nêhiyawak Networks: Native Perspectives of Digital Connectivity

By

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Acknowledgments

Foremostly, I dedicate this capstone to my family and to onihcikiskwapowin. It is for them and the nêhiyawak. I hope some value can be gained and passed on through this project. It's a glimpse into a disorienting moment in time.

My family gives me unconditional love and support through everything. They sustain me. Those people are my mother Sheila, my father Edward, my companion/partner Anna, my Aunty Betty, Anna's parents Brian and Mary Ann, sister Emily, dear Michael, my Uncle Stewart and cousin Ben. Love to Aunty Cindi. And to Aunty Diana and Shannon Houle—ay hay!

I also need to thank my four-legged friend, Lola, the best girl who kept me company as I wrote though the seasons, making it a less solitary and more bearable, or... should I say, doggable? endeavour. Special shout out goes to all my cuzzins, nieces and nephews! Love y'all.

I also need to thank my supervisor, Dr. Rob McMahon, who was exceedingly patient, kind and supportive. He has been a calming influence throughout this entire process. You pushed the right buttons, Rob! He stuck with me as I dragged this project out (far) longer than any of us had hoped or anticipated. But like the Elders say, there's no such thing as coincidences, so maybe this is how it was supposed to be all along. We're all just rushing to the grave, anyways.

"*Sometimes I go about in pity for myself,*

and all the while,

a great wind carries me across the sky."

- Ojibwe saying

Abstract

This Capstone explores the intersection and interplay between Indigenous Peoples and digital connectivity, as observed by citizens of Saddle Lake Cree Nation. Through a combination of autoethnography, Indigenous research methodology (IRM), and a braided framework that integrates critical theory and a postmodernist orientation with a nêhiyâw epistemology, this study interrogates and highlights the concurrent challenges, opportunities, ambiguities and complexities which digital connectivity uniquely present for Indigenous communities. Social and cultural impacts and implications of digital connectivity vis-à-vis Indigenous Peoples, and vice versa are, are investigated. The research unpacks the concepts of digital equity, digital inclusion, and digital sovereignty via a critique of the neoliberal language and ideology of human rights and recognition-based frameworks undergirding them. Findings suggest that while digital connectivity offers potential benefits for Indigenous cultures, economies, community welfare, and political mobilization, it also presents significant challenges related to maintaining sovereignty and distinct cultural integrities in a rapidly globalizing world. This work contributes to ongoing discourses concerning the holistic impacts and implications of digital connectivity with Indigenous Peoples. It offers a nuanced perspective on the ways Indigenous communities are leveraging digital technologies while grappling with real and potential threats to autonomy, culture, and self-determination.

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Glossary

amiskwacîwâskahikan – Beaver Hills Lodge; Edmonton

anticolonialism – distinct term that is often erroneously conflated with "decolonization," and not necessarily connected to the concept of social justice; it can refer to intentional and action-oriented behaviour a person or group engages in that deliberately targets and works to counter settler-colonialism and its effects, while directly accounting for, advancing interests or centring the needs of Indigenous communities and other subjugated groups through service to the community; actions that level hierarchies or power asymmetries in a group/societal dynamic

Big Tech – refers to the largest and most dominant technology companies in the world which have significant influence in global society and interrelated media, internet, and communications technologies ecosystems; often includes companies such as Apple, Google, Facebook (Meta), Microsoft, Amazon, and more recently NVidia

broadband – highspeed 'always on' internet with a target speed usually defined by federal governments (50mbps download/10mbps upload in Canada) and is available through wireless or wired (e.g. cable, copper or fiber optic) networks

capital – in the context of digital connectivity, this can refer to its human, social, economic, political, and cultural impacts, as well as its inputs/outputs, with respect to capacity, labour, and resources; related to earlier concepts by Marx and Weber, and more recently to the social theories of Habermas and Bourdieu

capacity building – a deficit-based approach, and the idea that a social, educational, technical or skills development program designed for a target group can improve or enhance their workforce proficiency; associated with workforce development and providing specific sets of trainings

geared towards disadvantaged or marginalized groups with the goal of building and strengthening their transferrable skillsets

capacity sharing – a strength-based approach, and can refer to the reciprocal exchange of skills, knowledge and learning experiences between people with different cultural backgrounds and competencies, or where a perceived gap or power asymmetry exists in a social/group dynamic; a situation where a task load is equitably shared among a group/collective of people who collaborate towards realizing a goal, outcome, mission or vision

