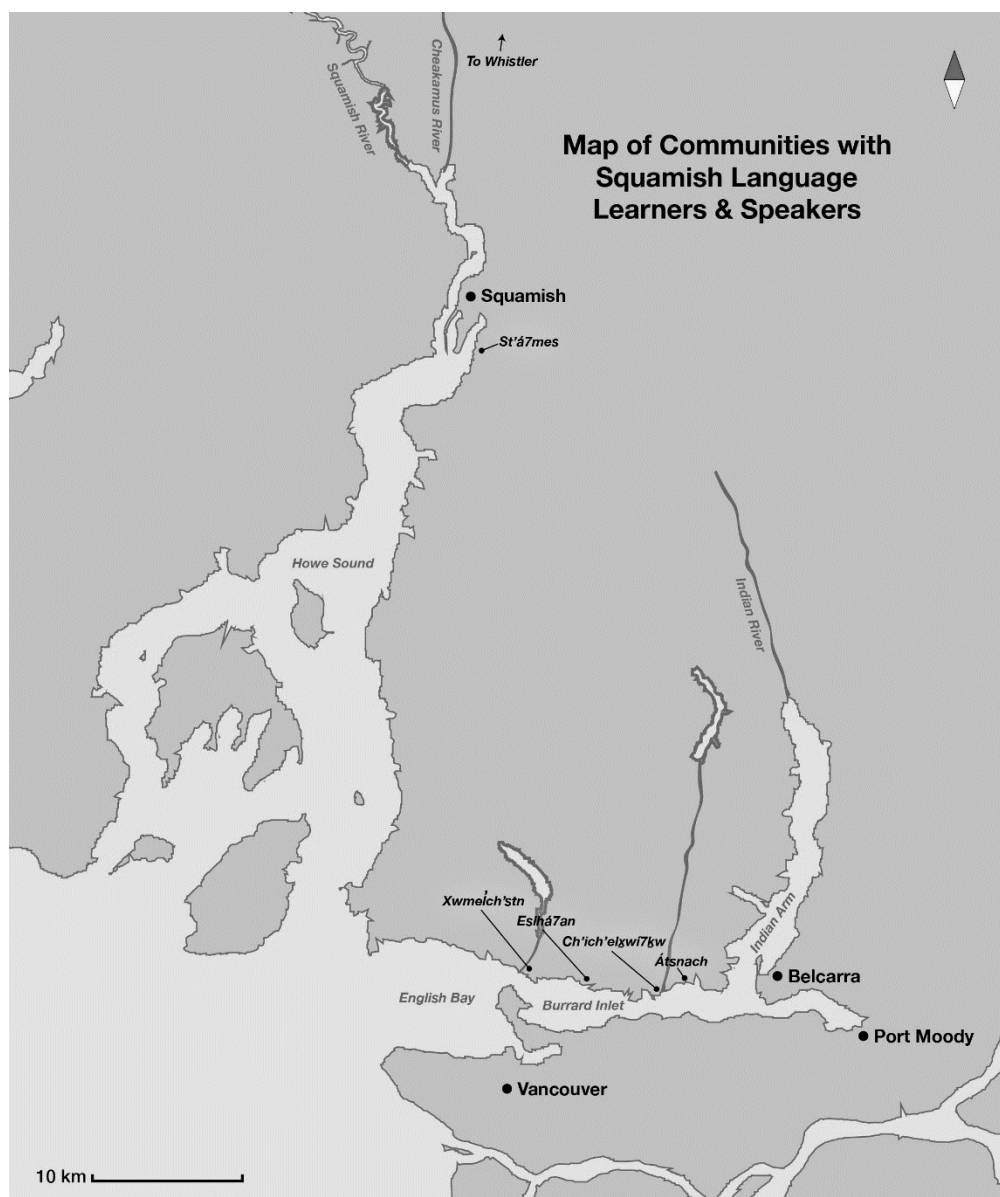
The success story in focus here is adult learning of Skwxwú7mesh Sníchim, an Indigenous language spoken by the original inhabitants of a territory on the west coast of what is now called Canada, which includes the watersheds of the Burrard Inlet, False Creek, English Bay, and Howe Sound (see [Figure 1](#)). In 2014 there were only seven remaining first language speakers of Skwxwú7mesh Sníchim (FPCC, 2014), and today, sadly, there are none. However, in 2016, the community organization Kwi Awt Stelmexw created a full-time adult immersion program for the language with assistance from Simon Fraser University. Before the Certificate in Skwxwú7mesh Language Proficiency (CSLP)² began, there were only a handful of learners who had reached an intermediate level or higher in Skwxwú7mesh Sníchim. By spring 2020, the program had graduated over 50 new speakers at these levels.

² When the certificate program began, it was offered through SFU's Certificate in First Nations Language Proficiency, subsequently renamed the Certificate in Indigenous Language Proficiency. This certificate is offered for several Indigenous languages. For clarity, this paper refers only to the Skwxwú7mesh Sníchim certificate and diploma programs, we have replaced the word Indigenous with Skwxwú7mesh in their titles.

In addition, the Diploma in Sk̓wx̓wú7mesh Language Proficiency (DSLP) had been created and graduated its first cohort of 18 students. In this article, we share the story of these programs and Sk̓wx̓wú7mesh Sníchim revitalization with attention to factors in the broader educational, historical, and socio-political context.

Figure 1

Map of Communities with Squamish Language Learners & Speakers



Note. Map designed by Khelsilem

A Glossary Approach to Qualitative Writing

A glossary ordinarily comes after a text, to define and specify terms, to ensure legibility. Glossaries can help readers to pause and make sense of something cramped and tightly worded; readers move from the main text to the back, and forth again. In this case, the glossary appears without its host - perhaps because it has gone missing, or it has been buried alive, or because it is still being written. (Tuck & Ree, 2013, p. 640)

A stand-alone glossary is an arts-based approach to qualitative writing, an example of creative nonfiction (Miller & Paola, 2019). The aim of creative nonfiction is to present factual information in an accessible and interesting way (Caulley, 2008), expanding the potential to reach a wider audience than typical research papers. A stand-alone glossary is an example of what Miller and Paola (2019) call a “hermit crab essay,” an essay written using the structure or “shell” of another writing form (p. 111). The stand-alone glossary has been used by Tuck and Ree (2013) and Hurren (2014, 2018) to present literature and research findings. Written as pieces of creative nonfiction, stories emerge through the words and phrases in their glossaries, expanding the readers’ awareness and understanding of the topic in question.

The glossary approach is both academic and artistic, particular and general, linear and circular. It is presented alphabetically but can be read in any order with no clear beginning or end as all the terms are interrelated. Many of these interrelations are indicated through cross-referencing, encouraging the reader to move through the glossary in a non-linear fashion. Tuck and Ree (2013) argue that such an approach violates “the terms of settler

colonial knowledge which require the separation of the particular from the general, the hosted from the host, personal from the public, the foot(note) from the head(line), the place from the larger narrative of nation” (p. 640). They explain that their glossary does not aim to tell the complete story, but is a “fractal” (p. 640). In the block quote above, they also indicate how glossaries can be useful for telling stories that have been suppressed or those that are still emerging. Part of the story, then, is told in the gaps between words, the elements that are still missing. Hurren (2018) notes for her glossaries that “a complete compilation of words . . . is not possible nor even desired” (p. 534). Their glossaries, and this one, do not aim to create a definitive product or final answer, but to shed light on a particular phenomenon from a particular angle at a particular time.

Introduction to the First Edition of the Glossary

This is the first iteration of the Glossary of Skwxwú7mesh Language Revitalization. It is intended to be reviewed and expanded over the years. The words have been chosen subjectively based on the authors’ perspectives and experiences. Khelsilem is a Skwxwú7mesh-Kwakwaka’wakw language revitalization activist, language teacher, and the founder of the CSLP. Nicki is a non-Indigenous graduate student working with the Skwxwú7mesh language community; she has worked with Khelsilem in the past, including providing administrative support for the creation of the CSLP.

We view the CSLP and DSLP, with their focus on adult immersion education, as the key to success in Skwxwú7mesh Sníchim revitalization in recent years. However, the story of these programs cannot be understood outside of the wider context. Some words selected for the

glossary, therefore, speak to the context, such as the history of language devitalization, the work that came before the CSLP to ensure the language was passed on, and the relationship between the CSLP, DSLP, and other programs. Other words speak very specifically to the CSLP, its creation, contributors, and teaching methods. In some cases, the connections between entries are made explicit through cross-referencing. In others, we leave these connections open to interpretation. As all of the words are interconnected, we leave space for readers to move through them freely, rather than follow a prescribed narrative.

We have chosen to use English as the primary language for this glossary. This is intentional as we hope that it will be accessible to a wide audience, serving as a practical and informative resource. In some cases, we use Sḱw̱x̱wú7mesh words as an educational element of the glossary and in others because the words are specific to the language or are official titles. Where there is a glossary entry about a Sḱw̱x̱wú7mesh person, we list them by their English name first with their Sḱw̱x̱wú7mesh name in parentheses. Sḱw̱x̱wú7mesh names are not held by only one individual, but are passed down within families. To include these entries by Sḱw̱x̱wú7mesh name first, we would need to describe all the people with this name, as well as the meaning of the name, and not just the person we intend to discuss. In order to share the former information, we would need permission from various families and individuals. This would be very informative to include in a subsequent edition of the glossary, but due to both time and word constraints, it is not included here. Likewise, all Sḱw̱x̱wú7mesh people mentioned elsewhere in the text are listed by their English names to maintain consistency. For a future iteration of the glossary, we will consult with individuals or families of deceased individuals about how they would prefer their names to appear.

The glossary does not and cannot cover the complete body of literature in the field of ILR or the entire history of Skwxwú7mesh Sníchim revitalization, nor does it include the perspectives of all Skwxwú7mesh peoples who have been involved in these efforts. The glossary would be enhanced from input and collaborative development with additional members of the Skwxwú7mesh language community. Our intention is to review and update the glossary every five years through such a collaborative approach. It is hoped that this first iteration of the glossary will provide an introduction to Skwxwú7mesh language revitalization, and that readers will find connections, cause for reflection, and new understandings.

Glossary

A

Adult learners learn differently than children and cannot be treated the same. While they have stronger cognitive ability to process complex grammar information (Grenoble & Whaley, 2006), they require higher levels of motivation than children to sustain learning (Griffiths & Soruc, 2018). Issues of identity and affiliation to the language affect adult learning (Muñoz & Singleton, 2011) and the ongoing impacts of colonial trauma affect many adult Indigenous learners (Jenni et al., 2017). However, for severely threatened languages, education efforts must focus on effectively educating adults who can become teachers to future generations (see MISSING GENERATION).

Assessment is used by students and teachers to determine what has been learned. It is important for measuring progress, evaluating teaching practices, informing curriculum, and

influencing policy. It is a growing area of interest in ILR, and practitioners are working to develop Indigenous-informed, learner-driven approaches to assessment for language programs (e.g., McIvor & Jacobs, 2016). The CSLP and DSLP use Oral Proficiency Interviews based on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scales for assessing students' progress.

C

Community language classes are gatherings of language learners and teachers, usually without attachment to accreditation by an institution. They are often offered for adults or families who cannot regularly participate in classes taught at schools or other institutions. Sk̓wx̓wú7mesh Sníchim community classes have been taught in various iterations since the 1960s by different language speakers in various communities. The classes have typically been offered 1–2 nights per week for 2–4 hours per class (see [TEACHERS](#)).

Core language classes is the term used by the British Columbia Ministry of Education to describe language classes that are taught as a subject in K–12 public and private schools. These classes are typically no more than 90 minutes per week. Core Sk̓wx̓wú7mesh Sníchim classes have been offered in schools on Sk̓wx̓wú7mesh territory since the 1980s and are entirely funded from the Squamish Nation's own source revenue (see [SKWXWÚ7MESH TERRITORY](#); [TEACHERS](#)).

E

Elders are not defined by their age, but rather by their wisdom and the respect that they have earned from their community who value them as teachers and spiritual guides. Often, they are Indigenous language speakers, or they have advanced proficiency, and their guidance is crucial for informing revitalization efforts (see [SEVEN; TA NEXWNÍWN TA A ÍMATS](#)).

Evan Gardner is the original developer of the Where Are Your Keys (WAYK) system for language teaching and learning. Khelsilem reached out to Evan in 2007 and started learning WAYK over Skype. In 2009, Khelsilem began teaching community classes for Sk̓wx̓wú7mesh Sníchim using WAYK and, as the Language Revitalization Advisor with Tsleil-Waututh Nation (TWN), he worked with Evan and the WAYK team to develop their language programs. Where Are Your Keys has always been used to teach Sk̓wx̓wú7mesh Sníchim in the CSLP and is used for courses in the DSLP. Evan continues to work as a language consultant for TWN and Sk̓wx̓wú7mesh Sníchim, providing support for the CSLP and DSLP (see [THE YELLOW HOUSE; WHERE ARE YOUR KEYS](#)).

F

First Nation is an Indigenous government with recognition in Canada, either through their inherent self-determination or status as an Indian Band with meaning under the Indian Act. The Squamish Nation and the Tsleil-Waututh Nation are examples of First Nations (see [THE INDIAN ACT; INDIGENOUS PEOPLES; THE SQUAMISH NATION; TSLEIL-WAUTUTH NATION](#)).

First Peoples' Cultural Council (FPCC) is a crown corporation in British Columbia whose mandate is to support Indigenous language, arts, and culture. FPCC has funded numerous language revitalization programs for Skwxwú7mesh Sníchim, including the BC Language Initiative, the Aboriginal Language Initiative, Mentor–Apprentice Programs, the Skwxwú7mesh Language Nest, and Community Language Planning. First Peoples' Cultural Council has funded initiatives with the Squamish Nation, Tsleil-Waututh Nation, and Kwi Awt Stelmexw (see KWI AWT STELMEXW; LANGUAGE NESTS; MENTOR-APPRENTICE PROGRAM).

Fluency is the term most people use to describe speaking well. However, it is a contested term that is hard to define. Many language communities have turned their focus instead to language proficiency, recognizing that one can be skilled, or proficient, in some aspects of the language and not others (see PROFICIENCY; SEVEN).

I

Immersion is when the target language is used as the exclusive medium of instruction. Being fully immersed in a language is the best way to learn (Grenoble & Whaley, 2006; McIvor & Anisman, 2018; Tedick et al., 2011). The CSLP is the first full-time immersion program for Skwxwú7mesh Sníchim at any level. English is used only in the first six weeks to explain the teaching methods and establish classroom protocols. During the first two years of the program, English was not used otherwise. In the Yellow House, where the program operated subsequently, there was an “English room” which students could enter to discuss pressing

matters in English if needed (see THE CERTIFICATE IN SKWXWÚ7MESH LANGUAGE PROFICIENCY; THE YELLOW HOUSE).

Indigenous language education programs are different from programs for dominant languages. Indigenous languages are grammatically different from dominant languages, and cannot be taught in the same sequence (Kell, 2014). There are often very few resources available for Indigenous languages, such as written materials, curriculum documents, or trained teachers (Hinton, 2011). Most importantly, the motivations of Indigenous learners are different from those of other language learners; they are not learning the language for travel or employment opportunities, but for reasons that connect to their rights and identity (McCarty, 2012) (see POLYSYNTHETIC LANGUAGES; RECLAMATION).

Indigenous language revitalization (ILR), also called language regeneration, language revival, language reclamation, and reversing language shift, among other terms, refers to efforts by Indigenous Peoples and others to strengthen the use of Indigenous languages. While producing new speakers is often a primary goal, ILR is part of wider community building efforts and “a larger fight for Indigenous cultural survival, human rights, and self determination” (McCarty, 2012, p. 1172) (see JOSHUA FISHMAN, RECLAMATION).

Indigenous Peoples are defined by Indigenous Peoples we work with as the original inhabitants of a territory that has been colonized. In Canada, Indigenous Peoples are often called Aboriginal, a legal term representing three distinct groups: Inuit, Métis, and First Nations. Skwxwú7mesh peoples are First Nations, the original inhabitants of a territory on

the west coast of what is now Canada (see FIRST NATION; SKW̱XWÚ7MESH ÚXWUMIXW; SƏ́LILWƏTƏ́L).

J

Joshua Fishman (2001; 1991) studied the causes of what he calls language shift, the movement away from using one language in favour of another. Through case studies of languages all over the world, Fishman identified the causes of language loss and developed guidelines for language planning and reversing language shift. Fishman's Graded Intergenerational Disruption Scale provides a model for understanding language endangerment or development and strategies to employ depending on the language's status. It demonstrates that for languages where the only fluent speakers are elderly and the language is not being transmitted to children in the home, revitalization efforts must focus on educating adults who can become the teachers to future generations. This model inspired the strategy employed by Khelsilem and is the reason for focusing on adult immersion programs over programs for children (see MISSING GENERATION; SEVEN).

K

Kanien'kehá:ka are called Mohawk in English and are Indigenous Peoples who reside primarily in present-day Quebec, Ontario, and New York State. Their language is a polysynthetic language called Kanien'kéha or Mohawk. The Kanien'kehá:ka communities of Kahnawà:ke and Ohswé:ken developed full-time adult immersion programs that served as inspiration for the CSLP. Khelsilem visited these communities and received support from Owennatékhá (Brian Maracle) and Onekiyóhstha (Audrey Maracle) who had established the

Onkwawén:na Kentyóhkwa adult immersion school in Ohswé:ken in 1998 (see POLYSYNTHETIC LANGUAGE).

Kwi Awt Stelmexw (KAS) is the name of a non-profit organization founded by Khelsilem to strengthen Sk̓wxwú7mesh language and culture. Kwi Awt Stelmexw is a phrase that roughly translates to “the coming after people,” which could refer to either ancestors or future generations, reminding us that we are the ancestors to the unborn children yet to come (Kwi Awt Stelmexw, 2019). Nicki worked for the organization from 2015–2017.

In 2016, KAS approached Simon Fraser University about using their Certificate in Indigenous Language Proficiency to run a full-time immersion program for Sk̓wxwú7mesh Sníchim. This would allow students to access education funding from their Nations and earn university credits while learning their language. This is how the CSLP began. Kwi Awt Stelmexw continues to provide funding for the CSLP and DSLP to hire language apprentices, assistants, and mentors (see TEACHERS; THE CERTIFICATE IN SK̓WXWÚ7MESH LANGUAGE PROFICIENCY).

L

Language champions are those who dedicate their lives to revitalizing and teaching their languages. Often, it is a handful of highly dedicated individuals that lead the way for ILR in their communities, demonstrating incredible strength, resilience, and innovation despite personal, social, and political barriers (see TA NEXWNÍWN TA A ÍMATS; TEACHERS).

Language Nests are immersion daycares or preschools which have been the key to success for Māori and Hawaiian language revitalization (Hinton, 2011). In 2018, a language nest was created by Squamish Nation's Language and Cultural Affairs Department for children ages 0–4 and their parents. It is next to Xwmélch'stn' Estimiaw'txw, and the staff are graduates from various Skwxwú7mesh Sníchim programs (see XWMÉLCH'STN' ESTIMIAW'TWX).

Linguists have a complicated history with Indigenous communities. While historically many non-Indigenous linguists have treated Indigenous communities as data sources for their own academic interests, their language documentation work has become invaluable in many language revitalization efforts. More recently, linguists are changing the way they work with Indigenous communities and are becoming more collaborative in their approaches (e.g., Czaykowska-Higgins, 2009; Leonard & Haynes, 2010; Rice, 2009). In addition, more Indigenous people are choosing to become linguists (Gerds, 2017).

Beginning with Franz Boas in the 1880s, various linguists included Skwxwú7mesh word lists in their work. In the 1950s Aert Kuipers was the first to compile a complete reference grammar for Skwxwú7mesh Sníchim, working with Isaac and Lizzie Jacob, Alex and Mary Peters, and Louis Miranda (Squamish Nation Education Department, 2011, p. xi). Randy Bouchard and Dorothy Kennedy then worked extensively with the language and developed the orthography with Louis Miranda that is used today. Documentation by these and other linguists laid the foundation for Skwxwú7mesh curriculum materials used in schools (Baker-Williams, 2006).

Since the 1990s, Skwxwú7mesh Sníchim documentation has been led by Skwxwú7mesh people, including Skwxwú7mesh linguist Peter Jacobs and the Squamish Nation Education Department, as well as collaborative work with non-Indigenous linguists from local universities (see [JOSHUA FISHMAN](#); [LOUIS MIRANDA](#); [PETER JACOBS](#); [TA NEXWNÍŴN TA A ÍMATS](#)).

Louis Miranda (Sxáaltxw Siyám), known to many as Uncle Louis, “inspired generations as a champion of the Squamish language and culture” (University of British Columbia, n.d., para. 2). He worked closely with Aert Kuipers in the 1960s to write the first comprehensive grammar for Skwxwú7mesh Sníchim, and his own documentation work included writing hundreds of pages of lessons, stories, and legends in the language. He was one of the first Skwxwú7mesh language teachers in the 1960s, and he taught well into his 90s. He also held the title as a siyám (hereditary leader) for 53 years (see [LANGUAGE CHAMPIONS](#)).

M

Māori are the Indigenous People of Aotearoa (New Zealand). The Māori People’s movement for language revitalization has served as an inspiration for many Indigenous communities around the world, including the Skwxwú7mesh people. Māori language champions, followed by those in Hawai’i, were among the first to implement many successful ILR strategies including language nests, bilingual schools, and adult immersion programs (King, 2001).

Medium of instruction is the language used to teach a given subject. In Canada, nearly all public schools use English or French as the medium of instruction. Provinces and territories

in Canada have varied policies regarding the use of other languages as the medium of instruction in bilingual and immersion programs. The CSLP and most courses in the DSLP use Skwxwú7mesh Sníchim as the medium of instruction.

Mentor–Apprentice Program (MAP) is a program structure developed by Leanne Hinton and Indigenous language activists in California to facilitate language acquisition by apprentice learners with mentor speakers through immersion-based activities (Hinton, 1994). The First Peoples’ Cultural Council funds MAPs wherein “the mentor and apprentice spend 300 hours per year together doing everyday activities using the language at all times” (FPCC, 2019, para. 2). MAPs have been used by Skwxwú7mesh language learners, including Khelsilem. He conducted a one-year MAP with Vanessa Campbell, and his proficiency advancement through this experience formed the basis for the development of the CSLP (see FIRST PEOPLES’ CULTURAL COUNCIL; TEACHERS).

Missing generation is a term increasingly used to describe adult Indigenous language learners who “hold great potential to contribute to the revival of Indigenous languages by acting as the middle ground between Elders, children, and youth within their communities” (Jenni et al., 2017, p. 25). Languages thrive when children are being raised in the language, but this is only possible if child-bearing adults are speakers (Fishman, 1991). In communities with few or no remaining first language speakers, ILR efforts must focus on creating a critical mass of adult speakers who can teach their own children as well as other children and adults in the community.

O

Orthography is the writing system used for a given language. Skwxwú7mesh Sníchim was an oral language with no writing system before colonization. Various anthropologists and linguists used different systems in their documentation of the language. In the 1960s, Randy Bouchard and Dorothy Kennedy worked with Louis Miranda to develop the orthography for Skwxwú7mesh Sníchim which was later adopted as the official writing system. Notably, the orthography uses the numeral 7 to represent the glottal stop, as it was designed for ease of use on conventional typewriters which did not include the symbol /ʔ/.

P

Peter Jacobs (T'naxwtn) is a Skwxwú7mesh and Kwagwł linguist who has been working tirelessly for the language for several decades. He worked for 20 years in the Squamish Nation Education Department, served as editor-in-chief on the first Squamish–English dictionary, and is now a professor at Simon Fraser University. He teaches in the CSLP and spearheaded the creation of the DSLP (see [LANGUAGE CHAMPIONS; LINGUISTS; THE DIPLOMA IN SKWXWÚ7MESH LANGUAGE PROFICIENCY](#)).

Polysynthetic language: A language in which words are made up of many morphemes, or units of meaning. In such languages, single words can contain as much information as whole sentences in more “isolating” languages such as English (Kell, 2014). Approaches to teaching polysynthetic languages are different from teaching isolating languages, as they must be taught in a sequence that allows students to move from basic to more complex word

construction (Kell, 2014) while also fostering an appreciation for the rich meaning and metaphor each individual word might carry (Rosborough et al., 2017).

Proficiency is a term used to describe language abilities with varied definitions. It is often distinguished from fluency in that it refers to one's ability to use and understand language even if they cannot always speak fast or fluidly. Khelsilem was introduced to proficiency through *Where Are Your Keys*, which has defined proficiency as the ability to produce and comprehend accurate language at increasing levels of complexity. He adapted the American Council Teaching of Foreign Language's Oral Proficiency Guidelines for use in the CSLP, and these continue to be updated for use in the DSLP (see ASSESSMENT; FLUENCY; WHERE ARE YOUR KEYS).

R

Reclamation is a term used in ILR in two different ways: either to refer to revitalization of a language that no longer has any first language speakers or to recognize that ILR is not only about language, but is part of a wider anticolonial resistance movement, tied to Indigenous rights, self-determination, and community building (Hinton et al., 2018). Both definitions of the term apply in the case of Sk̓wx̓wú7mesh Sníchim (see SEVEN).

Residential Schools were boarding schools that Indigenous children in Canada were forced to attend from the early 1900s to 1950s and later in some cases. The primary purpose was to assimilate Indigenous children into Euro-Canadian and Christian culture. The education they received at these schools was very poor, and former students have described horrific

cases of physical, emotional, and sexual abuse (Truth and Reconciliation Commission of Canada, 2015). The children were ridiculed and punished for practising their culture or speaking their languages. As the “intent was to eradicate all aspects of Aboriginal culture in these young people and interrupt its transmission from one generation to the next, the residential school system is commonly considered a form of cultural genocide” (Indigenous Foundations, 2009, para. 3). Residential schools are recognized as the primary cause of Indigenous language loss in Canada.

St. Paul’s Indian Residential School in North Vancouver housed Skwxwú7mesh children from 1899 to 1958, and others were sent to schools in more distant communities (Baker-Williams, 2006). Many of these children spoke Skwxwú7mesh Sníchim at home in early life but were forced to stop using it at school. Even if they retained knowledge of the language, many were ashamed to continue using it or did not pass it on to their children for fear of repercussion (see SAFE LEARNING ENVIRONMENTS; SETTLER COLONIALISM; SEVEN; THE INDIAN ACT; THE TRUTH AND RECONCILIATION COMMISSION OF CANADA).

S

Safe learning environments are comfortable, welcoming, and guided by compassion. Creating such a space can help to lower the “affective filter,” defined by Krashen and Terrell (1998) as a set of affective variables including learners’ attitude, self-esteem, and level of anxiety that can act as a screen to prevent learning. Indigenous adults may have specific filters related to trauma caused by colonial history and contemporary realities (Jenni et al., 2017). Strategies to create a safe language learning environment include not putting

students on the spot, not correcting speech or accent unless requested, using relevant and engaging materials, spending time outdoors, and the incorporation of fun and games (see ADULT LEARNERS; WHERE ARE YOUR KEYS).

Settler colonialism “is a distinct type of colonialism that functions through the replacement of Indigenous populations with an invasive settler society” (Bhambra, n.d., para. 1). In North America, this replacement began through violence and murder of the Indigenous population, then by appropriating lands through manipulative treaty processes, and then through harmful assimilation policies and practices that prevented maintenance of Indigenous languages and cultures such as residential schools. Foreign diseases also significantly reduced the populations of Indigenous Peoples in many places, including the Pacific Northwest coast of North America. The decimation of Indigenous Peoples, sometimes by 99 percent, aided settler colonialism, and contributed to language loss through the significant decline of speakers. Unlike some cases of colonialism where the foreign entity eventually leaves, settler colonialism continues to exist as long as settlers live on appropriated Indigenous land (see RESIDENTIAL SCHOOLS; THE INDIAN ACT).

Seven fluent first-language speakers of Sk̓w̓x̓wú7mesh Sníchim remained when the CSLP began in 2016. Today, sadly, there are none.

Seven thousand plus languages are spoken in the world today (Simons & Fennig, 2018), but it is estimated that 50–90 percent of these languages will cease to be spoken in the next 100 years unless deliberate action is taken (Austin & Sallabank, 2011). Before European contact,

there were an estimated 450 Indigenous languages spoken in what is now Canada, but today only about 61 of these remain (Statistics Canada, 2015). There are 34 Indigenous languages spoken in British Columbia today; all have less than 800 fluent speakers, 23 have less than 100 speakers, and nine have less than 10 speakers, including Sk̓wx̓wú7mesh Sníchim (FPCC, 2018).

səlilwətał (Tsleil-Waututh) are an Indigenous People whose primary ancestral residences include communities along the eastern Burrard Inlet around present-day Belcarra, the mouth of the Indian Arm river, and around present-day Port Moody (see [Figure 1](#)). Before Europeans arrived, there were up to 30,000 səlilwətał people living throughout the territory, but the arrival of European diseases devastated the population. There were only an estimated nine səlilwətał people remaining by the mid-1800s (Morin, 2018). In 1871, the surviving səlilwətał relocated to the present-day Átsnach, one of the three reserve sites assigned to the səlilwətał people.

In 1923, the adult men and designated Indian Band chiefs of the neighbouring Sk̓wx̓wú7mesh reserves amalgamated under the Indian Act to form one Squamish Nation (Squamish Nation, 2013). The səlilwətał were invited but declined to join as they wanted to retain their identity as a distinct nation (Morin, 2015). However, following the decline of the səlilwətał population, significant intermarriage occurred between səlilwətał men and Sk̓wx̓wú7mesh women. As a result of multiple generations of intermarriage, many səlilwətał families became Sk̓wx̓wú7mesh Sníchim speakers or bilingual speakers with Sk̓wx̓wú7mesh

Sníchim and hə́nqəmínem (see SETTLER COLONIALISM; SKW̱XWÚ7MESH ÚXWUMIXW; THE INDIAN ACT; TSLEIL-WAUTUTH NATION).

Sḵw̱xwú7mesh is the name of the Squamish People and the Squamish River in Sḵw̱xwú7mesh Sníchim. There are many interpretations on the linguistic meaning of the name but no agreed upon translation. Before Europeans arrived, there were up to 90,000 Sḵw̱xwú7mesh living throughout Sḵw̱xwú7mesh territory, but the arrival of European diseases devastated the population. There were only an estimated 300–600 Sḵw̱xwú7mesh remaining by the mid-1800s (Baker-Williams, 2006) (see SKW̱XWÚ7MESH TERRITORY; SKW̱XWÚ7MESH ÚXWUMIXW).

Sḵw̱xwú7mesh Sníchim is the name of the Squamish language in the Squamish language. It means Squamish language.

Sḵw̱xwú7mesh Sníchim - Xwelíten Snichím Sḵexwts is the first Squamish–English dictionary. It was edited by Peter Jacobs and Vanessa Campbell and includes input from dozens of speakers, texts, and conversations. It took 18 years to complete (Trigg, 2011).

Sḵw̱xwú7mesh Territory is 673,540 hectares that include the English Bay, Burrard Inlet, and Howe Sound watersheds (see Figure 1). The territory overlaps in many places with neighbouring Indigenous Peoples' territories. Sḵw̱xwú7mesh Territory includes a number of historical villages currently unoccupied. Many of the language revitalization efforts with

Sḵw̓xwú7mesh Sníchim are taking place in the communities of Xw̓melch'stn, Eslha7an, and St'a7mes.

Sḵw̓xwú7mesh Úxwumixw is the Sḵw̓xwú7mesh name for the Squamish Nation. The 1876 Indian Act assigned the Sḵw̓xwú7mesh to 26 reserve sites that were located at historically occupied communities of related family groupings, but the government would later expropriate and partition additional lands without consent. In 1923, the adult men and designated Indian Band chiefs amalgamated under the Indian Act to form one Squamish Nation to better protect Sḵw̓xwú7mesh lands and interests (Squamish Nation, 2013). Today there are 4,080 Squamish Nation members (see FIRST NATION; SETTLER COLONIALISM; THE INDIAN ACT).

Slúlum are songs, an important part of Sḵw̓xwú7mesh culture and carriers of Sḵw̓xwú7mesh language. Slúlum are used to teach language in the CSLP and DSLP.

Squamish is the English word for Sḵw̓xwú7mesh and is used for terms like Squamish language, Squamish peoples, and Squamish Nation in English. It is also the name of a town between Vancouver and Whistler. The majority of Sḵw̓xwú7mesh people do not live in the town of Squamish.

Squamish Nation (see SḴW̓XWÚ7MESH ÚXWUMIXW).

Squamish Nation Language and Culture Certificate was a post-secondary language certificate developed by the Squamish Nation through Capilano University and Nicola Valley Institute of Technology. Peter Jacobs and Vanessa Campbell taught all courses in the certificate. It was offered as a part-time program over five years in the 2010s.

S̓xwəx̓wíyám are Sk̓wx̓wú7mesh legends. S̓xwəx̓wíyám were some of the first pieces of language to be recorded by early anthropologists and linguists, and they are an important source of linguistic information, oral literature, and cultural teachings. S̓xwəx̓wíyám are used to teach language in the CSLP and DSLP.

T

Ta Nexwníwn ta a Ímats, Teachings for Your Grandchildren, was an Elders' group that formed in 1993 as an advisory group for Sk̓wx̓wú7mesh Sníchim with the Squamish Nation Education Department. They were instrumental in documenting and revitalizing the language. Participants at different times included Chief Lawrence Baker, Barbara Charlie, Tina Cole, Nora Desmond, Hilda Duerden, Frank Guerrero, Ernie Harry, Lena Jacobs, Lila Johnston, Yvonne Joseph, Addie Kermeen, Eva Lewis, Margaret Locke, Frank Miranda, Valerie Moody, Stella Newman, Lucille Nicholson, Audrey Rivers, Alex Williams, and Doris Williams (Squamish Nation Education Department, 2011) (see LANGUAGE CHAMPIONS; TEACHERS).

Teachers, called Úsaylh or Nexwsúsaylh in Sk̓wx̓wú7mesh Sníchim, are those who actively work to pass on the language, whether or not they have formal training. Self-teaching, teaching one's children, and teaching others are all essential elements of language

revitalization. Sk̓wx̓wú7mesh Sníchim has been taught formally since the 1960s (Squamish Nation Education Department, 2011). Since that time, the language has been taught in community classes, preschool, elementary and high schools, post-secondary programs, Mentor–Apprentice Programs, as well as in the homes of Sk̓wx̓wú7mesh families. All of the teachers who have worked and continue to work in each of these capacities have been essential to the reclamation and revitalization of Sk̓wx̓wú7mesh Sníchim (see LANGUAGE CHAMPIONS).

The Certificate in Sk̓wx̓wú7mesh Language Proficiency (CSLP) began in 2016 as a program at Simon Fraser University (SFU) for young adults of Sk̓wx̓wú7mesh descent. Kwi Awt Stelmexw conceived of and developed the program and approached SFU about delivering it through SFU’s Certificate in Indigenous Language Proficiency. SFU had created this certificate program for First Nations to offer credit for in-community Indigenous language courses. The CSLP would be the first time SFU would run the certificate as a full-time immersion program. Students in the CSLP receive 900 hours of immersion instruction over the course of a school year. The CSLP is taught using primarily the Where Are Your Keys method, as well as Sk̓wx̓wú7mesh legends and songs. Most students reach an intermediate level of Sk̓wx̓wú7mesh Sníchim by the end of the program (intermediate-low according to ACTFL scales). Students also earn a Certificate in Indigenous Language Proficiency, and the credits they earn can be used towards an undergraduate degree. The first two cohorts of the CSLP were taught by Khelsilem and met at SFU’s downtown campus. Subsequent cohorts have been taught by previous graduates of the program, including Swo-wo Billy and Char George, meeting at various locations on Sk̓wx̓wú7mesh and sə́lilwətał lands.

The Diploma in Skwxwú7mesh Language Proficiency (DSLP) began in 2018 as a partnership between the Squamish Nation and Simon Fraser University (SFU). The first cohort met one full day per week over the course of two years and graduated in the spring of 2020. The students were graduates from the CSLP and other programs such as the Squamish Nation Language and Culture Certificate. The instructors were Peter Jacobs and Vanessa Campbell.

In September 2020, the second offering of the Diploma program began, this time as a partnership between the Squamish Nation, Tsleil-Waututh Nation, Kwi Awt Stelmexw, and SFU. It is a full-time program in which students spend 450 hours in immersion over the course of one school year. Program participants are predominantly graduates from the CSLP. The Skwxwú7mesh Sníchim instructors include Swo-wo Billy, Char George, Victoria Fraser, and Norman Guerrero. The students earn a Diploma in Indigenous Language Proficiency, and the credits they earn can be used towards an undergraduate degree.

The Indian Act of 1876 forced Indigenous Peoples onto reserves and gave the Canadian government control over all aspects of Indigenous Peoples' lives. The Act aimed at assimilating Indigenous Peoples, forbidding language use and cultural practices, requiring Indigenous children to attend residential schools, and imposing non-Indigenous governance structures (Henderson, 2018). Although many changes to the Indian Act have been made over time, removing the most discriminatory restrictions, the Act continues to exist and sets rules for Indigenous reserves, resources, and governance (see RESIDENTIAL SCHOOLS; SETTLER COLONIALISM; SƏ́LILWƏTƏ́; SKWXWÚ7MESH ÚXWUMIXW).

The Indigenous Languages Act is legislation enacted by the Government of Canada in 2019. The Act affirms Aboriginal Rights within Section 35 of the Canadian Constitution and affirms its use to assist in the implementation of the UN Declaration on the Rights of Indigenous Peoples. It “establishes an independent Office of the Commissioner of Indigenous Languages that will champion and support language revitalization and review and report on Canada’s compliance to its obligations under the Act” (Assembly of First Nations, 2019, p. 25). It also enables Indigenous communities to enter into agreements with governing bodies to facilitate its implementation. It is yet to be fully enacted, and there have been calls for a national strategy for ILR in Canada to support its implementation (Bliss et al., 2020).

The Truth and Reconciliation Commission of Canada (TRC) launched in 2008 with the purpose of documenting the history and impacts of residential schools on Indigenous Peoples in Canada (Truth and Reconciliation Commission of Canada, 2015). Through meetings held across the country with over 6,000 witnesses, the TRC gave residential school survivors an opportunity to share their stories in order to reveal the truth of Canada’s abusive history, which had previously been hidden from the majority of Canadians. In 2015, the TRC published its findings along with 94 calls to action that include five calls regarding Indigenous language and culture (see RESIDENTIAL SCHOOLS; SETTLER COLONIALISM; THE INDIAN ACT).

The Yellow House is a yellow house in a residential area on Tsleil-Waututh Nation (TWN) land in North Vancouver that is used to house and support TWN language revitalization efforts. In 2019, the CSLP was invited to move into the house. The Certificate program staff,

TWN staff, and team from Where Are Your Keys all worked out of the Yellow House mutually supporting each other in their efforts (see SƏ́LILWƏTƏ́Ł; TSLEIL-WAUTUTH NATION).

Tsleil-Waututh Nation (TWN) is the First Nations government of the sə́lilwətał. Today there are 540 TWN members. For many decades, TWN has been supporting efforts to revitalize the hə́nqəmiṇəm language. Starting in 2018, TWN started funding efforts to revitalize Skwxwú7mesh Sníchim as well. Many sə́lilwətał people are descendants of hə́nqəmiṇəm and Skwxwú7mesh Sníchim speakers (see FIRST NATION; SƏ́LILWƏTƏ́Ł).

U

Urbanization has meant that certain opportunities exist for Skwxwú7mesh and sə́lilwətał peoples. While the encroachment of the city originally devastated their populations and was one of the main causes of language decline, today it also means that reconciliation efforts by the cities and their institutions focus on working with these Nations. It also means that young people from these Nations are less likely than those from rural communities to move far from home in search of jobs and services.

V

Vanessa Campbell (Iyál) has been involved in Skwxwú7mesh language activism since 1972. She was one of Louis Miranda's first students and taught with him in the first high school Skwxwú7mesh Sníchim courses. She has taught language classes at all levels for over 30 years, worked many years in the Squamish Nation Education Department, and co-edited the Squamish–English dictionary. She has also taught several young language learners,

including Khelsilem, through an intensive Mentor–Apprentice Program, and has been teaching in the DSLP (see LANGUAGE CHAMPIONS; TEACHERS).

W

Where Are Your Keys (WAYK) was developed by Evan Gardner and is the primary immersion method used in the CSLP and the second offering of the DSLP. Where Are Your Keys is a series of game-like lessons that build on each other, relying on oral language and supported by several techniques including the use of American Sign Language. Participants move on to a new lesson once they have practiced the previous one. New students are then able, and encouraged, to lead more novice learners through the previous lesson almost immediately. By encouraging learners to quickly become teachers and through its engaging participant-led format, WAYK is not only an effective method for rapid language acquisition, but also facilitates community building and strengthening (Where Are Your Keys, 2021). Where Are Your Keys has been applied in several Indigenous language communities in North America (Gardner & Ciotti, 2018) (see EVAN GARDNER; SAFE LEARNING ENVIRONMENTS; THE CERTIFICATE IN SKWXWÚ7MESH LANGUAGE PROFICIENCY).

X

Xwmélch'stn' Estimiaw'txw, Capilano Little Ones School, opened in 2002 as a preschool with a goal to grow to a Skwxwú7mesh immersion elementary school. Skwxwú7mesh Sníchim is spoken and taught at the school, which now offers classes up to Grade 2. However, the immersion goal has not been attainable due to a lack of proficient adult speakers who can work as certified teachers (Baker-Williams, 2006) (see MISSING GENERATION).

Y

Yelx̣tsáń is a word created by participants of the CSLP that means “to language hunt.” Language hunting is a WAYK technique in which a learner tries to identify or use new language through conversation with a more fluent speaker. When asked why he chose this term, WAYK founder Evan Gardner said, “if everyone hunted and ate whales, we would care a lot more about whales!” Mary Leighton (2017) elaborates: “When we start hunting for language, we start caring not just about the language, but also about the population of language speakers and the factors that support a healthy population of speakers. After all, we want to keep hunting language!” (para. 6).

About the Authors

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Khelsilem is a Skwxwú7mesh-Kwakwaka'wakw educator and community leader. He is a second-language speaker of Skwxwú7mesh Sníchim with eight years of experience teaching in community-based programs. His work focuses on the development of adult second-language speakers with high degrees of proficiency to aid in the full recovery and vitality of Skwxwú7mesh Sníchim.