CARE – a set of principles and best practices regarding Indigenous data governance that refers to "C.ollective benefit," "A.uthority to control," "R.esponsibility," and "E.thics"

data – comprised of digital bits and bytes of unprocessed and/or disaggregated information stored on computational devices represented through binary notation of "0" and/or "1"; can also refer to unprocessed datum that are disaggregated and decontextualized units of information which can exist in nominal/qualitative or numeric/quantitative form, and be further processed and organized to tell a story, create a piece of interpretable information, or to serve as a heuristic

decolonization – interpretive concept that can refer to cognitive/abstract processes of resistance, refusal, resurgence, deprogramming and healing from settler-colonialism and its mental, physical, emotional, spiritual tolls and pervasive affects; can also refer to the process of undoing and/or unmaking the on-going effects of settler-colonialism in concrete terms, most notably through the forms of restitution, such as with the return of stolen land, intellectual property, ceremonial tools, cultural artifacts, or by way of redress through economic reparations

digital/data colonialism – term(s) popularized by scholars Michael Kwet, Nick Couldry and Ulysses Mejias which are sometimes used interchangeably depending on context; a novel and pernicious variant of colonialism carried out by government, industry and Big Tech, referring to

their often surreptitious collection, processing and application of digital data and information flows from unwitting and often non-consensual human subjects who have been socially conditioned and desensitized to harms over time for the purposes of annexing life for capital

digital connectivity – refers to infrastructure, software, hardware, digital technology, digital platforms, and the Internet of Things that comprise and enable the internet and world-wide-web, and which connect us to local/wide area networks and the rest of the global internet

digital divide – versatile term encompassing what are in some cases deliberate exclusion of populations from the internet, thus inhibiting the ability to participate in digital society, as well as referring to significant gaps or disparities in access, availability and affordability of digital connectivity between specific demographics in urban and rural or remote areas; Indigenous, as well as Black, People of Colour (BPOC), racialized and low-income communities are disproportionately affected by the digital divide

digital equity – general definition referring to the condition and/or or state where people have the capacity, knowledge, digital technology and connectivity needed to fully participate in online environments, political and economic systems, as well as cultural activities

digital inclusion – the actions required to achieve digital equity; can refer to grassroots advocacy that seeks to reduce barriers to more affordable, reliable and accessible internet, especially for marginalized people, while enhancing participation from historically and/or contemporarily underrepresented, racialized, and disadvantaged groups in digital society, as well as "top down" advocacy efforts from industry, social enterprise, non-governmental or transnational organizations, and standard-setting bodies seeking to boost equality in business and labour markets while expanding the digital market and consumer/user bases

digital navigators – front line digital social workers and trusted community members who assist and guide multigenerational clientele through issues related to digital connectivity; they also educate through digital literacy and technical training on how to safely and effectively use the internet and digital technologies, while also promoting internet adoption in their communities

digital redlining – strategic under-investment and intentional neglect through discriminatory practices by an institution/service provider where it deliberately withholds and/or reduces access to digital connectivity and broadband services for a community or group of people based on their race, socioeconomic status, gender, and/or geography, which perpetuates extant inequalities or "gaps" for disadvantaged or marginalized segments of the consumer base and under-and-unserved communities in their service areas

Global North – sociological term denoting nations with economies that are characterized as wealthy, modern and industrialized; these countries are typically situated in Europe, North America, parts of Asia and Oceania, such as with Japan, Australia and Aotearoa-New Zealand

Global South – denotes nations with "developing" or less-developed economies compared to those in the Global North; the term characterizes countries which are economically and politically unstable or disadvantaged, and which also have higher levels of inequality or socioeconomic disparity

Indigenous data – any data and/or information pertaining to, from or by Indigenous Peoples, including their lands, waters, resources, knowledges, and stories; includes materials or works created by an Indigenous individual, government, community, or organization and those which are sometimes collected by non-Indigenous people and entities

Indigenous digital equity – a global movement advocating for Indigenous communities to have greater involvement in the adoption, creation, development, and implementation of digital

connectivity for their communities; encompasses collective efforts to increase Indigenous control and influence over the direction and integration of technology within digital society, in addition to being a strategic initiative aimed at bridging the digital divide by enhancing the digital connectivity of Indigenous communities, ensuring they can fully participate in the digital society should they so choose