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“WIINGE CHI-BAAPINIZI GENIIN ODE: IT REALLY MAKES MY HEART LAUGH”: LANGUAGE, CULTURE, IDENTITY, AND URBAN LANGUAGE REVITALIZATION

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Abstract

In Canada, the majority of Indigenous people live off-reserve in urban centres. Living off-reserve is a risk factor for language loss, as indicated by the fact that 44.9 percent of First Nations people on-reserve are able to conduct a conversation in an Aboriginal language, compared to only 13.4 percent of First Nations people off-reserve (Statistics Canada, 2019). For this reason, urban language revitalization is vital, yet it remains understudied and underfunded (Ball & McIvor, 2013; Chao & Waller, 2017; Jewell, 2016). The Kingston Indigenous Languages Nest (KILN) is an example of grassroots urban language revitalization. KILN presents Indigenous families in Kingston, Ontario, with opportunities to access language and culture through weekend family-focused sessions, as well as immersion weekends, evening adult language classes, digital resource development, and community partnerships focused primarily on Anishinaabemowin, Kanien'kéha, and Cree. Using qualitative data collected through talking circles, I explore what effect the weekend sessions have on participants' lives. The results indicate that participation improves language use. However, its impact stretches beyond this; participants describe a deepening of their cultural understanding and connection to community as key parts of the development of their identities as urban Indigenous people. It is clear that culture-based pedagogy is central to both language survivance and cultural and identity growth. It deepens participants' understanding of themselves as urban Indigenous people, allows them to experience their culture as a way of life, creates new understandings of Indigenous identity and community, and validates their community identity as equal to other Indigenous ways of being.

Keywords: language revitalization, urban, culture, community, identity

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Introduction

In the study of Indigenous language revitalization and education in North America, the emphasis of research tends to be on the education of First Nations children on-reserve or Inuit children living within Inuit Nunangat. On-reserve First Nations communities and communities in Inuit Nunangat are the epicenter for this type of language revitalization work because languages and cultures on-reserve are more present and more homogenous in most cases, providing a speaker community that can maintain and use the language (Statistics Canada, 2019). Furthermore, First Nations and Inuit are increasingly claiming self-determination in education and creating language programs and culture-based curricula that are heritage-language specific and appropriate to learners in their communities (Assembly of First Nations [AFN], 2010; Inuit Tapiriit Kanatami [ITK], 2017). This approach is very effective; while 10.7% of First Nations children (0–14) and 12.2% of young adults (15–24) report having an Indigenous language as their mother tongue, a higher number, 15.8% and 16.5% respectively, can conduct a conversation in one, indicating that First Nations people are effectively learning Indigenous languages as second languages. Similarly, 55.8% of Inuit children and 57.0% of young adults have an Inuit language as a mother tongue, while 65.2% and 64.4% can conduct a conversation in one.

However, programs and curricula delivered on-reserve or within Inuit Nunangat do not directly serve the majority of the Indigenous population, since more than 70% of Indigenous people live off-reserve (Congress of Aboriginal Peoples [CAP], 2018). Currently, 44.9% of First Nations people living on-reserve can conduct a conversation in an Indigenous language, while only 13.4% living off-reserve are able to do so (Statistics Canada, 2019). This divide is

even more pronounced within Inuit communities; 64% of Inuit in Inuit Nunangat speak an Inuit language, but only 10.9% of Inuit living elsewhere do (Statistics Canada, 2019). Therefore, living off-reserve or outside Inuit Nunangat presents a significant risk factor for language loss.

In the provincially-run public and Catholic schools that today serve the majority of the urban Indigenous population, there is seldom any opportunity to learn an Indigenous language, and so most modern schools continue to participate in what Ball and McIvor (2013) describe as “linguistic genocide” (p. 22). However, Indigenous people in urban centres have as much right as any other Indigenous people to learn their languages and cultures. Inherent and treaty rights are not relinquished when Indigenous people leave their First Nations or other land bases and failing to provide adequate support for Indigenous languages in urban and non-urban contexts is a breach of the federal government’s fiduciary duty to Indigenous peoples (Haque & Patrick, 2015).

Given that urban Indigenous people, communities, and rights are often ignored, urban language revitalization tends to be understudied and underfunded (Baloy, 2011; Ball & McIvor, 2013; Chao & Waller, 2017; Jewell, 2016). However, since an increasing number of Indigenous people live in urban centres, which presents a higher risk of language loss, urban language revitalization is essential. In spite of a lack of support, urban Indigenous language revitalization initiatives are happening around the globe and throughout Canada. These efforts demonstrate significant positive effects on language use and language revitalization,

as well as the cultural connectedness and strength of identity of the people who participate in them.

Purpose

This article aims to contribute to our understanding of the effects of grassroots urban language revitalization through the perspectives of participants in the Kingston Indigenous Languages Nest (KILN) in Kingston, Ontario, Canada. Through this research, we found that access to language learning through initiatives like KILN strengthens urban Indigenous peoples' language knowledge and enhances language presence within the community by increasing speaker numbers and creating new domains of language use. Within the community, this results in the development of a more positive language ideology. Furthermore, we found that participation in KILN enhanced participants' access to and ability to live their cultures and spiritualities, and it contributed to their sense of identity and belonging. That involved strengthening participants' connections to their heritage Nations, as well as developing a sense of urban identity that prizes diversity and celebrates new ways of living as Indigenous people. Since a growing number of Indigenous people in Canada live in urban centres, it is vital that we understand what the effects of urban language revitalization are, how it enhances the vitality of Indigenous languages, and how individual participants and communities benefit from it. This will help us to ensure that urban Indigenous people have access to the languages that are their birthright and that Indigenous languages and people continue to thrive both on- and off-reserve.

Contexts and Results of Urban Language Revitalization

Existing studies of urban language revitalization reveal that these efforts are beneficial to Indigenous languages in a variety of ways (Baloy, 2011; Davis, 2015; Jewell, 2016; Morgan & Clarke, 2011; Pitawanakwat, 2009; Sarivaara et al., 2013; Sherry-Kirk, 2014; Shulist, 2017). Most obviously, these programs have the potential to increase speaker numbers and expand domains of language use (Sarivaara et al., 2013). They also expand the potential for community and intergenerational transmission (Davis, 2015; Jewell, 2016), and they give insight into innovative practices that are connected to urban contexts. These include developing vocabulary for urban lifestyles; creating and developing practices that enable second language learners to effectively lead revitalization where there are fewer fluent speakers; and creating space, both metaphorically and physically, for language learning, teaching, and use that is practical and relevant for urban people (Baloy, 2011; Jewell, 2016, Pitawanakwat, 2009).

Furthermore, urban language revitalization presents an opportunity to (re)develop the language ideologies of urban Indigenous communities and sometimes also of coexisting non-Indigenous urban communities. Language ideologies are the beliefs and attitudes speakers hold about language, which are linked to larger social and cultural systems (Shulist, 2017). Increased access to Indigenous languages demystifies them and encourages community members to understand their value in terms of positive factors such as connections to culture and spirituality, stronger identity, belonging and community, and resistance to assimilation (Dementi-Leonard & Gilmore, 2015; Haque & Patrick, 2015). It also leads them to question

the idea that language knowledge is only useful if it results in increased economic advantage, which legitimizes underfunding (Haque & Patrick, 2015) .

Because of the complex connections between language and other facets of life, urban language revitalization efforts have implications beyond language survivance. With language comes an increased understanding of Indigenous cultures (Norton & Toohey, 2011; Sarivaara et al., 2013). Language learning opportunities often present access, sometimes for the first time, to traditional foods and activities (McIvor et al., 2009), as well as deeper aspects of Indigenous cultures, philosophies, and worldviews. Through language, learners learn about themselves, strengthen their identities, and express pride in their culture, which creates a “feedback loop” that makes them more likely to engage in cultural activities and even become culture keepers (Fast, 2014; Luning & Yamauchi, 2010). Language reclamation is for many a profoundly spiritual undertaking (Baloy, 2011). Indigenous languages offer access to practical elements of spirituality such as prayers, songs, and ceremonies (McIvor et al., 2009). On a deeper level, connecting to Indigenous languages strengthens Indigenous people’s connection to their/our communities, ancestors, philosophies, land, and Creator and makes us aware of our responsibilities to pass on our collective knowledge (Dementi-Leonard & Gilmore, 1999; Fast, 2013; McIvor et al., 2009). Culture and spirituality are significant protective factors for at-risk communities and help to disrupt patterns of suicide, substance misuse, and other effects of intergenerational trauma that are present in many Indigenous communities (Ball & McIvor, 2013; Baloy, 2011; Fast, 2014; McIvor et al. 2009; Sherry-Kirk, 2014).

Language, culture, and spirituality are some of the most tangible markers of culture and group identity, and they are also central to cultural transmission (De Souza & Rymarz, 2007; McIvor et al., 2009; Norton & Toohey, 2011). Language is particularly significant to identity because it is not only a way to understand Indigenous identity; it is a way to openly claim and visibly enact it. This is often fraught with anxiety as learners begin their language journey, but becomes profoundly validating as they continue, especially when they are met with encouragement and acceptance from other learners, speakers, and Elders (King & Hermes, 2014). Language revitalization and its connection to identity are important for both past and future generations. In many cases where older people have been shamed for language, culture, and Indigenous identity, younger people may experience shame for not being more linguistically and culturally connected (Fast, 2014; King & Hermes, 2014; Sherry-Kirk, 2014). As members of different generations overcome shame and engage in language and culture revitalization, culture and pride in Indigenous identity may flow back to older generations as well as forward to younger ones (De Souza & Rymarz, 2007; Luning & Yamauchi, 2010).

There is frequently a misapprehension that urban life is incompatible with Indigenous identity (De Souza & Rymarz, 2007; Sherry-Kirk, 2014; Shulist, 2018). In urban contexts, pressure to assimilate may be greater, there may be a more significant divide between Indigenous and non-Indigenous cultures, and Indigenous people may experience social, spiritual, and cultural isolation (De Souza & Rymarz, 2007). Additionally, more people may be navigating the complexities of mixed or multiple Indigenous, settler, and immigrant heritages (Baloy, 2011; Lawrence, 2004). Access to language and culture reinforces ties to land and connects those who have recently moved from elsewhere and those who have lived

locally for some time, thereby strengthening community members' connections to their heritage cultures, languages, territories, and Nations (Baloy, 2011; De Souza & Rymarz, 2007; Fast, 2014; Sarivaara et al., 2013; Shulist, 2018). At the same time, it also presents an opportunity to imagine new ways of being Indigenous and creating a unique urban Indigenous identity (Andersen, 2013; Davis, 2015; Norton & Toohey, 2011). In creating opportunities to come together through language and culture, urban Indigenous people redevelop their own sense of Indigeneity, help one another to overcome shame and fear surrounding "enoughness," and develop their own unique community, with its own teachings, practices, and traditions (Shulist, 2018). Those practices and ways of being are equally valid expressions of Indigeneity to those found in on-reserve, rural, or northern spaces.

Context of KILN and This Study

KILN is centred in Kingston, Ontario, Canada, and includes members of the local urban community as well as people from surrounding rural areas. Kingston is a fairly small city, with a population of approximately 117,660 (Statistics Canada, 2018). It is situated on the north shore of Lake Ontario at the mouth of the St. Lawrence River, approximately halfway between Toronto (260km) and Montreal (280km), and southwest of Ottawa and the National Capital Region (175km). Overall, the residents of Kingston are primarily of European settler heritage (74–82%), and the vast majority of people, 94%, speak English at home (Statistics Canada, 2018). Kingston is steeped in settler colonial history, having been the capital of the Province of Canada from 1841–1843 (Osborne, 2019), which heavily informs local mainstream culture and urban conceptualization. People who identify as Indigenous

comprise 3.7% of the population, and only 0.06% of people (or 1.6% of the Indigenous population) speak an Indigenous language (Statistics Canada, 2018).

The most prominent Indigenous Nations in Kingston are Anishinaabe, Kanien'kehá:ka (Mohawk) and other Nations of the Haudenosaunee confederacy, and Cree. These communities belong to unrelated language families, as Anishinaabemowin and Cree are Algonquian and Kanien:kéha is Iroquoian. The land where the city of Kingston is situated is traditionally considered shared Anishinaabe and Haudenosaunee territory and is governed historically and today by the Dish with One Spoon Wampum. The nearest First Nations Reserve is Tyendinaga Mohawk Territory (60km). Alderville First Nation is 150km from Kingston and is home to Mississauga Anishinaabe people who historically occupied the Kingston region and were displaced through colonization (Alderville First Nation, 2016). There are also several Algonquin non-Indian Act communities in the region including Ardoch Algonquin First Nation (Ardoch Algonquin First Nation, n.d.), Snimikobi First Nation, and Shabot Obaadjiwan First Nation (Algonquins of Ontario, 2013); these communities are without reserves at the time of writing but the latter two are currently involved in the Algonquins of Ontario Land Claim Negotiations, which includes lands bordering Kingston (Algonquins of Ontario, 2013; Lawrence, 2004). The Cree community in the city has developed due to several factors, particularly a partnership between Kingston Health Sciences Centre (KHSC) and the Weeneebayko Area Health Authority, which serves communities in Western James Bay (KHSC, 2021). The Métis community locally is served by the Highland Waters Métis Council of the Métis Nation of Ontario (Métis Nation of Ontario

[MNO], 2021). Kingston is also home to several colleges, universities, healthcare facilities, and correctional facilities, which has added to the diversity of the Indigenous community.

History and Development of KILN

KILN began in 2014 when a few local people began gathering informally to deepen their knowledge of their heritage languages. It became apparent through these meetings that there was a wide desire locally for access to language. KILN originally sought to present opportunities for Indigenous children to learn language and culture through biweekly music-based language learning activities. Many families attended sessions regularly, and many adults without children attended as well. Since then, KILN has maintained its bi-weekly sessions but has expanded to include land education; language and culture immersion weekends; community-based Anishinaabemowin language lessons at the beginner and intermediate levels; cooking lessons focused on natural foods; digital resource development for Anishinaabemowin, Kanien'kéha, and Cree; and partnerships with community organizations, school boards, libraries, and Queen's University. The membership of KILN is diverse and has included people who are Anishinaabek (primarily Ojibwe and Algonquin), Haudenosaunee (primarily Kanien'kehá:ka), Métis, Cree, Oji-Cree, Carrier, Mi'kmaq, Lakota and more, as well as settler allies (KILN, 2019). The organization's programming has generally focused on Anishinaabemowin and Kanien'kéha and, to a lesser extent, Cree. There have also been events for Mi'kmaq and Lakota (KILN, 2019).

Positionality

Wiikwedongkwe ndizhinikaaz. Makwa ndoodem. Wenji-maajijiwang gichigami-ziibi ndoonjibaa. Ardoch Algonquin First Nation ndibendaagoz. My Anishinaabe name means “Woman in the Bay,” and I am a member of the Bear Clan. I live at the headwaters of the St. Lawrence River (Kingston, Ontario). I am member of Ardoch Algonquin First Nation, and I am also a member of and accountable to the urban Indigenous community in Kingston. In addition to my Algonquin heritage, I carry French Canadian and Black Sea German heritage. I was one of several community members involved in founding KILN under the leadership of Maureen Buchanan, who was and is still the driving force behind much of the language revitalization work done locally. I am aware that as a community member and founding member of KILN, I approach this research with a longstanding connection to most participants, a love for the community and the organization, and an assumption that the work of KILN is a positive contribution to our community. I have done my best to see past my assumptions and biases and listen deeply to the voices of those who shared their thoughts with me, and I am hopeful that my knowledge of KILN and my love for and accountability to my urban community will allow me to present this research in a way that properly represents them.

Methodology

This a Community-Based Participatory Action Research (CBPAR) study that evolved out of discussions with KILN founders as part of development and expansion planning. In 2016, KILN was branching beyond its bi-weekly sessions to include other community activities and partnerships, and we wished to know why participants attended KILN sessions, what impact

KILN had on individuals and the community, and what participants hoped to see going forward. In June 2016, four questions were developed in collaboration with KILN organizers and Elders. These questions pertained only to the bi-weekly play-based language learning sessions. They were

- 1) Why do you come to the language nest?
- 2) Do you feel that the language nest has helped your language knowledge? How?
- 3) Do you feel that the language nest has helped you grow in your Indigenous identity or helped you grow as an ally to Indigenous people? How?
- 4) What do you think works best at the language nest? What would you like to see in the language nest to make it better?

Prior to being conducted, the study was granted ethics approval by the General Research Ethics Board of Queen's University, and fellow KILN leadership also expressed their support. During the study, 15 participants took part in two talking circles. The participants were of Anishinaabe, Haudenosaunee, Cree, Métis, Mi'kmaq, and non-Indigenous heritages. Since I am focusing on Indigenous identity-building, for the purposes of this article the voices of Indigenous participants have been privileged. Each talking circle was four rounds long, corresponding to local ceremonial protocols, and each of the questions was the basis for a round. The talking circles were held according to both Anishinaabe and Haudenosaunee protocols. Before each circle, participants were offered the opportunity to smudge.² A talking stick and a digital recorder were passed to the right for one talking circle in Haudenosaunee

² Smudging is a spiritual ceremony involving the burning of sacred medicines, in this case sage, and the wafting of smoke over oneself, someone else, or an object or space to cleanse, heal, and centre us.

tradition, and to the left for the other in Anishinaabe tradition. Responses were given mostly in English, with some Anishinaabemowin and Kanien'kéha words and phrases, which I checked with more fluent speakers for accuracy or transcription, although I did not correct learner errors. I transcribed and manually coded the recordings for themes and quantified recurrences, reviewing the data on three occasions several months apart and prior to a full review of literature; this was to ensure that coding was as representative as possible of what participants had shared and to help avoid bias in my analysis. For the purpose of privacy, all data have been anonymized, but I have included direct quotes to help convey participants' authentic voices. Before dissemination anywhere else, a written report was prepared and given to KILN organizers and any participants who wished to read it. Kingston Indigenous Language Nest's leadership have also read this paper prior to submission and publication.³

Analysis

Upon coding, several salient themes emerged from the data. These themes were language, culture, identity, community, land, diversity, and decolonization. This paper will deal primarily with the more individual aspects of language, culture, and identity. Although there is some overlap, the more collective themes of community, land, diversity, and decolonization will be addressed in a separate publication.

³ I am grateful to KILN leaders Deb St. Amant and Maureen Buchanan for their helpful review and feedback on this paper. Chi-miigwech.

Language

Unsurprisingly, “language” was by far the most salient code, with 51 recurrences. Within this theme, numerous subthemes emerged. Responses differed depending on whether participants were first or second language speakers, learners with some prior knowledge, or beginners. More fluent participants talked about KILN sessions as opportunities to speak their language, remember things they had forgotten, and stop themselves from losing it due to lack of practice. In this way, for fluent people, the sessions “gift the language back.” As one participant said,

Coming to this [KILN] actually creates a challenge for me, and it’s a good challenge because when I go home I feel real productive like I’ve done something worthwhile and practiced. . . .If you don’t practice you lose it real fast so I appreciate these opportunities and a friendly reminder of what’s important.

Similarly, more advanced second language speakers talked about having a chance to both repeat what they already knew and develop new knowledge and understanding. Speakers who arrived with very little or no language knowledge said that developing a base of even a few words helped connect them to their cultures, communities, and families:

I had no knowledge, just a few words or a few statements before coming to the language nest. And now I’m at a point where I can sing songs with my children, I can tell them to do something in Mohawk and use like small commands and things like that, and . . . that’s huge for me.

Many participants noted that having learners at all levels, especially fluent speakers, made a big difference in their learning. Since there are few fluent speakers in Kingston, both fluent

and non-fluent participants spoke about how they value the opportunity to learn from more fluent people and to share what they know.

The intergenerational attendance at KILN sessions was valuable to the participants. While they would have liked more teenagers to attend, having people of multiple generations, from infants to older people, was a benefit because it allowed for the creation of a safe environment where adults could learn alongside children and where children could be free to engage in their own activities and participate as they wanted to without pressure. Some participants said that even when it looked as though their children were not paying attention, they would repeat or ask about things they had learned after the sessions. In some cases, children who attended sessions were learning their language elsewhere, and were able to teach it back to adult attendees. As one participant whose younger family members learn their language in school, something she did not have the opportunity to do, said,

Sometimes when I listen though I can kind of pick up what people are talking about. But it's the grandchildren . . . and the children that are going to be making a full circle with that. And so the language nest is a good thing. Because sometimes we learn from our kids.

The pedagogy of the KILN sessions, which was modelled on language learning approaches for young children, was central to the non-threatening, multi-generational environment. The pedagogy was engaging, play-based, and multi-modal, which allowed learners to identify and work with their personal strengths and weaknesses and to learn through various approaches. As one speaker said, "one of the things that we do really well here is incorporating the

auditory, the visual, and the kinesthetic learning. To be able to hear, to be able to see, and to be able to experience the language I think is really important.” Participants felt safe to ask questions and make mistakes, and they encouraged one another. This empowered all the participants to expand on their learning: “I think that it has . . . emboldened me to speak, emboldened me to learn, emboldened me to try and embrace all of myself, all of myself. Here, at present.” Their experience kindled a love of Indigenous languages more generally in participants, which was fuelled by having access to both Anishinaabemowin and Kanien’kéha: “Really, I love any opportunity to learn the language, both languages. I love them.” It also gave them the chance to celebrate the vibrance and resilience of their languages: “When you come here to speak the language, the language is not dead, it’s alive, and it makes your heart laugh with joy that you can hear the language, and be in the language, and share the language.”

Beyond the sessions, participants talked about KILN as a motivator for language learning and use in their daily lives. They were inspired by one another because they saw progress in each other and were mutually supportive as like-minded language learners. They also felt accountable to one another to remember what they had learned at sessions, to keep developing on their own, and to make sure their commitment to language was not put aside because of other priorities in their lives. As one participant said,

The nest structure and the nest commitment kind of gives you some structure or some impetus to keep going. You’re kind of semi-accountable to other people to remember what was done and continue and learn the next thing, as opposed to if you’re on your

own you might say, “oh well I can do that next week, I’m really busy.” It gives you some structure to keep pushing ahead.

Access to ideas and resources enabled participants to expand domains of language use to their home and personal lives. Participation also taught or reminded participants that language is central to culture and worldview and enabled them to develop deeper understanding of cultural concepts that do not translate well into English.

Culture

The participants recognized language and culture as inextricably related, and so culture was highly salient with 16 recurrences. They spoke about how creating space for language has deepened their relationships to their cultures and allowed them to access cultural knowledge that had been forgotten or lost to them and their families. They found KILN sessions to be a place not only to learn about Indigenous cultures, but to live them. They appreciated the ability to share what they knew and learn from others in a spirit of equality with people from their own and other Nations. One participant described KILN as “so many different tribes learning from each other and sharing with each other in peace like the Creator meant us.” They also valued the opportunity to experience Indigenous ways of teaching and learning, particularly in ways that honoured children and decentred adults. One participant pointed out that the cultural knowledge that the children were acquiring through participation would be central to their resilience as they grew:

Somebody said to me that love and support and guidance actually aren’t enough—that culture is really important for raising children, and I can really understand that

because when you've faced racism in your life if you have your culture behind you, you'll be able to withstand, and recover, and be resilient much better.

Within the theme of culture, the sub-theme of spirituality stood out, with six recurrences. The sessions have always involved Indigenous spiritual practices and teachings and have always been done with respect for Indigenous cultural protocols. For some, particularly those who had been raised as Christians, this presented an opportunity to think about how they could decolonize or recontextualize their beliefs. For others, it reawakened Indigenous teachings they had forgotten and gave them a chance to share spiritual knowledge. Several observed that KILN did not just perform Indigenous spirituality, it meaningfully practiced it. Examples they gave included honouring the equality of participants; connecting to holistic wellness based in traditional medicines, teachings and foods; and reminding participants of their connections to the land and their other-than-human relations.

Identity

For the participants, cultural and linguistic development was linked to identity, and so identity was also a salient theme with 13 recurrences. Many KILN participants are Indigenous people of mixed heritage, and many are separated from what is viewed as typical Indigenous life through urban dwelling. As Lawrence (2004), Peters and Andersen (2013), and Shulist (2018) point out, these factors often result in feelings of not-enoughness. Participants spoke of this frequently. Some talked about accepting who they fully were, sometimes for the first time. As one mixed-heritage participant said of their Indigenous heritage,

I didn't realize that it meant something. And I was just trying to push it back and push it back, and it didn't do me any good, because all it was doing was making me more frustrated about where I actually belonged.

Others talked about overcoming shame that had led to keeping their heritage a secret, refusing to allow others to dictate who they should be, and the ultimate joy of celebrating the fullness of their heritage; they talked about this in terms of an "awakening of spirit," and spoke about how it allowed them to claim their mixed heritage and their Indigeneity as gifts. They questioned colonial concepts like blood quantum in favour of Indigenous concepts of belonging based in responsibility, recognition, and community orientation. When they were met with community acceptance, it instilled confidence, self-esteem, and a desire to live up to who they fully were as individuals and community members. Connecting to language meant connecting to culture, ancestors, family, and land, which was deeply validating:

There was this connecting that was about language, that was about culture, about family, about finding a place to be valid as a Native person. Like, deeply valid. Not an object, not something, but real. To be seen in a real way.

The acceptance they experienced, along with deepened cultural knowledge, created a deep sense of belonging that informed participants' identities. For many participants, KILN was one, and sometimes the only, place where they could be their full authentic selves: "You know as Indigenous people we have an Indigenous way of thinking, and Indigenous way of being, and the nest is giving that a safe place to be and nurture and springboard from." From a language perspective, the sense of community created safety and removed barriers to language learning. It created pride and understanding as participants got to teach and learn about their own and each other's cultures. Because of its inclusion of ceremony and

traditional ways of living and its focus on *mino-bimaadiziwin*, “a good life,” KILN also created a positive social space away from influences such as drugs and alcohol, where participants could see Indigenous cultures as pathways toward healthy living and where they could grow in healthy teachings to pass on to younger generations. As mentioned previously, they also felt that the cultural knowledge their children were learning would help them to be resilient against the racism and attempted assimilation they experience as urban Indigenous people.

Participants’ diverse identities informed both the conduct of sessions and the development of an urban Indigenous identity:

We don’t have that one common language and one common cultural identity. And so we all get to share snippets and pieces of where we come from. And it’s that openness that really helps to build our identity and our confidence as a people here in community. . . . So I think it’s really critical to who we are as people.

They saw diversity as a strength for language learning and for community identity-building. For more fluent speakers, it offered the opportunity to be challenged with something new, to compare languages and knowledge systems, and to identify cognates between related languages. From a pedagogical perspective, because they were learning multiple languages, everyone was a learner at some point. That made it more comfortable for them to try new things and make mistakes: “I think it’s very interesting to me to have multiple languages in this group because . . . everybody can kind of be brave in the group and just make mistakes and try it out.” Other participants noted that the respect for cultural diversity in the group also led to respect for individual diversity. They felt that the KILN community valued

individual identities, preferences, and abilities and enabled members to apply their gifts in ways that would benefit the group:

There's a lot of individual healing going on but there's community building and setting an example and coordinating our efforts and supporting each other. . . . And getting to understand each other and tap into hidden strengths or hidden talents and supporting certain weaknesses and vulnerabilities and lift each other up.

Discussion

The participants' perspectives echo the findings of previous research and build on previous knowledge of the importance of urban language revitalization and its influence on the development of urban Indigenous identity.

Language

Previous research indicates that a primary benefit of urban language revitalization is in increasing speaker numbers and domains of language use (Baloy, 2011; Davis, 2015; Jewell, 2016; Morgan & Clarke, 2011; Pitawanakwat, 2009; Sarivaara et al., 2013; Sherry-Kirk, 2014; Shulist, 2017). With respect to language, KILN bi-weekly sessions increased speaker numbers within the community. Participants who were more fluent noted that they improved or regained fluency. While non-fluent participants did not achieve fluency, they noted an increase in their language knowledge. The format of the sessions created both metaphorical and physical space for language (Baloy, 2011). Because participants had greater exposure to language and perceived accountability to one another to use the language and gain more knowledge, participation created space in their lives for language. Because

this is a grassroots initiative and not attached to an institution, the physical space overlapped with public spaces used by other individuals and communities. Most KILN activities have been held at the Kingston Community Health Centre (KCHC), but other public spaces, such as conservation areas, have also been used. This has created new domains of language use within the community, and it has also increased the visibility of Indigenous languages in the wider community (Baloy, 2011; Davis, 2015; Jewell, 2016).

As Morgan and Clarke (2011) and Sherry-Kirk (2014) point out, grassroots community initiatives such as this present opportunities and challenges for language revitalization, and understanding of these contributes to the wider language revitalization movement (Baloy, 2011, Morgan & Clarke, 2011; Pitawanakwat, 2009; Sherry-Kirk, 2014). As in other research, the communality and welcoming nature of the group encouraged belonging, group contribution, honouring of individual gifts and cultural diversity, and self-direction (Jewell, 2016; Morgan & Clarke, 2011; Sherry-Kirk, 2014). Since leadership is local, the culture-based pedagogies employed are reflective of the community, its connection to shared Haudenosaunee and Anishinaabe territory, and the diversity of its wider make-up. The lack of firm student–teacher boundaries put everyone into a position of bringing knowledge; fluent speakers noted that this allowed them to grow in language knowledge by teaching, and less fluent participants spoke about the accountability to the community they felt to improve and contribute. Since some of the more fluent participants were younger, and participants came from different language communities, the flow of knowledge was intergenerational, across fluency levels and Nations, which is respectful of Indigenous pedagogies in which everyone is seen as having something to offer (Battiste, 2013). Most of the leadership is

done by second language speakers, which has doubtlessly resulted in language and culture shifts (Pitawanakwat, 2009). While there is a risk that participants will learn the language incorrectly, the language and culture change that has occurred could also be argued to offer some benefit; the community has created ways of speaking that are unique and cultural understandings that reflect their own community.

As in other studies, the participants' responses reflected the development of positive language ideologies within the community (Davis, 2015; King & Hermes, 2014; Shulist, 2017, 2018). Participants noted more use of their languages at home and in other social domains, emphasizing their belief that their languages belong in the city. They had also come to understand diversity as additive and the presentation of multiple languages as complementary within their community. On an individual level, they arrived at a greater understanding of their own self-efficacy in language learning; the validation they experienced at KILN sessions enhanced that belief and further fed into their positive language ideology and resultant engagement with language, resulting in a "feedback loop" like Fast (2014) describes. Participants did not connect their languages with neoliberal concepts of the commodification of knowledge, nor connect it to economic incentives (Haque & Patrick, 2015); rather, they understood the value of their language to be in the positive benefits and wisdom it holds for culture, spirituality, and identity and its usefulness in helping them to resist assimilation (Dementi-Leonard & Gilmore, 2015; Haque & Patrick, 2015).

Culture

Language learning at KILN is inherently tied to cultural growth, as it offers access to both surface and deep aspects of culture (McIvor et al., 2009; Norton & Toohey, 2011; Sarivaara et al., 2013). The participants had made a conscious choice to actively reclaim their cultures and languages; deepening knowledge led to more understanding, more community validation, and a desire for more knowledge (Fast, 2014). As numerous researchers have described, as participants learned together, they developed a common cultural identity, which increased group and intergenerational cultural transmission (Ball & McIvor, 2013; Baloy, 2011; De Souza & Rymarz, 2007; McIvor et al., 2009; Norton & Toohey, 2011). Many Indigenous people have associated shame with Indigenous culture—either shame at being Indigenous or shame at not being Indigenous enough—and positive participation in language learning activities helps to overcome that (Fast, 2014; King & Hermes, 2014; Lawrence, 2004; Sherry-Kirk, 2014). The validation they experienced allowed them to bring their full selves to KILN, which helped them resist assimilation, celebrate the fullness of their heritage, and decolonize their concepts of Indigeneity and community belonging. For many participants, learning language and culture was spiritual, which enhanced the depth of their connections to one another, their Nations, their human and other-than-human relationships, their sacred teachings, and the land and allowed them to live their spirituality in meaningful ways (Fast, 2014; McIvor et al., 2009). The participants in this study were not learning *about* culture through language; they were actively participating in, internalizing, and creating culture through cultural ways of teaching and learning steeped in spirituality.

Identity

The linguistic, cultural, and spiritual growth participants experienced informed their identities as urban Indigenous people. Many urban Indigenous people have complex identities that are informed by multiple factors (Baloy, 2011; Lawrence, 2004). Participation in language learning contributes to strong identity development that produces protective factors against some of the challenges urban Indigenous people face. These include the cultural shift of relocating to an urban area, mixed heritage, racism, the “collective trauma” of assimilation due to removal from language and culture; trauma reactions such as misuse of drugs and alcohol; and the misconception that urban Indigeneity is somehow less valid than rural, on-reserve, or northern Indigenous lifeways (Andersen, 2013; Baloy, 2011; De Souza & Rymarz, 2007; Fast, 2014; Lawrence, 2004; Sarivaara et al., 2013; Sherry-Kirk, 2014; Shulist, 2018).

Participation in urban language revitalization contributes to healthy identity development in two ways. First, it allows participants to (re)connect to their heritage and Nation through shared language and culture. Participation in culture-based language learning allows participants to assert their Indigenous identity visibly and audibly, show pride in who they are, and overcome shame and assimilation (De Souza & Rymarz, 2007; King & Hermes, 2014). Second, participation in urban language revitalization enables participants to create an urban Indigenous identity that is reflective of their unique community; together, as with the participants in this study, they come to create new ways of being Indigenous (Andersen, 2013; Davis, 2015; Norton & Toohey, 2011 Shulist 2018). As this study demonstrates, when participation is met with encouragement and acceptance, participants’ pride in their identity

grows even more (King & Hermes, 2014). By asserting their identities and acknowledging the validity of others' identities, the participants challenged the misconception one cannot be urban and authentically Indigenous (De Souza & Rymarz, 2007; Sherry-Kirk, 2014; Shulist, 2018). The element of shared territory and community diversity is important and unique for this study. Here, the urban identity that developed at KILN was shaped by the diversity of the community, which presented opportunities for everyone to learn, to compare languages, and to appreciate the diversity of Indigenous cultures and knowledges. That appreciation of cultural diversity led to greater appreciation of individual diversity, and so validation, acceptance, and trust were key components of KILN participants' experiences.

Andersen (2013) writes, "identity as *being*, essence, or sameness offers a sense of community and a point of solidarity, while offering the dignity of historical grounding. Conversely, identity as the process of *becoming* acknowledges the discontinuities and fragmentations marking our colonial experiences" (p. 49). Here, participants were engaged in processes of both *being* and *becoming*, in that they were living culture, creating a sense of community and solidarity, and (re)claiming knowledge systems that had been threatened by colonization and aggressive assimilation (Andersen, 2013). For some, that reclamation involved sharing knowledge they had always carried, or remembering knowledge that they had forgotten or been removed from. Others were experiencing it for the first time. For many of the participants, regardless of the knowledge they carried when they arrived at the KILN sessions, learning was a process of owning their Indigeneity and becoming stronger in their identities as members of their Nations and the urban community.

Conclusion

Urban language revitalization is vital to the overall movement of Indigenous language revitalization. It ensures that urban Indigenous people, who are the majority of the Indigenous population, have access to their languages. It expands speaker numbers, domains of language use, urban Indigenous presence, and understanding of the value of Indigenous languages. That enables urban Indigenous communities to develop positive language ideologies; in this case, participants understood that their languages belonged in the city, that the diversity of their community was additive rather than divisive, that their languages had intrinsic value, and that they as individuals had the ability to learn their languages. However, urban language revitalization is about much more than language. When the approach is rooted in Indigenous cultures and spiritualities, it has the potential to make a difference in participants' understanding of themselves and their urban Indigenous community. In this case, participants recognized the importance of local Anishinaabe and Haudenosaunee teachings to local urban identity. They also saw diversity as a unique and important part of their community. By participating in language revitalization, participants were both living their Indigenous cultures and creating new ways of understanding what it means to be a part of their unique urban community. In short, urban language revitalization matters. With ongoing Indigenous urbanization, leading initiatives like KILN will be increasingly central to the survival of our languages and cultures and the development of new, unique, and beautiful ways to be Indigenous.

About the Author

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CAN YOU FEEL YOUR LANGUAGE? AN EXPLORATION OF INDIGENOUS URBAN LANGUAGE LEARNING AND THE RESTORATIVE POSSIBILITIES FOR MIND, BODY, AND SPIRIT

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Abstract

Indigenous peoples in Canada maintain beautiful and diverse languages and cultures. Despite the devastating impact of colonization, Indigenous people continue to value their connection to their respective languages and cultures. Due to colonial influences, there are significant numbers of Indigenous people living in urban areas across Canada. Many have relocated from their ancestral communities to pursue education, career, and other opportunities not found within the homelands. This paper explores the challenges, but also the positives and possibilities for the future of urban language learning. It also investigates the restorative possibilities of language learning for the mind, body, and spirit of urban Indigenous language learners, with a particular focus on the Kwakwaka'wakw or Kwakwala speaking peoples of BC. The following questions guide this paper: Is it possible to learn Kwakwala and truly understand Kwakwaka'wakw perspective while living outside of Kwakwaka'wakw territory? Is it possible for language learning to have psychosomatic, physiological, and possibly supernatural responses, thus "feeling your language"? Through an examination of relevant literature and personal experiences, I explore these related possibilities. An exploration of the influences of language learning on the mind, body, and spirit and have shown that language learning, in at least a few cases, is showing promise to have transformative properties empowering a learner to "feel the language."

Keywords: urban Indigenous language learning; land-based learning; Kwakwaka'wakw; Kwakwala language; Indigenous healing

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Introduction

Indigenous peoples in Canada maintain beautiful and diverse languages and cultures. Despite the devastating impact of colonization, Indigenous people continue to value their connection to their respective languages and cultures. Due to colonial influences, there are significant numbers of Indigenous people living in urban areas across Canada. Many have relocated from their ancestral communities to pursue education, career, and other opportunities not found within the homelands. Indigenous language initiatives such as introductory language classes are occurring in many of these urban centres. This paper explores the challenges, but also the positives and possibilities for the future of urban language learning. It will also investigate the restorative possibilities of language learning for the mind, body, and spirit of urban Indigenous language learners, with a particular focus on the Kwakwaka'wakw or Kwakwaka speaking peoples of BC. To guide this paper, the following questions will be explored: Is it possible to learn Kwakwaka and truly understand Kwakwaka'wakw perspective while living outside of Kwakwaka'wakw territory? Is it possible for language learning to have a psychosomatic, physiological, and possibly supernatural effect, thus "feeling your language"? I will examine relevant literature and draw on personal experience to explore these related possibilities.

Background

Urban Indigenous Populations

In Canada, just over 50 percent of band registered Indians are living off reserve in urban and other rural areas, and this does not include non-status Indians, Métis, and Inuit urban popu-

lations (Statistics Canada, 2016). This shift of Indigenous peoples from their ancestral territories to other locations is largely due to colonial influence, and further reasons for this movement include forced relocation, education and career pursuits, economic prosperity, and adequate housing. The impacts of colonization are felt strongly within Indigenous communities and many have left their respective ancestral lands in pursuit of a better life for themselves and their families.

The traditional territory of the Kwakwaka'wakw (the Kwakwala speaking people) encompasses the area around the northern tip of Vancouver Island and the surrounding mainland along the coast of BC. There are currently 14 to 16 tribes belonging to the Kwakwaka'wakw Nation, and only a few of these tribes remain in their original villages. Many of the Kwakwaka'wakw ancestral sites have been abandoned, and tribe members have relocated to nearby locations. It is my understanding, as a Kwakwaka'wakw member, that the majority of our population are now living in urban environments.

The Dzawada'enuxw, one of the Kwakwaka'wakw tribes, are one of the few remaining within their original territory. The Dzawada'enuxw band membership totals 600 approximately with only 60 remaining in the village of Ukwānalis (Kingcome Inlet) meaning 90 percent are living outside of the community and many in urban centres. Of the 60 members living in Ukwānalis, there are only one or two first-language Kwakwala speakers remaining. These speakers are elderly and unable to consistently teach or share their language knowledge within the village.

Kwakwala Language Loss

The Kwakwaka'wakw presently have a 2.2 percent population of first-language proficient Kwakwala speakers (Dunlop et al., 2018). The majority of these speakers are elderly, and to my knowledge, none of our Kwakwaka'wakw children can speak the language proficiently. The term Kwakwaka'wakw refers to the Kwakwala speaking peoples and this is how our people define themselves as a Nation. So then, what happens when all the speakers are gone? This could foreseeably happen within the next decade or even within the next five years in some communities such as my ancestral village of Ukwānalis (Kingcome Inlet) or the Kwagu'ł village of Tsaxis (Fort Rupert). I keep wondering, will our people still refer to themselves as the Kwakwaka'wakw? Or like the pop star Prince, will they become known as “the people formerly known as the Kwakwaka'wakw” and like Prince choose an identifying symbol instead?

Kwakwala Language Renewal

The following describes the state of the Kwakwala language:

Over the last two decades there have been occasional outbreaks of enthusiasm and opportunity in the form of Kwakwala teacher training, curriculum development and funding for additional positions and new technologies. But, in truth, and it's a time for truth, the history of Kwakwala renewal has largely been an account of teacher burn-out, student stagnation, and community disillusion in which everybody just gave the whole responsibility for language maintenance to the schools. And school programs have been unsuccessful in teaching the students to speak Kwakwala fluently; and the fluent speakers have grown older and fewer; and there is now little incentive to learn

the language because it is seldom used outside the gukw̓dzi ('bighouse'). (Anthony et al., 2003, p. 3)

This description still stands as a fairly accurate account of the current Kwakw̓wala language situation in 2021. My recent experience of living in the Kwagu'ł community of Tsax̓is, participating in Kwakw̓wala language learning groups, and working in numerous schools in the surrounding area as a counsellor for five years has provided me with insight into the current language situation. Kwakw̓wala continuity is largely a community expectation of the elementary schools within the Kwakw̓waka'wakw communities. The schools each have one or two language and culture teachers who typically spend no more than one hour per day with students. During this time, the teachers are expected to facilitate both language and culture programs (an entire potlatch program of traditional songs and dances). It seems these teachers are often stretched to capacity, with minimal support and insufficient resources or curriculum to follow. These "language exposure" programs offered through the schools have yet to produce any proficient speakers. Kwakw̓wala is seldom spoken outside of the gukw̓dzi (bighouse, where potlatches and other traditional ceremonies take place) and even then, less and less Kwakw̓wala is spoken in the gukw̓dzi during potlatches and other cultural events as many of the newer *gigame'* (chiefs, cultural leaders who are the main speakers during potlatches and other cultural ceremonies) are not able to speak Kwakw̓wala.

Importance of Language Connection and Honouring the Language of the Land

There is much evidence to suggest that many Indigenous peoples value their mother tongue and believe language continuity is important (FPCC, 2016; NAFC, 2018; OFIFC, 2015). Language connection can be especially important to urban Indigenous populations as it links

them to their homelands, communities, families, and cultural practices. Ancestral language learning can also offer an opportunity for healing and connection to land. Wildcat et al. (2014) argue that land-based education is essential to decolonization and that “decolonization must involve forms of education that reconnect Indigenous peoples to land, the social relations, knowledges and languages that arise from the land” (p.1). In a similar article, the authors express the importance of land-based learning involving Indigenous worldview and educational practices that encompass traditional ecological knowledge and encourage responsible care for the land (Bang et al., 2014).

Urban concepts of Indigenous identity are also significant as individuals encounter differing cultures and perspectives in city centres. Indigenous urban identity may be a different experience from those who remain within the homelands surrounded by family and community. No matter the location, having a strong sense of identity helps one move along confidently in life’s journey and a connection to ancestral language supports this (Child, 2016; Erasmus, 2019; Hallet et al., 2007; Thompson, 2012).

Also, of importance is an honouring of the language of the land you are located on. In her article titled “We Can’t Feel our Language,” Natalie Baloy discusses the importance of making space for language learning in the city as well as the concept of “placing language,” which involves an honouring of the local languages. As Baloy suggests, this is an important part of urban language learning; however, establishing a protocol with the language keepers of the

land and requesting guidance is also imperative. I believe the likelihood of a genuine language learning experience is greater if this acknowledgement and some learning of the land's ancestral language takes place.

As a Kwakwaka'wakw member living in the territory of the Snuneymuxw (city of Nanaimo), I am aware of the protocols involved when conducting cultural work in another Nation's territory. It is customary on Vancouver Island to acknowledge the traditional territory and people of the land before conducting any cultural practices, and I believe language work is included in this protocol. As our family moves forward in our language-learning journey in Snuneymuxw territory, I believe it is important to follow protocol and acknowledge the Nation and territory as well as the Hul'q'umin'um' language (ancestral language of the Snuneymuxw land and people). I also maintain it is important to reach out to those involved in Hul'q'umin'um' language revitalization for mutual support and guidance, especially if wanting to incorporate land-based learning. Doing so will help provide a language-learning experience that encourages an understanding of not only Kwakwaka'wakw, but also Snuneymuxw perspective and Indigenous worldview.

As part of a land-inspired Facebook project I am facilitating, I have reached out to a local Hul'q'umin'um' language teacher in Snuneymuxw to join the initiative. I have invited her to share with us the Hul'q'umin'um' words for what we are sharing out and the place names for the various locations we are sharing out images and videos from in Hul'q'umin'um'. It seems we are in the beginning stages of this work together, and I appreciate this connection and look forward to potential future collaborations. It does not feel like this effort to honour the

ancestral language of the land takes away from my Kwakwala work, but rather adds to it. Honouring the Hul'q'umin'um' language and the lands of Snuneymuxw I am living and learning on has enlightened my Kwakwala learning journey greatly.

Challenges for Urban Language Learning

The complexities of learning an Indigenous language, especially one that is endangered, are obvious to me as I attempt to learn my ancestral Kwakwala language in Snuneymuxw territory and it seems many of these challenges are found across urban and non-urban contexts.

Minimal access to speakers is a major obstacle for urban language learning (while acknowledging this can also be an issue for non-urban contexts). The Kwagu'ł community of Tsax̓is (Fort Rupert) has at least five proficient Kwakwala speakers engaged in language work, but in comparison, the Dzawada'enuxw community of Ukw̓analis (Kingcome Inlet) has none. Our Kwakwala language learning community group in Snuneymuxw, until recently, had one first-language Kwakwala speaker consistently supporting the weekly sessions over the past year. At our last session before the last holiday break, a special event celebrating our language work, a total of five speakers attended and indicated they would like to support our group in the New Year. It was exciting to have these speakers on board and our community group was gaining momentum until the onset of Covid-19, and since then we have not been able to meet, and our group learning is at a standstill.

The majority of Kwakwala first-language speakers living in urban areas have been away for a lengthy amount of time and have not had the opportunity to speak their language on a daily

basis. This is the case for the five Kwákwala speakers involved in our language work in Snuneymuxw. Thus, urban first-language speakers may require time to reawaken their language speaking ability in order to best support second-language learners. In a recent personal communication, Thilinuxw, Sara Child of the Kwagu'ł (one of the Kwakwaka'wakw tribes) community of Tsaxis (Fort Rupert), revealed the speakers she has been working with are “still remembering words from when they were children,” and are thus still in the process of reawakening the language even after 10 years of engagement in Kwákwala language revitalization work.

Many urban Indigenous populations are keen to learn their language but unable to attend classes due to poverty issues. The Ontario report on Language Transfer Practices in Urban Indigenous Communities highlight how urban community language classes are inconsistently attended and this is correlated with the general impoverished state of participants (OFIFC, 2015). These challenges include issues such as transportation, as many Indigenous families living in the city do not own their own vehicle and rely on public transportation. This was apparent during my time at an Indigenous community services organization in Victoria, where I worked with Indigenous families for five years. This is also a recent occurrence for families who are struggling to attend our Kwákwala learning group in Snuneymuxw. Busing across the city with children in the evening (a typical time for urban community classes) can be difficult. This prevents many urban Indigenous families from attending urban community events and programs, such as language classes.

Until recently, there were no funding sources available specifically for urban language-learning initiatives in BC. The First Peoples' Cultural Council (FPCC) addresses this in their report, which states "there is often no particular funding pot to enable Indigenous language acquisition and maintenance in urban settings" (2016, p. 29). Community groups in urban settings have typically come together with little or no funding. While there seems to be an understanding that everyone wants to learn and share for the sake of the language, it is difficult to do so without funds to pay for space, transportation, and nourishment. It is also difficult for first-language speakers and facilitators to make a commitment without some sort of compensation. This is due to the reality of westernized living, where we are required to earn an income to pay for the high costs of our livelihood in the city.

The FPCC also states "other challenges include addressing the needs of language groups who are some distance from their homeland" (2016, p. 30) as an issue for Indigenous urban language learning. It seems the further the distance, the greater the challenge in finding first-language speakers to support language learning, at least this has been the case for the Kwakwaka groups I have participated in. Also, if located outside of ancestral homelands and in the territory of a different Nation, protocols may need to be considered in acknowledging the Indigenous peoples of the land and their respective language. I discuss this concept of "placing language" put forward by Natalie Baloy earlier in this paper.

Dialect differences can be problematic for urban groups whose members are from varying dialects within a language group (again acknowledging that this also occurs in communities; however, it is often a factor in urban contexts). Also, older and newer versions of particular

words and phrases may arise, and these differences can also be tricky to navigate for learning groups (OFIFC, 2015). At times, even within the same dialect there can be vast differences. As an example, our group in Snuneymuxw was recently searching for the Kwakwaka'wakw word for scarf. I found 'Tłaxu' on the First Voices website, which was obtained from 'Yalis (Alert Bay, one of the Kwakwaka'wakw communities) and likely from a 'Namgis (one of the Kwakwaka'wakw tribes whose current village is located in Alert Bay) speaker. One speaker of the Dzawada'enuxw (another Kwakwaka'wakw tribe) dialect was not familiar with 'Tłaxu' and put forward Sabaxtle for scarf (also commenting that First Voices is often “wrong”). In the same session, another speaker of Dzawada'enuxw dialect shared privately with me that Sabaxtle refers to a scarf or kerchief worn over the head and instead gave the word Kan'xawe' for a scarf worn around the neck. Later when Kan'xawe' was put forward to the group, the first Dzawada'enuxw speaker disagreed and indicated Kan'xawe' is not a scarf but a tie worn around neck. This scenario is not an uncommon experience in language learning across, or even within, dialects.

A lack of adequate language learning resources can be an issue for language-learning groups in both urban locations and in the homelands. Space issues can also be of concern, particularly to urban groups who do not have rent-free access to community buildings as they might in their home communities. While there are many obstacles to overcome in urban Indigenous language learning, there are also some optimistic components and current strategies that are working well in the field.

Positives and Current Strategies in Urban Language Learning

Introductory language-learning groups can provide opportunity for those who have never heard or had any previous access to learning the language (FPCC, 2016). These urban language initiatives can also connect learners with others of the same ancestry, and this can be meaningful for those who have never been to their home community, as well as those who are living away. This connection to identity can be valuable for Indigenous urbanites and “sometimes can provide a more supportive environment than in a reserve community” (FPCC, 2016, p. 29).

Another strategy in urban language learning is the Mentor-Apprentice Program (MAP) which requires only two people, and is not bound by residence (Hinton, 2001), thus providing an opportunity for individuals to learn their language in urban centres. This report by FPCC also highlights a MAP team as a “success” where an urban community group formed around a Mentor-Apprentice pair (FPCC, 2016). In a Kwákwala language group I attended from 2012 to 2013 in Victoria, a MAP team was the driving force of our group. Recently, my mentor and I, as a MAP team, have been a crucial part of our Kwákwala learning group in Snuneymuxw. A former MAP team is also currently integral to the Kwákwala course currently offered through North Island College in Courtney, BC. Thus, MAP teams can strengthen other urban community programs.

As a recent response to Covid-19, language groups are taking advantage of Facebook to support community learning at a distance, which provides an additional opportunity for urban learners. Previously, Facebook was mainly utilized by various Indigenous language-learning

groups to coordinate activities (FPCC, 2016). Facebook is also used to share resources, post forums for language discussions, and share popular memes.

Memes are humorous images, videos, or pieces of text that are copied (often with slight variations) and spread rapidly by Internet users. Recently a Mohawk language learner and teacher, Tehakanere John Henhawk, was recognized for his efforts in creating and sharing Mohawk memes on social media. Henhawk says, "Everyone knows what memes are. We want the language to be seen, heard and to be used." He goes further to say, "you never know how that's going to affect somebody. Sometimes the smallest thing can inspire someone to at least look into the state of Kanyen'kéha and then maybe develop interest into helping make it stronger" (Deer, 2019, p. 1).

Facebook is used by several Kwakwala learning groups to coordinate activities, share resources, and discuss Kwakwala-related topics. Facebook memes have also become a fun way to share the Kwakwala language and are regularly posted and quickly shared by numerous Kwakwaka'wakw members. Facebook has also become better utilized by various Kwakwala communities to support learning at a distance (with the current Covid-19 situation). All of these uses of Facebook, ranging from coordinating activities to learning at a distance, are beneficial strategies for urban language learning.

First Voices and YouTube (live action/animated videos in language) are also popular resources for urban language learners. In addition, FaceTime and Skype are useful for connecting with mentors (first-language speakers) and "it is important to remember that a telephone

can enable a conversation in the language” (FPCC, 2016, p. 30). Along with these positive aspects of Indigenous urban language revitalization, there are also promising approaches for the future, including social media platforms.

Future Strategies in Urban Language Learning

A valuable concept uncovered in this exploration was that of equal opportunities for urban Indigenous peoples to learn their language (FPCC, 2016). In order for this to happen, consistent and adequate funding sources need to be available and equally support both urban and non-urban language-learning initiatives.

The National Association of Friendship Centres (NAFC) refers to the importance of “safe spaces where people are not afraid to fail or speak without being judged” (2018, p. 15). Safe learning spaces are crucial to all learning, including urban and non-urban Indigenous language learning. Creating and encouraging safe spaces for Kwákwala learning is essential to my language-learning journey both as a teacher and learner. As an Indigenous counsellor working within the school system in both urban and non-urban settings, I came to understand the fundamental importance of a safe environment for genuine learning. The Indigenous children and youth I worked with required safe environments where their socio-emotional needs were cared for in order for them to meaningfully engage in their learning at school. I believe it is the same for all learners no matter the age or context.

The potential for new digital technologies and online platforms to support urban language learning is promising (Carpenter et al., 2017; Galla, 2016). Indigenous radio also has great

potential for supporting Indigenous language revitalization movements in urban and non-urban contexts (UNESCO, 2019). As an example, the Homalco First Nation (currently located in Campbell River, BC) recently launched a radio station with the intent to provide language-learning opportunities for their membership. Darren Blaney, an elected councillor for the Nation, is hopeful “that six hours a week of K’omoks-language programming will help reverse the decline of the indigenous language and introduce it to a new generation” (Wilson, 2016, p. 1). Technology can also provide “a less intimidating venue for the learner” (Galla, 2016, p. 1144) or an alternative method for practicing pronunciation without fear of critical feedback. Lastly, creating new words for urban and modern living would also be beneficial for the forward movement of Indigenous urban language learning.

As an urban language learner, I have found there are areas where no Kwákwala exists, such as vehicles, city housing, and food groups found at the grocery store. The only reference for vehicle is the word for tires, and this limits our ability to talk about the diversity of current vehicles, especially in the city. There seem to be few words available to refer to the different types of modern housing, such as apartments and the high rises found in the downtown core. There are minimal words to talk about the wide range of foods in the grocery store and on our dinner tables. For example, Kwákwala has few words referring to fruits and vegetables, and so the general words used refer only to “something sweet to eat” and “something that grows from the ground.” There are some Kwákwala-ized (as I call them) versions of English words available for fruits and vegetables, such as payas for pears or con for corn. However, I personally would prefer a Kwákwala word that describes the food item as is the way of our

language (descriptive). Creating new words for modern day use, in my experience, is imperative to language continuity for both urban and non-urban learners but may be of greater importance for those in the city. Regardless of the ongoing challenges to language learning for Indigenous learners in both urban and non-urban areas, there are numerous possibilities to support future learning. This discussion of future strategies leads to the concept of land-based learning and its importance to Indigenous language revitalization but also the challenges particular to urban learners.

Land-Based Language Learning

Land-based learning is a concept that often surfaces in the current field of Indigenous language revitalization and is significant for urban language learning endeavours. Many Indigenous language warriors and teachers maintain land-based learning is integral to the resurgence of their respective language. Many believe language is connected to their lands, and for language learning to be authentic, opportunities for learning language out on their ancestral territories should be provided (Child, 2016; Erasmus, 2019; Kahtehron:ni, 2019; Rorick, 2019; Rosborough & Rorick, 2017). In her thesis, *Awi'nakola: We are one with the land and sea (Igniting the fire within: Youth leadership camp framework)*, Child emphasizes the importance of language learning on the land. Child believes a restoration of Indigenous wellness is possible but, “only if it occurs within our traditional territories because this is where our wellness springs from; this is where our ancestors come from; this is where our language shaped our worldview through relationships with the land, sea, and our ancestors” (Child, 2016, p. 52). In connection to this, Kahtehron:ni suggests a kincentric approach to community language planning and future language revitalization efforts in her thesis (Kahtehron:ni,

2016). This concept of self and nature as part of an extended ecological family that shares ancestry and origins also refers to the important connection between Indigenous language learning and ancestral territory. Kahtehron:ni says an intergenerational community approach to language revitalization “creates a path to healing by reclaiming, rebuilding, and recovering what we were once denied” (Kahtehron:ni, 2016, p. 66). In her thesis, Erasmus (2019) also puts forward the need for immersive language learning to take place on the land in order for learning to be authentic.

Land-based language learning is something aspired to by Indigenous language learners and teachers; however, it can be a challenging task especially for urban members living away from the lands of their ancestral language. Many urban Indigenous members are consumed by their day-to-day requirements of providing a home, food, and clothing for their families as well as working through the residual effects of the colonial system. Therefore, the ability to travel back to their home communities for language learning opportunities on their ancestral lands is compromised.

It is my impression many language champions envision land-based language learning as programming that involves bringing participants out on the land to origin sites, to traditional food harvesting locations, and incorporates traditional harvesting practices and so on. This type of teaching and learning is difficult for those in urban areas away from their ancestral lands to carry out as they do not have the rights to visit these locations or for harvesting in their lived area. As these sites may not be a part of an urban learner’s ancestral history, learning about them may also be irrelevant.

Also, bringing Elder first-language speakers out on the land is not a possibility for many due to age, limited mobility, and health issues. So, land-based learning initiatives may need to take place without first-language speakers who are usually the best resources for language learning, and there may not be many Elder first-language speakers available in the first place in an urban setting.

Although difficult, land-based learning can offer many positives to language learners. In my recent experience as an urban learner and as a response to Covid-19, I have initiated a land-inspired project with a couple members of our Kwákwala learning group in Snuneymuxw (Nanaimo). Each of us share out at least two posts per week on Facebook related to land-based learning. These posts can be a video or image with audio, including the Kwákwala word for the plant, animal, or outdoor life and also include an acknowledgement to the ancestral lands where the learning took place (or where the photo/video was taken). This land-inspired project has been a meaningful learning experience for all involved. Not only are we learning the Kwákwala words as individuals and as a small group, but we are also sharing these out to encourage others to learn. It has been a way for us to learn Kwákwala and connect with the ancestral lands of the Snuneymuxw we are living on.

Another example is the calendar project I am facilitating on Facebook (also in response to Covid-19). This Kwákwala project involves a daily calendar share from one of the seven participating families including the date (day of the week, month, and date). Kwákwala months were named in relation to what was growing or available for harvesting on the lands and waters in our territory at the time. For example, August is *X̱amsx̱amsdi* and refers to the

emptying of fish storage boxes. The three months previous are related to the berries that would have been growing or the time we would have been picking these berries. *Kamkamdzakwanx* (salmon berry time) is how we refer to May, *Gwagwatānx* (red huckleberry time) for June, and *Ninakwanx* (salal berry time) for July. Due to this project, I am now paying attention to and teaching my children about what is growing around us or what we would have been harvesting if living in the homelands. This calendar project encourages all participants to tune into the plant life around them and thus supports a connection to the land even though most are in urban locations. This calendar project also includes a word of the day component where each family chooses their own word and some families are choosing to do their videos outdoors with words related to the natural world. One family in particular has gone out searching in their urban area for such things as clams, starfish, and blackberries for their word of the day and to record their video from that location.

The last Facebook initiative I have been overseeing is a weather project involving a few households from within our family. In this activity, parents record short conversations with their children about the weather. I have also been sharing photos with accompanying phrases to do with the weather. This project encourages everyone involved to get outside to best learn about the weather and supports a connection to mother nature. It is exciting for our household when the weather changes, as we then have new stimulus for our learning!

All of these projects have been incredibly helpful to my personal language-learning journey and an unexpected but great way to conduct land-based learning in an urban setting. I have

been taking photos and videos practicing my Kwákwala learning while out running in various locations in Snuneymuxw. I share many of these photos and videos out on Facebook as part of our projects. It has become a highly enjoyable time for me to get out for some alone time, exercise, fresh air, and to capture the plant and animal life and weather occurrences I am encountering. It encourages me to get out for exercise more often and also has me paying attention to what is growing in these locations. I am learning about plant life in a way I have never learned before. I do not know the names of many of these plants in English, and so it is exciting to learn them in Kwákwala first! I am also appreciating the creatures I cross paths with, such as deer, turtles, centipedes, worms, and even slugs are now exciting! These projects encourage a connection to the natural world in general but also support all aspects of my being and have been a surprisingly effective way to carry out holistic land-based learning in an urban setting.

The obstacles to land-based learning are numerous and more so for urban language learners. However, if these difficulties can be overcome, the benefits would be vast. Traditional ecological knowledge could be gained as part of language learning on the land. Also learning about the traditional place names and origin stories of first ancestors would be significant. This type of language learning opportunity could support a connection to ancestral lands in a way that holistically engages the mind, body, and spirit of those involved. It is my opinion much learning could be gained not only in terms of language acquisition but also worldview perspective and a strengthening of identity, thus providing a genuine language-learning experience.

Restoration of Kwakwaka'wakw Perspective and Falling in Love with the Language

In her Master's thesis, Tłi'linuxw, Sara Child (2016) suggests the restoration of Kwakwaka'wakw perspective is possible through the understanding of Kwakwaka'wakw concepts and land-based learning. Tłi'linuxw says, "our distinct language feeds our view of the world and our way of being, it is interwoven with culture, is vital to our personal and collective wellness and is integral to who we are as Kwakwaka'wakw" (p. 1). Tłi'linuxw believes language learning on the ancestral lands of the learner will have restorative benefits for the mind, body, and spirit and will further lead to an authentic understanding of Kwakwaka'wakw perspective. She describes six Kwakwaka'wakw concepts (2016), *Sanala* (to be whole), *Maya'xala laxus bāk'wine'* (respect for self), *Mu'lanokw* (we are grateful), *Awi'nakola* (we are one with the land and the sea), *Maya'xalapá* (respect for each other), and *O'man's 'nam'a* (we are one), to be used as the basis for Kwakwala learning and leading to a restoration of a Kwakwaka'wakw way of seeing the world. These Kwakwaka'wakw concepts are examples of the beauty found in the Kwakwala language and exemplify the Kwakwaka'wakw worldview.

In her work, the late Tłatłakuł, Dr. Trish Rosborough (2019), Kwaguł (Kwakwaka'wakw) member and Kwakwala language warrior, also explores the beauty of the Kwakwala language and the deeper meaning of words. Tłatłakuł shares, "speaking Kwak'wala is not just about having translations of things I want to say in English but that I can understand the Kwakwaka'wakw way of seeing the world" (p. 1), thus, speaking to the importance of gaining an understanding of worldview as part of language learning. In my Kwakwala journey, I have deeply appreciated the broadening of perspective and a beginning to seeing the world as my

ancestors did. The Kwákwala language vastly differs from that of English (my first language) and examples of this include the following: our general reference for cousins is the same as for brothers and sisters (and this aligns with our Kwákwaka'wakw teachings that our first cousins are our brothers and sisters), and there is no way to say “I am sorry,” but there is a word for “I am regretful.” A point of significance in my learning journey was the realization that the way we ask someone “how is your day?” is the same as how we ask about the weather. This I learned as part of the weather project I am facilitating over Facebook. It is only from this Kwákwala learning that I came to understand how the weather of the day directly impacts how I am feeling. The Kwákwala language reflects and teaches us about this connection between our well-being and the natural world in a way that English does not.

In her doctoral dissertation, Tłátlakuł states, “working to recover Kwak’wala in my own life involves deep personal, interpersonal, and social processes and an untangling of messages carried at a profound level” (2012, p. 14). I believe what Tłátlakuł alludes to is the deeper experiences of learning an ancestral language and the psychosomatic, physiological, and spiritual responses that are possible. I recently had an overwhelming experience as part of my language-learning journey. As I was lying in bed with Kwákwala words running through my mind, I could simultaneously feel my heart beating to the words and other physical responses happening in various parts of my body. To me, it felt as though I was integrating these Kwákwala words into my mind and body, and I also sensed a spiritual awakening. I thought to myself, “I’m feeling my language,” and for me this was a profound and similar experience to that of falling in love.

My Kwakwala language-learning journey began long ago, but it is more recent that I have been actively learning and also teaching my family daily. I am definitely “feeling my language,” and I am deeply engaged with Kwakwala. As in any meaningful relationship, there are times when I am overjoyed and other times where I am frustrated or things feel stagnant. My language learning aspirations require a long-term, steady commitment with lots of patience, nurturing, and tender loving care towards myself and the language. It is a journey that encompasses every aspect of my being, and I am grateful I have been able to find ways of engaging in language learning that are holistic, broaden my perspective of Kwakwaka'wakw worldview, and connect me to the natural world despite living away from the homelands.

Conclusion

This paper explored urban Indigenous language-learning with a particular focus on the Kwakwaka'wakw Nation and Kwakwala language. As many Indigenous people are residing in cities and other urban locations across Canada, urban language initiatives offer Indigenous peoples the opportunity to learn language, connect with others, and strengthen their identity. There are many challenges for urban language learners but also positive influences, strategies working well, and possibilities for the future. Some of the leading strategies at present are the combined efforts of the Mentor-Apprentice program with other community programming initiatives and the use of social media platforms such as Facebook.

Indigenous language revitalization seemingly contributes to the restoration of Indigenous ways of being, and land-based learning offers a possibility for this. I have questioned whether authentic land-based learning can occur and if an understanding of worldview is possible if

learning language occurs outside one's ancestral lands. I have come to believe this learning and understanding is more likely if you are engaging with the ancestral language of the land you are on. I also explored the influences of language learning on the mind, body, and spirit and have found that language learning, in at least a few cases, is showing promise to have transformative properties empowering a learner to "feel the language."

Glossary

Awi'nakola ~ we are one with the land and the sea.

Dzawada'enuxw ~ person or people from Ukwānalis (Kingcome Inlet), one of the tribes of the Kwakwaka'wakw.

Gigame' (chief) ~ traditional leader

Gukwdzi (bighouse) ~ where cultural ceremonies take place.

Gwagwaṭanx (red huckleberry time) ~ June

Hałzaqv ~ the Hałzaqvla speaking people of Wágłisla (Bella Bella) on the northwest coast of North America just above the Kwakwaka'wakw.

Hul'q'umin'um' ~ the ancestral language of the Snuneymuxw.

Kamkamdzakwanx (salmon berry tome) ~ May

Kwagu'ł ~ person or people from Fort Rupert, one of the Kwakwaka'wakw tribes.

Kwakwaka'wakw ~ the Kwakwala-speaking people on the northeast coast of Vancouver Island and the adjacent mainland coast of British Columbia.

Kwakwala ~ the ancestral language of the Kwakwaka'wakw.

Maya'xala laxus bakwine' ~ respect for your self

Maya'xalapā ~ respect for each other

Mu'lanokw ~ we are grateful

'Nangis ~ person or people from Alert Bay, one of the Kwakwaka'wakw tribes.

Ninakwanx (salalberry time) ~ July

O'man's 'nam'a ~ we are one

Sabaxtle' ~ kerchief

Sanala ~ to be whole

Snuneymuxw (Nanaimo) ~ refers to the great people.

Tłatłakuł (Trish Rosborough) ~ Kwakwala name

Tł̥axu' ~ scarf

Tł̥i'linuxw Sara Child) ~ Kwak̥wala name

Tsax̥is (Fort Rupert) ~ the village of the Kwagu'ł.

Ukw̥analis (Kingcome Inlet) ~ the village of the Dzawada'enuxw.

X̥amsx̥amsdi (time of empty fish storage boxes) ~ August

K̥an'xawe' ~ neck ring

'Y̥alis (Alert Bay) ~ the village of the 'N̥amgis

About the Author

Nugwa'am Yola...k̥'akut'ł̥an x̥an Kwak̥wale' - I am Yola. . . I am learning Kwak̥wala. I am also a mother of three, partner to a fellow Kwakwaka'wakw, and we are learning our ancestral language of Kwak̥wala as a family. I am a doctoral student in the field of Indigenous language revitalization with the University of Victoria. I came into this program with intention to create space for learning my language and to explore the connection between language learning and healing. My family and I are currently living and learning on the ancestral lands of the Hul'q'umi'num' language and the Snuneymuxw people.

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INDIGENOUS LANGUAGE TECHNOLOGIES: ANTI-COLONIAL OASES IN A COLONIZING (DIGITAL) WORLD

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Abstract

Language technologies are an increasingly common part of daily life for people around the world. Millions of users per day access services like Google Translate and Apple's Siri in a technology ecosystem that favours a handful of the world's most common languages. In a form of digital colonization, Indigenous languages are pushed aside in a profit-based system of research and development that results in both values conflicts and technological misalignments. Despite the hostile environment that disincentivizes the use of Indigenous languages, Indigenous language communities are pushing back by engaging language technologies to proactively support their work of language maintenance and revitalization. This paper argues that Indigenous leadership in the development of language technologies encourages the development of responsive and responsible Indigenous language technologies (ILT) that push back against dominant cultural and technical limitations.

Keywords: Indigenous language technology, decolonizing technology, digital colonization, speech technology

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Introduction

Technological engagement and innovation are critical components for the ongoing survival of Indigenous languages around the world. In the North American context, the shift to electronically mediated communication has been underway for at least a generation (Buszard-Welcher, 2018) and the COVID-19 pandemic is further accelerating this trend with the health risks associated with in-person communication (Chew, 2021; Sinclair, 2020). In this rapidly changing environment, Indigenous languages are at risk of being left behind in the digital space by technological changes driven by large multinational corporations supporting a small handful of the world's most common languages. The spaces and tools created by these large companies impose a set of values about languages and impose languages themselves at the expense of minoritized and Indigenous communities and their languages. This ubiquity of these tools, the monopolies of these corporations, and the imposition of language values represent an ongoing process of digital colonization. In this exploitative context of businesses and languages, it is critically important for Indigenous people to take active roles in the development of responsive and responsible Indigenous language technologies (ILT) that prioritize the voice and values of their respective language communities (Galla, 2016; Lothian et al., 2019).

For the purpose of this paper, Indigenous leadership is defined in the most basic sense, that is, Indigenous people and speakers of Indigenous languages involved in all aspects of technology development, from identifying the problems, finding solutions, and exercising control, to deploying the tools back to their communities. The ideal of Indigenous leadership in the development in ILTs faces challenges that are shared with other minority language

communities. Even as the tools for creating advanced language technologies become easier to access, they remain expensive and time consuming to develop, typically requiring large amounts of language data which are not always available in Indigenous and minority contexts. Despite a challenging environment for the development of ILTs, Indigenous participation and leadership in language technology development actively challenges dominant technological and value assumptions and creates anti-colonial oases where Indigenous and minority languages can flourish.

Background

Adapting to new language technologies for communication is nothing new, and history is replete with examples of shifting language technologies. In their simplest form, language technologies are the tools and methods used for encoding knowledge and communication, including everything from signal fires to satellite communications. Individual language technologies come and go as new tools arise and others fall out of use, while change remains the constant. This perpetual change is seen in the evolution of writing instruments from stones and charcoal, to brushes, quill pens and pencils, to mechanical typewriters and then finally computer keyboards. Each of these tools was a response to a new context that demanded a new solution as human needs changed. These shifts came about through advances that enabled new and more efficient means of communication, paralleling the development of technology in general. The modern experience of global communication can find its roots in the ships that carried messages around the world in ancient times and gave way to telegraph wires laid under the oceans and around the world throughout the second half of the 19th century. The global scope of communication technology was further amplified

with the creation of the first digital computers in the 1940s that brought language technology into the present digital age.

The digital transition of language technologies has continued unabated since the invention of the digital computer, and modern language technologies blend into the background of daily life and work for people around the world (Buszard-Welcher, 2018). Ubiquitous technologies like mobile telephones and text messaging; the Internet and social media; spelling and grammar checkers; automatic translation; and speech technologies like “Siri” and “Alexa” enable continuous and effortless communication across the room and around the world. While this interaction with technology is routine for many, it is mediated through a small number of the world’s most common languages and often provided by a small number of multinational corporations. This limited interface with unlimited potential is of critical importance to Indigenous language communities that want to have a digital presence.

Just Another Colonizer? Technology and Language Shift

Majority languages place enormous pressure on lesser-spoken languages as speakers tend to migrate, willingly or otherwise, to languages with a (perceived) higher socio-economic value. This is a basic fact of language shift and was a common tool in the assimilation of Indigenous people in Canada (Truth and Reconciliation Commission of Canada, 2015). The pressure to shift languages is amplified in the digital sphere where the world’s major languages hyper-dominate available technologies and services. While the actors have changed, the imposition of particular languages and underlying values about language represent an active process of colonization. Before the widespread adoption of digital

language technologies, Bernard reported that “about 97% of the world’s people speak about 4% of the world’s languages; and conversely, about 96% of the world’s languages are spoken by about 3% of the world’s people” (1997, p. 142).

The linguistic hegemony of the world’s major languages is multiplied online where large companies drive technological development and content creation for these languages. As an example, YouTube reports that their service is available in 80 languages reaching 95 percent of the world’s online population (YouTube About, n.d.). This statistic from YouTube, while inherently skewed toward wealthier countries and people with Internet access, clearly demonstrates the negative economic pressure facing development of technologies for the vast majority of the world’s (non-majority) languages. With the ability to serve so many people with so few languages, there is no financial incentive for companies like YouTube, Google, Microsoft, Apple, Amazon to expand their services to include any of the thousands of other languages around the world.

As with language technologies, languages themselves change over time. These changes occur through alterations of the socio-political climate, migration and interaction with neighbouring peoples, through natural processes of language evolution, or through adoption of lingua franca for shared communication in specific language domains. The natural expression of a multilingual environment is now challenged by rapidly changing technologies, and change is hastened by instantaneous global communication. In this new context, language choice is no longer limited by time, geography, or socio-political boundaries, but rather it is *imposed* by the same technology that enables communication.

The factors contributing to language shift in the current situation are complex, and they are being explored; however, it is impossible to ignore the fact that technology itself may be a significant factor in the language pressures faced by Indigenous language communities (Galla, 2016). The threat posed by the pervasiveness of the language technologies of world's major languages creates a complex relationship between Indigenous communities and the language technologies they see as vital to preserving their languages into the future. Galla (2018) conveys the complexity of this relationship as the proverbial “two-edged sword,” recognizing the harm inflicted on Indigenous communities by hegemonic languages, but also feeling the necessity of active engagement with technology to ensure language survival.

Many Indigenous language communities are looking at ILTs as potential tools for Indigenous language revitalization (ILR) (Galla, 2009; Keegan & Cunliffe, 2014; Kuhn et al., 2020; Littell et al., 2018; Wagner, 2017), and it is exciting to think of talking to “Siri” in a small Indigenous language. However, with the negative financial pressure facing the development of ILTs by the world's large technology companies, Indigenous people must take the lead in developing the next wave of responsive and responsible language technologies. With the increasing importance and use of language technologies for all languages, it is more important than ever for Indigenous language communities to carry their languages through the digital transition to ensure the languages' continued use and vitality.

Moving into Colonized Spaces (Digital Transitions)

As communication and activities of daily life continue their transition into the digital sphere, Indigenous people are finding and creating spaces for their languages in the mainstream

digital world (Keegan & Sciascia, 2018; Littell et al., 2018; McIvor & Anisman, 2018). The idea of creating space is nothing new for Indigenous peoples who have existed for generations in a hostile milieu that transcends land, politics, language, resources, and religion. The digital spaces being created today differ according to the needs and capacity of communities and their languages, but they all share the goal of normalizing, stabilizing, and revitalizing Indigenous languages.

Some technologies of daily life are easier to adapt than others. An easily accessible space for many language communities is social media. Green (2017) highlights the role of social media engagement as a strategy for advanced language acquisition in adult Kanyen'kéha (Mohawk) language learners at Six Nations, in Ontario, Canada. Likewise, other language communities are engaging social media as a language teaching tool (Blake, 2017; Outakoski et al., 2018). The politics and values of social media spaces like Facebook or Twitter may not always align with Indigenous values, but these platforms are freely available and widely used. However, these sites are again dominated by the world's major languages, and Indigenous language users must typically navigate the site in a majority language.

The reality of digital technologies dominated by a few languages highlights the need for the creation of Indigenous spaces in the digital transition. In contexts with large numbers of speakers, such as Aotearoa (New Zealand), this transition is enabling the use of Indigenous languages in the activities of daily life, for example using a bank machine or checking out a book from the library (Keegan & Sciascia, 2018), where a translation layer sits on top of a common technology. The spaces occupied by these speaking communities enable Indigenous

languages to live on in modern life and normalize the presence of Indigenous languages in the digital world. Keegan and Cunliffe (2014) state that passing on te reo Māori (the Māori language) to the next generation is insufficient to ensuring language survival if there are no opportunities to use the language. This attitude inspires ongoing technological development and helps ensure that te reo Māori can be used in daily life (Keegan & Nfato, 2014; Mato et al., 2016; Whaanga et al., 2015).

For languages with fewer speakers, digital transitions are assisting language revitalization through computer assisted language learning (Bontogon et al., 2018; Kazantseva et al., 2018; Lessard et al., 2018). In the Canadian context, this approach is responsive to the needs of language communities involved in language revitalization through structured language teaching and acquisition programs. These tools are typically designed to help learners acquire the language and explore features of the language while creating opportunities for learners to boost their language proficiency away from the classroom. A prominent example of this technology is firstvoices.com, which “is a suite of web-based tools and services designed to support Indigenous people engaged in language archiving, language teaching and culture revitalization” (First Peoples' Cultural Council, n.d., para. 1). FirstVoices provides a standard set of language independent (or agnostic) tools that are essentially containers that hold whatever language data is placed into them. Digital technologies are also supporting Indigenous languages by enabling language documentation that drives both language programming and the development of advanced language technologies (Bird, 2018; Rice & Thieberger, 2018).

It's Not Easy Living in Colonized Spaces (Technical Challenges)

Indigenous communities experience varying levels of difficulty in completing this digital transition.² Looking back to one of the foundational technologies discussed earlier, orthography can be a major barrier to being online for Indigenous languages, meaning the ability or inability to accurately represent Indigenous writing systems. The orthographic barrier is one more colonizing factor that is critically important to overcome as text is a primary medium of interaction with the digital world.

As defined by Schillo and Turin (2020, p. 72), “orthography refers to writing conventions that are implemented when using a script, such as capitalization, or the set of letters from a script used by a particular language.” In a digital environment, the script or writing system can be the orthographic barrier. For languages that use the standard Latin or Roman characters printed on this page, a digital transition is simplified as digital environments support the letters, even if they do not support the language. The distinction is important because it allows a language like Kanyen'kéha (Mohawk), which uses the standard Latin/Roman alphabet with diacritics common in European languages (The Mohawk Language Steering Committee, 1993), to be used in digital environments, even without language-specific support with tools like spell checkers or grammar aids.

A challenge exists for languages that use their own writing systems. In the North American context, the GWY (Cherokee) syllabary developed by Sequoyah in the early 19th century is

² For an overview of the process of digitization, see *Indigenous Languages: Zero to Digital* (2019). The non-profit group Translation Commons created this guidebook in partnership with UNESCO as part of the 2019 International Year of Indigenous Languages.

an historically significant Indigenous script. This writing system uses 85 individual characters to represent whole syllables of the language rather than individual phonemes or letters (King, 1975, pp. 11–12). In the 19th century, the syllabary allowed the GWY to claim space in the print world through letterpress printing (another language technology innovation). The transition to written language opened new domains for expression, and Cherokee literacy surpassed that of the settler population (Parins, 2013). The syllabary was later adapted to typewriters and then made a digital transition with the design of GWY keyboards and typefaces (fonts). This process mirrors that of languages in Canada like Cree and Inuktitut that also use syllabic systems, and it illustrates that orthographic barriers in technology can be overcome, although with some difficulty (Schillo & Turin, 2020). Unfortunately, the availability of a typeface or font does not guarantee universal access across multiple devices and programs that need to be programmed to recognize additional characters and diacritics.

The problem of universal readability is addressed through Unicode.³ Unicode is a global standard that ensures characters display correctly across multiple devices, sites, and programs. When a character is included in Unicode, any compliant technology should accept and display that character correctly. If characters are not Unicode compliant, they may not display correctly and/or force users to use other alphabets. Communities that use their own writing systems can apply to have their characters included in the global Unicode standard, but this presents a significant technical challenge. In their discussion of new technologies for

³ For more information, see <https://home.unicode.org>

Indigenous languages, Buszard-Welcher (2018) asserts the importance of Unicode compliance as a foundational technology for digital transition. Likewise, The Unicode Consortium itself declares on their homepage that “everyone in the world should be able to use their own language on phones and computers” (The Unicode Consortium, n.d.). However, the process of proposing new characters for the global standard is highly technical and requires expertise which can be beyond the capability of many under-resourced language communities. The complexity of Unicode adoption is illustrated by Pine and Turin (2018) who oversaw the modernization and adoption of *Hałtzaqv* (Heiltsuk) characters into the global Unicode standard. As of March 2020, Unicode 13.0 includes 143,859 characters, including emoji (The Unicode Consortium, n.d.). The process of Unicode adoption remains overly complicated and is only a first step in bringing an Indigenous language into the digital sphere.

On the surface, services offered by Facebook or Google permit the use of Indigenous languages; however, the underlying language technologies privilege the world’s major languages. This foundational dependence on the major languages is clear when one considers that Google’s search algorithms must “understand” a language to suggest related topics and “Alexa” must speak the language of a user. At most, the technologies that power these services are anchored in a few hundred of the world’s more than 7000 languages. Adding to this concern, the users of these services ultimately depend on the goodwill and continued profitability of large multinational companies to ensure continued access.

Essentially, Indigenous people are claiming digital spaces for their languages in a hostile environment. Google's self-declared aim to "organize the world's information" (Google, n.d. para. 3) necessitates language technologies that categorize, store, translate, and provide this information to users around the world. This process can only happen through majority languages, and the use of services provided by the large technology companies is essentially the passive use of inherently non-Indigenous spaces. The users (Indigenous or otherwise) of these services do not have a direct role in the development or design of the services provided by these companies and have little control over the way their information is used. The services provided by these companies are directed at a global market of consumers where overall value is determined by the largest possible return for the smallest possible investment. This defining value presents a conflict for many Indigenous communities.

The New Colonizers (Systemic Challenges)

The world's top five technology companies (Apple, Google, Amazon, Facebook, and Microsoft) drive the development of language technology for the major world languages in a profit-based model. It may not always be clear to the user, but each of these companies is selling something to someone, even when providing "free" services. The profit-based model works well for majority languages because it supports the creation of language technologies that are expensive and time consuming to develop. However, the profit-driven model for language technology and content development is disadvantageous for Indigenous peoples and their languages as it favours a handful of widely spoken languages at the expense of thousands of smaller (and often Indigenous) languages.

At the LT4ALL (Language Technology for All) gathering hosted by UNESCO (Paris, December 2019), Frances Tyers characterized the development of mainstream language technologies as focused on “small numbers of rich people, or large numbers of poor people.” Tyers’ critique was pointed squarely at the large technology companies and their profit-driven motivation. In Tyers’ four-part division (rich/poor, many/few), most Indigenous language communities fall in the underserved intersection of small numbers of poor people. While there are occasional forays into the world of endangered languages by the large technology companies,⁴ the companies are ultimately responsible for delivering profits to shareholders, and any other activities are (at best) ancillary to their central mission. The global dominance of a few companies and their often proprietary language technologies creates a digital space focused on a small number languages that are accessible at the expense of all others.

The dominance of the world’s major languages across the Internet is sustained by the underlying language technologies that are largely designed for English. In these cases, even major world languages face challenges adapting these technologies to their languages. Gilles Boulianne describes his experience working with speech technologies for Canadian French as one of constantly finding ways to adapt inherently English technologies to French needs (personal communication, November 19, 2019). This challenge is further amplified when adapting these underlying English technologies to completely unrelated Indigenous languages. While technologies like artificial intelligence are theoretically language agnostic,

⁴ For example, Google oversaw the development of the Endangered Languages Project (<http://www.endangeredlanguages.com/about/>) before turning over ownership to expert organizations, and Microsoft has localized some of their software packages into a number of Indigenous languages including Māori, Welsh, Catalan, and Cherokee with translation support from those language communities.

the data requirements are an effective barrier to all but a handful well-resourced Indigenous languages (Buszard-Welcher, 2018).

In their assessment of challenges to ILT in Canada, Littell et al. (2018) outline a number of projects that are attempting to adapt these technologies, including text-to-speech and automatic speech recognition (ASR) for Indigenous languages. Advances in computing power, programming, and algorithm design are creating opportunities for communities to adapt these advanced technologies (Jimerson & Prud'hommeaux, 2018; Lessard et al., 2018; Micher, 2018), but work is ongoing and their ultimate accuracy and effectiveness is unknown at this point.