Indigenous data sovereignty – a movement and imperative whereby Indigenous communities repatriate/rematriate their data and information from colonial corporate entities, which includes (re)gathering and (re)claiming ownership and control over their knowledge, information and intellectual property

Indigenous digital sovereignty – a state where an Indigenous peoplehood, nation, or community is vertically integrated and has complete ownership and control over the network architecture existing on their lands and territories, as well as over their digital data and information flows

Indian Act – The Government of Canada's federal legislation, first passed in 1876, that regulates various aspects of Indigenous existence, including the rights of Treaty or Status Indians, which also dictates and defines the legal identity of Indigenous Peoples in Canada

Indian Country – can refer to regions, traditional territories and physical locales where American Indian, Native American, Native Hawaiian, Alaska Native, First Nation and other Indigenous Peoples live or where their communities are situated; a philosophical term connoting an Indigenous state of mind that can be carried to wherever one exists is in the world

Indigenization – interpretive term that can refer to initiatives by non-Indigenous settler institutions or organizations to establish and/or repair their relationships with Indigenous communities, while working to ensure that Indigenous members have equitable stakes in their affairs; can also refer to Indigenous rightsholders inserting themselves into dominant settler/non-

Indigenous institutions and organizations in an effort to build a critical mass of Indigenous

thought therein, with the assumption being the institution or organization could then be reformed

information – distinct from knowledge (particularly with respect to knowledge or information

from Indigenous sources found online, or Traditional Knowledge that is digitally stored) and

data; typically refers to processed, organized or structured data which are useful, provide

meaning and context for a purpose

information and communications technology (ICT) – covers all advanced technologies in

manipulating and communicating information, including telecommunication technologies such

as satellite, cable, mobile telephony, radio and TV, as well as digital technologies such as

computers and the internet, among others

Internet – the decentralized local, wider, and/or worldwide network of networks interconnected

and activated through a combination of computers, cables, routers, light, and electricity which

move and store information in the form of digital data

internet adoption – efforts to drive subscriptions to an internet service or telecommunications

provider to get people online, in addition to encouraging people to use and get accustomed to

digital connectivity

moh'kinsstsis – Blackfoot (Niitsitapii) word for the Elbow river; the place where the Bow meets

the Elbow river, otherwise known as Calgary

nêhiyâw/nêhiyawak – a Plains Cree person; Plains Cree people

OCAP – First Nations Information Governance Centre's foundational principles of Indigenous

"ownership," "control," "access," and "possession" over their data and information; started in the

late 1990's and early 2000's as a response to the Canadian federal government's exclusion of

First Nations living on reserve from major health surveys and the resulting data gap

onihcikiskwapowin – Shadow Lake, now known as Saddle Lake Cree Nation, located in Treaty Six Territory

Treaty – a sacred covenant agreed to between a group of Indigenous Peoples (peoplehoods, nations, communities, tribes, bands, etc.), the Creator, the crown, and/or a government that lasts for as long as the grass grows, sun shines, and the rivers flow

wâhkôhtowin – nêhiyâw laws of kinship and the rules that govern the relationships between all living and non-living things; can more simply be described as "relationship"

UNDRIP – United Nations Declaration on the Rights of Indigenous Peoples

Chapter 1: Introduction

My journey through the MA in Communications and Technology (MACT) program took me on a bonafide genealogical trip through time and space. The constellation of kin was expanded. I am behooved to briefly expound upon this because my history and experience ties directly into the Capstone. That means I must let people know who I am, where I come from, and where I be at, because my positionality unquestionably impacted this study and how I've approached it. Like the legendary detective Lester Freamon from The Wire succinctly stated, "all the pieces matter" when you're making a case.

This chapter is organized as follows. I begin with my personal background, mentioning key family members who continue to be forces in my life. Next, I situate myself to share about where I live, work, and play. Then I share pieces of my own story to contextualize my place in this Capstone. From there, we move into a brief discussion of where I'm at today—mentally, psychologically, spiritually and so forth—so the reader can better understand the meta/reciprocal aspect of this project and how the Capstone impacted me. Penultimately, the positioning statement, research topic, and research approach are described. Lastly, a brief conclusion summarizes my thoughts and guides the reader to the next chapter. But before any of that, let me get this started off in a good way, as is nêhiyâw tradition.