The profit-based model that drives the global technology giants also devalues non-majority languages when it prioritizes provision of service to the most people at the lowest cost. By default, this model devalues ancestral and heritage languages and relegates them to non-digital spaces, diminishing their value for the future of electronically mediated communication and contributing to language shift. This profit-first valuation of language is the polar opposite of work by countless Indigenous language communities to restore and revitalize their languages for their inherent value. Indigenous leadership in the development of ILT challenges the system as it exists and has the potential to create technologies that support Indigenous languages rather than continue their devitalization. Fortunately, Indigenous people around the world are exercising technological leadership as they claim spaces for their languages in the digital realm.

A Note About Data Sovereignty

Given the hostile environment created by a profit-based multinational model, responsive and responsible language technology development must be done with care and planning to protect Indigenous languages from the effects of digital colonization and potential exploitation. In the context of an online existence, Indigenous communities around the world are increasingly thinking about the role of data sovereignty in their digital futures (Davis, 2016; Pool, 2016; Walter & Suina, 2019; Wilks et al., 2018). Data sovereignty is briefly defined as Indigenous people maintaining control over their own data and digital development. In the realm of ILT, language data includes parallel translations, computer codes that interpret or construct language, texts in Indigenous languages, and voice recordings. Responsible language technology design ensures that language communities maintain control over their language data at all stages of technological development.

Indigenous leadership within ILT development keeps the voice of the language communities at the forefront and can help ensure that the underlying values of the language technologies are rooted in Indigenous values. A discussion of values vis-à-vis technology may seem out of place given the common narrative of value-neutral technologies; however, as Miller (2020) argues, technology is part of the socio-politico-cultural system, not apart from the system. Data sovereignty (and community sovereignty) are values questions that need to be considered in ILT development along with value-laden questions such as language ownership, who has the right to learn a language, and how languages should be protected. Those questions are outside the scope of this paper but illustrate the complexity of creating anti-colonial spaces for Indigenous languages to thrive in a digital environment.

In his keynote address to the HELISET TFE SKÁL conference (June 2019), Keegan shares his (negative) experience of working with Microsoft and Google to develop resources for te reo Māori. The model used by these two projects alienated language data from the community that created it and absorbed the data into various software platforms and algorithms. Keegan shares that the community was not able to keep its own translations and encourages Indigenous communities to ensure control of their language data. With his experience, Keegan asserts that “we’re the only ones that really *care* about our languages, so if we want something, we have to make it ourselves” (Keegan, 2019). While Dr Keegan’s encouragement to ensure “we do for ourselves” is certainly the ideal way forward, many language communities lack capacity to undertake this technically challenging work that combines linguistics, computer science, and artificial intelligence with Indigenous knowledge.

For Indigenous languages around the world, the process of technological shift has created new mediums of expression. As Galla notes, “digital technology has created new domains for languages to exist, allowing learners and speakers to engage in or at least feel that the language is a necessary part of their Indigenous well-being and the contemporary world” (2016, p. 1123). New technologies present new opportunities to ensure the continued survival of Indigenous languages.

Anti-Colonial Oases

To meet the challenges outlined above, many communities in Canada are collaborating with non-profit partners for the development of ILT outside of a profit-driven ecosystem (Kuhn

et al., 2020; Littell et al., 2018; Rice & Thieberger, 2018). These innovative partnerships include universities, communities, research institutions, governments, and others, which go beyond simply decolonizing these spaces into active anti-colonial work that challenges systemic and technological limits to advance the presence of Indigenous languages in the digital world.

In the Canadian context, these partnerships (ironically, often funded by the original colonizing governments) are producing ground-breaking language technologies that are innovative by any standard. One pioneering partnership has developed between Onkwawenna Kentyohkhwa at Six Nations in Ontario and the National Research Council (NRC) of Canada. The partnership is between the Indigenous Language Technology Project Team and local teachers to develop a verb-conjugator for Kanyen'kéha (Mohawk) (Kazantseva et al., 2018). This application emerges from the community's desire to support learners in their exploration of complex Kanyen'kéha verb morphology. Kawennón:nis (the Word Maker) is the product of technically challenging work, with the community providing language expertise and the NRC programming skill and financial resources. Furthermore, while the initial development was done with a specific language (Mohawk), the underlying tool was created to work with any language in a "first deep, then broad" approach to design and development (National Research Council of Canada, n.d.). The partnership with the NRC adds value to the project at the national level because a broad approach to development is not the responsibility of an individual language community.

In the realm of speech technology, the simplicity of interactions with “Siri” or Google Translate disguises the complexity of the underlying technologies. These technologies are in demand (Littell et al., 2018) but are very difficult to develop. However, the increasing accessibility of computing power and innovative programming is enabling research and development that would ordinarily be limited to high-resource languages (Besacier et al., 2014; Gupta & Boulianne, 2020a; Jimerson et al., 2018). Speech technologies have great potential to support language communities and language learners through tools such as voice recognition and talking dictionaries, along with tools for language documentation (Cox et al., 2019; Zahrer et al., 2020).

Jimerson and Prud’hommeaux (2018) report on their work for ASR in Seneca in the Seneca homeland in what is now New York State. This project is directed by a Seneca citizen to support the nation’s language learners and strengthen their language for the future. Indigenous leadership ensures that the research keeps the needs of the community at the centre and aligns with Keegan’s assertion (2019) that “we do for ourselves.” This innovative research for a small Indigenous nation with few speakers has great potential to support the community’s language goals but would never be undertaken by a large technology company. As such, a research partnership between the language community and a university (in this case through a PhD student) is an ideal vehicle to complete this work. This type of innovative research is stimulating and challenging and there are many non-Indigenous researchers/allies who are intensely interested in helping communities solve technical challenges (Kuhn et al., 2020).

Indigenous leadership in technology development also helps address concerns over data sovereignty. As Herbert discusses in *The Financial Post* (Malone, 2017), when Indigenous people take the lead in technological development, it helps ensure that language data and intellectual property remain with the Indigenous communities. The leadership role within research partnerships needs to be one of equals to avoid the experience Keegan relates (2019) of working with Google and Microsoft and the alienation of language data from the community.

The alienation described by Keegan (2019) is rooted in a conflict of values. In the profit-driven eco-system of large technology players, the value of language data comes from the ability to offer services that will attract users and generate revenue. For Indigenous communities, especially those engaged in language maintenance and revitalization efforts, the value of language data is relational and comes from its ability to support and enhance language use and learning. In the context of these Indigenous communities, language data is “valuable” because the language itself is inherently valuable for diverse and dynamic socio-politico-cultural reasons. While there are potentially valuable opportunities to partner with large technology companies to access their platforms or technologies, the values conflict needs to be acknowledged, and community interests in their data need to be protected. Indigenous leadership in ILT development can ensure that these questions of data sovereignty are addressed in planning, development, and distribution stages.

In the mainstream technological world, software and licensing models are used to protect content creators and data while granting users varying degrees of access to programs and

services. There are two levels to this protection: the software and the data that was used to create it. In the context of language technologies, there are varying instances of closed source and open source programs, with varying levels of access to the data that are used to create language models. For the big tech companies, their programs and data sets are generally closed to protect their financial value. When the focus shifts to Indigenous led development of ILTs by communities and people working to strengthen their own languages rather than exploit their monetary value, the open/closed source models of programs and data sets becomes complicated.

Open source programs have obvious value to prevent reduplication of effort in low resource contexts (Brinklow et al., 2019). As language technology tools are developed, it is in the collective interest to see that they are shared and adaptable for other languages. This open source approach guides the work of the National Research Council of Canada Indigenous Languages Technology unit in an empowerment based approach (Kuhn et al., 2020). As tools are created in partnership with Indigenous communities, they are released for other communities and languages to adapt to local needs.

In terms of language data, for under-resourced Indigenous languages from communities with histories of exploitation, opening-up to outsiders can be a rightful cause for concern. While open source tools, free of language specific data, present a smaller threat to community data sovereignty, language data can be sensitive, depending on the priorities and beliefs of the individual communities. The models of open and closed source programs and data presume that an individual or company owns the information. When working with an

Indigenous language, the concept of licensing is stretched, with conflicting views of language ownership (Hutton, 2010) in a context based on protecting property. Indigenous values can be infused into licensing models to open programs and data for use and development while taking protection into their own hands rather than relying on a set of accepted licence models.

One such Indigenous approach to data sovereignty that can apply to programs and data sets in language technology is the Kaitiakitanga licence developed by Te Hiku Media (2018). This licensing model is based on the Māori concept of guardianship or protection and intends to create resources that are both open and protected. The application of an Indigenous licensing model can respect principles of open access while maintaining data sovereignty. While this model was developed by a solely Indigenous led and run project, without external partnerships, there are principles that are useful in partnership or sponsorship relationships.

Conclusion

Technological engagement is a critical component of language revitalization strategies for Indigenous communities around the world. This engagement takes many forms depending on the needs and desires of the various language communities and falls across the entire spectrum from low- to highly-advanced technologies (Zhao, 2003). Some communities are taking their first steps by creating digital fonts with their local orthographies (Pine & Turin, 2018) while others are conducting research that is pushing the boundaries of computer-speech interaction (Gupta & Boulianne, 2020a, 2020b; Jimerson & Prud'hommeaux, 2018). On the whole, Indigenous and minority language communities are engaging technology to

proactively support their efforts of language maintenance and revitalization (Galla, 2016; McIvor & Anisman, 2018; Ward, 2004).

Indigenous languages around the world are transitioning into the digital world as part of their ongoing process of adaptation to novel language technologies. This transition is complicated by real concerns about the role of technology as a potential cause of language shift (UNESCO Ad Hoc Expert Group on Endangered Languages, 2003). Despite the risk, many communities have concluded that a presence in the digital world will ensure the vitality of their languages for the next generation (Galla, 2016).

A digital transition brings Indigenous languages into a hostile environment that privileges a small number of common languages in a profit-driven pursuit to provide service to the most people at the least possible cost. It is only when Indigenous people take active roles in the development of language technologies *outside* of the profit-driven ecosystem, that they can help ensure the responsible development of responsive and responsible language technologies that challenge the dominant systemic and technical limitations and create anti-colonial oases in a colonizing (digital) world.

About the Author

Thanyehténhas ní:i yónkyats. Kanyen'kehá:ka niwakhwenstyò:ten táhnon wakenyáhten. Kenhtè:ke nitiwaké:non táhnon eh nón:we kherihonnyén:nis onkwawén:na. Ó:nen oyé:ri niyohserá:ke wakateweyenstonhátýe táhnon shé:kon sótsi é:so tká:yen akeweyentéhta'ne'. Tekhenonhwerá:tons ne yonkerihonnyén:nis tsi wa'onkyé:nawase' ohstónha aká:ronke' nonkwawén:na. Nyawenhkó:wa. Sewayo'tenhserí:yos.

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EVERYDAY STORIES IN A FOREST: MULTIMODAL MEANING-MAKING WITH OJIBWE ELDERS, YOUNG PEOPLE, LANGUAGE, AND PLACE

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Abstract

Expanding efforts in Indigenous language revitalization and reclamation (e.g., Henne-Ochoa et al., 2020; Leonard, 2008, 2019; McIvor, 2020) highlight the ecology of relations that language is embedded in across communities and land. A critically important aspect of understanding these relations is a language's "livingness" in place; that is, the context of where the language emerged and where the language is intertwined and has lived within lands and stories for generations. Taking up this intersection of language, land, and story, our paper examines the multimodal language of storying the land in Ojibwe in episodes from video-recorded intergenerational (Elders and youth) walks in the woods that were a part of an Indigenous languages documentation project. We focused on interactional episodes involving storywork (Archibald, 2008) and conducted interaction analysis (Jordan & Henderson, 1995). Indigenous scholarship (e.g., Noori, 2013; Simpson, 2014) articulates the importance of stories as Indigenous theory, and this paper builds on this work, illustrating how everyday storying and walking on lands (Marin & Bang, 2018) are rich contexts for language learning and reclamation.

Keywords: Indigenous language reclamation, story, land, place, Ojibwe

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Introduction

The purpose of this study is to respond directly to expanding efforts in Indigenous language documentation and reclamation (e.g., Henne-Ochoa et al., 2020; Leonard, 2008, 2019; McIvor, 2020) that highlight the ecology of community and land-based relations in which language is embedded. A critically important aspect of understanding these relations is a language's "livingness" in place; that is, the context of where the language emerged, where the language intertwines and lives within lands and stories for generations. We focus on this intersection of storying, walking, and land and their role in Indigenous language reclamation. Stories hold pedagogical potential (e.g., Archibald, 2008; Basso, 1996; Iseke & Brennus, 2011; Simpson, 2014) and are part of human learning and becoming, with language as both living content and context for use.

This study presents data and analysis from an Ojibwe language documentation project that brings bilingual youth and First Speakers together on land to illustrate the significance of story, language, and place for everyday intergenerational sense-making. We aim to expand how story is considered in Indigenous language scholarship by moving beyond notions of story that tend to be tethered to the significance of a story's content. Instead, we present storying as a practice whose "livingness" is held and distributed across human bodies, memory, language, and land. We also seek to extend recent work that views walking, reading, and storying land as important intergenerational cultural practices (Bang & Marin, 2015; Bang et al., 2014; Marin & Bang, 2018; Meixi, 2019) by documenting intergenerational walks in Ojibwe in local forests to deepen our understanding of storying and re-storying relations.

We ask: *What is the role of stories in intergenerational sense-making in Ojibwe language on Ojibwe land?*

An Intervention to Documentation: Reclamation as Living in Relation

Recent work in Indigenous language documentation and reclamation challenges the idea of “dying languages” that reduces Indigenous languages to verbally-produced data that should be captured as code text before they “die” (Child Language Research and Revitalization Working Group, 2017; Fitzgerald, 2017; Leonard, 2018, 2020; Manatowa-Bailey, 2008). Perley (2012) refers to this practice as “mortuary linguistics,” an approach “where linguists go out to find the last speakers of dying languages and record their last words” (p. 140). We align with critical documentation scholarship that rejects ideas of language as a static, settled object, plucked from time and place (Coulthard, 2014; Meek, 2007), and we turn to Indigenous scholarship that says Indigenous languages are a living relative, not a dying object (Deloria et al., 2012; Hohepa & Mika, 2018; Kawagley, 1995; Leonard, 2017; Nicholas, 2009; Simpson, 2014; Wildcat, 2005), even if some are sleeping or awakening (Baird, 2016; Baldwin et al., 2013; Leonard, 2008;).

Rejection of these deficit discourses of “death” and “extinction” (e.g., Amery, 2009; Austin & Sallabank, 2018; Dobrin et al., 2007) requires that Indigenous language projects work from Indigenous epistemological concepts of language rather than structural linguistics (Henne-Ochoa et al., 2020; Hermes, 2005; Hermes et al., 2012; Leonard, 2017, 2020; McCarty et al., 2019; Smith, 2013). For instance, Leonard’s (2008, 2018, 2020) use of the term *reclamation* describes efforts that are defined by communities, emphasizing projects that center

decolonizing as a goal. Community projects such as language camps, community language nights, language houses, and community-driven classes can range in scale from single gatherings to multi-site collaborative initiatives that span many years (Báez, 2016; Dementi-Leonard & Gilmore, 1999; Johnson, 2017; McKenzie, 2020; Oberly et al., 2015). Not limited to institutional spaces, such efforts often take place on Indigenous lands and waters, in community homes and centers. They often aim at re-elevating and creating accessibility to Indigenous concepts of language for new generations of learners and can include as much about lifeway and relational identity teachings as they do about language (Baldwin et al., 2013; McCarty & Lee, 2014). As documentation projects increasingly include community collaboration (e.g., Penfield et al., 2008) issues of the purpose, products, and if or how community members might be involved in the initial design are emerging (Austin & Sallabank, 2018; Hermes et al., 2012; Nathan & Fang, 2013).

This paper is based on data from a documentation-as-reclamation project,² affectionately referred to hereafter as “Forest Walks.” Each of the authors came to the project via different paths and with different experiences, relations, and investments in Ojibwe language, Indigenous language, and place.

- **Mary Hermes.** Waabishkiimiigwan, gaa-wiinid a’aw Mooka’am. Nimiigwechiweniminim ingiw maanidoo, gaa-wiidookaajig. Baatayiinowag. Memindage niminkwenimaa, a’aw minomooyehn, Zhaangweshiban. As Principal Investigator (PI), Mary originated the forest walks project, which built on other Indigenous sustainability, land, and language efforts. She is a Lac Courte Oreilles

² National Science Foundation DEL/BCS grant no. 1664510

Ojibwe community member, a scholar/language activist, and co-founder of the Waadookodaading Ojibwe Language Immersion School, the immersion school attended by the young bilingual speakers in the documentation project. Also, she is a Professor of Curriculum and Instruction at the University of Minnesota Twin Cities in her spare time.

- **Meixi** joined the forest walks team in January 2020 as Hokchiu land-based learning scientist, former middle school mathematics teacher, and current postdoctoral fellow in American Indian Studies at the University of Minnesota. Meixi draws from her prior experiences co-design teaching and learning with Indigenous families to support the video data analysis process and the roles of walking and storying lands in language reclamation.
- **Mel Engman** was once one of Mary's graduate students and is a descendant of white settlers to the Great Lakes region. Mel is an applied linguist and learner of Ojibwe language who has been involved with school, family, and community language projects since 2012. She took part in Forest Walks data collection and analysis as part of her work with Mary's non-profit organization Grassroots Indigenous Multimedia (GIM). She is now a Lecturer in Education at Queen's University Belfast.
- **James McKenzie.** A Diné graduate student with experience in Diné language and culture revitalization and immersion programming on the Navajo Nation, James began work with the project as research assistant to Waabishkiimiigwan. He was appreciative to join the project in 2019 and to contribute to the analysis while he was a graduate student at University of Minnesota focused on Indigenous immersion education.

Informed by both the community language camps on land and the centuries-old Indigenous traditions of walking and reading land, the project aimed to capture and document interactions on land in Ojibwe. Following the work of Chicago American Indian Center Researchers (Bang et al., 2014), youth and Elders were asked to go on walks in the woods on the Lac Courte Oreilles reservation. They were outfitted with point-of-view cameras, asked to talk about whatever they wished, and return in about 20 minutes. The seeming simplicity of the project design is its most extraordinary feature. The youth participants were willing and able to stay in Ojibwemowin for the entirety of each walk. (See: Hermes et al., under review, for expanded discussion of documentation methods.)

Set at the Lac Courte Oreilles Band of Lake Superior Chippewa reservation (LCO) in Northern Wisconsin, youth were invited from the Waadookodaading Ojibwe Immersion School to be a part of this project. Part of the decision to choose this particular community to work with comes from community membership and a long-term relationship with this school, but mainly because it is outstanding in its ability to cultivate language use among youth within the school. Youth at the school have consistently been acquiring high levels of proficiency in Ojibwemowin (Sullivan, 2018), and within the 20 years since it was established, this is having ripple effects on the wider language reclamation community.

In this documentation-as-reclamation project, there were 14 walks, ranging from 10–30 minutes, which were transcribed and translated over the course of two years and will soon

be available at the American Philosophical Society.³ This corpus served as data for our research team, which used a micro-interactional analysis to describe the interactions found in this paper. Meeting weekly for one academic year and one summer, we sorted, coded, analyzed and wrote about the collaboration, inclusion of land, and apprenticeship we see in this data. This paper focuses on a single one-minute interaction, part of a longer 14-minute walk, chosen for its relationship to storying the land.

Theoretical framework

Why Everyday Stories Matter for Reclamation

This project draws on Indigenous scholarship that articulates the importance of stories as Indigenous theory as emergent from Indigenous lands and language (e.g., Archibald, 2008; Brayboy, 2005; Noori, 2013; Simpson, 2014). In this paper, we use theory to refer to guiding principles that shape how one understands and enacts their unique place-based relationships with others, humans, and more-than-human. Theory functions as an ecology of living teachings that guide how one learns, understands, acts, and makes decisions. Simpson (2014) describes how stories generate theory “from the ground up” (p. 7) for even the youngest community members who, by holding the story, imbue it with power. This theory-making relies on stories as “anchors” that maintain throughlines of meaning across individuals and communities through time and space.

³ Archives were deposited to the American Philosophical Society in June 2020. Due to Covid-19, they are still in the process of being uploaded but will be publicly available when the upload is complete.

Indigenous scholars have drawn on Jo-ann Archibald's (2008) scholarship on "storywork" to explore how Indigenous communities rely on stories and traditions of storytelling to know, listen, and teach. Importantly, the interrelated processes of storytelling and storylistening reveal the "interrelatedness between the intellectual, spiritual (metaphysical values and beliefs and the Creator), emotional, and physical (body and behavior/action) realms" (Archibald, 2008, p. 11). These stories, storytelling, and storylistening reflect land-based lifeways in place (Marker, 2018; Ortiz, 1992) and reflect important protocols of asking for stories and receiving them that index values of reciprocity and require labor and responsibility on the part of the hearer (Iseke, 2013). This paper makes visible how such theory-making is active, not passive; and the actions of story-making are critical to Indigenous ways of knowing (Kawagley, 1995) in concert with place (Marker, 2018).

Stories connect our understandings of human, more-than-human, and land-based relations. As Marker (2018) explains, "(n)arrative meaning is inseparable from place and a metaphysically saturated sentient geography" (pp. 458–459). Language, story, and land are entangled rather than distinct entities. In many instances, stories live in and with an "ensouled landscape" (Marker, 2018, p. 458). This perspective on stories and storytelling is foundational to our framing of stories as embedded in ways of being, ways of knowing, and place. For language reclamation this contributes to expanded concepts of language as localized (rather than decontextualized) and multimodal (rather than solely oral/verbal). Additionally, Indigenous epistemologies do not impose a binary separation between the nature of things that are sacred and everyday, as if everything were only one thing or the other (Deloria, 2009; Marker, 2018). Rather, meaning can be made in interaction and

relations with the large and the small. Thus, attention to stories encourages attention to educational possibilities rooted in storying that is sewn by interwoven threads of the spiritual, concrete, relational, experiential, and linguistic.

To localize this theory in our data, that is in Ojibwemowin, is important in this context to discuss what we mean by stories. In Ojibwemowin there two distinct words (with many more variations) for “story”: aadizookaan and dibaajimowin. The first is defined as a sacred story or a spirit, the second as a narrative story. Importantly, Ojibwemowin also makes a distinction in the grammatical gender of these two words. Aadizookaan is “animate” whereas dibaajimowin’s grammatical gender is “inanimate,” a distinction that can be approximated in terms of the difference between the pronouns “she,” “he,” and “they” as compared to the pronoun “it.” We note this here because it demonstrates the ways in which Ojibwe worldview is reflected in its grammatical structure.⁴ Aadizookaan as “animate” is alive and has agency of their own. There are many other words for the narrative kind of story that use the same final word ending, for example, wiinaajimo (she tells a dirty story), babaamaajimo (she spread the word about), danaajimo (she tells the story of a certain place). While this may seem to contradict the above notion that there is no binary separation between the everyday and the sacred, these types of stories are distinct in the Ojibwe language and culture.

Although it is beyond the scope of this piece to distinguish all the ways “stories” are told in Ojibwe context and further delineate categories that those specific Ojibwe words about

⁴ Animacy in Ojibwemowin linguistics refers to a gendered category, and it is debatable if these categories always mean “living” in English translations. Although aadizookaanag do have spiritual and aliveness significance, this does not follow with all animate nouns.

stories, talk, and conversation create, we can contribute to sense-making of aadizookaanag within the context of the ordinary. While we do not know what the categories in Ojibwe thinking might be, we are pointing to the limitations of an English translated dictionary. That is, aadizookaanag are not necessarily distinct from dibaajimowinan because one is sacred and one is not; sacred and secular are Western categories. With that distinction aside, we turn our attention to discuss what one aadizookaan (sacred story) looks like within the context of interaction on land, that is, a sacred story that is used in meaning making in the everyday.

Connecting Everyday Stories and Interaction

The story we write about here was told on walks in the forest, a story that came about in everyday *interaction* in the springtime. What does it mean to think of stories as embedded in interactions, not as abstracted from a context? We ask this because, at times, the content of Indigenous stories is appropriated out of context and romanticized (Sarris, 1993). This decontextualization runs counter to the idea at the heart of this study—that everyday practices are reinforced, redundant, and part of constellations of practices that are deeply cultural (Rogoff, 2014). Because of this, we see the contexts of these stories as worthy of study as well. For example, we know that it is not the content of the bedtime stories that is important and distinct in Heath's (1982) well known example, but rather the way the stories are told, their place within interactions and routines in relationships, that distinguish one class culture from another.

We draw on this understanding of storying as theory-making in collaboration, in place as part of a documentation-as-reclamation study of intergenerational Ojibwe language. Acknowledging the traces of formal, traditional storytelling that inform sense-making in everyday interactions, we see how informal collaborative storymaking *in the language* holds tremendous potential for understanding how inquiry is generated and knowledge produced in place.

Methods: Multimodal Interaction Analysis

Study Context and Design

This study of intergenerational walks in the woods takes place on forest lands that are the ancestral home of Anishinaabe people around the Great Lakes region of what is now the United States. Most walks took place on or near the reservation lands of the Lac Courte Oreilles Band during the spring and summer months between April 2016 and May 2018. Many of the First Speaker Elders and young bilingual speakers (students and graduates of Waadookodaading Ojibwe Language Immersion school) who took part in this Ojibwe language documentation project had participated in previous documentation and reclamation projects, and all were financially compensated for their labor and expertise.

Starting with an acknowledgement of the relationality holding together the participants and language and place, each recording day began with offerings of tobacco (Hermes et al., 2012). Tobacco is offered in the Ojibwe tradition to ask someone to participate, and in turn participants put tobacco out on the land to acknowledge our relations there. Participants were then divided into small groups consisting of at least one Elder and one bilingual young

person, they were outfitted with microphones and head-mounted GoPro cameras, and asked to go for a walk in the woods lasting no more than 20 minutes. No specific prompts were given; rather, they were instructed to talk about anything they wanted to. The young people knew each other well, as all of them came from the tight-knit community that sustains and is sustained by Waadookodaading. Some Elders were familiar community figures, while others were not. Introductions were made prior to the start of data collection and were also subsequently enfolded into the early stages of each walk as participants made conversation about their families, their clans, and their home communities and got to know each other as they walked.

Data Analysis

Each walk was logged, transcribed, and translated into ELAN software by a bilingual Ojibwe language specialist affiliated with the project who worked independently and later with the speakers to check accuracy. Transcripts were then divided into “episodes” based on attentional content, that is, one episode is determined by group attention being oriented around a topic or environmental phenomenon. For instance, one episode called Waagaagin (fiddlehead fern) features two young speakers and one Elder as they puzzle over a fern shoot pulled from the forest floor. The boundaries of the episode begin when the first young speaker discovers and calls attention to the fern shoot, including all of the talk, movement, and land-based engagements that are seen as relating to the fern shoot, and the episode ends when attention has shifted away from the fern.

We used transcripts side-by-side with videos to guide our multimodal interaction analysis (Hall & Stevens, 2016; Jordan & Henderson, 1995) of the walks. As interaction analysis involves unmotivated looking at first, we did not initially search for stories. However, transcripts were augmented after each data session to include salient features of interaction and sense-making that were not visible in the first round of transcription and translation. As the research team watched and re-watched videos, we enriched the flat, code-focused transcripts to include wide-ranging non-verbal, multimodal features of interaction through various transcription techniques such as inclusion of screenshots, multimodal “toon strips,” and including land as an animate interlocutor in the interaction. These augmented transcripts were subsequently compared with the movies over and over again to ensure that they represented the source data as thoroughly as possible.

Through a close, micro-analysis of the co-operative action (Goodwin, 2018) in these rich transcripts and their corresponding movies, the research team then identified episodes that showed evidence of storytelling (Brayboy, 2005), storywork (Archibald, 2008), and/or (re)storying the land (Bang et al., 2014; Marin & Bang, 2018) as theory-building in concert with language and with place.

Findings

This study demonstrates the flexibility of story as a resource for sense-making on and with land. In our example, we present one episode (extracted as four excerpts) that illustrates how shared knowledge of traditional stories serves as a resource in coordination with verbal and non-verbal communication, and with land as an animate interlocutor in the interaction.

The human participants in this walk are Joe Nayquonabe,⁵ a first speaker Elder from Mille Lacs Band of Ojibwe, and two bilingual young people from Waadookodaading Ojibwe Language Immersion School named Bea and Lexi. As the trio walks the path in the woods, their attention turns to features of the land that are referred to in a traditional story. The story is one that is only told under specific circumstances by those who heard it and learned it under similar conditions. As the group references the story and reads it in the land, we see evidence of the practices and protocols associated with traditional storytelling in the talk about the story, illustrating intergenerational expertise with the entanglements of story, land, and language.

Excerpt 1: Manidoo, aa, gii-namadabi

Excerpt 1 (see Table 1; see Appendix A for transcription conventions) begins approximately 5 minutes into the walk that illustrates how stories in the forest emerged while the triad was reading and walking lands in a kind of fluid synchrony (Mejía-Arauz et al., 2018). In this extract, Bea and Lexi build on each other's observations in an additive way to further the group's engagement and observation of the forest.



Bea begins by turning to her companions and saying in lines 1 and 2, "indaa-gagwe-mikaamin, aa, mitig ezhinaagwak yo'ow" (we should find a tree that looks like this). As she says the word "yo'ow" (this), Bea uses her right arm and hand to make a sort of U-shape. Joe and Lexi follow Bea's lead, and they turn to look at the land (See Joe's and Lexi's point-of-view [POV] shots in line 3). As Lexi's attention shifts from Bea to the land, Lexi locates just



⁵ Real names were used at the request of the participants.

such a tree off to the right of the trail, pointing in its direction with her arm (line 4), saying, “im[aa!” (there!). Lexi builds upon Bea’s invitation to further direct the group’s attention towards the cluster of trees, and all three turn to look deeper into the woods (lines 5 & 6). Bea similarly adds onto Lexi’s observation, saying “manidoo, aa, gii-namadabi” (a spirit sat there) in line 7 and sustains the group’s keen attention with land again saying “imaa” (there).

Table 1

Transcript Part 1: Manidoo, aa, gii-namadabi (A spirit sat there)

	Spkr	Verbal	Non-Verbal
1	Bea	indaa-gagwe-mikaamin, aa, mitig (.) <i>we should find a tree</i>	on the word “mitig,” raises hand to eye level, with palm turned perpendicular to the ground
2		ezhinaagwak <u>yo'ow=</u> <i>that looks like this</i>	 slides arm and hand to form a U-shape, gaze directed at Joe throughout
3	Land	=	
4	Lexi	hh. im[aa! <i>there</i>	extends arm straight, pointing off the trail to the right of Joe
5	Joe Bea Lexi		all three direct gaze to the woods in the direction that Lexi pointed

6	Land		
7	Bea	[manidoo, aa, gii-namadabi [a spirit sat there	
8		[imaa <i>there</i>	
9	Lexi	[mirrors tree shape and Bea's embodiment of it 





Bea's use of the affix "gii-" to signal the past tense in line 7 suggests she was drawing from a previous experience or heard a story that a spirit "sat there," indicating that a spirit *was* there in the past. Bea knew what to look for because she has seen this kind of tree before from previous land-based encounters. At the same time, Bea seems to be hesitant around saying who that spirit was as well. In a similar fluid collaboration as if one organism with multiple parts, Lexi uses her arms to mirror Bea's initial movements, embodying the tree that they are paying attention to. Both Bea's and Lexi's coordinated use of talk and embodiment indicate an experiential knowledge with place that is both cognitive and embodied. They begin a sequence of collaborative sense-making between the humans and land in the interaction that involves the perceptual field, language, bodies, and story memory as resources for constructing understanding together. This continues to unfold in Excerpt 2.

Excerpt 2: Wenabozho namadabid

In this extract (see Table 2), Joe follows up with a question to Bea and Lexi, asking “Wenabozho namadabid?” (Wenabozho is sitting?) in line 11, naming Wenabozho directly as potentially the spirit in the tree. It is significant that the youth do not utter Wenabozho’s name—oral protocols dictate not to speak of this powerful spirit unless the ground is frozen. Joe, as an Elder, says the name but the girls refrain. In that utterance, Joe also changes “gii-namadabi” (uttered by Bea in line 7) to “namadabid,” with the reframing of tenses suggesting the very present way that Wenabozho is still sitting there in the land, reaffirming the livingness of stories within the forest. Bea affirms that and is amused by Joe’s indication of Wenabozho there in the woods.

As the triad continue to keenly observe the trees in the forest, Joe adds onto the narrative of Wenabozho in the woods. This time he switches from the verb “namadabid?” (sitting) to “gana[waabaminang” (watching us). Namadabi is an animate intransitive verb, whereas ganawaabam is an animate transitive verb, meaning that both the “watcher” and the one being watched are necessarily animate. This verb shift signals the relational nature of watching between Wenabozho and themselves, and it indexes the living interrelationships that are embedded with stories. Rather than single narrative events that teach “about,” stories are read, lived, and perceived with land in ways that can strengthen our unique understandings of who we are within these systems of land-based relationships.

Table 2*Transcript Part 2: Wenabozho namadabid (Wenabozho sitting)*

	Spkr	Verbal	Non-Verbal
10	Joe	o <i>oh</i>	
11		Wenabozho namadabid?= <i>Wenabozho sitting?</i>	
12	Bea	=yah=	smiles, laughs
13	Land		
14	Lexi	=nashke imaa! =look there	points toward same direction as earlier 
15	Joe		turns toward the right of the trail, in general direction Lexi is pointing
16		gana[waabaminang <i>watching us</i>	
17	Bea	[gegaa go, izhinaagwad <i>[almost, it looks like</i>	
18	Land		
19	Joe	oh gegaa, henh? <i>oh almost, yeah?</i>	

20			looks back over to girls who look at him, then looks back to the tree, continuing to walk
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Extract 3: “Awenesh gaa-wiindamawik i’iwe?” (who told you that?)


Though the group’s forward movement continues, the storyline of Wenabozho’s chair holds the group’s attention. Bea directly refers to story memory in line 28 with “o nimikwendaan i’iw” (Oh I remember that), building on the idea of Wenabozho sitting and watching them. Joe looks out at the tree as he says “bangii” (a little), perhaps building on the earlier hedged assertions that it “almost” looked like Wenabozho was watching them. After the triad establishes a common understanding and perception that it almost looks like Wenabozho is watching you, Joe pauses to ask Bea and Lexi who they have learned these stories from. Bea and Lexi respond to this starting in line 32 and show us how the genealogies of stories are part of reconnection to land and language.

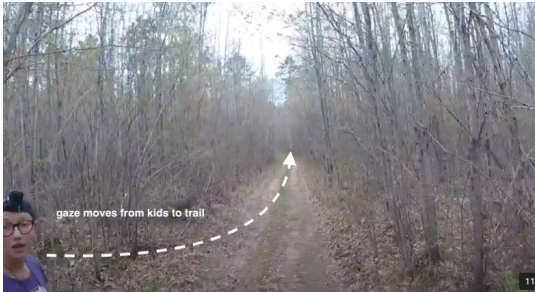


As the triad continues down the trail, Joe opens up a conversation around the learning relationships of stories. As Joe’s gaze returns to the trail, he stops walking and asks Bea “awenesh gaa-wiindamawik i’iwe?” (who told you that?). Bea and Lexi both stop and look at Joe, almost recognizing the gravity of the question he just posed. Bea answers that she heard it from her friend, Niizhoodewii (line 34). Joe’s gaze then moves from Bea back to the trail. Bea is still thinking about who she learned this story from and offers a second person to her genealogy of the story (line 36), Waawaakeyaash, a founding teacher at Waadookodaading. Lexi, who is four years younger than Bea, places herself within this web of relations too,

saying in line 39 “Waawaakeyaash nigikino’amaaged” (Waawaakeyaash is my teacher). Not completely unlike citational practice in academic work, in Indigenous ways of knowing, acknowledging the origins of stories and the relational way they travel is important and reinforces distributed community knowledge. These practices help us understand and place ourselves within genealogies of Indigenous knowledge—for Lexi and Bea, this includes deepening ideas of themselves as historical actors, what unique responsibilities they hold, and how these responsibilities came to be (Gutiérrez, 2008). Drawing on stories as part of theory-making, Indigenous practices go beyond the purely citational function, they help make sense of how an individual and the knowledge they steward are connected within a network of relationships. Joe’s question made the importance of this clear to the two young people.

Table 3

Transcript Part 3: Awenesh gaa-wiindamawik i’iwe? (Who told you that?)

	Spkr	Verbal	Non-Verbal
28	Bea	o nimikwendaan [i’iw <i>Oh I remember [that</i>	
29	Joe	[bangii <i>a little</i>	gaze moves “on trail” again, forward facing 
30	Joe Bea Lexi		all stop walking
31	Joe	awenesh gaa-wiindamawik i’iwe? <i>who told you that?</i>	
32	Lexi		both stop and look at Joe

	Bea		
33	Joe	imaa namadabid aw manidoo, <i>that the spirit was sitting there</i>	
34	Bea	um:: (.) niwiiijiwaagan bezhig Niizhoodewii <i>one of my friends, Niizhoodewii</i>	
35	Joe	o ahaw <i>oh okay</i>	looks from kids to the trail 
36	Bea	miinawaa indinendam Waawaakeyaash gaye wiin <i>and I think Waawaakeyaash also</i>	starts walking again as she speaks 
37	Joe Lexi		both start to walk slowly again
38	Joe	o <i>oh</i>	
39	Lexi	Waawaakeyaash nigikino'amaaged <i>Waawaakeyaash is my teacher</i>	facing Joe
40	Bea Lexi		both stop walking
41	Joe	o aah <i>oh</i>	gaze turns to both girls 

Joe responds to Bea's offering of two of her teachers with a verbal recognition that he coordinates with his motion and his gaze. He briefly stops walking to look directly at both

girls, acknowledging their story memory and the network of community relationships that hold the story. By asking “awenesh gaa-wiindamawik i'iwe?” (who told you that?) Joe aims to better understand the knowledge carried by Lexi and Bea in ways that acknowledge and extend learning beyond just the people, times, and places of the present, and that are shaped by the relationships that have nurtured and sustained them. As such, stories as our ground-up theories (Simpson, 2014), passed down and transformed across generations, within the genealogies of clan, group, and place have served as relational repositories of knowledge. Sharing these knowledges in immersion schools like Waadookodaading is a powerful move of re-establishing connection within and across groups in language and cultural revitalization, particularly in the face of cultural genocide aimed at quashing these knowledge systems. In this sense, referencing who and where we learned these stories is an act of reclamation itself.



Extract 4: Epilogue: “Ganawaabaminaang” (He is watching us)




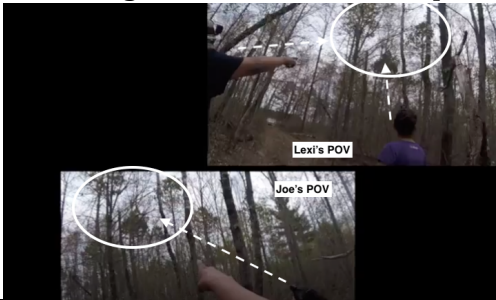
This episode concerning the storying of Wenabozho and springtime land ends as group attention shifts to an animal in the perceptual field. However, the livingness of this storying is evident in talk that occurred 5 minutes later. Though it could be considered an episode of its own, we treat this fourth excerpt (see Table 4) as a sort of epilogue to the episode that comprises the first three excerpts because the interaction that unfolds continues building upon the interactional, co-operative substrate (Goodwin, 2013, 2018) that was established 5 minutes earlier. Joe stops walking and calls attention to a tree to the right of the path. He coordinates his cessation of movement with the extension of his arm and pointed finger, gesturing toward the tree and asks the girls if they see how they (some animals) climb up



the tree and store something there (lines 43 and 45). Lexi follows Joe's direction and as she looks out at the land she builds on his observation, saying in line 49: "Ganabaj ogii-namadab imaa bezhig" (I think one sat there). Joe and Bea affirm this assertion in lines 50 and 51. Then, as they begin walking again, Joe appears to connect Lexi's words in this moment with the utterance from 5 minutes earlier that used the very same words to refer to Wenabozho. Joe simply says "Wenabozho" and looks to Bea who laughs, acknowledging the shared memory of their collaboration earlier in the walk. As Joe and Bea continue their movement down the trail, Joe says "ganawaabaminang" (he is watching us) in line 55, revoicing the storying that took place 5 minutes earlier (line 16), re-reading it into the land.

Table 4

Transcript Part 4: Ganawaabaminaang (He is watching us)

	Spkr	Verbal	Non-Verbal
42	Land		
43	Joe	gigikendaan ezhichigewaad e, <i>do you know what they did</i>	Stops walking, raises hand and points to upper tree tops off to the right 
44	Bea		Turns to face Joe, then follows his finger pointing toward the treetops off to the right of the trail

			
45	Joe	akwaandawewaad mamooowaad iwe <i>climbing and getting that?</i>	<p>Raises arm and index finger up in a straight line as he speaks</p> 
46	Land		
47	Bea	ganabaj= <i>maybe</i>	
48	Lexi	=hhh! ((gasps))	
49		ganabaj ogii-namadab imaa bezhig! <i>I think one sat there</i>	
50	Joe	oh yaa yaa na? <i>oh yeah yeah right?</i>	<p>standing still, points with right arm and index finger toward bent treetops</p> 
51	Bea	uh-huh	gaze follows Joe's pointing toward same treetops

52	Joe	Wenabozho (.) <i>Wenabozho (.)</i>	<p>drops arm before he speaks, gaze moves to Bea</p> 
53	Lexi		<p>Joe and Bea are walking on, Lexi's gaze stays on Joe for a few steps</p> 
54	Bea	<i>((laughs))</i>	smiles at Joe, they begin walking again
55	Joe	<i>ganawaabaminang, he is watching us</i>	starts walking again

In the four excerpts comprising this episode, a traditional story about Wenabozho and a trace he leaves on the land anchors over 50 turns of intergenerational Ojibwe language interaction. The evidence of the story that the young Ojibwe speakers read into the land are as relevant to the interaction as the circumstances of the story's telling. The story itself is not told, but rather serves as a reference for reading land, for whole body language use, and for performing Ojibwe identity in collaboration. This is theory-making. An experience-based hypothesis is proposed, evidence is gathered and collectively analyzed, and a genealogy of the existing knowledge is provided. All of this is bound up in story knowledge that serves as a resource for learning and using language in place.

Conclusions

Indigenous people, in every place they lived, found ways to address these questions of survival and sustainability in profoundly elegant ways. And through the seeking, making, sharing, and celebrating of these natural relationships, they came to perceive themselves as living in “a sea of relationships.” In each of the “places,” they lived they learned the subtle, but all important, language of relationship. (Cajete & Williams, 2020, p. 1714)

In this paper, we suggest that intergenerational, everyday storying with lands is a language of relationship, a reminder of our relationships with human and more-than-human worlds. These excerpts illustrate that storying is a multimodal practice for making meaning, remembering, and learning. The storying that is demonstrated here in interaction on land in the springtime reflects a story’s “livingness”; it accompanies and frames the walks. Its content does not need to be retold to be a resource for theory-making. Rather, the protocols that hold certain stories as “sacred” are reflected in the practices of the everyday—walking, reading, embodying the land, and remembering stories as shared points of reference across generations.

For education, this work has implications around how Indigenous language reclamation is part of reclaiming relations. Storying was a way for young people to demonstrate expert knowledge of the story not by re-telling it word-for-word, but by reading it into the land with the support of their language and bodies and referencing it carefully according to protocols. For scholarship addressing the teaching and learning of Indigenous languages, this helps

reimagine how we might recognize “proficiency.” Typical associations of the verbal output associated with the linguistic competence of re-telling a story are turned sideways when we instead recognize competence in embodied, distributed knowledge of storying with *place*. This relational approach refuses to lift stories from their contexts and instead views “proficiency” as an understanding of how to hold a story in a wider ecology of knowing. Linguistic systems are only a part of storying for reclamation. It also involves social, genealogical, geographical, climatological, and ecological systems. How a story becomes known to someone, the *who*, *when*, and *where* of it, is entangled with the story knowledge. For the youth in this study, their sources of the Wenabozho story are multigenerational, that is, a friend or a teacher at school, legitimizing both peers and adults as teachers. The inclusion of this genealogy is also important to the theory-making work of storying, where *how* you know is as important as *what* you know. And on land, the knowing *with* becomes significant as well.

It's Like Making a Dance With the Trees That Explains Life

This “knowing *with*” is especially the case in stories that relate concepts and ideal relationships to the forces of the natural environment and all the living things therein. Metaphoric thinking is closely involved with the process of imagining in creativity (Cajete & Williams, 2020, p. 1713). Living in the colonial structures of what language is, and so what reclamation means, need to be centered around relationality, especially with land and other human communities. When learning language is defined in a Western academic way, it becomes narrowed to language acquisition, devoid of context and relationship making. An individual can learn or acquire a language, but Indigenous reclamation involves re-

establishing relationships, relationality which must extend to include the land from which the language itself grew. In our efforts to reclaim Indigenous language, it is not just the product of language acquisition we are after. The process of how we reconnect with each other, the context of our plant and animal relatives: those are just as important as using the correct morphemes and syntax.

In this case, oral language and storytelling on land affords the opportunity for the imagination of the participants to recall the spirits that inhabit the land. Beyond a metaphor, the phrase, “Wenaboozhoo is watching us” is deeply symbolically encoded, and an immediate literal reminder, replete with layers of meaning for the past and present way of being. They breathe life into the story through noticing the trees in the forest and sharing a sense of what this means. While the meaning of the story is shared, each participant who hears the story is free to find the most salient lessons for themselves and connect them to the moment that they are living. In this kind of theory making, the analysis is not extricated and expounded on, it is left ongoing for continuous meaning making as living Ojibwe futures.

Glossary⁶

Aadizookaan: (animate noun) 1. A sacred story, 2. A spirit

Babaamaajimo: (verb animate intransitive) s/he spreads the word about

Danaajimo: (verb animate intransitive) s/he tells a story in a certain place

Dibaajimowin: (inanimate noun) a narrative, a story

Wiinaajimo: (verb animate intransitive) s/he tells a dirty story

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⁶ Translated definitions supported by the Ojibwe People's Dictionary: <https://ojibwe.lib.umn.edu/>

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Appendix A

*Transcription conventions*⁷

ikidowinan <i>words</i>	Ojibwe on top in unmodified text <i>English translation below in italics</i>
=	Latching
(.)	Brief, untimed pause
word-	Repair, self-interruption
[Overlapping turns
(())	Gesture, non-verbal communication
.	Falling intonation
,	Slightly rising (or “listing”) intonation
?	Rising intonation
<word>	Slower speech
>word<	Faster speech
°word°	Very quiet speech
<u>word</u>	Stressed, emphasized word or syllable

⁷ Adapted from: Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. Lerner (Ed.), *Conversation analysis: Studies from the first generation* (pp. 13–31). John Benjamins Publishing.

BREATHING LIFE BACK INTO THE STORIES: CREATING THE CIRCLE OF INDIGENOUS LANGUAGES WEBSITE

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Abstract

This paper describes an innovative project undertaken to create a website to share historical recordings of the nēhiyaw (Cree), Nahkawe, and Michif languages of Saskatchewan. Each author played a role in the delivery of a graduate program that took place simultaneously alongside the creation of the Circle of Indigenous Languages (COIL) website. This paper explores the importance of Indigenous networking and a collective consciousness towards Indigenous language revitalization as neither project would have happened without the spark and interconnection of the other. Weaving together our language experiences, we highlight the strength of aligned synergies. This paper also addresses critical issues pertaining to cultural continuity for Indigenous Peoples by embracing technology. Therefore, the greatest impact of the COIL project was to koskopita (reawaken) the stories from inaccessible formats in private collections. The project of digitization, categorization, and website creation provided access to old stories, and therefore “whole language,” now shared in the public domain. Our journey with technology and the experience gained can be used by other language communities to support Indigenous language documentation.

Keywords: digitization, archiving, website creation, adult language learning, Indigenous language revitalization, nēhiyaw, Nahkawe, Michif

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Introduction

As nēhiyaw educators, we share stories of our journey in Indigenous language revitalization (ILR) drawing from the COIL website as a focal point for our aspirations and collective consciousness. Using storywork (Archibald, 2008) as theory and method, we present our stories and work carried out in this paper as intertwined and woven together based on our shared commitment to language revitalization. The paper includes both the coming together of the authors as a collective, as well as the efforts of the COIL project team which concurrently transpired. Utilizing retrospective analysis (Hermes et al., 2012), the authors reflect on the process that the COIL project team used to digitize, categorize, and create a website for Indigenous language story compilation. The impetus to write the paper stems from the importance of the COIL project's contribution to the field of adult language learning and, more specifically, the need for access to first-language speakers' recordings. This paper also covers issues pertaining to access to cultural continuity for Indigenous Peoples. It explores the importance of Indigenous networking and a collective consciousness towards ILR. This paper adds to the discourse about how and why accessibility to Indigenous languages matters to Indigenous people and why it is important for the world to retain these languages and knowledges.

Our Stories

Charlotte

Charlotte Ross is a nīhithaw iskwīw (Woodland Cree woman) raised in northern Saskatchewan. She is a second-year doctoral student focused on ILR at the University of Victoria. She grew up surrounded by nīhithawīwin (the Woodland Cree language) and learned how to read and write in nēhiyawēwin (Plains Cree language) while in university using the Standard Roman Orthography from late Dr. Freda Ahenakew. In 2016, she was hired to be an Indigenous Language Consultant supporting the students and instructors in the University of Victoria's Masters in Indigenous Language Revitalization (MILR) program hosted in Saskatchewan, where she first met Onowa. Shortly after, she also began working with Joan on the COIL project, which included digitization, categorization, and website creation. Both projects were completed in 2018 when the website was launched and the MILR students completed their graduate program.

Joan

Joan Greyeyes is a nēhiyaw iskwēw (Plains Cree woman) from Saskatoon, Saskatchewan. She completed a graduate degree in Educational Administration from the University of Saskatchewan and has significant experience as a senior executive, contributing valuable knowledge working with corporate, government, and Indigenous relations at the post-secondary level. Joan's commitment to Indigenous education and expertise in negotiating for First Nations within institutions and provincial and federal governments secured the delivery of the University of Victoria MILR program in Saskatchewan in 2016 as well as funding for the COIL project including digitization, categorization, and website creation. Joan

met Onowa through an international Indigenous studies conference and had an established working relationship with Charlotte as an Indigenous Languages Consultant over many years. Joan's role was central to both the MILR program delivery in Saskatchewan and the COIL project funding, development, and actualization as a functioning resource.

Onowa

Onowa McIvor is maskékow-ininiw (Swampy Cree) and Scottish-Canadian. Her family is from kinosao sipi (Norway House) and Pimicikamak (Cross Lake) in northern Manitoba. She is a grateful visitor now in SENĆOTEN and Lkwungen speaking territories. Onowa is a lifelong learner of her mother's nēhinawēwin (Cree language), and an Associate Professor focused on ILR at the University of Victoria. She teaches and supervises graduate students focused on ILR and co-leads the NETOLNEW Research Partnership, a project working to understand and enhance Indigenous adults' contributions to reviving Indigenous languages in Canada. A part of this national research project includes building a virtual space for Indigenous language communities to share their learning and teaching activities. This project, entitled NETOLNEW Indigenous Language Learning Atlas (nilla.ca), currently under development, together with teaching and supervising in the MILR program brought Onowa together with Joan and Charlotte across their shared passions for language revitalization, building proficiency, building resources for adult learners, and the power of networking for growing and sustaining the work of ILR.

Our Language Connects Us

We are three Cree² women who share a commitment to strengthening, building, and learning our nēhiyawēwin (Plains Y-dialect), nēhinawēwin (Swampy N-dialect) and nīhithawīwin, (Woodland TH-dialect), Cree language, representing three different dialects. The team approach we embraced is similar to other scholars such as McGregor et al. (2016); McIvor et al (2017); Rosborough and Rorick (2017); and Thomas et al. (2020). Our lives, as with the scholars mentioned, have intertwined and connected through post-secondary education as we believe that education is key to the revitalization of our Indigenous languages. Our paths came together through an initiative with the University of Saskatchewan's Office of First Nation & Métis Relations (OFNMR) and the University of Victoria aimed at offering an ILR graduate program.³ Our shared belief in revitalizing Indigenous languages is what brought us together initially to māmawī-atoskātāmāk (to work together) on delivering the MILR program. As the COIL project was beginning to take shape at the same time, there was cross fertilization about the critical role of Indigenous language recordings to language learning. Faculty shared the latest research and issues in ILR with the students through course delivery and discussions, sharing their experiences as language teachers. As the MILR program progressed and the COIL website was being developed, language teachers in the MILR program (and beyond) commonly shared their frustrations at the lack of Indigenous language audio resources. They expressed challenges in identifying short language clips to

² We use the more generic anglicized term Cree when referring across all authors and dialects of which we are three.

³ For more information on this initiative and connection see the following:

<https://news.usask.ca/articles/general/2016/indigenous-language-holds-the-key-to-cultural-preservation.php>

<https://www.cbc.ca/news/canada/saskatoon/victoria-indigenous-language-program-coming-university-saskatchewan-1.3674175>

support their student's learning outcomes. The design of the website included categorization and sub-indexing incorporating the feedback we received from Indigenous language teachers to suit their pedagogical needs.

Through our collective energies, an online Indigenous language resource to support language learners was created. Joan recollected the intricate historical background, while Charlotte contributed consultative support to both the categorization and website development. Onowa, as an international ILR researcher with some expertise with building web-resources and networking, provided a broader perspective for how the website contributed to and supported adult language learning. The website provided critical resources for adult language learners with limited access to first-language speakers, which is critical to creating speakers.

Following the completion of the digitization, categorization, and creation of the website, we utilized retrospective analysis to reflect on our experiences (Hermes et al., 2012). Our reflections on what we contributed and learned from the COIL project are key to understanding how the project began and evolved. Hawaiian scholar Manulani Meyer (2014) reminds us that language work requires good energy, good intentions, and a good heart, to have good healing as an intended outcome. We realized in retrospect that we followed Meyer's philosophy, as the common goal for the COIL project was based on revitalizing Indigenous languages for the healing of our people.

Storywork

We write from a theoretical lens of storywork, relationships, and decolonization using narrative inquiry to highlight the importance of a relational approach (Smith, 2012). As Indigenous authors, we want to tell our own stories, write our own versions, in our own ways, and for our own purposes (Archibald et al., 2019; Smith, 2012). We share the story of our experience in reaching out to others for their expertise in storying a mentorship relationship. We reflect on how we worked with individuals to digitize their historical language recordings, making them publicly accessible, with permission, on a website. It was important, at the outset, to establish respectful relationships with all our partners in this project for it to be completed ethically and in a good way.

Wilson (2008) applies an Indigenous methodological frame to investigate the experience of being an Indigenous scholar within the university system. If Indigenous ways of knowing were to be narrowed through one particular lens, he asserts, that lens would be relationality and relational accountability. This concept is carried out in our writing as we reflect how we supported the MILR graduate program while simultaneously working on the COIL project. Both of these initiatives were carried out based on being accountable to all our relations. We needed to ensure that we made careful choices for all aspects of the initiatives and how we would present them as we were accountable for our intentions. From the beginning of both initiatives, ceremonial Elders and traditional knowledge keepers guided the process to ensure that we followed protocols inherent to the territory.

Kovach (2009) uses storytelling as the centre of transmission of Indigenous epistemologies, knowledge, and teachings, writing about Indigenous methodologies from a nēhiyaw perspective. Our project was based on following the principles of story work with informal visits with individuals who had historical recordings they wanted to digitize and share on a public website, with the intention of “reawakening” the stories.

The seven theoretical Indigenous storywork principles as articulated by Archibald (2008), and exemplified by Archibald and Parent (2019), are respect, responsibility, reverence, reciprocity, holism, interrelatedness, and synergy. Reflecting on the inclusion and engagement of traditional knowledge keepers and the community in both the MILR program and the COIL project, the seven principles of Indigenous storywork guided our work. The individuals involved in the MILR program, and the COIL project embraced these principles as they worked together toward a common goal. Early in the MILR program and the COIL project, we shared the intentions respectfully with the ceremonial Elders and knowledge keepers first to demonstrate reverence and responsibility for the nature of the work. Once ceremony was carried out, we met with the MILR cohort and the COIL project team to share the intentions and discuss how ILR was being supported by their involvement (holism and interrelatedness). We had regular contact with MILR program cohort and faculty along with the COIL project team to ensure synergy for the projects.

This process has been referred to as language ideological clarification (Kroskrity, 2009), which has been identified as a significant factor in the success of language renewal activities. Language ideological clarification was critical to the success of the MILR program and the

COIL project to have clear communication clarifying the purpose and intention. At regular intervals, the MILR program and COIL project team clarified intentions and timelines to ensure we were of the same understanding. Joan's role was crucial as she personified the background and history to the COIL project as well as the motivation to actualize the MILR program offering in Saskatchewan.

Literature Review

In keeping with our storywork methodology approach to this paper, we have interwoven aspects of the COIL website creation within our review of relevant literature on Indigenous languages, documentation, and online resource creation.

Indigenous languages face many challenges, but technology can be used in language learning to contribute to revival and revitalization (Galla, 2016; Herman et al., 2020; Smith et al., 2018). There is considerable planning required for engaging technology in ILR depending on what the technology is intended to support (Hermes et al., 2016). To help communities navigate their readiness for technology, a technacy framework for language revitalization (TFLR) is strongly recommended (Galla, 2016). The framework includes consideration of critical factors that can inform the level of readiness for technology. The questions to ask focus on the community's language status or background preparation in 1) linguistic and cultural, 2) social, 3) technological, 4) environmental, and 5) economic areas (Galla, 2016). With the use of technology to help archive, document, preserve, revitalize, and maintain the voices of Indigenous people, it is an act of gifting future generations with priceless

knowledge and wisdom while contributing to the success of Indigenous community resurgence (Galla, 2016; Ka'ai, 2017; Tukker, 2017; Wemigwans, 2018).

Embracing technology to support ILR is not new for some global Indigenous Peoples. Two examples are the Māori and the Hawai'ian peoples whose language revitalization best practices are often held up for their innovation and as models for Indigenous languages to recreate. It is important to recognize that both language groups are singular in focus, which is a significant difference from the North American context. Given that, the following examples are noteworthy. Ka'ai (2017) offers insight into Māori language revitalization and technology through the Te Whare Matihiko o te Reo, which is a funded research project. Critical to the Māori language strategy was the establishment of the Te Ipukarea, the National Māori Language Institute, in 2008. A key component of the Māori Language Institute's mandate was to develop and advance a digital strategy for the creation, delivery, and assessment of Māori language curricula in addition to the collection and dissemination of Māori knowledge across domains. In addition, the development of speech resources for the Māori language using a Text-To-Speech (TTS) synthesis will be one of the first TTS resource for the language (James et al., 2020). Text-To-Speech has potential for applications like e-readers and talking books for learners working to improve proficiency. Developers working on TTS synthesis understand the work is critical especially when the availability of first-language speakers is rapidly diminishing across all Indigenous language groups (Bontogon et al., 2018; Littell et al., 2018).

Regarding the Hawaiian efforts, it has taken about five decades of committed advocacy to resuscitate the Hawaiian language to be spoken as a first language by two full generations (Galla, 2018b). With support from Apple and Microsoft, the Hawaiian language is supported across most platforms to strengthen Hawaiian language revitalization. Not only has access to digital technology increased the domains of language use, but it has also provided access to culturally relevant and authentic materials from an Indigenous worldview without the limitations of physical geography (Galla, 2019; Herman et al., 2020). Technology allows languages to be experienced multimodally in broad domains, while permitting access to language resources in homes, schools, offices, and on the land as language learning is enhanced by domain usage (Galla, 2016; Herman et al., 2020).

As technology is now a part of our daily life, the journey of language learning often includes the use of technology to access programs, dictionaries, websites, fonts, and apps to support learning (Herman et al., 2020; Hermes et al., 2016; Jim, 2016). In addition to attending language learning workshops and training, learners who become familiar with digital resources can support their language learning in this way, as repetition is a key factor in learning to speak a new language. Language advocates and scholars share rich and diverse forms of technology that assist with language learning, including but not limited to, the Hawaiian, Cherokee, Ojibwe, and Mohave language groups (Hermes et al., 2016). Additionally, the First Peoples' Cultural Council (2020a) created a helpful resource for all communities called *Check before you Tech!* aimed at assisting communities at assessing the quality of existing resources and with useful tips for topics to think about when planning digital projects.

During the interpersonal restrictions created by the COVID-19 pandemic, organizations such as the First Peoples' Cultural Council (2020b) in British Columbia, Canada created an online resource to assist individuals with ideas on how to continue their language learning virtually and at home. As one part of this, online access to audio and video recordings of spoken languages can be a great comfort to the language learners to hear their ancestral languages. We are reminded of a teaching shared on the COIL website by nēhiyaw Elder Mary Lee that language has a spirit and an energy that is contained within the flame of life that supports and nourishes the listener, a belief shared by others as well (COIL, 2017; Herman et al., 2020).

In Indigenous language communities, resources to support language learners are often scarce. Through organizations and partnerships, free online digital tools for language learning using audio recordings have been created such as online language tutorials, animations, social media, games, and materials storage (Galla, 2018a; 2018b; Herman et al., 2020; Ka'ai, 2017; Smith et al., 2018). Language revitalization is viewed as a long-term commitment to building community capacity with the assistance of partnerships to create technology-based teaching resources (Galla, 2016; Herman et al., 2020; Little et al., 2015). Scholars and language advocates acknowledge there needs to be a directed effort to build technological capacity within Indigenous communities (Galla, 2018a; Hermes et al., 2016; Wemigwans, 2018). Resources produced through language documentation, revitalization, training, and analysis are invaluable resources for many Indigenous language communities (Fitzgerald, 2020). When creating resources for learners, the length and quality of audio or

video recordings is critical to the pedagogical needs of learners. To create multimedia software for an Ojibwe language learning resource, the recordings that were one to three hours in length did not meet the need for shorter video clips (Hermes et al., 2012). This held true for the COIL project as we also needed to create shorter audio clips using detailed categorization and sub-indexing (COIL, 2017; Ross, 2020; Ross & Greyeyes, 2019; Ross & Greyeyes, 2021).

Using Technology to Preserve Cultural Knowledge

Scholars and cultural advocates refer to Indigenous knowledge that can be shared in an online format as “introductory” in nature and that will not bring harm to others if shared (Four Directions Teachings, 2006; Restoule, 2019; Saskatchewan Indian Cultural Centre, 2009; Wemigwans, 2018). It was through a similar understanding that the ceremonial Elders and traditional knowledge keepers in the COIL project ensured the nature of the content was introductory, would not bring harm to others, and was therefore appropriate for sharing in a public forum.

The COIL website was being created as Wemigwans (2018) was composing her book entitled *A Digital Bundle* in which she strongly advocates for the use of technology in the preservation and sharing of Indigenous knowledge. As authors, and among the COIL project team, we shared similar beliefs regarding technology and Indigenous language preservation and sharing. The Four Directions Teachings website features traditional stories from Elders and traditional teachers while addressing the importance of being able to publicly access traditional knowledge respectfully. Saskatchewan nēhiyaw Elder Mary Lee, who is also

featured on the COIL website, shares these values also from a nēhiyaw perspective. The Four Directions Teachings website features a strong case study on how Indigenous communities can create online learning opportunities while respecting Indigenous knowledge, protocols, and paradigms.

Striking similarities exist between the COIL project and a Canadian Broadcasting Corporation (CBC) North project undertaken to inventory, digitize, and catalogue audio recordings of first-language speakers (Faille-Lefrançois, 2017; Shapiro, 2020). In the CBC project, a North Slavey language broadcaster expressed the historical and cultural importance of preserving, digitizing, and cataloguing their stories as many of them were told by Elders who are no longer alive (Tukker, 2017). We share their point of view, as many of the story tellers on the COIL website have passed on and were traditional knowledge keepers.

Recordings as Pedagogy

Like the COIL project, Bontogon et al. (2018) discuss using technology to support nēhiyawēwin (Cree language) learning in higher education where the main community involvement was the contribution of audio recordings. While an adult learner can learn morphology and structure of the nēhiyawēwin (Cree language) through a university course, it is the oral practice and intonations most easily accessed and practised through recordings that move learners to higher levels of usage and retaining the language (Belcourt, 2021).

As the COIL project involved considerable effort to create a digital archive of recordings, the outcome could have been to focus on documenting Indigenous languages and studying the language. Documentary linguistics is a linguistic specialization concerned with producing high quality recordings that are then translated, transcribed, and annotated for further research by linguists specializing in the field of studying the language (Austin & Sallabank, 2017). However, through the COIL website, we are taking the important next step of activating the recordings to support Indigenous language reclamation, revitalization, and pedagogy as modeled by other scholars and activists before us (Cushman, 2013; Fitzgerald, 2020; Johnson, 2017; Little et al., 2015; Tukker, 2017).

Website Creation

Project Goals

The COIL digitization, categorization, and website project focused on several key actions. The overall goal was to preserve the historical recordings for posterity and to provide teaching resources on a publicly accessible website. The first step then was to collect,⁴ sort, and review the recordings by consulting with ceremonial Elders and knowledge keepers regarding the suitability of content for the website. Materials deemed not appropriate for a public audience including mainstream recordings or that were of a personal nature were returned to those who donated the recordings. Second, the recordings that were suitable for a public audience were digitized, and a digital copy of the recording was returned with the original recording to the individual or organization. Third, once the recordings were

⁴ More information in the following sections on how the recordings were collected.

digitized, the audio files underwent a detailed categorization and sub-indexing process by a team of first-language speakers. Fourth, our online mentoring program provided access to language mentors for learners interested in learning more about the Indigenous language recordings posted on the website. Fifth, the website provided space for individuals to directly upload recordings through the website. Sixth, we established an on-site recording studio in partnership with the University of Saskatchewan's Department of Indigenous Studies, separately funded, to facilitate on-site interviews and record stories with Indigenous speakers.

Background to Website Creation

The vision to create a digital learning resource involved individuals committed to Indigenous language and oral history preservation. Together they held the foresight for future generations and efforts that would require creativity to preserve both oral history and Indigenous language. As a lifelong advocate for Indigenous languages reflecting nēhiyaw oral history, the digitization of historical recordings and creating of an Indigenous languages website were centrally part of the dream and vision for late Tyrone W. Tootoosis. Over several years, recorded stories were collected by late Tyrone W. Tootoosis in his work with traditional ceremonial Elders and storytellers across Saskatchewan. He was an avid oral historian who was self-taught and raised in a family of orators inheriting his late father's collection of stories. In addition, Dr. Winona Wheeler (Indigenous Studies, University of Saskatchewan), a professionally trained oral historian, had a collection of stories by distinguished knowledge keepers on topics pertaining to Indigenous history. The collections were privately stored and made available through relationships built between key

individuals involved in the COIL project who shared a mutual commitment to oral history preservation and ILR.

Based on meetings with the COIL project team and the storyholders, a top priority was to preserve and digitize historical recordings that were on reel-to-reel, cassette, VHS, microcassette, and beta tapes. In addition to preserving Indigenous language materials, our goal was to share the language recordings on a publicly accessible website. However, this idea presented a challenge as there was not an existing website that could support the language recordings to adequately meet our vision. This led to the idea to include designing and building a website to host the Indigenous language recordings.

Circle of Indigenous Languages (COIL) Website

The COIL website is a digital learning centre and database created from the audio and video files donated by individuals and organizations. A project team for the website developed the website in conjunction with Elders and traditional knowledge keepers to preserve and share Indigenous languages while adhering to cultural protocols. The foundational and planning work was based in Saskatchewan (Canada) while the website designers were in eastern Canada. Establishing strong working relationships built on foundations of trust and respect were integral to the project as our COIL project team meetings were held virtually. Funding was secured to design and build the website in addition to the cataloguing and categorization from sources such as the National Indian Brotherhood Trust Fund, Canadian Internet Registration Authority, and the Aboriginal Language Initiative. One of the website partners was the Saskatchewan Indigenous Languages Advisory Committee (SILAC) along with

individual Saskatchewan Indigenous language speakers who contributed to the categorization and sub-indexing of the recordings.

The name of the website, Circle of Indigenous Languages, reflects the philosophy of our traditional knowledge keepers and the nēhiyaw worldview, which is holistic in nature, cyclical, and forward moving. We carried this out by consulting with Elders and traditional knowledge keepers while following traditional protocols. Elder Mary Lee shares from a nēhiyaw worldview on where language originates from. She shared this knowledge in an interview conducted in nēhiyawēwin (the Cree language) which is posted on the COIL website along with a translation to English (COIL, 2017). Part of the website design included creating a visual image that would reflect the nēhiyaw understanding of how and where language originates from. The artist worked closely with the Elder to provide the culturally appropriate images for the origin of nēhiyawēwin and the meaning behind each of the symbols and colors in the artwork on the website.

Receiving Recordings

In order to properly track the recordings, a subject index catalogue format was provided by Dr. Wheeler as it included details critical for an oral history collection. A catalogue entry was created for each of the recordings. Upon receiving the first collection, from the Tootoosis and Wheeler collections, a sampling of the reel-to-reel, beta and microcassettes tapes were selected for digitizing to determine the content. The second collection received was from a Saskatchewan Aboriginal broadcasting organization. This collection consisted of a sampling of the historical collection of reel-to-reel tapes in the Indigenous languages that they had

created for broadcasting programming. The third collection was received from an Indigenous journalist as he had heard via “the moccasin telegraph”⁵ that the project was underway and donated a portion of his private collection. The fourth collection was received from a Saskatchewan First Nation organization who had also heard about the project and wanted to digitize a sample of their historical collection. Other recordings were shared by individuals and their families as they also continued to hear about the project from others. The digitization process involved accessing services locally in addition to the website design team. Once digitized, the audio files were shared with the COIL project team through OneDrive or Google Drive in addition to a hard copy in CD or DVD format.

Categorizing with Knowledgeable Speakers

Once the categories were established by the COIL project team, the recordings were categorized by first-language speakers. The categorizers had previous experience working with language recordings, using technology, and were knowledgeable about traditional protocol and spirituality. The categorizers were provided access to a laptop with training to listen to recordings using two different software programs to keep track of timing within a recording. This training included the use of Microsoft Word and Excel to document the categorization of each recording. The categorizers were already proficient speakers who shared that listening to the recordings strengthened their own language knowledge. The process generated many conversations among the categorizers as they would come together to discuss the recordings they had reviewed. During this process, they shared that the

⁵ The moccasin telegraph is an informal oral means of communication usually between relatives, friends and associates.

recordings triggered positive memories, and they would reminisce about the individuals who were recorded as they were well known traditional knowledge keepers and storytellers. Their language spirits were nourished by hearing the language used in recording oral histories.

Assessing Quality and Suitability—Ethical Considerations

From the beginning, the project team was committed to honour the teachings and languages that were shared by those who donated recordings. Traditional protocol and ceremony were followed with the ceremonial Elders and knowledge keepers to honour the stories of those who had passed on to the spirit world. The storytellers shared their teachings for future generations to learn the language and the teachings, as both are intertwined and inseparable. Traditional protocol with respect to the recordings was followed throughout this process. The importance of adhering to ethics in working with Indigenous people, communities, and language materials is critical as shared by Indigenous scholars (Absolon, 2011; Kovach, 2009; Smith, 2012; Wilson, 2008). The project adhered to the ethics and responsibilities inherent to working with Indigenous language recordings by following traditional nēhiyaw and Nahkawe protocol guided by ceremonial Elders and knowledge keepers (SICC, 2009). Part of these protocols is that they cannot be publicly shared or explained here; rather they must be witnessed or can be discussed in certain circumstances orally, but it is important to document here that they occurred and were a foundational component of this project and story.

Connection to Wider Landscape

The shift over into the technological space for ILR work has been in some ways slow. Of course, this shift has begun to gain speed during the pandemic of 2020 and beyond. However, the long-term effects are yet to be known. Within that, the COIL project and particularly the undertaking of collecting, digitizing, and categorizing Indigenous language recordings is part of a larger set of undertakings across Canada and further afar. Here we will name just a few. The National Research Council (NRC) of Canada runs the *Canadian Indigenous languages technology project*, which was granted \$6M in 2017. Littell et al. (2018) explain the various foci of this work that include a category of computer aided language learning, which contains courses embedded with recordings organized as resources for learners. Other projects they support are other forms of digitization, as explained on their website (NRC, 2020), such as segmenting and indexing audio recordings, as well as support for online tutoring software (with audio). An additional entity entitled *Indigitization* is a collaboration between Indigenous groups in BC and academic partners, created to support the digitization and systemic archival of precious materials (<https://www.indigitization.ca>). A key difference between many of these projects and the COIL website is that they are either digital preservation for the sake of preserving or, in the case of some of the NRC projects, are documentation projects created for the purpose of creating resource products (such as short clips for audio dictionaries and other technologies). The COIL project, however, combines the archival digitization work of organizations like *Indigitization* with a pedagogical focus of creating specific curriculum resources, stories in “usable” chunks for K–12 teachers and adult learners.

Another connection to the wider landscape and future of digital tools in ILR is the NILLA project (nilla.ca) currently underway through NETOLNEW: *“One mind, one people”* Indigenous language research grant. The online portal space would be a wider, broader space for the COIL website to be embedded within a context of language learners or teachers seeking connection across language revitalization efforts.

Intended Outcomes

There were many outcomes from the project. While some were planned, others were unintentional, yet everyone benefitted from being involved. We learned that connections and relationships are critical elements, and consistent communication is foundational to efficient work and building trust. Success for the project meant receiving recordings, cataloguing, and digitizing them as a first step. Success was gauged by properly categorizing and sub-indexing the stories. The goal for the project was designing and building a website to host the categorized audio recordings for learners and to facilitate additional language learning and sharing.

We received feedback from nēhiyawēwin (Cree language) teachers that were using the website audio clips to share the language and support students' learning outcomes. The website was utilized to support several Mentor Apprentice Program teams over a two-year period to access whole language learning as well as listening to the traditional teachings that the Elders in the recordings shared. At each stage of the website development, we shared the progress with the Elders, knowledge keepers, and language teachers to incorporate their feedback into the next stage of development.

With the categorization process, we learned that technology training is important at the forefront. It was critical to have individuals who were first-language speakers in the Indigenous languages and were comfortable working with technology. We learned that sub-indexing was an invaluable resource for learners and teachers searching for specific content that was in a usable format. We understood that dialect differences in listener knowledge were important to affirm and acknowledge throughout the project. As the recordings were often of an unknown content, we worked on matching the categorizers with the same dialect of the speaker on the recording to accurately reflect the stories on the file.

Unintended Outcomes

There were several unintended outcomes throughout the project. The Elders, knowledge keepers, and categorizers (all of whom were first-language speakers) experienced a deeper understanding of their own language and teachings, which was enriched by the opportunity to hear the recordings. The audio recordings in Cree are primarily the recordings of speakers using a high level of fluency as they were elderly speakers and traditional knowledge keepers. The speakers shared that listening to the recordings strengthened their own language as they remembered old words that are not spoken often and felt supported to bring them back into use. The process of categorizing the language recordings created a rich resource for the first-language speakers to hear the language and be encouraged in their continued language use. Another unintentional outcome was that the recordings were used in senior level university nēhiyawēwin Cree language courses for students to practice their transcribing skills.

Individual support and background information was provided for the categorizers to discuss any questions on the content of the recording. The categorizers also felt that they were learning about the speakers, their philosophies, and the teachings they were providing which was also an unplanned outcome. We learned that it was important to provide opportunities for first-language categorizers to work together, and not alone, to interpret a recording as the recorded speakers were often traditional knowledge keepers who had unique life histories and philosophies that grounded their stories within their life experience.

Knowledge Dissemination

The authors felt that it was important to share the process and outcome of the COIL project for several reasons. The dissemination provided an opportunity to share with others the experience of not only creating a website but also digitizing historical recordings that were then categorized and shared on the website. Presentations were shared at three international Indigenous language conferences on the development of the COIL website including the International Conference on Language Documentation and Conservation (ICLDC) conferences (Ross & Greyeyes, 2019, 2021) and the International Indigenous Languages conference, HELISET TFE SKÁL: Let the Languages Live (Greyeyes & Ross, 2019). We were able to review the intention of the website with our audiences and determine if there were similar websites that existed for other language groups. Joan and Charlotte were invited to participate in a national Indigenous language roundtable discussion by invitation for Onowa's SSHRC Connections grant-funded roundtable in January 2019, with representatives from across Canada, focused on the creation of NILLA (mentioned above), an online portal for language communities and organizations to share their success stories

and pedagogies with one another. And finally, a webinar was delivered through Maskwacis Cultural College on the background and development of the COIL website to an international audience with a mutual vested interest in the use of technology to preserve Indigenous languages (Ross, 2020).

Conclusion

In this paper, we shared the learning journey we have undertaken to digitize historical Indigenous language recordings, to catalogue and categorize these stories, and lastly, to create a publicly accessible website to share the recordings. This project has highlighted the importance of preserving and documenting historical recordings of the nēhiyaw, Nahkawe, and Michif languages in Saskatchewan. The authors and the COIL project team had the correct motives for success—good energy, good intentions, and a good heart—that we believe lead to healing the spirit of the language (Meyer, 2014).

We shared similar philosophical outlooks, values, and beliefs regarding the importance of oral history and ILR and the possibilities held in strengthening networks and digital resources as tools to support learning. We had key individuals who shared a vision and began researching how we could share the language as widely as possible. The yarn that connected community members, educators, and scholars was our commitment to revitalizing and strengthening our Indigenous languages using digital archiving and website creation to assist us in making the audio recordings more accessible to a wider audience. Throughout our work, we were guided and blessed by ceremonial Elders and traditional knowledge keepers who ensured that we followed traditional protocols as our languages are sacred.

There is a need for a greater abundance of quality and accessible audio and video resources to support language learning, which the COIL project was designed to address. Writing about our journey together with interwoven projects was an act of honouring the many individuals involved, but particularly those who made the COIL website come to life and contributed their ideas, energy, and language into making it a reality. We valued being able to communicate in nēhiyawēwin (Cree language) by text or email as we collaborated on the writing of the paper as an affirmation to the tenacity and hope for our language despite years of colonization. We also share our story with the wider language revitalization community in hopes that our learning will assist others in their learning and resource development journeys. ahaw

About the Authors

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Joan Greyeyes nisihkāson. Muskeg Lake Cree Nation kisiskācōwinihk nitakison. My recent work with the University of Saskatchewan centered around the preservation and revitalization of Indigenous languages. I created partnerships resulting in the delivery of the UVIC Masters of Indigenous Language Revitalization program in Saskatchewan along with the creation of the Circle of Indigenous Languages website.

Dr. Onowa McIvor nitisithikāson. nītha maskēkow-ininiw (Swampy Cree) ikwa Scottish-Canadian ikwa nēhithawīwin language learner and language warrior. I am a Professor of Indigenous Education at the University of Victoria. My current areas of research span Indigenous language revitalization, immersion and bilingual education, sociocultural language learning, additional language acquisition, and Indigenous health and well-being.

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STORYING AN INTERCONNECTED WEB OF RELATIONSHIPS IN INDIGENOUS LANGUAGE RECLAMATION WORK AND SCHOLARSHIP

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Abstract

Indigenous language work is manifested in a diversity of community-led responses of resilience and persistence. Indigenous persons who are reclaiming their languages have entered academia with goals of contributing to community language reclamation efforts and broader resurgence movements. Adapting Archibald's (2008) concept of storywork—experiential narratives that privilege a cultural lens—we take a dialogic approach for scholar-educators to *story* their Indigenous language work within a web of interrelated relationships. From our positionalities as Chikashsha, Hopisino, Kanaka Hawai'i, myaamia, and Brazilian scholars, we ask and reflect on the following questions: Who are we storying with and for? What does language work look like in our community contexts and academic collaborations? How do we define cultural praxis in our work? What principles inform and emerge from our collective work? How do we co-construct knowledge that will sustain our language work and relationships? This reflective and reflexive process engages and maintains a continual balance of the cumulative past and present toward the future. Foremost, we aspire to act and work consistently in ways that are good for our peoples and communities, which includes a view of the research we undertake as purposeful journeying (Hill & Wilkinson, 2014) within our academic contexts and scholarship.

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Prologue

We come together through a shared responsibility to Indigenous language work. There is no single story that brings our paths together; rather, our stories intersect at various times and places, forming a web of relationships. As individuals, our paths have intersected at various convenings, including the American Indian Language Development Institute (AILDI) at the University of Arizona and Natives4Linguistics at the Linguistic Society of America annual meetings. We planned to come together as a group for the first time at a colloquium organized by Nicholas and Chew, called *Braided histories, braided futures of Indigenous language reclamation work: Retelling ancestral stories, storying new Indigenous linguistic futures*, at the American Association for Applied Linguistics 2020 meeting. Due to the pandemic-related cancellation of this event, this article provides an alternative venue for us to bring to fruition our vision of a dialogic approach to storying our individual and collective language work. We begin by introducing ourselves and inviting the reader into dialogue with us.

Chokma, saholhchifoat Kari Chew. Chikashsha saya. Amanompa' ithanali. Greetings, my name is Kari Chew. I am a Chickasaw Nation citizen. I am learning my language. My work as an assistant professor of Indigenous education supports language education work, especially for adult and diasporic language learners.

I, Sheilah Nicholas, am anchored by birthright in my Hopi ancestral homelands, Tuuwanasavi, the Black Mesa region of the US Southwest. My language work has illuminated the path to (re)member myself to place and community so that I can share the “harvest” of

my quest in reciprocity to my ancestors, my people, and those to come.

Welina me ke aloha. 'O au nō 'o Candace Kaleimamoowahinekapu Galla. As a Kanaka Hawai'i and associate professor, I have kuleana (responsibility, privilege) to serve my community back in Hawai'i, the diaspora, as well as other Indigenous communities, in our individual and collective effort of language reclamation, renewal, and restoration.

'Ano'ai e ka mea heluhelu ē. 'O au nō 'o Keiki Kawai'ae'a no Keaukaha, Hawai'i o ka ua Kanilehua. Warm greetings all. I am Keiki Kawai'ae'a of Keaukaha, Hawai'i of the Kanilehua rain. I am a mother, grandmother, educator, and administrator striving to revitalize my beloved Hawaiian language as the "normal" language of home and daily life. I'm on a wonderful journey of rediscovery of my Hawaiian identity and returning Hawaiian to the home across multiple generations of my 'ohana (family) and kaiaulu (community).

aya, Wesley Leonard weenswiaani. niila myaamia. Hello, my name is Wesley Leonard. I am Miami. I was greatly influenced by my late grandfather, who believed in the future of the Miami people and in the reclamation of our once-sleeping language, myaamiaataweenki. I became a linguist to support these efforts and strive to build capacity for decolonial language work.

I, Wilson de Lima Silva, am originally from Manaus, Brazil. I am an assistant professor in the Department of Linguistics at the University of Arizona, where I direct the Master of Arts program in Native American Languages and Linguistics. I promote capacity-building

workshops with Indigenous groups in Amazonia, thus seeking to contribute to language work that engages communitarian and social justice objectives.

Introduction

In Hopi storytelling, Spider Woman is a central figure. The spirit of Spider Woman represents all earthly knowledge. Spider Woman was instrumental in making the world habitable for humans. She is believed to be the driving force behind discovery and innovation. (Hartman Lomawaima in Ferrero, 1986, p. 4)

As Chikashsha, Hopisino, Kanaka Hawai'i, myaamia, and Brazilian scholars, we are engaged in Indigenous Language Revitalization (ILR) as a named and “growing field of community action as well as academic interest and involvement” (Hinton et al., 2018, p. xxi). Through this article, we come together to *story* our language work and journeys. We draw on the metaphor of a spider's web to convey the interconnectedness of our relationships to one another. Through sharing experiential narratives which privilege a cultural lens (Archibald, 2008), we story our Indigenous language work. We define “language work” as active, dynamic, in the present, and occurring within ILR.

From our positionalities and locations—communities and institutions—we ask and reflect on the following questions:

- Who are we storying with and for?
- What does language work look like in our community contexts and academic collaborations?

- How do we define cultural praxis in our work? What principles inform and emerge from our collective work?
- How do we co-construct knowledge(s) that will sustain our language work and relationships?

We began our writing process with virtual meetings to create a space for us to come together on our own terms to collectively explore and engage the issues that matter to us and our language work. Google Docs became our shared writing space, with each author posting their story. We then engaged with one another's stories as a process of collaborative storying, reflecting Indigenous norms of co-produced knowledges that also illuminated interactions and intersections of our language work with and for Indigenous communities. This reflective and reflexive process originates from the deeply personal and particular, within the contexts of highly local and social ways of knowing and engages and maintains a continual balance of the cumulative past and present toward the future. Foremost, we aspire to act and work consistently in ways that are good for our peoples and communities. This includes a view of our language work and scholarship as purposeful journeying (Hill & Wilkinson, 2014).

Storying Our Language Work

Through our storywork, we explore how Indigenous people who are reclaiming their ancestral languages and their co-resistors (Simpson, 2011) have entered academia with goals to advance and play a contributing role in community language reclamation efforts and broader resurgence movements. Representing diverse Indigenous communities—our own and those *with* and *for* whom we work—we come together in support of language

reclamation within these communities and to affirm one another in this work.