Background

Phil Steinhauer-Mozejko nitsiyikâson, amiskwacîwâskahikan ohci niya. My name is Phil Steinhauer-Mozejko, and Beaver Hills Lodge (Edmonton) is my belly-button place. Moh'kinsstsis êwîkîyan. I live in the place where the Bow meets the Elbow (Calgary, Treaty 7).[1] Sheila Steinhauer-Możejko nikâwiy.[2] Edward Możejko nohtawiy.[3] Elizabeth "Betty" Steinhauer nikâwîs.[4] Stewart Steinhauer nisis.[5] Ben Steinhauer nisêm.[6] Nohkom Margaret Lillie Steinhauer.[7] Nimosôm Herb Steinhauer.[8] I am a member of onihcikiskwapowin (Saddle Lake Cree Nation) which is in Treaty Six Territory.[9] These people and places have shaped my understanding of the world and continue to inspire me in great ways. What's more, they ground me. My kin, place of residence, and home territory are a backdrop for this Capstone and frame the whole experience. Kahkiyaw niwâhkomâkanak. I am all my relations.

As my Uncle Stewart says, Saddle Lake Cree Nation literally translates to, "the place where a shadow was seen on ice, lake ice." Steinhauer (2004) clarifies about Saddle Lake:

> White people, fantasizing about being explorers, misunderstood their translators, who spoke a Cree-influenced english [sic]. Shadow on the lake sounded to their ears like Saddle Lake, but it's [sic] name really talks about the shadow on the lake.

That is a short excerpt from Stewart's (Weypimus) self-published book, *Voice from the Coffin: Iyisiniwak as Weeds in a Monsanto Landscape*. Some might call it Indigenous lit, a work of

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[1] https://native-land.ca/maps/treaties/treaty-7/
[2] Plains Cree kinship term for "my mother" in nêhiyawewin (Plains Cree language).
[3] Plains Cree kinship term for "my father" in nêhiyawewin.
[4] Plains Cree kinship term for "my (maternal) auntie" in nêhiyawewin.
[5] Plains Cree kinship term for "my (maternal) uncle" in nêhiyawewin.
[6] Plains Cree kinship term for "my younger brother" (cousin) in nêhiyawewin
[7] Plains Cree kinship term for "my grandmother" in nêhiyawewin.
[8] Plains Cree kinship term for "my grandfather" in nêhiyawewin.
[9] https://www.ualberta.ca/en/arts/arts101/treaty_6_information.html

fantasy, others, unsarcastically as a work of creative non-fiction. Uncle Stewart once quipped, perhaps facetiously, that White people call our stories "magical realism."

Stewart Steinhauer was born in 1952 and resides in Saddle Lake. He is a thinker, writer, artist, knowledge holder, and unofficial humourist who will always be a hero of mine. As a granite carver, he has been working with stone for over 40 years.[10] His work can be seen across Western Canada and the Prairie landscape, almost always in symbolic locations or those of cultural significance. The Sweetgrass Bear—welcoming and equanimous as ever—is one of his signature pieces presently resting at the University of Alberta's Quad. It's one of several Treaty marker sculptures located at different UAlberta campuses.[11] I have never known anyone like nisis, and never will because he is one of one. He inspires me beyond what English can convey.

My cousin, or little brother in a Plains Cree kinship relational sense, is Ben Steinhauer.[12] He is Uncle Stewart's youngest son. Ben is a resident of Saddle Lake and a young Elder who was raised without a standard (Western) education. Growing up, he was provided tutelage from prominent Elders, among them Jimmy O'Chiese, who educated Ben in ceremony, protocol, Treaty, and other forms of Traditional Knowledge. Having an intimate understanding of our stories, history, and ways of being, Ben is wise beyond his years. Not unlike his father, there is no one quite like Ben. He is a singer, knowledge keeper, ceremonialist, and teacher who ensures that our culture and traditions continue to be practiced so they may be passed down for generations to come. Every time I'm with Ben, I learn something new and important about the nêhiyâw way of life.