We ground our storywork in a language reclamation framework “of claiming—or reclaiming—the appropriate cultural context and sense of value that the language would likely have always had if not for colonization” (Leonard, 2011, p. 141). By telling our stories individually and collectively, we engage in a “dialogic, intergenerational storying approach” that is “accessible and graceful, but also answerable and rigorous” (Tuck & Yang, 2019, p. xi). We center community needs and perspectives, and, by extension, privilege communities’ norms of sharing their needs and perspectives and transparency in our process that includes accountability to one another and to those who will hear our stories. We distinguish between listening and hearing and between language and voice. We challenge our audience to *listen* to our *languages*, AND to *hear* our authentic *voices* (Warner, 1999). We also invite readers into the conversation that we assert is not *about* us but ultimately *for* and *led by* us.

Notably, each of us does ILR work from positions within particular academic disciplines, such as Indigenous studies, education, and linguistics. Following Leonard (2018), we propose a distinction between named academic fields that are capitalized and uncapitalized areas of work and study. For example, Linguistics is a field concerned with the scientific study of language, including formal theories, while linguistics refers to a broader, humanistic approach to language. All of the authors work to Indigenize the disciplines to which we are connected. In some cases of our training, these disciplines have had established Indigenous-centered programs, like the summer AILDI. Nonetheless, we still find ourselves performing within disciplinary structures and “truths” that have often been harmful to our communities.

The Spider Web Conceptual Model

Indigenous scholars Leola Roberta Rainbow Tsinnajinnie, Robin Starr Zape-tah-hol-ah Minthorn, and Tiffany S. Lee (2019) teach that “we each have a unique story to tell,” and the “process of storying together reveal[s] where our pathways intersect” (p. 51). In searching for these intersections, we employ the metaphor of a spider’s web. The web offers a conceptual and visual image of how we perceive and present ourselves as a community of scholar-educators engaged in Indigenous language work. The web structure captures our intuitive recognition that we comprise a dynamic, multi-sited, heteroglossic, and multivocal community that illuminates how our work is multifaceted yet intersected in the shared spaces of the web. Santa Clara Pueblo scholar Anya Enos (2017) describes the spider’s web as both a metaphor, a visual display, and a demonstration of *interconnectedness* spanning history—Indigenous lives and experiences across time. The spider’s web is a “microenvironment [capturing]—an individual . . . or a snapshot of time in history,” and at other times, it is a “macroenvironment—[encompassing] worldwide Indigenous communities or time immemorial” (p. 43). The spider’s web becomes an apt metaphor to articulate a response to our question: Who and what are we storying for?

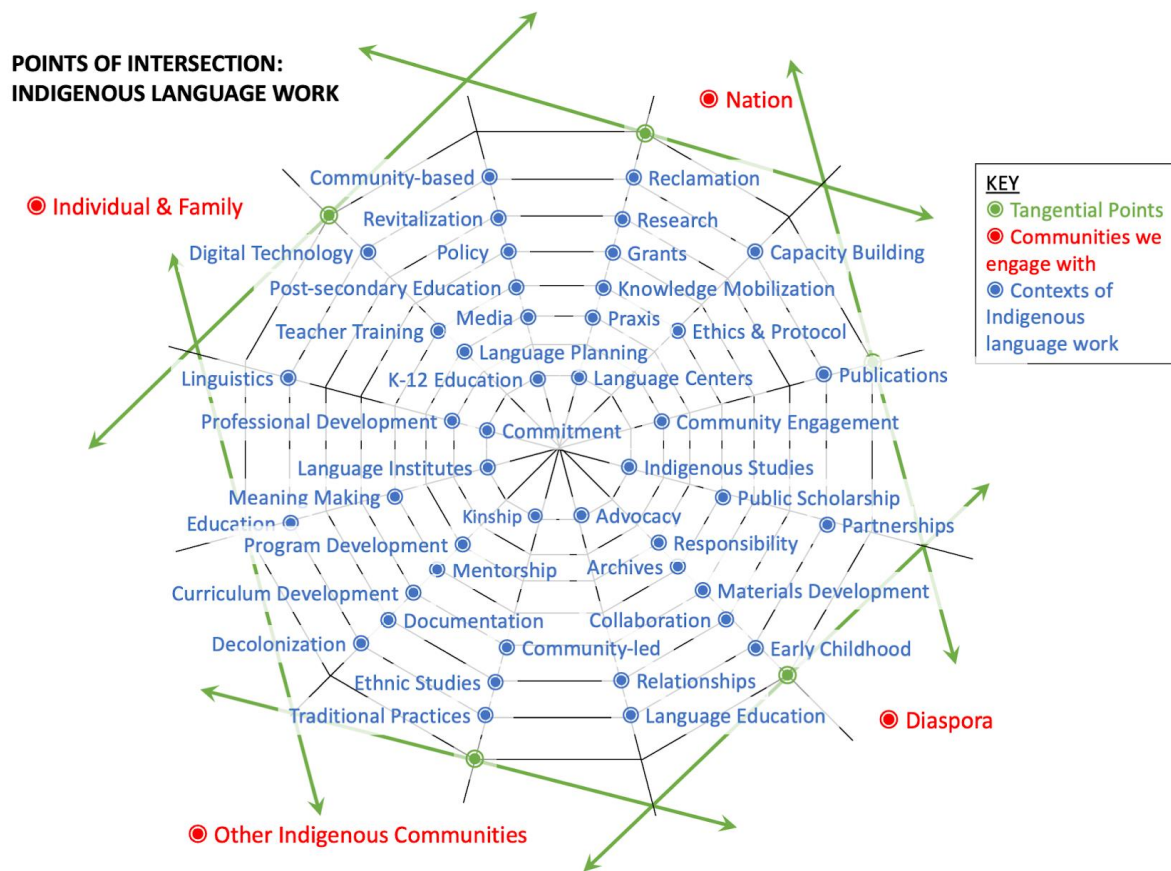
Microenvironments

The web’s microenvironment locates place or the community where we are undertaking our language work and within which our individual stories unfold. The following map (Figure 1) locates the primary sites of language work embedded in our stories.

Indigenous spaces generate the stories that “speak for us” (Naranjo, 2017, p. 29, citing Ortiz, 1999) and work to inspire, encourage, and empower us as we engage in language work.

Figure 2

Points of Intersection: Indigenous Language Work



Note: Created by Candace K. Galla

Tangential Points

The efficacy of the spider web structure applies to storying our language work, as Indigenous academics, to illustrate how our stories “touch on others” outside the micro- and

macroenvironments of Indigenous worlds and spaces. We draw on Deloria's concept of *tangential points*:

The best method of communicating Indian values is to find points at which issues appear to be related. Because tribal society is integrated toward a center and non-Indian society is oriented toward linear development, the process might be compared to describing a circle surrounded with tangent lines. . . . There are a great many points at which tangents occur, and they may be considered as windows through which [we] can glimpse each other. (Deloria, 1970, p. 12)

We use the image (see Figure 2, the green points of intersections and lines) to illustrate those points of interactions and intersections or windows through which our storying can be heard and our language work shared as well as better understood. The efficacy of the spider web metaphor is evident in the works of other Indigenous scholars (e.g., Archibald, 2008; Lambert, 2014; Maaka et al., 2018).

Figure 2 visually illuminates how our respective disciplines, communities, and approaches to language work span these multifaceted aspects of our language work to inextricably link, reflect, and display the diversity and complexity of ILR community efforts. We understand these as *places of resurgence*, as a *collective act of resurgence*, and Indigenous *presence* (Simpson, 2011). We view our personal storying and engaging with each other's stories as reinstituting "Indigenous processes" (p. 17) that compel us toward resurgence and to articulate our shared visions for renewing Indigenous futures. The process of collaborative storying reflects Indigenous norms of co-produced knowledges. As authors, we have begun to articulate these knowledges and understand that readers will find their own tangential

points and develop the meanings in stories along with the original authors. The following sections present each author's story.

Toompalli': Summer Will Come Again (Chew)

The Chickasaw Nation uses the metaphor of the four seasons to tell the story of a Chikashsha renaissance—a rebirth following our forced Removal to Indian Territory beginning in 1837. Toompalli' (summer) is the beginning of the Chikashsha New Year. Within the metaphor, it represents the struggles of *Asipóngni'* (my ancestors) to rebuild their lives in an unfamiliar place. During this season, the deep connection between place and language was severed. Hashtola' *ámmono'na'* (fall), a time of transition, represents survival against an onslaught of colonizing and assimilatory US policies meant to eradicate Indigenous peoples. English-only schooling caused many *chokka-chaffa'* (families) to stop speaking or suppress the language. Hashtola' (winter) describes the keeping of faith, as *okla* (the people) carved spaces of cultural and linguistic continuity. The language had a space in *aaittanaa'* (churches), which were sites of political and cultural revival. Chikashsha *okla* flourished during *toompalli'* *ishtayya'* (spring) as the Chickasaw Nation found increased political and economic stability. During this season, the work of language reclamation became a priority for the Chickasaw Nation as a whole. In 2007, 170 years after our forced Removal from our homelands, the Nation founded the Chickasaw Language Revitalization Program.

My language learning journey began one year later, in 2008, when I participated in my first language class. Since that time, I have worked to increase my knowledge of *pomanompa* (our language) and to navigate higher education in ways that support my language work. While I

have found supportive spaces to engage with my work, the academy has also resisted my presence. I recall the first academic conference I attended as a new doctoral student. I presented a story of how that 2008 language class changed my life because I learned to say Chikashsha saya (I am Chickasaw) in my ancestral language. Coming to say these words in Chikashshanompa' revealed to me my responsibility to continue learning the language and sharing it with other Chikashsha. After I presented this story, a colleague stated, "you speak so colloquially," noting that my English was more familiar than the formal and highly specialized language commonly used and expected in academia. This comment and similar ones compelled me to reflect on my speaking style and the way in which I presented myself as a Chikashsha scholar. I decided that I would strive to speak "colloquially," using Chikashshanompa' when possible and to my ability so that my words would feel familiar first and foremost to my ancestors, my community, my family, and other Indigenous persons actively engaged in the work of language reclamation.

Storying, using our authentic voices, is rigorous (Tuck & Yang, 2019), and, because it is an act of resistance to the norms of academia, it is hard work. As a Chikashsha scholar reclaiming Chikashshanompa', my efforts to learn my language have required me to also learn the language of the academic disciplines which have held captive Chikashshanompa' linguistic knowledge. I spent nearly a decade as a student in higher education studying disciplines out of necessity in order to access my language. Once, I was particularly frustrated by this reality and expressed to another Chikashsha language advocate that I've spent the last decade *reacting* to the work of non-Indigenous researchers who have studied our language. Swinomish and Tulalip photographer Matika Wilbur, whose Project 562

challenges stereotypical representations of Indigenous people, calls this narrative correction work (Wilbur & Keene, 2020)—or the work of resisting the stories that oppress Indigenous peoples by portraying us and our languages as deficient, vanished, or conquered. The work beyond narrative correction is imagining Indigenous futures beyond settler colonialism (Wilbur & Keene, 2020).

I story with and in relation to Chikashsha okla, as well as other ILR scholars and practitioners, to imagine and usher forth these futures where Indigenous languages flourish again. One form this storying takes is collaborative, community-based work to create our Rosetta Stone Chickasaw online language course. This course is significant because it represents the first time our community has come together to create a multi-year language curriculum with four levels comprised of a total of 160 one-hour language lessons (Hinson, 2019). This course reflects the input of Elder speakers, community members, and scholar-practitioners. As Chikashsha okla, we know that the seasons will continue to change and toompalli' will come again soon, bringing a new year and the beginning of a new chapter in the story of who we are as Chikashsha okla. As a result of individual and collective Chikashsha language work, I envision toompalli' as a time where the next generation of Chikashsha shaali' (language carriers or language learners) are not burdened by narrative correction work and have full access to their language as their birthright. Their stories will not be about learning to, and subsequently claiming the space, to say Chikashsha saya because they will know and they will already have this freedom.

Braiding the Strands of Language Reclamation Work (Nicholas)

The northeastern plateau region of Arizona in the US Southwest remains as the historic and contemporary homelands of the Hopi people who speak Hopilavayi, a Uto-Aztecan language. The remoteness of the region has helped to preserve much of the culture in its traditional form *but* does not give immunity to the impact of colonizing processes manifest in sociocultural and sociolinguistic change that reverberates in the commentary: “If we don’t work on this language issue, we’ll be Hopi in name only. There will be no meaning beyond that.” The truth of this perception was the first rude awakening to this personal reality in the context of my work in a foreign country when I responded with silence to the question, “What is a Hopi?”

Years later, as a graduate student at the AILDI at the University of Arizona, I would confront another rude awakening that merged my personal and academic trajectories on a course to “my true calling”—to attend to my ancestral language—through processes encapsulated in the Hopi concepts “naami yori” (taking a look [back] at myself) and “naamiq yori” (looking inward). The AILDI instructors, Hopi research anthropologist, the late Emory Sekaquaptewa, and linguist, Dr. Akira Yamamoto, each played a pivotal role. Emory opened the door to Hopilavayi literacy through which I understood the significance of being immersed from conception through childhood in my Hopi world through the language. On the other hand, immersion in the Western world through the English language and schooling served to dismember me from my Hopi world in a profound way. Dr. Yamamoto, through a course assignment, gave rise to vocalizing this reality when I asked, “Where did my language go?” Reassuringly, he explained that my language was not lost; rather, it had receded into the

depths of my being waiting to be called forth—signaling the beginning of my language work at a personal level. My initial efforts to use Hopilavayi with my late mother prompted her response, “Um tsayniiqe paas Hopiningwu. (When you were a child, you were “fully” Hopi.)” and reiterated my shame of being Hopi in name only but would serve as the catalyst to (re)search the meaning of being *fully* Hopi.

Invited to assist Emory in providing monthly Hopi literacy instruction for Hopi students at the local high school, I was intrigued to learn that despite being raised in Hopi culture from birth, these Hopi youth had not acquired a Hopilavayi proficiency. The Hopi way of life based in the ancestral agricultural tradition and ceremonial rituals continue to be practiced in contemporary Hopi life; what was the current and would be the long-term impact? My dissertation research became the academic aspect of my language work—investigating the intergenerational interface of culture, language, education, and identity through case studies centering on three Hopi youth. The saliency of Hopi oral tradition and the traditional Hopi identity formation process, affective enculturation nurturing lifelong allegiance—Hopi qatsit aw unangvakiwyungwa (Having one's heart in the Hopi way of life) among contemporary Hopi youth despite language shift—or language as cultural practice (Nicholas, 2009), became fundamental to my ensuing language work in language teacher preparation.

The Hopi response (tribal mandates) has positioned schools as the primary sites of language revitalization. Tribal funding directed to Hopi language teacher professional development to assist school-based culture and language programs repositioned my language work with, for, and in my community in the design and implementation of the Hopilavayi Summer Institute

2004–2010 (Nicholas, 2021). I brought a Hopilavayi literacy and receptive proficiency, a commitment to and background in the oral immersion approach to language teaching, and a long-term instructor and administrative experience with AILDI as a program model to foster a tribal-university-school partnership. This “preparation” aligned well with community-based resources, aspirations, and needs. Respectively, Institute participants, paraprofessional, and certified teacher-speakers are critical resources who live the curriculum (the Hopi way of life) and continue the oral tradition, which remains vital in contemporary Hopi life. Learner aspirations were voiced as poignant yearnings to participate “fully” in Hopi life while a desire to re-instill the value of *kyaptsi*, respect for the Hopi way of life, resounded in the community. Respect, understood as emanating from an understanding of the core Hopi values implicit in cultural and linguistic practices, required these to be made explicit to the youth through “teaching” the language in formal spaces, an unprecedented need that was realized. I story for these *first* teachers of community youth who uphold traditional cultural praxis that speaks to right relationships, respect, cohesiveness, well-being, and survival—*lomaqatsi*, the good life.

E Ho'omau: Indigenous Language Work at the Periphery of Academic Institutions (Galla)

At the time of writing, I have lived over half of my life away from my traditional homelands of Hawai'i. As a guest and visitor to the homelands of the Tohono O'odham during my undergraduate and graduate studies at the University of Arizona in Tucson, and now to the ancestral and unceded territory of the *hənqəminəh* speaking *x^wməθk^wəyəm* (Musqueam) people as a faculty member at the University of British Columbia in Vancouver, I have been

keenly aware of my positionality. I have had experiences of inclusion and exclusion within and outside the institutions. Notwithstanding, my story is not unique to me and may be familiar among my Indigenous colleagues and students in post-secondary institutions.

My path in academia was unclear for many years as I navigated a multitude of contexts in a Western institution. I meandered between majors hoping to find a discipline that would inspire yet challenge me and allow me to give back to my community. The summer leading into my fourth year as an undergraduate, I registered for a general education course about language. This course piqued my curiosity and set me on a path to major in Linguistics. I did not know where this degree would take me, but I knew that Linguistics provided me an opening to reconnect with my Hawaiian language while living away from Hawai'i. My growing interest prompted me to continue with graduate studies in the Native American Languages and Linguistics Master of Arts, with a focus on 'Ōlelo Hawai'i. My master's program began with two courses offered through the AILDI in 2004.

The AILDI was a novel space that allowed for critical discussions regarding language vitality to occur in the academy with Indigenous language speakers, learners, educators, policy makers, community members, and Allies from across Turtle Island and beyond. It was *the* place that humanized the discipline of linguistics for me and reignited my passion for my language and culture. I met colleagues and faculty from diverse communities, cultures, and linguistic backgrounds who became lifelong friends and mentors who shared stories of language loss, struggle, hope, and renewal with tears, laughter, and understanding. The AILDI privileged Indigenous knowledge systems—at a time when other academic

departments and programs questioned, resisted, opposed, and/or silenced Indigenous ways of knowing-being. The AILDI became my “home”—an anchor point in the university where I learned from and with Indigenous faculty, staff, students, and community members—a stark juxtaposition from the rest of the institution.

That same year, a relational network of Indigenous doctoral students at the University of Arizona created the Indigenous Thinkers in response to the lack of Indigenous scholarship, research, curricula, pedagogies, methodologies, and representation in Indigenous education within the College of Education (Galla & Holmes, 2020). This was an attempt to “make the academy both responsive and responsible to First Nations goals of self-determination and well-being” (Justice, 2004, p. 113). Indigenous Thinkers was a way for us as Indigenous and emerging scholars in the Western academy to establish a “continuous, visible, and active presence” (Mihesuah & Wilson, 2004, p. 5) in the College of Education and at the University of Arizona. “Through [Indigenous Thinkers], we (re)defined the meaning of ‘success’ for ourselves and each other, holding on to the aspiration of a doctoral degree that would be useful and relevant” (Galla & Holmes, 2020, p. 54)—a purposeful journey (Hill & Wilkinson, 2014) that we engaged in to create an environment and outcome that we wanted to see for ourselves, our communities, and each other.

Graduating with my doctoral degree, however, did not completely confirm or validate my “belonging” in the academy as I sought to find a critical mass of Indigenous scholars while endeavoring to attain tenure. We are still a minority, but a growing one. As a faculty member who taught at Ka Haka ‘Ula O Ke‘elikōlani College at the University of Hawai‘i at Hilo, and

now at the University of British Columbia, I continue to cultivate my place in the university as a diasporic Kanaka Hawai'i and an Indigenous scholar-practitioner.

Working in the context of Truth and Reconciliation in Canada has made me even more responsive to community language priorities, especially at a time when there is a raising of consciousness across the country (and beyond) that calls for change and action in order to redress the legacy and impact of residential schools. My positionality has afforded me opportunities to work alongside Elders, teachers, language speakers, and learners in British Columbia and Hawai'i with the intention to develop language materials and curriculum, document language and literacy practices, and explore digital technologies and tools for language learning and teaching. With this privilege and honor comes responsibility I have to each community I serve that is based on respectful relationships.

As an Indigenous language and literacy educator, and Hawaiian language learner, I stand on the shoulders of Indigenous scholars that came before me with the commitment to continue, e ho'omau, their work of chiseling away (individually and collectively) at the institution to allow Indigenous knowledge systems, voices, and bodies to occupy more than a "space" in the academy that has attempted to eradicate our histories, lives, and communities. I story for Hawai'i, for Kanaka Hawai'i, for language learners and speakers, and for all Indigenous Thinkers and scholars so that we can envision a strong and brilliant Hawaiian and Indigenous future.

A Koe Nō Nā Pua: Shaping Our Destiny as the Vision Unfolds (Kawai'ae'a)

In 1978, Hawaiian became an official language of the State of Hawai'i. At that time there were some 2,000 Native Hawaiian speakers, the last generation raised in Hawaiian speaking homes and communities (Kamanā, 2004). There were a handful of families, second language speakers like me, outside of the last Hawaiian speaking community of Ni'ihau, who were raising their children through Hawaiian as their first language through a pulakaumaka (a great desire to revitalize Hawaiian through a grassroots effort to renormalize our precious mother tongue beginning in the home).

That kuleana (responsibility and privilege) was ours to bear as children and grandchildren of the last native speakers of Hawaiian. We had a few thousand Elder speakers, Hawaiian language classes at the university, and some community programs, audio recordings, and an enormous repository of Hawaiian language written materials predominantly from the 19th century when Hawaiian was the national language to support our efforts.

For those handfuls of families who began, there was no sail plan in place and no great strategy to guide the way except a deep internal compass that was pointing in a new direction to ho'ōla i ka 'ōlelo (revitalize our mother tongue with our babies beginning in the home). Then in 1985, two Pūnana Leo preschools opened in Honolulu and Hilo. Then in 1987, the Department of Education opened the first public immersion schools in Waiau, O'ahu, and Keaukaha, Hawai'i. This afforded families like ours to bring our children together in a learning environment totally immersed through Hawaiian. E ola ka 'ōlelo Hawai'i (May the Hawaiian Language Live) was the simple vision to reclaim our native language.

In the early years, many made personal and family sacrifices to establish new school sites, become teachers, prepare curriculum, and change law and policies at the state legislative level and Department of Education (Wilson & Kamanā, 2001). With nearing 40 years of Hawaiian language revitalization efforts to reflect upon, the primary vehicle has been an educational platform to “maintain high standards of language, and cultural and academic excellence” (Kawai'ae'a et al., 2007, p. 186) through an educational pathway infant-toddler through PhD, a P-20 model.

From a frightening number of under 50 minor age (17 and younger) speakers of Hawaiian in the mid-1980s to the fifth non-English home language in the state, the 2000 US census reported 26,608 speakers of Hawaiian in the US (Ng-Osorio & Ledward, 2011). On my home island of Hawai'i, 29.9 percent of the families speak Hawaiian in the home and Hawaiian is once again becoming a language heard in the community (Hawai'i State Data Center, 2016; State of Hawai'i, 2016). For example, here in Hilo, it's not unusual to hear Hawaiian being spoken in community places like the grocery store, community volleyball games, and at the beach by people I know and others I don't know.

Hawaiian medium (kaia'ōlelo) and Hawaiian-immersion (kaiapuni Hawai'i) schools are found in all four counties—Hawai'i, Maui-Moloka'i-Lāna'i, O'ahu, Kaua'i-Ni'ihau—as Department of Education and charter schools. There are currently 26 K-12 schools and 12 infant-toddler preschools with enrollment at about 3,700. The Commission on Language Learning (2017) reports that children in Hawaiian medium-immersion schools are

graduating at a rate of three percent above the state average and are attending college at a rate of 15 percent above the Native Hawaiian average.

At the university level, Ka Haka 'Ula O Ke'elikōlani College at the University of Hawai'i - Hilo campus provides degree programs from bachelor to doctorate where Hawaiian is used as the language of instruction from upper-division undergraduate courses and above. In addition, general education courses are now available in Hawaiian for subjects like math, history, psychology, sociology, and Hawaiian language. Hawaiian medium teacher preparation is a full-track program offering certificates in early education and K-12 as preservice preparation for licensure with masters and doctoral degrees for Indigenous education contexts. University of Hawai'i Mānoa, UH Maui College, UH West-O'ahu, and Brigham Young University-Hawai'i also have multiple programs strengthening Hawaiian language and Hawaiian knowledge opportunities that collectively are raising the bar in higher education.

It has been a powerful experience through the good times and challenges to reclaim a language that is highly endangered. It requires one to deal with personal internal struggles as second language speakers and the immense social pressure against mainstream English norms to stay the course with our children as the primary collateral. As a parent and now a grandparent of Hawaiian speaking children, there is unbelievable joy in hearing Hawaiian spoken again across three generations. It is part of our family strength and the legacy we have returned to our family history.

After nearly 40 years of Hawaiian language revitalization work, I continue to hear people ask, “are your children succeeding in English?” The answer is yes, of course, and their lives have been enriched as speakers of Hawaiian. English is everywhere in our community, and the general public attitude towards English being the language of success continues to deter the efforts of revitalizing our language. Therefore, failure is not an option, and staying the course will continue to yield positive results for generations to come. Towards these efforts, Hawaiian is showing promising signs of language recovery.

The vision continues to be more than just a dream; it has been a trajectory explosion to recalibrate Hawaiian identity and “to bring life back to our *mauli*, our life spirit” (Kamanā, 2004, p. 150) grounded in our language, culture, and place for future generations. Our proactive stance has also been a healing process to reclaim our language as an inherited right for our families and communities: A legacy for future generations to build upon as new chapters of the story unfold for ‘ōlelo Hawai‘i (Hawaiian language) – a koe nō nā pua (only the flowers [descendants] remain). Towards a bright future that reclaims our mauli through our language, we must continue to hold the vision as a banner of victory, e ola ka ‘ōlelo Hawai‘i, e ola nā ‘ōlelo ‘ōiwi, e ola nā iwi (may the Hawaiian language live, may Indigenous languages live, may the bones of our ancestors live on).

myaamiaatawiaanki kati: A Reclamation Narrative (Leonard)

myaamiaki eemamwiciki (the Miami awakening) is a story about reclamation, and this is how many members of my tribe name the cultural renaissance and recovery of our language, myaamiaataweenki, from archival documentation. myaamiaki eemamwiciki describes how

the Miami people came together—literally in spaces that we make into our own despite colonial invasion, and metaphorically in our shared vision of building a strong Miami future. It begins with our ancestors, who documented the knowledge needed for our awakening after a long period in which many Miami cultural practices were dormant. However, *myaamiaki eemamwiciki* is not an historical narrative or winter story, but rather a contemporary account that continues to develop as we reclaim our culture, language, and well-being. *myaamiaki eemamwiciki* emphasizes our outcomes of two forced Removals and how *myaamionki* (Miami place) thus includes not only the original homelands in Indiana and Ohio, but also the area of Kansas where my ancestors had a reservation in the 19th century after the first Removal, and the current seat of government in Oklahoma where Miamis came to live after the second Removal. It includes old accounts of how *myaamia miincipi* (Miami corn) came to the Miami people hundreds of years ago, and the more recent story of how cultivation of this unique variety of corn once stopped but came back into practice by planting seeds saved by an Elder, a process furthered by a collaborative ethnobotanical research project (Gonella et al., 2016).

Right from the start of my community's efforts to reclaim our language from documentation in the 1990s, which was also when the process began to be known as *myaamiaki eemamwiciki*, I think our intent was always to story with and for each other and to center Miami values. However, I realize now that we were initially unaware of the extent to which our language work was covertly being guided by others' ideologies, processes, and expectations. In particular, people kept saying that our language was extinct, so we had to go out of our way to justify that yes, it existed, and yes, we had the capacity to learn and speak

it. Though part of this advocacy was directed inward toward community members who had internalized the idea of the “vanishing Indian,” it was primarily a response to the colonial logics of Linguistics, which had adopted the damaging label “extinct” to describe myaamiaataweenki (Leonard, 2008). My current work aims to decolonize Linguistics, which offers useful tools for language reclamation but continues to other Indigenous scholars and language communities (Leonard, 2018).

Earlier actions within the story of myaamiaki eemamwiciki were also overly influenced by the idea that members of my community just needed to learn to speak myaamiaataweenki and that healing from colonial trauma would ensue. I did observe some healing, but there was a limitation in this thinking. The assumption might have been fine if we had been following more traditional notions of language, where relationships and interaction with people and places are so intertwined with myaamiaataweenki that “learning language” would accordingly be an embodied, relational process. However, I now realize that the initial efforts of my community overly drew on Western notions of language and language pedagogy. Even if ostensibly meant to support Indigenous communities, dominant approaches that frame languages as objects to be acquired easily further the colonial project by controlling how we, who are part of Indigenous communities, relate to our own languages. The programs we have developed more recently build Miami identity and center relationality in ways that respond to the ruptures that underlie my community’s earlier shift away from myaamiaataweenki. For example, many of our educational programs take place outdoors, emphasizing interactions with earth and sky, and participants learn and use language in culturally grounded, interactional contexts. Tribal events are increasingly

framed as gatherings of *relatives* with the phrase *ceeki eeweemakiki* (all my relations) now common along with *niila myaamia* (I am Miami) and *kiiloona myaamiaki* (we are Miamis). For us, language reclamation entails building and supporting relationships with each other, our ancestors, our non-human relations, and land.

Another type of relationship has also come to characterize Miami language work. Respectful collaboration within tribal-academic partnerships has become a hallmark of Miami cultural and language reclamation praxis (e.g., Baldwin et al., 2016; Baldwin & Olds, 2007; Gonella et al., 2016; Leonard & Haynes, 2010) and is guided by the belief that research facilitates reclamation *provided that* the people and institutions involved are respectful of Miami intellectual and political sovereignty. As with my efforts to reimagine Linguistics from an Indigenous lens, educating about Indigenous approaches to research is part of this praxis. *neepwaantiinki* (we learn from each other) has become a named concept to describe these partnerships, which reflects how the co-production of knowledge builds and sustains relationships. Responsibility, which aligns with respectful relationships, informs our practice of sharing the knowledge developed through these partnerships so others can benefit, though we are vigilant about the ongoing threat that knowledge can be misused. Because of this approach, there are many non-Miamis in the story of *myaamiaki eemamwiciki*, and my vision is that this story will continue to build reclamation capacity both for Miamis and for our co-resistors: *myaamiaatawiaanki kati* (We will speak *myaamia*).

From Theory to Practice and Back (Silva)

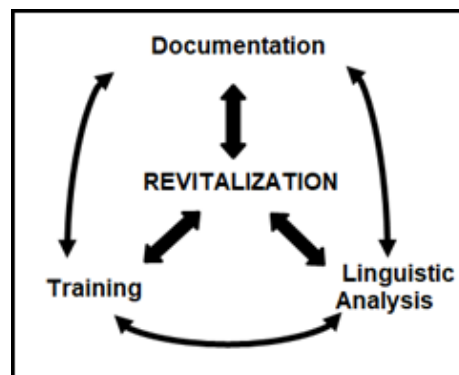
I write with my current and former Native American Languages and Linguistics Master of Arts students in mind. The cohort of students in this program is diverse: Some are native speakers or second language learners of their Indigenous language, and a few are non-Indigenous students who work in collaboration with an Indigenous community. Students enroll in the program because they are interested in formal training in the kinds of skills needed to work on maintaining, revitalizing, and documenting their own language or the language of the community with which they work. Becoming a scholar with formal training in Linguistics was a kind of serendipitous thing that grew out of my work with a diasporic Tikuna community in Manaus, my hometown.

My involvement with Indigenous language preservation work began in 2001, as a volunteer with the Tikuna people in Manaus. At the time, I was an undergraduate student and invited to join a community-based project that focused on assisting two community members, Aldenor Félix and Tobias da Silva, who had just completed high school, in language pedagogy and language material development. Sadly, the community lost Aldenor Félix to COVID-19, and I dedicate this work to his memory. Due to concern that, once in the city, the children and young adults would lose interest in their language and culture, community leaders wanted to create a school in their newly established community in Manaus. I was studying English as a Foreign Language at The Federal University of Amazonas and was familiar with language teaching pedagogies. At the time I was not familiar with Linguistics, but this did not preclude us doing the work and achieving the goals of the community project.

My work experience with the Tikuna community, combined with the formal training in Linguistics in graduate school, influences the projects I am currently undertaking with Indigenous communities in Brazil (Desano), Colombia (Desano, Siriano, M̐teã), and Ecuador (A'ingae). My work focuses on methodologies that emerge from collaboration with members of the communities, and in tandem with their community goals. We adopt the research approach outlined by Dupris and Silva (forthcoming) in which language revitalization activities are center stage, and from which the activities of language documentation, training, and linguistic analysis derive. Figure 3 shows a formal representation of this model.

Figure 3

Knowledge Flow (Dupris & Silva, forthcoming)



Because language revitalization is often led by the community, this model suggests that the other activities, that is, documentation, linguistic analysis, and training, coexist in the context of the community goals to revitalize their language. The model fosters a relationship in which stakeholders may explicitly address the skillsets they can bring to the project and to the community. This can be beneficial for the community to achieve their goals. Thus, products

and outcomes for language revitalization are no longer framed as afterthoughts of the scholar as a way to “give something back” to the community.

To illustrate this model at work, the project of developing digital animations and storytelling materials for the Desano traditional tales (Silva, 2016) is instructive. This project centered on the community's interest in promoting traditional knowledge to new generations of speakers using digital media. The project involved *training* of community members (artists) in digital animation technologies; it involved *documentation* activities, for example, participants used tools for annotating audio and video-materials used for creating captions for animations; and because animations provide the visual representation of the events in a narrative, the activities gave rise to explanations from the part of fluent speakers of the semantics of complex grammatical structures in the language, thus providing fruitful materials for linguistic analysis.

The model we adopt allows for the implementation of the concepts in the Indigenous Research Paradigm of the Spider Conceptual Model (Lambert, 2014). Furthermore, it provides an environment that fosters relationships and collaboration. This in turn promotes the training of community members as “curators for the languages,” insofar as they assume the responsibilities of researchers, language learners, and language teachers (Furbee & Stanley, 2002, p. 115). Finally, the work also promotes “collaborative consultation” (Leonard & Haynes, 2010, p. 269) for exchanging knowledge through language research work and for building long-term relationships based on principles of mutual benefit, reciprocity, respect, ethical engagement, and trust.

Making Meaning through a Web of Stories

Enos's spider web metaphor as both microenvironment and macroenvironment captures the essence of "time" across our stories. The web is a snapshot of *our time, now*, in Indigenous history as the generation bearing the legacies of forced Removal, relocation, displacement, dismembering, and diaspora. It is also our moment in time that has captured us, both individually and collectively, in enacting a critical consciousness and reawakening in the resurgence process. The following sections discuss three key themes, or tangential points, that emerge from our collective storywork: building relational spaces for language work in academia, upholding responsibility and speaking with an authentic voice, and ushering forth renewal and resurgence.

Building Relational Spaces for Language Work in Academia

All authors have in common the experience of navigating academia in order to advance their language work. There is a shared struggle in trying to locate our community-responsive language work within existing academic disciplines. Notably, we initially came together as a group in response to an invitation by the American Association for Applied Linguistics, which reflects a common assumption that language work belongs in Linguistics and related disciplines. For several of us, Linguistics was what Galla describes as an *opening to reconnect* to language. The siloing of Indigenous language work within academic disciplines leads to challenges for ILR scholars, including feeling isolated and needing to constantly explain and defend anything Indigenous-related. Established programs and institutes like AILDI have been significant to breaking down disciplinary silos and creating transdisciplinary spaces within institutions for language work. Leonard describes this as making spaces our own

despite colonial invasion. Within academia, these are spaces where generations of scholar-practitioners engaged in language work have chiseled away at the institution to not just occupy a space, but purposefully carve something that fundamentally changes the nature of the institution for everyone.

Notably, our group of authors represents multiple generations within ILR work. Those who are “younger” generations of scholars were invited into a supportive network. As Chew reflected in dialogue with other authors, “I am fortunate that, as an emerging Chikashsha scholar in ILR, I was brought into and mentored by a close-knit network of other scholars—several of whom are co-authors of this article—working to ensure the continuance of Indigenous languages. These mentors encouraged me to tell my story and created space for my story alongside theirs.” Leonard further offered in conversation with co-authors that knowledge is co-constructed in these networks rather than in disciplinary silos: “I now see more clearly how much my reclamation praxis draws from networks that go far beyond my tribal community, especially important being those with other Indigenous scholar-practitioners. Reading my co-resistors’ stories, even the parts that relate bad experiences, is ultimately a nurturing experience that reminds me of how colonizers keep trying to dismantle our Indigenous nations politically and ontologically—but they don’t succeed because we’re telling our own stories and building positive futures.”

Upholding Responsibility and Speaking With an Authentic Voice

During collective reflection, Kawai'ae'a offered a quote printed in an old 1917 Hawaiian newspaper called *Ka Puuhonua o na Hawaii*: “‘Ike ‘ia nō ke kanaka no kekahi lāhui ma kāna

‘ōlelo” (a person is recognized where they are from by the language that is spoken) (‘Olelo Hawaii’). Kawai’ae’a went on to say that “the reclamation of one’s language is personal and a family and community commitment. It is a kuleana (responsibility and privilege) of urgent proportions and immense social pressures for Indigenous languages against mainstream norms.” These words express a shared sentiment that language work is about upholding an urgent responsibility to oneself, family, and community. Upholding this responsibility requires one to be recognizable, through language and connection to place, to others. We understand this as speaking with an authentic voice and being in relationship with our languages. We become familiar with our languages and then use them in a familiar way so that our ancestors, community, family, and Indigenous colleagues can story with us. This is a means to provide well-being while also disrupting the (dangerous colonial) hierarchies of academia.

Our Indigenous languages express our authentic voices (Warner, 1999), and, as our stories demonstrate, dominant languages can also be claimed and used in ways that align with Indigenous values and further our ability to uphold responsibility to Indigenous communities. Chew’s story of speaking in a way perceived to be too colloquial for an academic presentation prompted other authors to share similar stories. Silva was reminded of a decision to write a collaborative paper with Desano in the Amazonian Portuguese variety familiar to all the authors: “A reviewer wrote their review in English correcting my Portuguese and pointing out that the paper wasn't really an academic paper. The editors asked me to revise but I told them I wanted to keep the ‘non-academic’ voice. They published it!” Similarly, Leonard shared a story of being a special editor for a Linguistics journal and

navigating tension between an Indigenous author and the main editors of the journal: “The main editors raised objections about the paper because of the style of writing. The author commented that the editors were trying to erase their voice as an Indigenous person.” Like Silva, the Indigenous author ultimately published the piece, which is now cited and taught in university courses. Returning to Kawai'ae'a's words, we understand that we have a responsibility and privilege to honor our identities and the identities of others. In doing so, we not only celebrate our languages, but contribute to the efforts already begun of building relational spaces for language work in academia.

Ushering Forth Renewal and Resurgence

All of our communities are engaged in a cycle of renewal or rebirth. Thus, our language work requires both envisioning the future and keeping the spirit. By finding strength in our authentic voices, we are raising our critical Indigenous consciousness (Lee, 2009). For example, Chew “learned to say Chikashsha saya (I am Chickasaw),” words in her ancestral language that revealed a responsibility to continue learning the language and sharing it with other Chikashsha. Similarly, Nicholas found that she would only need to call forth her language that resided deep within. In these ways, we are guided by the footprints of knowledges *from time immemorial* that our ancestors left for us to find our way back to our authentic selves and that compel us toward resurgence. A raised consciousness enables us to free our minds to imagine and envision Indigenous linguistic futures and to cut the shackles of colonization (Kirkness, 1998). Drawing on the four Bs shared by kupuna Betty Kawohiokalani Ellis-Jenkins, who has been described as “a web-maker and grand spider for many people” (Calizar, 2012, para. 3), Kawai'ae'a reflected to the group: “Reclaiming one's

language requires that one 'believe, behave, become, and belong' to the vision and stand vigilantly on course by raising one's language as a shining beacon of hope and guidance." In doing so, we claim our birthright for ourselves and for those yet to come.

Epilogue

Like Spider Woman, storying our language work has engaged us as co-authors in a collective process of connecting the multiplex strands of community linguistic histories and legacies and to the creation of a visual web of interconnectedness across the micro- and macroenvironments of our work. The spider web metaphor demonstrates how our language work, while multifaceted, multidimensional, and occurring across myriad locations, is an active and dynamic movement in the present, *sensed* through the concurrent reverberations of and across the multiplex strands. The spider web also elucidates the resiliency and persistence of an incessant movement undertaken since time immemorial forwarding positive Indigenous futures and presence—"that looking into [and to] the past is a part of looking forward and that our stories, like time, is not really linear" (Enos, 2017, p. 41). And, as Enos further notes, "the spider creates and modifies her web in response to the environment and need" (p. 42), assurance that our language work will continue to respond and unfold accordingly.

We have shared our stories amidst concurrently occurring traumatic events—a pandemic, natural disasters, social unrest, and contemporary economic crisis. The Hopi word, *koyaanisqatsi*, "life/the world out of balance," being uttered and heard again, is testament that these events are not unprecedented as reiterated in the Hopi prophecy; humankind has

played a profound role in the recurrences. Still, Indigenous presence is also testament of survival, rebirth, and resurgence; thus, our coming together to story our language work is not only timely but a mobilization of a collective resurgence that we have embraced as our responsibility to enact in our time of Indigenous history. We all carry a responsibility for restoring balance and harmony. Michi Saagiig Nishnaabeg writer Leanne Betasamosake Simpson writes that “desired outcomes are heavily influenced by the processes we engage in, our relationships [with humans and non-humans], and how we live in this world” (2011, p. 144). In the spirit of Spider Woman and with discovery and innovation as the driving forces, we extend an invitation to reset the course toward rebirth.

Glossary

Indigenous Peoples	
Chikashsha	Chickasaw
Hopisino	Hopi
Kanaka Hawai'i	Native Hawaiian
myaamia	Miami
Tikuna	community in Manaus

Indigenous Languages	
A'ingae	spoken by A'i in Ecuador and Columbia (also called Cofán or Kofán)
Chikashshanompa'	Chickasaw language
Desano	spoken by Desano in Colombia and Brazil
Hopilavayi	Hopi language
M̐teã	Indigenous language spoken in Columbia (also called Karapana)
myaamiaataweenki	Miami language
'ōlelo Hawai'i	Hawaiian language
Siriano	spoken by Siriano by in Columbia

Indigenous Language Organizations	
American Indian Language Development Institute (AILDI)	summer institute for language learners, teachers, and speakers held annually at the University of Arizona
Chickasaw Language Revitalization Program	Chickasaw Nation program focused on ensuring the continuance of the Chickasaw language
Hopilavayi Summer Institute	summer institute on Hopi community focused on Hopilavayi literacy and language revitalization work (2004–2010)
Ka Haka 'Ula O Ke'elikōlani	College of Hawaiian Language at the University of Hawai'i at Hilo
Natives4Linguistics	a special interest group of the Linguistic Society of America

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‘A‘ALI‘I AND WÁHTA OTERONTONNÌ:'A: SYMBOLS OF INDIGENOUS INNOVATION FOR LINGUISTIC AND CULTURAL RESILIENCE

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Abstract

Like the humble ‘a‘ali‘i shrub growing abundantly throughout the Hawaiian island chain or the gentle wáhta oterontonnì:'a (sugar maple sapling) native to the Haudenosaunee territory in the north-eastern woodlands of North America, both adapting and thriving in different and extreme environments, Indigenous people, amidst foreign pressures to change, are innovating in order to adapt and ensure the survival of their unique languages and cultures. This article examines how Indigenous people, with focus on Hawaiian and Kanien'kehá:ka (Mohawk people), are maintaining linguistic and cultural resilience through innovation, something that Indigenous people have arguably been doing since long before the arrival of colonists to their territories. All authors (three Hawaiian and one Kanien'kehá:ka) of this article are doctoral candidates in the Hawaiian and Indigenous Language and Culture Revitalization program at the University of Hawai‘i at Hilo, Ka Haka ‘Ula o Ke‘elikōlani College of Hawaiian Language.