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[10] Uncle Stewart has worked with soapstone in the past but now works almost exclusively we granite. He has a personal relationship with Rock Grandfather. https://ilovecreston.com/creston-bc-sculptor/

[11] https://www.ualberta.ca/en/the-quad/2016/08/the-sweetgrass-bear.html

[12] https://podcasts.apple.com/ca/podcast/normalizing-nehiyaw-education-with-ben-steinhauer/id1517083728?i=1000557763186

Ben's mother was my Aunty Cindi. Tragically, and rather unexpectedly, Cindi passed away in the summer of 2023, which was a shock to our family and to Saddle Lake. Hers is an enormous loss, as she was the firekeeper who enabled much of the crucial work Uncle Stewart and Ben undertake not only at home, but in community and through much of Treaty Six. She was a devoted mother, grandmother, and knowledge keeper in her own right; she was ceremonialist who would often help guide youth from the community who were interested in or wanting a way back into their nêhiyâw culture. She was a bridge between people and worldviews. Aunty Cindi and I had many memorable visits where we chatted about life, family, culture and politics. She loved her family dearly and was determined to make Saddle Lake a better place.

Elizabeth Steinhauer, or, my Aunty Betty, is the youngest of three siblings, being sister to Uncle Stewart and my mother Sheila. Now retired, Elizabeth is a physician (medical doctor) and one of the first Indigenous women in Canada to be trained in the western medical tradition. She personifies a rare reciprocity between Indigenous and Western paradigms. What's more, she is a proud grandmother which, she maintains, is the real job she's been destined for all her life. Aunty and I are very close. Like my visits with Ben (and the rest of my family for that matter), I always learn something new, and gain novel insights into life when I am with her. She sees the connections in everything. In general, one becomes a better person just being around her. Truly, Elizabeth is a living bundle of knowledge who embodies our Cree tenets of humility/humbleness, courage/determination, honesty/truth, and loving kindness. I am forever grateful for our healing walks together and for all the noetic wonders we've shared.

For me, the story begins with nimosom Herb Steinhauer, who was a citizen of Saddle Lake. Although my memory of "grandpa" is somewhat fleeting—he died when I was 10—I remember him as a loving, kind, and quiet man of dignity. His presence looms large over me to

this day. Through my time in MACT, I feel as though I have grown closer with nimosom in his posthumous state; I've certainly gotten to know him better, which is a little surreal. My relations have told me he also had an amazing voice, was an awesome cook, and a gentle giant who was passionate about the welfare of nêhiyawak and our Plains Cree culture. He was also engrossed in Native affairs and our battles for rights, sovereignty and self-determination. His brother, my great Uncle Ralph Steinhauer (Apow), was the first Indigenous person to serve as a lieutenant-governor in Canada.[13] Mosom Herb also served in World War II and was a survivor of the Indian Residential School system.[14]

My grandmother Margaret was an old stock Canadian of Celtic lineage whose family (Lillie) has deep roots in what is now Southern Ontario. Shortly after graduating as a public health nurse from Toronto Western Hospital, she left the centre of the universe and headed West to an alien environment on the prairies. She arrived in Edmonton in 1947 and was immediately stationed at the Charles Camsell Hospital. Shortly thereafter, a measles outbreak at Saddle Lake's hospital would impel her to relocate there, which is where she met Mosom Herb.

Her story is a complicated one, if altogether fraught, and she lived a very difficult life.[15] My grandmother believed that 'Indians' needed to be assimilated—and, indeed, were better off that way. She was a major deterrent to the practice of nêhiyawak ceremonies, language, or anything related to our traditional culture. At the risk of portraying her in an incorrigible light, I will say that later in life she expressed remorse for her earlier ways. She also isn't the sole reason why the "Native side" of our family suffered. There were larger forces at play. All that said, I still have fond memories of my grandmother, and I know she had love and deep affection for

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[13] https://www.thecanadianencyclopedia.ca/en/article/ralph-garvin-steinhauer
[14] https://thechildrenremembered.ca/school-histories/edmonton/
[15] Grandma was bedridden for extraordinary stretches of her life, suffering from debilitating pain and illness.

nimosom. She and Herb had three children: Sheila, Stewart, and Betty Lou (Aunty Betty), each remarkable in their own unique way. The family lived together in Saddle Lake for many years, then moved to Hobbema (now known as Maskwacis), and finally settled in Edmonton when the kids were teenagers.

My mother, Sheila Steinhauer-Mozejko, was born in Two Hills, Alberta, being the oldest of the three children. She was raised in a strict, if not stern environment. The United and Catholic churches had strangleholds in Saddle Lake in those days; Christianity was practiced and promoted in the community.[16] Sheila excelled academically in her youth and completed her undergraduate studies at the University of Alberta (U of A) with a degree in Mathematics; soon after she finished an MBA at the same school. She went on to be a teacher and worked at the U of A for almost 30 years, having taught courses in management science and statistics.[17] She finished her career in academia as Associate Dean in the School of Business at MacEwan University, after investing another 24 years in teaching and administrative roles there. Over the course of her life, my mother has persevered in the face of great adversity.[18] Beyond her academic and professional accomplishments, though, I can honestly say I have never known anyone with her innate blend of patience, determination, kindness, and good humour. She is the unassuming but courageous matriarch who always protects her family.

My father, Edward Możejko, was born in 1932 in Samarkand, Uzbekistan, then part of the former Soviet Union. He identifies as an ethnic Pole and Catholic of Lithuanian ancestry. I never met my father's parents; they passed away long before I was born, and I know little about them other than that they were pharmacists. When Edward was a child, his family emigrated

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[16] My mother does not consider herself to be Christian and has never identified as such.
[17] One of the first (if not the first) and only Indigenous women to teach in their faculty at UAlberta.
[18] Both sides of my family are afflicted by intergenerational trauma.

from Eurasia to Belarus, settling in the historic city of Vitebsk, where he spent most of his early years.[19] During World War II, he and his family were taken as slaves by the Germans. Edward's first language is Russian, and given the region's history and circumstances, it is no surprise that he became a polyglot.[20] Like my mother, my dad excelled academically, somehow managing to finish his secondary education during the war. He often credits his sister—my Aunt Ewelina—for his precocious abilities, success in school and nascent love of learning; after their mother suddenly died in his early childhood, she and his aunt cared for and guided him through those trying times. Edward completed his PhD in philology from Jagellonian University in Krakow in 1964. He worked as a professor in Sofia, Bulgaria, then Denmark, and finally in Canada. He arrived in Edmonton in 1967 having accepted a position at the U of A in the Humanities, where he was a professor of comparative and Slavic literature for almost 30 years.[21] For as long as I have known my dad, he was passionate about his work and devoted to his career in the academy—usually to the detriment of his family. His academic career frequently took precedence. He was also deeply Eurocentrist.[22] One can imagine, I had a strained relationship with him at the best of times. But I recognize Edward is a complicated man who lived a colourful life, one with great contrast. In the end, I can say with confidence he is a good and caring person who loved his family, and that he always wanted the best for us. And I know he genuinely tried to change for the better after he retired.

I must also pay mention to Henry Bird Steinhauer (Sowengisik), my great-great-great-great grandfather, because the modern Steinhauer story begins with him.[23] An Ojibwe from the

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[19] Vitebsk was the home of renowned modernist artist Marc Chagall.
[20] In the past, Edward could fluently speak upwards of 10 languages from different language groups.
[21] My father recalls this period as a prolific phase, a golden era for the arts and humanities at UAlberta.
[22] In mentioning Edward, I use present and past tenses because he is now 93 years old and suffering from dementia. He is a shell of his former self.
[23] https://www.thecanadianencyclopedia.ca/en/article/henry-bird-steinhauer

Lake Simcoe region, Henry Bird was a prominent figure in the early history and shaping of the

Prairies whom his descendants speak of as legend. He was an interpreter, translator, teacher, and

Methodist minister who, during his educational sojourn in the United States, adopted the

Steinhauer name from a German American benefactor.[24] There has also been some debate (and

controversy) around who created the syllabic system, which missionary James Evans is often

credited with developing. On our side, however, the story goes Henry Bird is the one responsible

for inventing and establishing it among Cree.[25] Henry's wife was Jessie Joyful (SeeSeeb), a

Swampy Cree woman from Norway House, Manitoba. Regrettably, I have not come to know

more about her through my relations or otherwise.[26] From the small bits available, Jessie Joyful

is portrayed as a strong woman with a sphere of influence in her own right.[27] She gave birth to

eleven, potentially twelve children; one or two were stillborn. Together, she and Henry Bird

migrated across the Prairies, eventually settling in Whitefish Lake, Alberta. From what I know,

as Henry Bird neared death, he became openly critical of the Methodist church and expressed

remorse for the work he earlier engaged in on its behalf.