Through autoethnography and personal interviews, this article highlights Indigenous innovation within four areas of practice: Hawaiian translation and interpretation, Hawaiian song and music, Indigenous food sovereignty, and Kanien'kéha (Mohawk language) documentation. For the purposes of this article, Indigenous innovation is summarized as innovation through retrospection, making informed decisions for the future based on the past. This article also brings to light obstacles and possible fears surrounding innovation due to the debate between purism (maintaining traditional knowledge and practice) and innovation (creation for adaptation to modern times). Just as the ‘a‘ali‘i or the wáhta oterontonnì:'a remain firmly rooted yet supple in their branches, allowing them to twist and

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bend with the ever-changing winds, Indigenous people must follow suit in order to ensure linguistic and cultural resilience.

Keywords: Indigenous innovation, resilience, language and culture revitalization, Hawaiian, Mohawk, Kanien'kéha

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‘A‘ali‘i and Wáhta Oterontonnì:'a: Symbols of Indigenous Innovation for Linguistic and Cultural Resilience

He ‘a‘ali‘i kūmakani mai au, ‘a‘ohe makani nāna e kula‘i.
I am a wind-resisting ‘a‘ali‘i shrub, no gale can push me over.
-‘Ōlelo No‘eau (Native Hawaiian Proverb)

The opening saying is a Native Hawaiian proverb used to describe a resilient people. The ‘a‘ali‘i (*Dodonaea viscosa*) is a humble and partially woody shrub that grows from the subalpine shrubland mountain tops down to the sandy coastal shorelines of Hawai‘i’s vast geological landscape. Growing on all eight major Hawaiian islands, the evergreen ‘a‘ali‘i thrives in coastal dunes, lava fields, dry-mesic forests, and wet forests and is able to tolerate extreme drought, strong winds, and salt spray (Native Plants Hawai‘i, 2009). Its sturdy root system is what holds itself grounded while its adaptable stalk and branches allow it to twist and bend in strong gales without breaking (Pukui, 1983). Due to the resilient nature of ‘a‘ali‘i, its enduring wood has been traditionally used by Native Hawaiians for building canoes and houses and also for making weapons and agricultural tools (Native Plants Hawai‘i, 2009).

Like the ‘a‘ali‘i, the wáhta oterontonnì:'a, or sugar maple (*acer saccharum*) sapling has long been a symbol of resilience and strength to the Haudenosaunee. Wáhta oterontonnì:'a is used to refer to the creator of human beings in the Haudenosaunee creation story,² who, one of two twin boys, creates everything upon the earth. In this story, Wáhta Oterontonnì:'a, also referred to as “Sapling” or “Tharonhiawá:kon” (he holds the sky), battles over control of the world with his twin brother, Shawíhskara (flint). It is said that Shawíhskara was covered

² For a detailed account of the Haudenosaunee creation story, see: Hewitt, J. N. B. (1903). Iroquoian cosmology. *Twenty-first annual report of the Bureau of American Ethnology, 1899-1890*.

in sharp flint since birth. After many battles between them, Wáhta Oterontonni:'a overcomes his brother, Shawíhskara, giving him the power to decide over the fate of the world that they have created. The wáhta, sugar maple tree, is a deciduous hardwood that grows native to Haudenosaunee territory in the north-eastern woodlands of North America. It is regarded as the leader of all trees, as it is the first tree each year to provide sustenance to human beings in the form of maple sap. The wáhta is also known to grow in a wide variety of soil types, in both sun and shade, as well as not being susceptible to high wind damage. The wáhta is even resilient in highly disturbed environments, such as those impacted by forest fires (Gilman & Watson, 1993; Payette et al., 2018).

Both the 'a'ali'i and the wáhta oterontonni:'a serve as metaphors for the resilient nature of Indigenous people who remain strong, flexible, and rooted while standing firm in the winds of change by adapting through innovation (see Figure 1 and Figure 2). As true observers and descendants of people who are mindful of nature's occurrences, Indigenous researchers demonstrate that prolific connections of environmental elements are complemented by academic research within Native frameworks.

Figure 1

Illustration of the 'A'ali'i as Metaphor for Indigenous Resilience by Ian Nāhulu Maioho

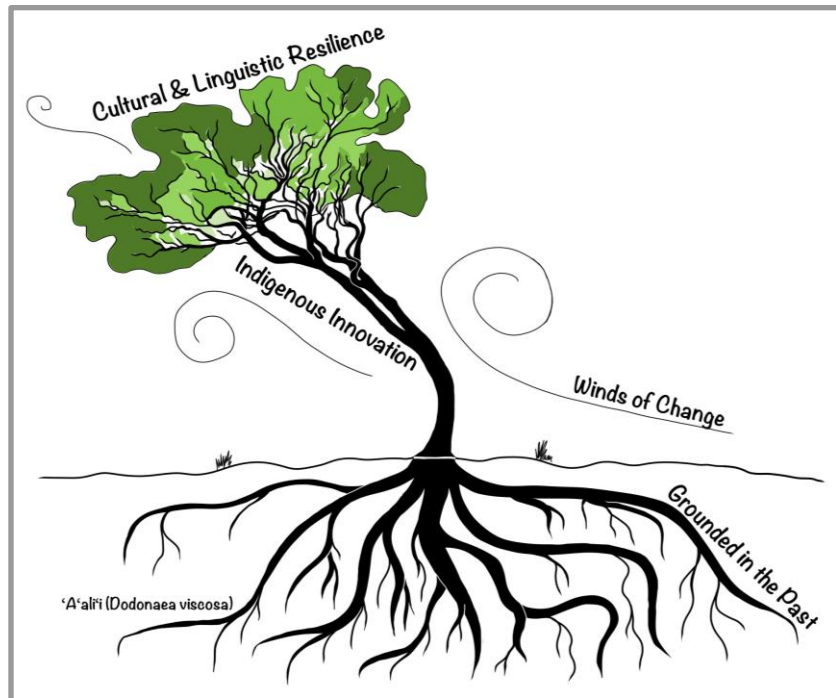
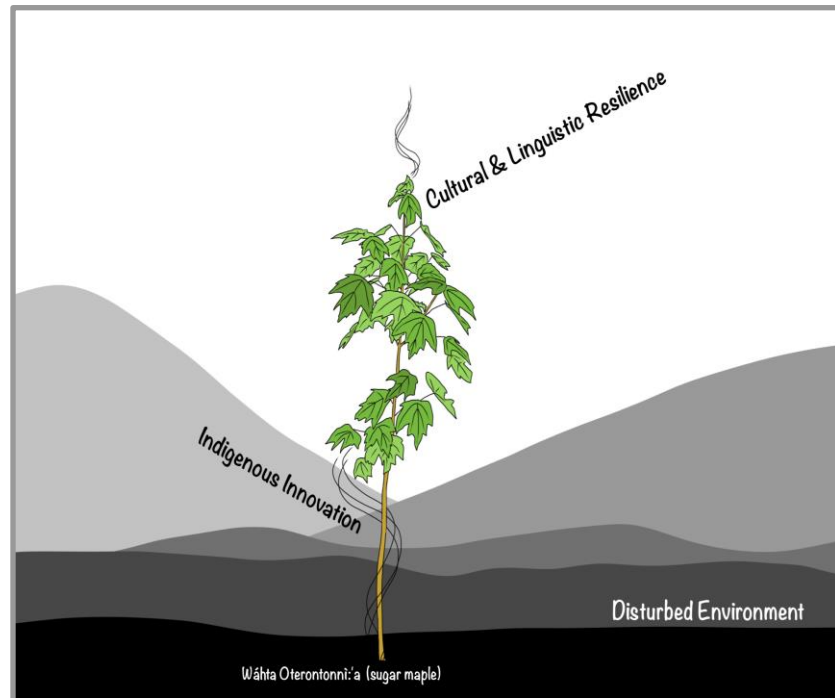


Figure 2

Illustration of the Wáhta Oterontonnì:'a as Metaphor for Indigenous Resilience by Ian Nāhulu

Maioho



A survey of events and experiences from our past plays a critical role in shaping our thoughts and actions for the future. It is through this grounding of retrospection that Indigenous people, communities, and civilizations are able to deem what remains significant, essential, and influential to its culture while remaining resilient in modern times through adaptation and innovation. This dualistic relationship between change and maintenance of cultural knowledge raises the following essential question and the focus of this article: How does innovation ensure linguistic and cultural resilience for Indigenous people?

As Indigenous cultural practitioners working within four respective fields: 1) Hawaiian translation and interpretation, 2) Hawaiian song and music, 3) Indigenous food sovereignty, and 4) Kanien'kéha (Mohawk language) documentation and revitalization, the researchers of this article are often confronted with the aforementioned question in the pursuit to ensure the revitalization, maintenance, normalization, and overall survival of Indigenous cultures within a world of ongoing pressures by colonial forces to assimilate into the dominant society.

This article will reveal the importance of Indigenous innovation for the resilience of Indigenous language and culture and will highlight the unavoidable truth—that cultures and languages must adapt with the changing of time to ensure survival. Through autoethnography and personal interviews with cultural practitioners working within the four aforementioned areas of practice, this article reports and highlights observations on how innovation is occurring within such practices. By creating an awareness of the possibility of innovation in these various fields, the outcomes will serve as outlets for future reference in the collective Indigenous pursuit to ensure the continuity of Indigenous languages and cultures.

Literature Review

Indigenous people have historically overcome profound adversity, namely what has been associated with colonial expansion and assimilation. Due to a certain resilience at individual, societal, and cultural levels, many Indigenous groups have been able to maintain their languages and cultures. Originating in psychology and later ecology, the term “resilience” generally refers to an entity's ability to overcome disturbances, namely external in origin

(Kirmayer et al., 2011). This article specifically focuses on linguistic and cultural resilience and how Indigenous people are re-organizing, innovating, and adapting in order to maintain and transform their language and culture to suit modern times.

Walker and Salt (2006) define resilience as “the capacity of a system to absorb disturbance and still retain its basic function and structure” (p. xiii). Furthermore, as discussed by Kirmayer et al. (2011),

In biological systems, resilience usually does not involve simply springing back to a previous state but is a dynamic process of adjustment, adaptation, and transformation in response to challenges and demands. (p. 85)

This resilience is not about returning to a previously untouched or uninfluenced state. Rather, it is a dynamic process rooted in retrospection that allows a people, their language, and their culture to adjust and transform in response to external forces while changing the environment that surrounds them. By creating new habits, adapting to contemporary development, and maintaining an Indigenous attitude through practice, a culture becomes resilient.

In the context of this article, linguistic and cultural resilience is additionally inspired by and grounded in the ideas of "resilience thinking" (Walker & Salt, 2006, p. 190), which, since the beginning of the 21st century, has spread in use throughout a range of disciplines. As stated by Roche (2017), resilience thinking is

A framework for analyzing complex systems that portrays sustainability as a dynamic rather than a static state, and places emphasis on adaptively responding to, rather than avoiding or resisting, disturbances to the system. (p. 190)

Rather than total assimilation without retainment of tradition, the most resilient of cultures embraced innovation and application of change as a way to complement their already genius existence.

The term “Indigenous innovation” has been discussed within many areas of study such as sociology (Walters & Takamura, 2015), ecology (Roche, 2017), psychology (Roche, 2017), and anthropology (Charlot, 2005). For the purposes of this article, Indigenous innovation is summarized as innovation through retrospection, making informed decisions for the future based on the past. It is understood that the resilience exhibited by Indigenous people is embedded in long-held practices of Indigenous innovation that are linked and fundamentally tied to what has come and been practiced before. This acknowledgement of the past can be exercised and expressed in many measures by Indigenous people by building one's literacy of language and culture. Before Indigenous innovation can occur, an individual or group will need to understand the urgency of a loss within the culture. Upon recognizing this incident, action in a strategic, sensitive, and sustainable manner is formulated to provide such justification in backing its Native beginnings. e holistic discourse surrounding linguistic and cultural Indigenous innovations, this article provides a detailed analysis of how chosen individuals showcase the importance of change for the survival of their language, culture, tradition, and lifestyle.

Methodology: Autoethnography and Personal Interviews

Autoethnography is “an approach to research and writing that seeks to describe and systematically analyze (*graphy*) personal experience (*auto*) in order to understand cultural experience (*ethno*)” (Ellis et al., 2011, p. 1). From the traditional Western academic view, personal narrative is often thought to lack objectivity, a concept deemed to be essential within evolving conventional academic discourses. Because of this, personal narrative is often viewed as a methodology that lacks accuracy and rigor. This is often the contrary within Indigenous paradigms that tend to blur the lines between the objective and the subjective and emphasize the critical importance of personal experience and personal context in coming to know and understand (Houston, 2007; Smith, 2013).

For the importance of congruent research methodologies, Indigenous researchers have the privilege of understanding subjectivities and perspectives from none other than their own cultural lenses (Chew et al., 2015). Therefore, from an Indigenous lens, autoethnography is an appropriate methodology for providing an authentic and representational voice of personal experience while simultaneously maintaining academic rigor (Houston, 2007).

For this article, autoethnography brings to light not only the connection between the researcher and their respective field of work, but also the relationship between the researcher and their fellow cultural practitioners. Because all researchers of this article are also practitioners within their respective fields of study, they have created long-lasting and personal relationships that far predate the writing of this article. From an Indigenous perspective, the importance of relationship is clear in the ideology that symbiotic

relationship leads to the survival of all: The farmer shares his crops with the fisherman who shares his fish. Because of this, personal interviews were employed as a means to gain perspective on the importance of Indigenous innovation in the four various fields of study. These interviews were semi-structured, allowing the conversation to flow where necessary. The interviewees were given the following prompts:

1. Tell me about the Indigenous innovation in your field of work.
2. How has Indigenous innovation been beneficial in your field?
3. How does Indigenous innovation in your specific field ensure the resilience of language and culture?
4. What are some possible challenges and obstacles that arise from Indigenous innovation?

As we are Indigenous researchers and practitioners in various fields, it would be a folly to not pursue this research inclusively. It allows a resurgence of Indigenous thought and perspective reformatted to fit a modern time. It fosters the ideas of interconnectivity and interdependence in the sense where the “one” works for the “whole.” It challenges the Western framework of what true methodology actually is: for the betterment of those studied, not for the potential gain of the researcher. It is for these reasons that this article portrays the research in this fashion.

Autoethnography

Hawaiian Translation and Interpretation: Ian Nāhulu Maioho

My name is Ian Nāhulu Maioho and I was born in Honolulu, O‘ahu and raised on the rural island of Moloka‘i. I am of Native Hawaiian descent, and I was immersed in Standard

American English and Hawaiian Creole English at home while learning 'ōlelo Hawai'i (Hawaiian language) at school. Because of this multilingual upbringing, I was aware from a young age of the existence of a complex multilingual and multicultural world.

After graduating with my master's degree in Indigenous Language and Culture Education from the University of Hawai'i at Hilo in 2014, I began working in 2015 as a translator mentee at Awaiaulu Inc., an organization dedicated to making Hawaiian knowledge accessible through translation. There, I was mentored on translating and interpreting Hawaiian language material from the 19th and early 20th centuries for a contemporary 21st century audience. I learned how to bridge resources and knowledge from the past to a current audience through translation and interpretation. After 2 years, I became a mentor as I took two mentees under my wing to become Awaiaulu translators themselves.

Through my work at Awaiaulu, I have made lifelong connections with fellow Native Hawaiian translators spanning the Hawaiian archipelago and beyond. The three individuals whom I interviewed for this article are seasoned translators and are currently employed at Awaiaulu Inc. They represent different "generations" of Awaiaulu Inc. totaling a sum of over 15 years of experience there. Kalei Kawa'a was a mentor of mine who has been at Awaiaulu for more than 7 years; another interviewee, Ha'alilio Solomon, a fellow mentee, has been at Awaiaulu for 5 years; and another interviewee, Aolani Ka'ilihou, a mentee of mine, has been at Awaiaulu for 3 years.

Innovation in Hawaiian Song and Music: Nicholas Keali'i Lum

Music, in the most general sense, has been a foundational aspect of my life that continues to shape and mold my character, my direction, and my consciousness. I come from a musical family and was raised, with my older brother, by two loving parents in Ha'ikū, He'eia on the eastern side of O'ahu. I fondly remember music being a constant throughout my childhood, whether it was listening to Hawaiian music on the radio or strumming the 'ukulele at our weekly family gatherings. This early nurturing of my love for Hawaiian music set the stage for a lifelong commitment to ensuring the resilience of not only Hawaiian music, but Hawaiian language and culture in totality.

After my graduation from the Kamehameha Schools Kapālama, I furthered my education at the University of Hawai'i at Mānoa obtaining a Bachelor of Arts degree in Hawaiian as well as a Bachelor of Arts degree in music. I then continued on to higher level education and obtained a Master of Arts degree in Hawaiian. It was during this time that as "Keauhou," we began to record and release studio albums. Three albums were released in 3 consecutive years and garnered a total of 17 Nā Hōkū Hanohano awards, the Hawaiian equivalent of the American Grammy.

I have conducted two interviews with famed and innovative Hawaiian artists from different generations, Robert Uluwehionāpuaikawēkiuokalani Cazimero and Kainani Kahaunaele. During my college years, I became an 'ōlapa (hula practitioner) of Hālau Nā Kamalei o Līlīlehua under the direction Cazimero, a multi-award-winning musician, haku mele (song writer) and kumu hula (hula teacher). Coming from high musical prestige with "The Brothers

Cazimero” as well as “The Sunday Mānoa,” Cazimero illustrates a constant reminder of where we have been (specifically during the Hawaiian Renaissance and the Indigenous innovation found there), where we are now, and where we must go as practitioners of mele Hawai’i to ensure its resilience.

It was also during these years that I fostered many personal relationships with my fellow practitioners of Hawaiian song, one of whom is Kainani Kahaunaele, a multi-award-winning musician, haku mele, and teacher at Ka Haka ‘Ula o Ke‘elikōlani, College of Hawaiian Language at the University of Hawai’i at Hilo. She is known for her innovative style of Hawaiian music that is grounded in Hawaiian thought and perspective.

Indigenous Food Sovereignty: Naupaka Damienne Joaquin

Born into a genealogical lineage of Portuguese, Filipino, and Hawaiian ancestry, I recall my childhood being a culturally diverse one. Growing up in small town areas on the island of Maui, I, along with my siblings and cousins, were cared for dearly by our grandmother, Louisa Kaaihue Artates, in our early childhood days into adulthood. Widowed with a fixed income, my grandmother was always able to be hospitable to all who came to visit. The first few words of her greeting never fail to persist, “*You bettah go eat!*”

It was after adolescence and my years of formal institutionalized education that I came to appreciate and research the idea of feeding. How did this proverb of my childhood, “*You bettah go eat,*” seem so simple, but yet was rooted in an Indigenous way of thinking? This path of discovery and understanding the importance of feeding came years after I learned

and applied a Hawaiian epistemology to my urbanized lifestyle. Once fluent in the language, I saw that my changes in behavior, values, and choice were backed by my literacy in stories, myths, legends, and accounts that suggest, within its history, the significance of study.

It also became evident to me as a mother of a young, active family, that the high costs of living on an island that once relied wholly upon sustainable resources was now difficult due to colonial oppressions. It was through my work as a Hawaiian medium educator where I was able to work among professionals of all sorts that I began to pursue a couple of individuals who were brought into families/communities where eating was the means of survival.

I have chosen two individuals who are deemed to be experts in the philosophy of sustainable gathering and farming to highlight important perspectives of an Indigenous food sovereignty lifestyle. These individuals will serve as specialists in their respective fields and can be retrieved to further expand upon areas of question or inquiry. Ali'i Robin Hauani'o is the son of two papaya farmers from Pāhoa, Hawai'i who shares his insight as to how education influences students, particularly in the ways of farming and using tools and how work ethics are introduced through performance. Hauani'o has a unique attitude, cultural understanding, and linguistic background that best exemplifies what and how ancient farmers may have practiced. Tetauavavaopu Teikitekahioho, a noble home farmer, is another participant originally from Nukuhiva, French Polynesia. As an educator, I have had the privilege of meeting with Teikitekahioho for a number of years. She has witnessed my growth as a mother to my son and shares the commonalities of Indigenous lifestyles that are important to instill within our children while practicing familial traditions.

Kanien'kéha Documentation for Revitalization: Ryan DeCaire

Among the many areas in which language revitalization work takes place in Indigenous communities, documentation is especially important for any opportunity at language revitalization. I learned this principally through my experience growing up and working in Wáhta Mohawk Territory, a small Kanien'kehá:ka (Mohawk) community in Ontario, Canada with very limited Kanien'kéha (Mohawk language) vitality.

I have become intimately involved and focused on documenting the language vitality situation in Wáhta and other Kanien'kehá:ka communities. The completion of the first ever language revitalization plan in Wáhta led me to become formally involved in developing and completing the first language documentation project ever in Wáhta. This project was an oral history language documentation project called *Tewanónhstat ne Rotiksten'okòn:'a Raotiwén:na* "Preserving the Voices of Our Elders" (Wáhta Mohawks, 2019). The final product is a 3-hour video in a documentary format where highly proficient and semi-speaker first-language speakers talk about Wáhta history, changes in the Wáhta culture and community over time, and the importance of language to community and Kanien'kehá:ka identity and well-being.

From my experience in documentation work in Wáhta, I have come to understand the importance of being innovative to acquire a more robust account of how the language is actually used on an everyday basis in Kanien'kehá:ka communities. This can be done, for example, by focusing more on "learner-directed speech," which allows us to capture more authentic language, such as language functions, idiomatic expressions, metaphors, and

conversations concerning the everyday lives of our speech community (Amery, 2009; Sugita, 2007), ultimately producing something that will be useful to language revitalization in the Kanien'kehá:ka community today and in the future. I have learned this in part from my own experience, but also from sharing with other Kanien'kehá:ka language practitioners engaged in documentation work, including Tahohtharátýe Joe Brant and Nicole Bilodeau, whom I interviewed for this article.

Findings

Across all four fields of study—Indigenous innovation in Hawaiian translation and interpretation, Hawaiian song and music, Indigenous food sovereignty, and Kanien'kéha documentation—a total of nine cultural practitioners were interviewed. They served as representatives for their individual fields to explain their perspectives on the importance of Indigenous innovation for the resilience of language and culture. Included below in Table 1 are the names of those interviewed separated by cultural practice.

Table 1

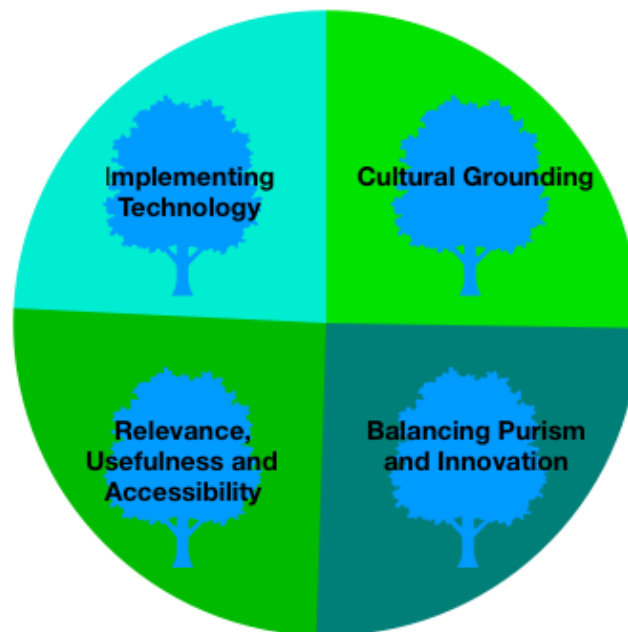
Indigenous Innovators and Expert Areas

Hawaiian Translation and Interpretation	Hawaiian Song and Music	Indigenous Food Sovereignty	Kanien'kéha Documentation
Aolani Ka'ilihou	Robert Cazimero	Ali'i Hauani'o	Nicole Bilodeau
Kalei Roberts	Kainani Kahaunaele	Tetauavavaopu Teikitekahioho	Tahohtarátýe Joe Brant
Ha'alilio Solomon			

Upon completion of the interviews, each individual researcher transcribed their interviews and culled the main topic quotes from each. These quotes were then analyzed collectively and sorted into four main themes that each interviewee highly stressed during their interview. The themes are shown in Figure 3. Through strict analysis, these themes support how Indigenous innovation ensures the resilience of language and culture.

Figure 3

Theme Sequence of Analysis Outcomes



Technology

The first topic to be discussed is the Indigenous implementation of foreign technology. Technology is “the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment” (Encyclopaedia Britannica, n.d.). Being something that applies knowledge to the practicality

of human life for the purpose of changing, technology was not surprisingly a common topic discussed by several of the interviewees in regard to Indigenous innovation. The research has found that a form of Indigenous innovation is the implementation of foreign technology by and for Indigenous people to assist in their linguistic and cultural resilience. Areas that foreign technology has been adopted and adapted by and for Indigenous peoples are technologies aiding in food production, in recording and documentation, in keeping the purity of literature, and in creating platforms for collaborative work.

When talking about food production, “Hawai’i is so ahead,” said Teikitekahioho, an Indigenous woman of Nukuhiva, Marquesas Islands, French Polynesia, upon reminiscing about her first observations of Indigenous innovation in Hawai’i. Teikitekahioho mentioned that technology made things fast and easy. Hauani’o shared that modern tools now used in Hawai’i are a step up from traditional Native Hawaiian tools and his experience in modern farming and agriculture helped him apply modern technology such as shovels, pickaxes, and rotary-tillers to help him become the successful Indigenous farmer he is today. He, however, adds that the ‘ō’ō (traditional Hawaiian digging spade) is still necessary for his practice in contemporary times. Hauani’o shares the reasons why technology was and continues to be useful:

It wasn’t too hard to incorporate those tools and machinery, being that the machinery would help to multiply one individual’s efforts. Where, as opposed, maybe would need to have 3-4 people to do the job, we’re [utilizing] our equipment back here, one person can do [the job]. . . . When it was just me and ‘Anakala Isaiah, [it] was just the two of us, so the machine [was] a big help. . . . Then [when educating] our students, we always

try to make the effort to tie the past with the modern and just remind them that these tools [are what is] available to us now.

One important historical instance of Western technology that was made available and utilized by Native Hawaiians was writing orthography when it was first introduced to the Kingdom of Hawai'i by Calvinist missionaries in the 1820s. During those early years of learning literacy in Hawai'i, the Native Hawaiian king at the time, King Kamehameha III, proclaimed that his kingdom was one of literacy and thus Native Hawaiians adopted the technology of reading and writing as being a symbol of the kingdom, and, therefore, a large part of their Native Hawaiian identity (Kamakau, 1868). This adoption of literacy translated to decades of innovation of this technology as a means of not just teaching and learning the Gospel, but also recording Native Hawaiian literature and communicating cultural practices with nationwide Native Hawaiian audiences (Nogelmeier, 2003). Today, technologies such as tape recorders and video cameras assist in this custom of recording Native Hawaiian knowledge and disseminating it to the larger Indigenous community. Brant, a Kanien'kéha documentation practitioner in Canada, explained, "we use 'colonial instruments' that are most efficient. We need to use the practical and efficient pieces of technology that we can in order to get this done." Brant also added that "audio/video is also important to help in understanding the more pragmatic aspects of speaking the language such as gesturing or posturing." Bilodeau, another Kanien'kéha documentation practitioner in Canada, shared that many recordings of Indigenous language Native speakers have been audio recorded and were not disseminated or formatted in ways that are physically accessible to the larger Indigenous community. Bilodeau shared how audio/video recordings

help to innovate traditional Indigenous storytelling into a new platform that is easily disseminated and made accessible to the larger Indigenous community:

I think that our approach was kind of like a documentary approach rather than just collecting interviews. It was more of an approach that you would see if you were watching a documentary on any modern topic. I think that was kind of innovative, that we were using this format for storytelling that we haven't seen that much of in relation to language.

In the space of translation and interpretation, many Native Hawaiian scholars and educators have been summoned to become translators and interpreters due to the growth of language usage among younger generations (Wang, 2018). One of these translators, Solomon, shares how he is able to apply linguistic knowledge in his practice of language translation: "Innovation I would say I participate in is through applying linguistic knowledge that I have gained through my graduate program to help offer alternative explanations, descriptions, or pedagogies about 'ōlelo Hawai'i to other learners and speakers." Many of these young translators are learning the art of translation on virtual platforms and collaborating in translation work via these same platforms. One organization that is pioneering this innovative approach to building the capacity of Hawaiian language translators is Awaiaulu Inc. One of Awaiaulu's key personnel, Roberts, shared,

Technological advances that we have today, [allow for] our Awaiaulu personnel [to] have spanned the state of Hawai'i and even Aotearoa. Technology and its tools have allowed for that, where in the past, we were limited to meetings and projects strictly operating out of O'ahu. Though O'ahu still serves as the main headquarters, we are

able to work online through various applications and software from Skype to Google Suite etc. It's allowed for us to grow and expand like we never imagined.

Relevance, Usefulness, and Accessibility

The need for language and culture to be relevant, useful, and accessible to current and future generations of all ages was a theme shared among our interviewees. Almost all interview respondents stressed that innovation in their respective fields is necessary for culture and language to remain relevant and useful and, therefore, accessible to the present lives of their Indigenous communities. This mirrors what is said in the literature as well as what was experienced by the researchers within their work as Indigenous practitioners.

The idea that if our own people, with special attention towards children and future generations, are going to play a role in maintaining linguistic and cultural resilience, they need to understand their language and their culture as being relevant and useful within their everyday lives despite modern world changes. This points to the notion that language and culture are not solely suited for ceremonial or ancestral domains, which modernization in Indigenous communities can often suggest, and that language and culture must be commonplace, usual, and, of course, be accessible to people with different knowledge and experiences. This is especially important for younger generations who often face societal pressures to “fit in,” leading them to adopt dominant cultural norms.

Brant speaks directly to this when talking about how language documentation needs to consider the lives of present and future language learners, most of whom are and will be

second-language learners with very different life experiences from first-language elder speakers of Kanien'kéha: "We need to bring it [the language] into their lives. Learning has to be applicable to their lives. They have to see it as an everyday occurrence. As a contemporary and relevant activity." Brant is speaking to the idea that although all language documentation could be useful to a speech community in some way or another, most historical and present documentation of Indigenous languages has often not focused on capturing language that new generations of speakers will be compelled to use or need to use on an everyday basis. He adds that language documentation and pedagogical materials developed from such documentation must "concentrate on things that affect language learners every day" and that "it has a practical application that is going to affect language proficiency." This points to the idea that context really matters and that for a language and culture to remain resilient, its speakers must allow it to adapt and adjust with changing societal norms so that it remains relevant and, therefore, useful and accessible to the speech community. Bilodeau, another practitioner who has worked in language documentation, puts special attention towards this when she states that "we need to think about what will be useful to people beyond just documenting it and storing it somewhere," and that "you have to keep the context in mind so that you're creating resources that are useful and are in line with wherever you're at in your language vitality as a community."

If Indigenous language and culture are going to be resilient in the face of pressures to adopt the dominant global culture, innovation must take place that allows the language and culture to remain relevant by adopting aspects of dominant culture while being informed by linguistic and cultural knowledge and traditions. Hawaiian musician, Kahaunaele, talks about

the need for bridging classic Hawaiian music with more popular forms of music as a means to increase exposure and accessibility to Hawaiian music and make it more relatable and “consumable” to listeners:

One of the most prevalent benefits would be to encourage the young people of today, or even our community, to expose our classic mele in the styles that the general community consumes. And unfortunately, Hawaiian music, as we call it, isn’t as popular, or isn’t as integrated into every household as we would like it to be. Because, as musicians, we love all kinds of music as well, and it’s a natural progression, natural evolution, to bring our poetry into the music styles that we love.

Contrary to many conservative ideologies that argue for language and culture to remain in their “purest” form, untouched by dominant society, this suggests that innovation is, in part, defined by bringing together aspects of Indigenous and non-Indigenous culture and language and that doing so makes it more relevant and accessible to present day Indigenous people. This, as a result, leads to greater linguistic and cultural resilience. Roberts, regarding the role of innovation in translation and interpretation, points directly to this when she states that “if Hawaiians are innovating, then they are engaging deeply and meaningfully in knowledge sets that originate across time while finding useful, functional, perhaps crucial current relevance. This is what I believe responsible, true innovation aims at.” This touches on the related theme identified in our research, that relevance is in many ways dependent on maintaining a balance between being informed by long-held Indigenous knowledge and traditions and also changes in modern society. Ka’ilihou, regarding the mission of the organization Awaiaulu Inc. and the role of translation and interpretation within that organization, points to this and how

it is necessary in ensuring that linguistic and cultural content are relevant and accessible to Indigenous people with different degrees of linguistic and cultural knowledge and experience:

Its [Awaiaulu's] translation services aim to bridge a gap that exists between the haves and the have-nots. The projects that are produced are not standalone translations, but instead, a supplemental text to assist both Hawaiian language speakers and non-speakers alike in interpreting the text. These supplemental translations provide a gateway for those who are interested in learning the language to "dip their toes," so to speak, in the material that they could have access to if they are in fact interested.

Ultimately, this highlights that, as human beings, we are in constant change and flux. If Indigenous languages and cultures are to become and remain resilient, it needs to be understood that lives and experiences change, that environments change actions, and that actions change environments. This has a constant impact on what is useful and relevant to the lives of Indigenous people. Brant makes this clear when he states that "the focus [of language documentation and revitalization] is going to change every single year," so that it can cater to what is relevant and needed by the Indigenous community.

Cultural Grounding

Innovation can be a controversial topic when ethics, design, and cultural traditions are altered. This alteration of culture, which expands to language, behavior, occupation, and even arts, can be illustrated as a means of resilience. Preservation through practice is expected in order to be responsible and accountable for modifying any feature of culture.

A recurring theme that the interviewed practitioners found impactful and necessary for resiliency in their area of work (translation, song, Indigenous food sovereignty, and language documentation) is that of cultural grounding. Kahaunaele, artist of contemporary Hawaiian music and second-language speaker, shared two significant terms that may possibly lead to a standard of measuring Indigenous innovation: prerequisite and delivery.

The prerequisite would be to be a practitioner of Hawaiian music, not just to know about the music, but to know about the delivery of it. And to know that there are poetic standards. There are levels to *haku mele* (song writing). We all began at ground zero; it takes years of practice and passion to become better.

Attaining prior Indigenous knowledge as a prerequisite to practice, innovate, and perpetuate has been highlighted here as a fundamental feature of responsible innovation. The delivery, or transmission, of knowledge through teaching and creating also serves as a significant detail in change and modification of cultural practices. Delivery in relation to innovation supports the standards of cultural grounding that encompasses not only the relationship of people but also the environment or space.

Adding to the standards of cultural grounding, literacy becomes apparent to the innovator in reclaiming and defending their tradition. The capacity of knowledge that such an expert acquires originates from Indigenous resources: genealogies, stories, legends, first-hand accounts, and later outside references that complement or build upon understanding. Further learning and research is expected to gain sufficient knowledge in any area of study. When comprehension occurs, expansion of knowing takes place. Hawaiian translation specialist, Roberts, brings attention to the power of imagery in her scope of work and how

this allows for interpretation by those who have limited knowledge or are at the beginning stage of understanding how to be innovative:

For example, there are times in which, as translators, our knowledge of what we are translating is limited. This can occur for many reasons, but often because we are not familiar with the practice that has been documented. Our own images, as translators, highly influence how we translate those sections.

Roberts, along with her fellow translators at Awaiaulu Inc., recognize the amount of reference needed to accurately define and transcribe some of Hawai'i's most endearing historical accounts.

To possess special skill and knowledge or be trained by practice are both characteristics of an expert. The excellence in practice of the individual does not occur immediately. Observation, listening, silence, and imitation are a part of an Indigenous learning process. From the previous and upcoming informants that were acknowledged and interviewed, many promoted the idea of continuity through learning. Whether generational, institutional, or formal, education has many constructs that have similar goals in producing a fine apprentice. Throughout many traditional features of culture—language, occupation, or arts—its very survival is highly associated with innovation and change. Teikitekahioho reminisces about the time spent accompanying her fisherman father who spoke, acted, and lived in a sustainable and resourceful way: “My dad was teaching me, grow your own food for your own family. I like to eat the fish from the ocean. I know I can get food from the ocean. That is how I wanted to teach my son. I wanted to feed like how my makua (parent) was teaching us.” Moving to Hawai'i from French Polynesia, Teikitekahioho maintained her

training practices of providing for her family in an Indigenous manner to the best of her ability. Innovations such as tools, machinery, and markets were all advantages to her already established praxis of knowing. If the circumstance is appropriate, the continuity of culture will be shared amongst those who will respectably perpetuate practice by responsible innovation.

Balancing Purism and Innovation

This final and heavily discussed topic deals with the balance between purism and innovation. The consensus between interviewees is that the vital importance of this balance exists in the middle of these opposite extremes. Just as a scale balance operates, there must be equal parts at each end to maintain harmony. The same holds true with the balance of traditional knowledge and innovation. When the overwhelming focus is placed on one or the other, the scale topples.

Cazimero speaks of this balance found within the two iconic and innovative Hawaiian music groups of which he was a part:

When Roland [Cazimero] and I went into being “The Brothers,” Roland was the one who was more innovative in a style that was not necessarily Hawaiian, and so my job, and even with “The Sunday Mānoa,” I felt that my job was to bring the Hawaiian part to it so that we always made sure that we had a solid foundation, a base, because I think that’s really important.

This “base,” of which Cazimero speaks, is the grounding in culture discussed previously. Innovation relies on a previous grounding and foundation of cultural knowledge in order to

birth a new iteration of itself for modern consumption. This further reveals the symbiotic relationship between old and new and raises another caveat for its balance: Indigenous innovation is a spawn of traditional knowledge, not a separate entity lacking genealogical connection.

Challenging this balance are those who exist solely at the polar opposite ends. On the topic of Kanien'kéha, Brant states that "the purism approach and ultra conservative approach is very likely what is leading the language to its extinction." If one holds all value in what came before with no thought of the future, that of old vanishes into antiquity. If one holds all value in the creation of new, that of old becomes forgotten. Solomon describes this struggle in his practice of Hawaiian translation and interpretation:

I notice one of the tensions in the revitalization movement of 'ōlelo Hawai'i is the coining of new terms. This is certainly addressed and complicated in the field of translation theory, and the spectrum between "keep it traditional" and "invent anew" can be quite literally applied to the different institutions that teach 'ōlelo Hawai'i today. These differing philosophies create massive obstacles and discrepancies in the long- and short-term goals for each institution and begin to erode the unity of the movement.

The only path that allows true coexistence is found in the integration of both old and new at equal parts and value. Perhaps that is the true meaning of a living culture—a culture that is so firmly rooted that innovation is welcomed with open arms.

But how does one successfully integrate innovation with tradition? As mentioned previously, a solid grounding in culture is mandatory before innovating. Brant raises a strong example of this in terms of Kanien'kéha: "It is important for second-language learners to have a high proficiency before you create with the language. You need to have the proficiency and Kanien'kéha way of knowing before you start messing with the language." Furthermore, approval should be granted by respected individuals of the practice before innovation begins. Kahaunaele speaks of this in her Hawaiian song writing process:

As a composer myself, I always think, "What would Larry [Kimura] think?" "What would Hiapo [Perreira] think?" "What would Kauanoe [Kamanā] think?" "What would Kalena [Silva] think?" People who practice chant and hula where we see innovation there all the time.

This approval not only provides backing for the innovator, but also reassurance that the new creation is that of the culture, not of foreign origin or desire.

Balance is a concept that traverses many boundaries and, in all situations, provides harmony and stability. The same holds true for the resilience of language and culture through Indigenous innovation. Ultimately, this is about survival, perpetuating our practices, philosophies, and ways of life to maintain our distinction as Indigenous people. Bilodeau frames this idea with truth and conviction: "Adapt or die. At this point, it's about survival. Maybe not for all Indigenous communities, but for us, it is. Survival, as in continuing to live and to exist as distinct people—those, to me, are the same."

Conclusion and Implications

Through autoethnography and personal interviews within four specific fields—Hawaiian translation and interpretation, Hawaiian song and music, Indigenous food sovereignty, and Kanien'kéha documentation—this article highlights the importance of Indigenous innovation for linguistic and cultural resilience. The hope is that this article may serve as a reference for appropriate Indigenous innovation as well as become a driving advocate for innovation in Native cultures and languages abroad to ensure their survival. Like the durable 'a'ali'i shrub or the wáhta oterontonni:'a that adapt in extreme habitats and ecosystems, Indigenous people too continue to exist throughout the world, persisting and advancing in foreign social environments. By remaining rooted in a medium that grounds Indigenous communities and extending their reach to allow space for creativity amidst winds of change, Indigenous languages and cultures will continue to blossom and produce saplings that will carry forth new generations of hope and continuity.

It is our hope not only as the writers of this article, but also as Indigenous people, that more of our future actions will take a leap into responsible innovation by acknowledging its features of longevity, relevance, and prosperity to ensure the resilience of our Indigenous languages and cultures. Let us continue to let nature be our guide, allowing for adaptation and creation, so that we may continue to exercise autonomy over our own destinies.

Glossary

‘A‘ali‘i	Shrub growing abundantly throughout the Hawaiian island chain
Awaiaulu Inc.	An organization dedicated to making Hawaiian knowledge accessible through translation
Haku mele	Song writer
Haudenosaunee	The Iroquois people
Kanien‘kéha	Mohawk language and culture
Kanien‘kehá:ka	The Mohawk people
Kumu Hula	Hula teacher
Mele Hawai‘i	Hawaiian song
‘Ōlapa	Hula practitioner
‘Ōlelo Hawai‘i	Hawaiian language
‘Ōlelo No‘eau	Hawaiian proverb
‘Ō‘ō	Digging stick
Shawíhskara	“Flint” –One of the male twins in the Haudenosaunee creation story
Tharonhiawá:kon	“He Holds the Sky” –One of the male twins in the Haudenosaunee creation story
‘Ukulele	Musical instrument of four strings
Wáhta	Sugar maple tree (Mohawk)
Wáhta oterontonni:‘a	(sugar maple sapling) native to the Haudenosaunee territory in the north-eastern woodlands of North America

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Naupaka Damienne Joaquin is the daughter of Warren Gouveia of Hāli'imaile, Maui and Lourdes Gouveia of Keokea, Maui. Joaquin is an educator in Hawaiian medium education and lives a novice lifestyle raising poultry and producing wild boar sausage along with her family in Puna Hawai'i.

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Ian Nāhulu Maioho is a keiki of Moloka'i Nui a Hina and works for Kamehameha Schools. He was recently a translator and mentor at Awaiaulu Inc. where he helped to translate hundreds of Hawaiian language newspaper articles to increase public accessibility and for future printing.

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GANGGALI GARRAL DJUYALGU (WEAVING STORY): INDIGENOUS LANGUAGE RESEARCH, THE INSIDER–OUTSIDER EXPERIENCE AND WEAVING ABORIGINAL WAYS OF KNOWING, BEING AND DOING INTO ACADEMIA

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Abstract

Aboriginal weaving is used as a method to explore new understandings and extend on the notions of insider–outsider in the research space. Just as weaving requires different strands of fibres, the insider–outsider researcher finds ways to enable the co-existence of differing authorities, roles, and responsibilities as community Elder and emerging researcher alongside the development of culturally resonant research approaches and methodologies.

This paper weaves together strands that are a representation of Aboriginal knowing, being, and doing: cultural practices that influence Indigenous language revitalisation research. As an Indigenous Australian researcher, community Elder, language teacher and activist, the lead author Radley is experienced in the complexity of performing multiple roles while undertaking research. She relays the tensions inherent in an insider–outsider researcher identity through her research into the revitalised Gathang language (Mid North Coast, New South Wales, Australia). Aboriginal academics, co-authors Ryan and Dowse explore Indigenising academic spaces, the politics of elevating Aboriginal protocols to transform research ethics, and the importance of listening and telling our stories in our own ways. Together, the authors interweave their stories to demonstrate partnerships between research and culture and speak of the importance of Indigenising the academy.

Keywords: Aboriginal researcher, language revitalisation, weaving story, insider–outsider, ethics processes

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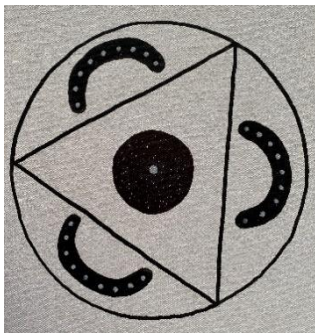
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<http://dx.doi.org/10.18357/wj1202120293>. Special Issue on *Indigenous Language Revitalization: Innovation, Reflection and Future Directions*, Guest Co-Editors Drs. Onowa McIvor and Kari A. B. Chew.

Minya Djuyal (This is The Story)

Djiyagan (sisters) are moving grasses in a free weave motion, meaning there is no set pattern. Grasses can be woven vertically, horizontally or diagonally to fill the spaces to create butjin (basket). Thus, we are telling our stories in ways that go beyond the expected academic writing formulations to capture the interconnectedness that exists within each story. We interweave our stories, at times in the first person, interspersed with academic writing and Gathang language to communicate to the readers the making of something new in a style that is our own.

Figure 1

Sisters Weaving Stories



Note: Artwork and story by Anjilkurri Radley: outside circle: the connection to Mother Earth; semi-circles: sisters sitting; small circles: contributions made from the heart; central circle: creation; triangle: transformation.

Aboriginal people from (what is also known as) New South Wales (NSW), Australia have been weaving for tens of thousands of years, or as we prefer, since time began. Weaving provides a resonant structure for storytelling. Story is a key essence of what Martin and Mirraboopa (2003, p. 208) have referred to as our ways of “knowing, being, and doing.” It has given us abilities to relate, connect, and understand as well as view our world

through a lens that is our own. Story is interwoven into the fabric of our lives. Drawing on weaving as a method to express our stories aligns with cultural practices that see our women sitting in circle weaving and djuyaliyn (talking) (see Figure 1). We describe weaving as method and cultural process as our individual strands weave together with collective ways of knowing, being, and doing openly and freely. We extend on Chew's (2019) metaphor of weaving as cultural practice to convey a model for planning and decision making that acknowledges ancestral wisdom. Weaving is an intangible knowledge process, narrative, belonging, and knowledge transference. This is beyond metaphor, as metaphor² suggests our ways are less legitimate than theory or method. It is conceptual framework building in its most resonant form.

As we djiyagan visualise strands of grasses coming together, our stories interconnect to construct butjin (basket), which carries our hopes for transforming the academic system. Butjin (basket) holds Aboriginal cultural ways of knowing, being, and doing the space to explore the insider-outsider notion (Smith, 2012); provides insights into what is needed to support Aboriginal researchers to achieve their goals; and gives voice to the importance of honouring Aboriginal protocols alongside the academy's ethics processes within the context of language revitalisation research.

The three Aboriginal women researchers who are weaving and storytelling are Anjilkurri Rhonda Radley, Tess Ryan, and Kylie Dowse. Anjilkurri Rhonda Radley is a proud Goori³

² Tuck, E. & Yang, K. W. (2012). Decolonization is not a metaphor: *Decolonization: Indigeneity, Education & Society*, 1(1), 1-40.

³ This article uses various terminology interchangeably to discuss Australia's First Peoples such as Aboriginal, Torres Strait Islander, Indigenous, Black, and Goori.

woman with strong cultural and family ties to the Birrbay and Dhanggati peoples (Mid North Coast region, NSW, Australia) through bloodlines of grandparents Guula, William Henry Holten (nee Davis) and Josephine Pearl Moran. Acknowledging grandparents enables other Aboriginal people to position Anjilkurri within their kinship structure. Tess is a Birrbay woman and academic whose research focuses on Aboriginal and Torres Strait Islander women, leadership, representation, and support of students. Tess is part of Anjilkurri's PhD supervisory team. Kylie is a Gamilaraay woman with ties to Bundjalung nation, living on Birrbay country, whose community practice, teaching, and research focus on strengthening Aboriginal-led solutions to problems resulting from colonisation.

Each djiyagan brings unique strands of experience into the weave and through these strands, we demonstrate the myriad of discussions required to navigate both the research paradigm and the richness of cultural values and protocols. In a time when Indigenous knowledge is recognised within the university system in Australia, many important conversations are required around homogenising mindsets inherent in the ethics process. Elder knowledge and practice is the significant driving focus of our identity and knowledge building. Their wisdom enacts in us the power to see knowledge as interconnected, therefore allowing our research to have a resonance beyond dominant Western scholarship. Privileging the multi-layered insider and outsider perspectives brought by Indigenous researchers can inform and challenge research processes.

The ways cultural protocols, personal ethics, and university ethics processes interact offer opportunities to broaden the common area between each while keeping people safe in research. In this paper, we will, therefore, draw from Nakata (2017) and refer to the overlapping realm as "cultural interface." How we align personal ethics with research is

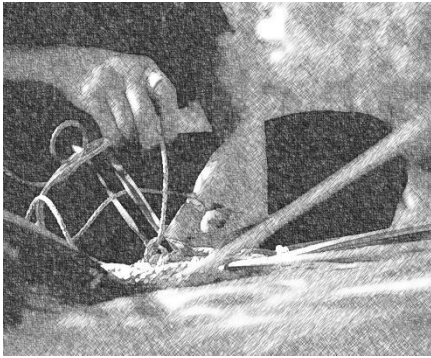
evident in our using accessible language to value our readers beyond urges to “sound clever” or somehow prove we belong in academia. Sharing stories to enrich understandings of what we have experienced and why we have made particular decisions in relation to research brings Aboriginal ways of knowing, being, and doing to the research space (Tachine, 2018). We resist deficit-based storying of our people and take note of Senior Kurna Elder Aunty Barb Wingard’s call for “telling stories in ways that make us stronger” (Wingard & Lester, 2001, p. 1). Anjilkurri, community Elder/emerging researcher, takes the lead in weaving story.

Yukulduwa Ganggali Garral (Weaving Through the Heart)

Anjilkurri: The weaving of a solid base for butjin (see Figure 2) is crucial in supporting the structural design of a carry vessel. As Baan (Aunty and Elder), I start the weave with telling my story of educational challenges, disconnection, and connection to language and language revitalisation research. I construct a context to generate dialogue for djiyagan to contribute. In weaving their strands of grass, telling their stories, butjin grows in capacity and strength to connect us, our stories, and inform a way forward.

Figure 2

Weaving Through the Heart



Note: Photograph by Arlene Maree, image produced by Anjilkurri Radley

In telling my story I share from the heart the journey of ngarrayn (learning) to give a contextual narrative and an insight to my cultural standpoint. I left school at 15 to financially contribute to my family's household. I had the chance to go back to school for a period at 17. I resumed school with a different outlook on life; I found other students unappreciative and immature in their attitude towards their education and others. I had to leave school again due to becoming pregnant with the first of my four daughters. Upon reflection, I loved learning but found the education system to be biased, judgemental, and with no Aboriginal content. In the 1970s there was no truthful mention of Aboriginal peoples' history or culture. This experience inspired me to want to work within the education system and support Aboriginal students in their understanding of their history, culture, and identity.

As a mature student, I commenced education at university completing a Bachelor of Teaching, Graduate Diploma in Education, then later obtained a Master of Indigenous Languages Education (Hobson et al., 2018). Past experiences enabled me to relate to students who were struggling in their learning and to subsequently develop learning

experiences that engaged students beyond the classroom. My teaching philosophy is based on traditional Aboriginal ways of learning. This involves bringing story to life through storytelling, movement, song, dance, the use of symbolism, and connection to land, ancestors, and community.

For many years I have worked in and across Aboriginal organisations, government and non-government organisations, and education systems to give voice to and respond to the needs of Aboriginal people. Over time I became disheartened in the lack of change within the colonised systems and decided to shift my focus to community capacity building. Language revival and working with Aboriginal women promised a way forward.

In this paper, I will reflect on my upbringing where strong aunties, mothers, and grandmothers modelled caring for others, a pride in their culture, and a desire for the next generation to do well. These women experienced the full force of government policies: welfare intervention, separation from family, and other forms of racism. On behalf of those women, I am working to create change, and I am using Gathang language as an instrument to drive that change.

Wiyagi Gathang (A Call to Language)

Anjilkurri: In wuruma (the wind), language moves through the trees, awakens the people, changes landforms, and sings up the ancestors. Speaking the language of the land connects me to my culture, mob, land, and ancestors. The language of the land was never forgotten; it lived within the land and all she holds.

Figure 3

Wuruma Moving Through the Trees



Note: Photograph by Anjilkurri Radley

The disruption of our language and culture being passed down from generation to generation is a product of colonisation. In the colonising process, foreign laws and policies were introduced to enable the forced removal of Aboriginal people from their ancestral lands and the separation of children from their families and culture. As the late Yankunytjatjara Elder Uncle Bob Randall discussed in the documentary film *The Land Owns Us*, the responsibility to revive and fortify cultural aspects such as language is still ever-present. That connectedness, Uncle Bob said, “to care for my country, care for my mother, care for everything around me . . . the oneness . . . the completeness of that oneness . . . [we] call it Kanyini” (Randall, 2006, 3:47). Growing up carried a strong sense of family and connection to land, yet I felt deep within my spirit a link to culture was missing. Our family shared language words interspersed in English, but I craved the fluency of the language of my ancestors. After the release of the Gathang dictionary (Lissarrague, 2010), I learnt Gathang language alongside other family members. I then

continued with further studies to become a language teacher and activist. The Gathang language is spoken by Birrbay, Warrimay, and Guringay people located along the east coast of NSW, Australia. Gathang was one of 35 Aboriginal languages spoken in NSW prior to British invasion. Over time English became the spoken language, with Aboriginal people forbidden from speaking their native tongue (Lissarrague, 2010).

Working in partnership with Muurrbay Aboriginal Cultural and Language Cooperative (Ash et al., 2010) and the Gathang Language Group, I started to become active in reviving the Gathang language. Without fluent speakers and little audio recorded language to draw upon, bringing back language that had been bubaliyn (sleeping) seemed almost an impossible task. After years of teaching language, listening now to our language being presented in song, dance, signage, and everyday talk brings pride in the fact I have had a strong influence in making this possible.

I am a community Elder, a title that is earned through sustained leadership, involvement, and dedication to community and accepted knowing and understanding its responsibilities and obligations. Eldership elevates status in community and requires availability. There is an opportunity here, within this role, for me to do more work in bringing Aboriginal language to the hearts and minds of all communities. I wanted to contribute to the efforts being made to revitalise Aboriginal languages in Australia.

Matjarr Djuyal (Hand Talk)

Anjilkurri: The hands are used with language to tell the story of "Bila Yii Maraliyn." Mitji Djiyagan (Little Sisters) sing in language, their hands moving fluidly to convey the motion of the flowing river (see Figure 4).

Figure 4*The River is Flowing*

Note: Photograph by Anjilkurri Radley

In teaching the Gathang language I continually used gesture, bodily movements to transmit information. Gesture has long been part of traditional Aboriginal teaching methods to convey the meaning of spoken words (Power, 2013). For example, a movement of hand towards self directs a person to come, or in storytelling, all-body movements can be used to enhance the meaning of the story. I wanted to formally explore the effectiveness of gesture to learn the Gathang language.⁴ Current research in language teaching and human cognition provides evidence to suggest that gesture may facilitate the acquisition of a second (spoken) language by adults and children (Goldin-Meadow, 2014; Gullerg, 2014; Macedonia & Von Kriegstein, 2012). Although gesture has long been part of the communicative repertoire of Aboriginal languages, there is an absence of research examining the efficacy of gesture in facilitating the acquisition of Aboriginal languages in a revitalisation setting led by an Aboriginal researcher.

⁴ See Radley, A., Jones, C., Hanham, J., & Richards, M. (2021) Matjarr Djuyal: How using gesture in teaching the Gathang helps preschoolers learn nouns. *Languages*, 6(2) 103. <https://doi.org/10.3390/languages6020103>

The decision to undertake formal research in the use of gesture to learn the Gathang language came with some trepidation of stepping into the unknown. How would my community who knew me in the role of Elder and teacher view me as an emerging researcher?⁵ How can I use my cultural standpoint to elevate Aboriginal ways of thinking and doing? These questions could only be answered by engaging with my nature of knowing through the research journey with an intention similar to that described in the work of Margaret Kovach, “expression of the relevant narrative from personal experiences, those reminiscences of life rooted in our earliest experience that shape our understanding of the world” (Kovach, 2009, p. 112).

Guided by Caroline Jones, my PhD principal supervisor at Western Sydney University, I explored the possibilities of my research framework to incorporate the use of my cultural standpoint, intrinsic to my ways of knowing. Thus with my ancestors, I stepped into the unknown.

⁵ The term “emerging researcher” is preferred as it better aligns with concurrent Eldership role than “student” or “junior” researcher.

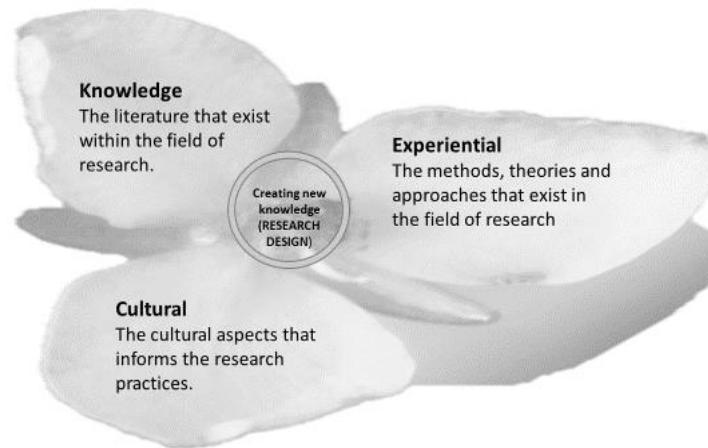
Ngarralbaa (Learning Place)

Anjilkurri: As I walked over barray (the land) my understandings of relatedness guided me on, the journey of exploring an untrodden path, developing a framework for language research. In that moment I acknowledged that all things are connected and what I perceive as not knowing is only a lack of connectedness.

A native flower, the small bush iris, appeared when I was contemplating the importance of this research to my community. This flower image informed the design of the research framework. The flower's three petals reflect ways of approaching the research and represent the "knowledge" element, the "experiential" element, and the "cultural" element (see Figure 5). These elements are pivotal in the research design and the creation of new knowledge for the language research. The research design consists of guiding questions that are central to the collection and analysis data. This will ascertain the extent of new knowledge that will be acquired from the research. Although there is literature outlining a variety of research, theories, and approaches to support the research, it is the cultural practices that will influence how the research is undertaken and how information is correlated and presented.

Figure 5

Research Framework Elements



Note: Image produced by Anjilkurri Radley

This approach gives equal importance to the ethical processes and Aboriginal community protocols and embeds the cultural element within the development of the methodology for the research. It was inspired by Indigenous researchers such as Smith (2012) and Yunkaporta (2009). Working within a methodology framework that instils cultural respect to guide the research approach originates models for other emerging Aboriginal researches to consider. This supports the position that other Indigenous scholars have proclaimed. Wilson (2008, p. 54) states, “Indigenous scholars are in the process of shaping, redefining and explaining their positions. They are defining the research, outlining the ethical protocols and explaining the culturally congruent methodologies that can be used at the behest of their communities.”

University ethics processes and cultural protocols/practices lay the ground work to engage with the emerging Aboriginal researcher’s standpoint (Wilson, 2008, p. 11). University ethics processes generally require emerging researchers to think through and

plan for possible harms for people engaged in research. A specific form is completed then submitted to a university ethics committee for approval. Processes vary across universities; however, there is consensus that research engaging Aboriginal people attracts greater scrutiny. Cultural protocol is a broad term to describe intricate codes for behaviour and interaction among Indigenous peoples, lands, and waters. Protocols vary across countries and mobs (nations and clan groups) with a consistent thread of respect woven through. In order to understand cultural considerations, further the validity of the Aboriginal researcher and community Elder, cultural standpoint (cultural practice) that integrates ngarrangga (must listen) is explored.

Ngarrangga: A Cultural Practice of Listening

Through the years we have listened to the stories. In the Aboriginal way, we learn to listen from our earliest days. We could not live good and useful lives unless we listened. This was the normal way for us to learn—not by asking questions. We learnt by watching and listening, waiting and then acting. (Ungunmerr-Baumann, 1993, p. 35)

As an Aboriginal researcher and community Elder, my cultural standpoint is the embodiment of my nature of knowing, being, and doing. This is induced by ngarrangga, an important cultural practice. Within deep listening there is a connection to self, others, ancestors, and the oneness of all there is. A place of listening beyond the ears is encapsulated within all senses and brings us into the present. It gives us guidance through a knowing that forges a path to behave in a respectful way. Once you know it you cannot unknow it—it simply is.

Further evidence supporting ngarrangga is beginning to be written about in academic spheres. Senior Elder Miriam-Rose Ungunmerr-Baumann reflects on such principles described in her language Ngan'gityemerri as dadirri (deep listening). She says, "Dadirri is inner, deep listening and quiet, still awareness. Dadirri recognises the deep spring that is inside us. We call on it and it calls to us" (Ungunmer-Baumann, 1988, p. 9). Ngarrangga holds value for research projects in enhancing our ability as researchers to listen to more than spoken or recorded words, instead urging us to seek understanding more fully.

Yunkaporta's thesis captures some of the general principles in Indigenous ethics research processes that are evident in my cultural standpoint: "As respecting the living and culturally managed nature of knowledge, being present, listening deeply, learning and enriching community learning, being real, respecting all things, engaging in relations (cultural, environmental, historic and social), and understanding that while these principles may be generalisable, methods arising from them in a particular community are not" (Yunkaporta 2009, p. 8). To maintain the integrity of my cultural standpoint within the context of this research is to listen deeply, act respectfully, ensure ethics and protocols processes are woven into research methodologies, ensure accountability, and establish culturally safe practices. The interweaving of cultural values and protocols with academic ethics benefits both researchers and the researched (Nakata, 2017) Nyiirun ngarrangga (we all must listen).

Djinangga Yuungga (Insider–Outsider)

My cultural standpoint shapes the way I interact with all research stakeholders: people who have a vested interest in or may be affected by the research. Stakeholders include the academy, language learners, parents, community preschool staff, all local community

members, and language cohorts. My cultural standpoint influences positionality and relatedness to the insider–outsider notion. The insider–outsider notion is a concept of positioning oneself within the realms of research investigation. Researchers over the years have had ways of exploring and defining this notion: “Whether the researcher is an insider, sharing the characteristic, role, or experience under study with the participants, or an outsider to the commonality shared by participants, the personhood of the researcher, including her or his membership status in relation to those participating in the research, is an essential and ever-present aspect of the investigation” (Dwyer & Buckle, 2009, p. 55).

It is suggested that Evered and Louis presented the terms “inquiry from the inside and inquiry from the outside” (1981, p. 385). Understandings of insider–outsider research are critical in the research process, and within this concept issues relating to subjective positioning and a privileging of identity must be explored.

Insider and outsider, or “emic and etic” (Pike, 1954, p. 37) labels in research initially related to the potential for scientific bias. There was little appreciation for insider qualitative research, and findings were considered questionable and lacking in objectivity. The work of Barbara Myerhoff, a Jewish-American filmmaker and anthropologist in the 1970s and 1980s shifted her research lens from examining “exoticised others” to focusing her research on projects involving and benefitting ageing Jewish women (Myerhoff, 2007). Myerhoff’s approach placed value on nuanced understanding of research as storytelling in and of one’s own culture.

Other key advantages to being a research insider are described by Bonner and Tolhurst (2004) as holding a greater understanding of the specific culture studied, keeping a flow between the social interaction of the researcher and respondent, and having an existing or established level of intimacy promoting truth-telling within the research process. We are meant to understand the political intersections between who we are as a collective, and what we conclude of the world around us. The dichotomy that exists within insider research is that of collective and familiar knowing and that of individual perspectives.

Karen Martin investigated the ways Rainforest Aboriginal people regulate outsiders and the implication for Western research and researchers in her doctoral thesis and book, *Please Knock Before You Enter* (2008). Martin located through the Burngu, Kuku-Yalanji community, three types of relatedness in Indigenous research: “Ngarrbal (stranger who is not known), waybak (whiteman who is known about), and jarwon (friend who is known)” (Martin, 2008, p. 5). This relatedness situates understandings of insider–outsider research from multiple perspectives.

These researchers identify that relatedness to the culture studied and the establishment of relationships determines your position as an insider and/or outsider. I consider myself predominantly an insider, conscious of the impact my role as researcher may have on my relationship with language learners, family, and community, knowing I will have to deal with the consequences of my behaviours and processes (Smith, 2012).

Multiplicity exists within my roles in the context of the research undertaken in my local community. I am a board director for the community preschool where the study is situated, deliver language lessons to the learner cohorts, and conduct testing for

individual results. I have long-standing membership in all nine organisations that supplied support letters to my university's ethics committee for the research. I am a language activist, teacher and learner, Aboriginal Elder, and researcher. I navigate these roles freely and respectfully, as I am conscious of the privileges they afford in my community and research investigation.

As an emerging researcher coming from an insider position of Eldership and Traditional Owner within my community, in the world of academia I was, as Martin (2006) described, "[a] stranger who is not known" (p. 5). Although Martin refers to this within a non-Indigenous context, I perceived myself as the same in the academy, an outsider, an unknown stranger grappling with the lack of status, authority, and connection.

The motivation to persist with research despite uncertainty is found among language learners, family, and community and knowing language research is both an act of decolonisation and a means to revive language as cultural practice. Within the notion of cultural insider connecting to the academy as an outsider, I developed a broad lens to visualise what was needed to support the continuance of my research journey and to develop ideologies to Indigenise the academy. I recognised I was conceding my cultural standpoint when engaging with my non-Aboriginal research supervision team due to my inability to articulate the dilemma of where to position my being within the academy. I struggled initially to find the common ground, the cultural interface, a cultural meeting place where my supervision team and I could converse in greater depth about my research. I considered what further support mechanisms were required. Support materialised in the form of two Aboriginal researchers, sisters Tess and Kylie.

Djiyagan Djuyaliyn Djuyal (Sisters Telling Stories)

As I stop weaving into the butjin, the storytelling of my research experiences brings our djiyagan circle into ngarrangga, a place to reflect. To continue the weave, djiyagan share their connection to me, a community Elder and emerging researcher. Their strands of grass find their place to shape butjin, as their stories find their place within my story to strengthen its capacity.

Wubal Matjarra Djinanggabirang (Weaving from the Inside)

Djiyagan, Tess is my mentor and a member on my supervision panel. As an emerging researcher, I am grateful to Tess for accepting my invitation to join my supervision panel. At a university session I attended, Tess spoke these words: “The term ‘decolonising’ is used regularly in discussions around disrupting the institution, yet I am unsure whether we can do that to its fullest extent. So realigning, resetting, and re-empowering our Black bodies through a Western system of knowledge production is how I name what I attempt to do within academic institutions” (personal communication, July 20, 2019).

Anjilkurri: In this moment I had a knowing Tess would be instrumental in my growth as an emerging Aboriginal researcher. Throughout our many conversations Tess conveys her understanding of her positionality within the insider-outsider notion in multiple domains. She gives insights into the level of support required for Aboriginal researchers to reach their goals and the value of listening. Tess empathises with the complexity of amalgamating Aboriginal epistemology within the academy. Weaving story with Tess has enabled two Birrbay sisters to connect and share the importance of language and culture to identity.

Baan Anjilkurri and I met through a research capability building program I was presenting in. It is there that she asked for me to join her on her research journey. The pathways that lead us often appear stronger in hindsight, yet my reflections of our connection had a resonance to it I will always remember. It is through our connection that a strong sense of culture exists. Nakata's "cultural interface" demonstrates this meeting in those middle spaces where the shared moments of knowing and not knowing create learning and purpose. The engagement between those middle spaces builds in us both deeper philosophical arguments and understandings within the "corpus of knowledge" that is Indigeneity (Nakata, 2017, p. 350).

The dislocation from my country and cultural teachings has motivated my educational career to building an awakening of what was bubaliyn and of learning within the Western models of the education system. Baan is sharing the knowledge of reviving Gathang language, and through that knowledge sharing process, my cultural values are further broadened, as is my sense of belonging and identity. The language of Birrbay culture and those cultural embers live inside the body, consisting of values, protocols, language, and being. Organically it has slept within and showed brief moments of ignition, yet with this shared engagement between Elder knowledge and academic knowledge, that being is now burning strongly between us.

I also understand what it feels like as an Indigenous student within a structure that regularly seems to want us for our knowledge yet wants to also shape us through the prism of their own. Previous research undertaken with regards to the Indigenous health researcher workforce demonstrated how integral "peer generative power" was in the context of Indigenous research training (Ewen et al., 2019, p. 8). Through the sharing of

experiences, the alignment of knowledge, and the challenges faced in approaching Western knowledge structures, a large degree of shared guidance and support is offered within the cohort of students on the PhD journey.

There is immense need for levels of support for Indigenous students, and institutions have been acutely aware of this. These levels of support include Indigenous student centres, writing retreats, and research capacity building programs, which develop higher degree research aspirations (Asma & Page, 2011). Yet one of the failings in the attempt to form structures to support students is the recognition of the legitimate power generated through the shared and collaborative pathways these students create. True also is that the value of Black women in spaces of knowledge within the academy has been accepted without recognition of the gift that sharing brings to the academy itself (Fredericks et al., 2014). Baan felt through witnessing me sharing my knowledge that having me on her PhD team gave her what was missing—being someone who was within the realms of being “inside her inside” (Black women together), as well as being “inside what was outside” (a knowing of the research space within the academy).

As an insider-outsider, I am regularly questioning my weaving (storytelling) through reflective practice. Where are the strands (stories) I carry and what weight do they hold for myself, my Blackness, and the legitimisation of my being within the academy? The greatest strand I bring to myself is that of power in my learnings as I awaken more language in myself to name all I have felt as an Aboriginal woman. For someone who sits neither firmly inside academic institutions nor outside of them, I have always considered myself dwelling on the edges of any parameter that tells me “I should” and rather focus on what I can discover and how it enriches me.

My motivations push me to realign dominant Western systems to consider ways of being as Aboriginal and Torres Strait Islander people—that means different ideas and knowledge, which for many years has been undermined by the institutional structures we sit in. The work I do in supporting other students to build their understanding is paramount, and it is the power in how it is done that holds most value. Many younger or earlier students I speak to suggest that they are learning a new language within English language systems. When in deep conversation with others traversing educational spaces, I talk about nuances in disruption and an element of unlearning compliance to systems of knowledge while still in conversation with them. Ngarrangga has taught me to listen, observe deeply, and consider how we can speak our ways of knowledge so that it is at the forefront and not positioned as an afterthought within the academy. This is my construction of decolonising and can be considered as a point for further discussion.

Henderson and Battiste (2000, p. 35) affirm that “Indigenous knowledge is not a uniform concept across all Indigenous peoples; it is a diverse body of knowledge that is spread throughout different peoples in many layers. Those who are possessors of this knowledge often cannot categorise it in Eurocentric thought, partly because the processes of categorisations are not part of Indigenous thought.”

My interface with my Aboriginality is that of reclaiming what was removed by dislocation and trauma and therefore is personalised through those experiences (Ryan, 2019). Subjectivism suggests that social phenomena is created from perceptions and consequent actions (Beker et al., 2012). My drive to work in areas for change determines that future knowledge-building roles will be driven by my subjectivism. As I must observe a stance that embodies how I view knowledge, I therefore perceive my academic work to be focused on a sense of informing through investigation what must change for a better

society. As neither fully inside nor outside the university, my pathway is firmly focused on the continuation of ngarraliyn (learning) that is of myself and how I assist in change for Aboriginal and Torres Strait Islander people. We all carry different strands of experience into our storytelling weave, and the acknowledgement of such is an integral element to the work of research.

Wubal Matjaru Yuunggabirang (Weaving from the Outside)

Djiyagan Kylie is my research mentor and a shining light in the darkness. As Kylie's Elder and Aunty, I am Kylie's cultural caretaker. I hold cultural authority, which I can and have evoked to influence decisions Kylie makes freely. While this might seem convoluted, it makes visible multiple parallel roles that we navigate seamlessly. Authority is understood in a different way to Western concepts of dominance, power, and hierarchy; instead it is lovingly enacted with respect, care, integrity, and connection. Our connection is strong. Through our connection, our weaving and storytelling highlights what is possible in honouring cultural protocols in academic research and ethics processes.

As I accept butjin to introduce new strands, flashes of memory spring to mind. I do not recall a first meeting with Baan Anjilkurri; instead, I accept knowing. Knowing describes cellular memory and acquired knowledge. Cellular memory is a complex phenomenon which may be more clearly articulated through cultural storytelling practices. Archibald (2008, p. 83) refers to the diversity among "particular traditions, protocols, and rules concerning stories and the way the stories are to be told for teaching and learning purposes." Archibald (2008, p. 83) asserts our storying may "vary from the sacred to historical, from cultural traditions to personal life experiences and testimonials." The

stories I share here sit somewhere between experience and testimonial, drawing on cyclic cultural practices of sharing my learning in order to teach ngarrangga.

We were sitting in powdery red dust under the dappled shade of mulga trees at women's camp near Uluru carving wati bunggil (clapsticks). Not having worked the tough, sun-baked branches of the mulga tree we had harvested, I began applying advanced shaping techniques without being shown. Strangely, I knew what to do as the wood sang to me, revealing its preferred shape as time melted away. Women began asking me how to work wati, their words and actions assuming the skill was a familiar one. Working wati with the ancient craft practiced by Aboriginal women for eons fused with my knowing, and I am grateful Baan Anjilkurri was present. Was this why she had brought me to this place of intense heat, swarming flies, and swag-sniffing dingoes? "When we get back home you can teach the other women," she said.

This conscious experience of ancestral memory underscores cultural protocols carried into my research through more intentionally trusting ancestors and their gifts of cellular memory to guide me when something is, or is not, right. The ethical processes and protocols are the pivotal aspects of Indigenous research, and as researchers we understand the responsibility placed on us to undertake research appropriately for our communities.

Figure 6

Wati Bunggil (Clap sticks)



Note: Photograph by Kylie Dowse, hand-carved wati bunggil made with mulga sourced near Uluru on Anangu Country

This leads into another story more obviously related to my research. Cultural protocols surrounding Elders and their revered status in our world supported the identification of Western hierarchical positioning in relation to university research ethics. Too frequently, Aboriginal protocols and ways of knowing, being, and doing are reduced to esoteric “nice but unnecessary” permissions from reference groups, much like Acknowledgement of Country can be recited without understanding its meaning. It does not have to be this way. I have come to understand that researchers have the capacity to shape universities as knowledge is produced. Our work is political and does not require us to choose between culture and academic aspiration. Respectful, meaningful processes carved out through sustained team efforts can offer wonderfully resonant ways to collaborate. A robust pilot partnership between Birrbay people, my PhD supervisors and committee, and the University of Melbourne Ethics Committee provides an example of keeping

people safe in research by honouring Aboriginal cultural protocols to enhance academic ethics processes.

Saltwater Ngaluwi (Wave) Local Ethics Committee

Gathered around a table in an overly air-conditioned hotel lobby in Hong Kong, Vanessa Davis, Anthony Newcastle, and I met with our PhD supervisors as a cohort. The cohort was a measured arrangement we negotiated to ensure adequate cultural and collegial support in our various research projects. We had graduated together as Masters of Narrative Therapy and Community Work and insisted on a formal Welcome to Country at the graduation ceremony where we, along with Justin Butler, collectively delivered the valedictorian speech. The graduation hall was made more elegant by Wurundjeri Elder Uncle Colin, who donned possum skin and ochre, and carried gum leaves to mark the occasion. As part of our cohort requirements, we selected our shared principal research supervisor, David Denborough, whose knowledge of Narrative Therapy and international Collective Narrative Practice we believed essential to support the integrity of our research (Denborough, 2008). It was David's suggestion that later led to Aunty Barb Wingard joining my supervisory team. Appreciation for this insight lingers.

I was explaining that a Birrbay community Elder, Baan "Aunty Rhonda" Anjilkurri, was invested in my community's research project and had ideas on how we might proceed. One of my supervisors (now enjoying well-deserved retirement while writing children's books) is highly experienced and cautioned that university ethics processes had not been followed in engaging with my community Elder "prematurely." By seeking Elder guidance ahead of university ethics committee approval, I could likely not write about our conversation in my thesis. Perplexed, I asked if the university had Aboriginal

representation among those tasked with determining ethics applications. The answer brought a brief period of silence. “Not that I’m aware of.” Being a bit cheeky by nature and feeling safe in the relationships built, I challenged this notion. “So, are you saying I’m supposed to seek permission from a group of non-Indigenous people to talk with my Elder?” My supervisor conceded it seemed bizarre when framed that way. It was a pivotal moment in my research journey, as I knew I could not progress until Aboriginal protocols received proper recognition.

As a team we worked through inverting cultural protocols and university ethics, formal and informal, big and small, each time correcting nuanced suggestions that the university was formal or big while the local committee was informal or somehow less substantial. Together, we arrived at a respectful arrangement of a Local Ethics Committee (Birrbay community members and other folks contributing their expertise, like community organisers dedicated to prison abolition) and a Faraway Ethics Committee (the university). A space for research was created where the Faraway Ethics Committee could not provide approval without first satisfying the Local Ethics Committee; however, the Local Ethics Committee could provide approval for processes affecting local community in isolation. Birrbay community retains rights to every word written. Baan Anjilkurri spoke by phone with my PhD committee chair, which honoured Anthony’s suggestion that local mob and university folks converse. Both women were a little unnerved at first, each wanting to demonstrate respect, which was a fortuitous place to start. Aboriginal knowing, being, and doing became more fully acknowledged, and the research could progress.

University ethics processes automatically flag Indigenous research projects as risky, and while the intention to protect is not without just cause, paternalism is evident in ways Aboriginal communities are excluded or relegated to tokenistic fringes of many research projects. Western research has led to damage-centred, deficit storying of how we experience Aboriginality (Tuck, 2009).

Stark insight into ways colonising approaches to education fail to appreciate cultural knowledges and render Aboriginal people as outsiders is provided in the documentary, *In My Blood It Runs* (Newell, 2020). The story relays an Aboriginal boy's experience of two worlds. In Aboriginal cultural ways, ten-year-old Djuwan Hoosan is positioned as capable, inheriting his grandfather's gift for healing sickness, which carries a position of great responsibility among his people. Simultaneously, Djuwan is depicted struggling at primary school while his teachers degrade Aboriginal spirituality and question his behaviour and frequent absence from the school. Footage shows Djuwan's joyful engagement with weekly Arrente language classes; the contrast in his participation and interest is striking. A community change project springs from the film, calling for Arrente-led schools.

Much like Djuwan, Indigenous researchers walk in two worlds. The notion of Aboriginal-led universities seems a too-distant concept for many of us presently engaged in research and academic pursuit. Concurrent to the work of those pursuing enormous change, we can work productively with universities to change existing structures and approaches within them. While I acknowledge it is not the same for all, my experience has been overwhelmingly positive, with university folks surrounding Saltwater Ngaluwi equally enthusiastic about changes we have made together.

Wakulda Yabang Mayan.gu (A Way Forward as One)

We djiyagan have woven our stands of grasses from the inside and from the outside to tell our stories in our own ways to give meaning to our positioning within the weaving circle. As we continue to weave together the last strands of grasses into butjin, our storytelling focuses on the connections as a way forward to bring oneness, wakulda (as one) to the academy.

The article has applied a unique method of free weave storytelling, sisters sitting in circle, sharing cultural and academic knowledge and experiences. The storytelling demonstrates the need for purposeful conversation and action regarding university ethics and cultural protocols and to include greater support for emerging Indigenous researchers. Wilson (2008, p. 54) states,

Indigenous scholars are in the process of shaping, redefining and explaining their positions. They are defining the research, outlining the ethical protocols and explaining the culturally congruent methodologies that can be used at the behest of their communities.

We call on universities and emerging Indigenous researchers to view university ethics processes as opportunities to broaden, document, and formalise the cultural interface. Ngarrangga; engaging with nation and clan cultural protocols; and seeking advice ahead of approval from Aboriginal Elders, communities, and mentors are all ways to support robust research while mitigating risk.

We invite universities to critically examine how ethics processes and committees are structured and their positionality in relation to knowledge production, while privileging Aboriginality among those doing the examining. Working in partnership with Aboriginal

people and their communities gives a richer understanding of the research needed and the nuanced Aboriginal cultural protocols to be considered (Tachine, 2018).

The engagement of Aboriginal ways of “doing” within universities enhances the quality of research projects and reduces potential negative effects for Aboriginal people. Buoyed by this “knowing,” moving beyond research “reference groups” to adopt holistic ways to engage accountable practices that rely on Aboriginal knowledges becomes imperative. It brings the outsiders in and invites the insiders out. It promises opportunities for Aboriginal people to find safe spaces as both researchers and the researched. Research projects engaging emerging Aboriginal researchers or peoples must adopt significant cultural support mechanisms and engage cultural mentors to truly succeed. For example, a seemingly straightforward requirement in research is to undertake a literature review. Non-Aboriginal supervisors must acknowledge such a task will expose Aboriginal researchers to a litany of negative assessments of their knowing, being, and doing. However supportive the relationship between non-Aboriginal supervisors and Aboriginal researchers, a shared “being” with Aboriginal people trusted by the researcher are essential to guide their emergence from research work unscathed.

It is not enough to ask an emerging Aboriginal researcher if they are satisfied with support provided by non-Aboriginal supervisors. The “outsider” positioning identified in butjin makes power dynamics visible. While feelings of not yet belonging to universities are not exclusive to emerging Aboriginal researchers, unresolved colonising histories contribute to our experiences as outsiders and the ways power dynamics affect us differently. Responding to power dynamics between non-Aboriginal supervisors and emerging Aboriginal researchers requires Aboriginal people to populate our research

journeys, whether sourced inside or outside academic institutions. Non-Aboriginal supervisors are uniquely positioned to produce sweeping systemic change by asking emerging Aboriginal researchers “who might help” rather than “if” Aboriginal people are needed as mentors, supervisors, or panellists (Trudgett, 2014).

The concepts surrounding the insider–outsider exemplar for Aboriginal people is multifaceted and contains levels of connectivity and relatedness, respect for Elder knowledge, and individual journeying for those reawakening what lives within our being. It also acknowledges the power of our voices, our world, our stories, and our ancestors by recognising their footsteps when undertaking research within university spaces.

The recognition of the cultural interface, the overlapping realm that exists between university systems and Aboriginal ways of knowing, doing, and being initiates knowledge and learning experiences. Here within the cultural interface, ngarrangga (deep listening) resides, a crucial element for hearing stories, changing, and Indigenising the academy. Through the telling of stories, bringing strands of experience into the weave, we have created a carrier to take forth our understandings, not as an end but an invitation to craft and expand on the stories told, and relationships, experience, and knowledge gained.

Figure 7

Butjin Djuyal (Story Basket)



Note: Photographs supplied by Anjilkurri, Tess, and Kylie, image produced by Anjilkurri Radley

As the ends of the grasses are now in place to secure our weave, we view all the strands woven to form butjin. As Master Weaver, Birrbay woman, Patricia McInherny teaches us, “no weave can’t be mended and there is always the ability to extend and reshape the butjin” (personal communication, March 7, 2020). Hence our stories can change and there are other stories to be told to enhance, expand, and strengthen butjin. As the djiyagan gift the butjin (see Figure 7) to you, we close our weaving circle with a blessing.

Wakulda nyiirun ngarrangga (Let us all listen as one)

Glossary of Words and Phrases, Gathang Language

Baan	Aunty, Elder
barray	the land
bila yii maraliyn	river is flowing
bubaliyn	sleeping
butjin	basket, carry vessel
butjin djuyal	story basket
djinangga yuungga	insider-outsider
djiyagan	sister/s
djiyagan dyuyaliyn djuyal	sisters telling stories
dyuyaliyn	talking
ganggali garral djuyalgu	weaving story
matjarr djuyal	hand talk
minya djuyal	this is the story
mitji djiyagan	little sisters
ngaluwi	wave (tidal)
ngarralbaa	learning place
ngarrangga	must listen
ngarrayn	learning
nyiirun ngarrangga	we all must listen
wakulda	as one
wakulda yabang mayan.gu	a way forward as one
wati	tree, stick
wati bunggil	clapping sticks
wiyagi Gathang	a call to language

wubal matjaru djinanggabirang	weaving from the inside
wubul matjurru yuunggabirang	weaving from the outside
wuruma	the wind
yukulduwa ganggali garral	weaving through heart

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