Situating

I live in the traditional ancestral territory of the Niitsitapii ("the real people") and the

homelands of the Siksikaitsitapi, which is the Blackfoot Confederacy. The Confederacy consists

of three nations in Canada and one in the United States, each being a closely related but still

distinct group. They are the Kainai (Blood Tribe), Piikani (Scabby Robe), and Siksika

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[24] https://www.evelynsteinhauer.ca/
[25] https://newsinteractives.cbc.ca/longform/a-question-of-legacy-cree-writing-and-the-origin-of-the-syllabics/
[26] While accounts of Jessie do exist, they are altogether fragmented and short. She is always portrayed in a positive light and is thought to be a major support to her husband. The most accessible and vivid description of Jessie Joyful is given in Peter Erasmus's "Buffalo Days and Nights". I believe the general scantness and brevity of her life on the record reflects (hetero)patriarchy in our times and speaks to the biases of the historicisers.
[27] https://www.southpeacearchives.org/finding-aid/fonds-660-kirkness-steinhauer-testawich-family-fonds/

(Blackfoot). Across the border in Montana, there are the southern Peigan/Piikani people of the Blackfeet Nation.[28] Collectively, they comprise the resolute and influential Blackfoot people.

Treaty 7 is also home to the Tsuu T'ina Nation, who were erroneously referred to as "Sarcee" in the past. They are Dene/Diné people who have been displaced from their homelands, having been moved by the federal government onto a slim parcel bordering southwest Calgary.[29] They are also an Athapascan language group who share distant ancestry with the Navajo people of Arizona.[30] The Tsuu T'ina are a vibrant and proud people who continue to make positive developments for their nation.

The Stoney Nakoda, "people of the mountains," have existed here and called this place home for hundreds, if not thousands of years. Their language and culture are Assiniboine/Sioux.[31] In Treaty 7, their communities consist of the Bearspaw, Chiniki and Goodstoney Nations, and they are close relatives of the Lakota and Dakota people of the Northern Plains.[32] In fact, they are thought to be the dominant inhabitants of a vast Prairie region up until the mid-17th century, having been pushed further West towards the Rockies with the arrival of Cree, Saulteaux, and Gros Ventre.[33] Further disruption and dispossession occurred with the encroachment of fur traders, colonials, and even the Métis. But like the others, the Nakoda are resilient. Their friendly and inviting reputation precedes them, and through it all they have forged lasting alliances with their Blackfoot, Cree, and Diné neighbours.

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[28] https://blackfeetnation.com/lands/

[29] https://tsuutina.com/our-history/

[30] https://brighterworld.mcmaster.ca/articles/renae-watchman-tse-bit%CA%BCa%CA%BCi-keeping-dine-and-dene-stories-alive/

[31] https://stoneynakodanations.com/about-us/

[32] The Lakota, Dakota and Nakota/Nakoda people's territories, all belonging to the larger Sioux Nation, span North and South Dakota, Minnesota, Nebraska, Wisconsin and Manitoba.

[33] https://gladue.usask.ca/assiniboine

Treaty 7 is a diverse locale. It has a rich history with a confluence of Indigenous cultures that have co-existed in the region for centuries, if not millennia. As I write this, I can now say that most of my time in the MACT program has been spent in moh'kinsstsis, the place I now call home. This is where I've read, learned, studied, storied, written, thought, and experienced much in the past 24 months. But it's not where I'm from. Like so many others I am a guest residing in their territory; and being nêhiyâw, there's a chance I'm even unwelcome!

My story

I am a citizen of onihcikiskwapowin, also known as Saddle Lake Cree Nation, which is in Treaty Six Territory.[34] Our nation is a forced amalgamation of four Tribes, or four extended clans: Onchimanhos/Chief Little Hunter, Seenum Band/Chief John Seenum, Blue Quill Band/Chief Blue Quill and Wasatnow Band/Chief Bear Ears.[35] Saddle Lake is not a member of the Treaty Six Confederacy, but we are signatories to Treaty Six. I live almost 500 kilometres away from my home nation of Saddle Lake, and 250 kilometres from hometown Edmonton.

I am a city boy through and through; an urban Indigenous, white-presenting/white-passing—and, also White—cisgendered heterosexual male who has privilege and some advantages. I was born and raised in amiskwacîwâskahikan, otherwise known as Beaver Hills Lodge, or Edmonton. I had one brother growing up who was significantly older than me, who left home while I was still very young, so I was more of an only child. My mom's side of the family was scattered across Alberta and BC, with relatives across the Prairies all the way to Ontario. My upbringing could be isolated and was lonely at times.

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[34] https://www.treatysix.org/t6history
[35] https://slcn125.ca/departments/emergency-management-2/

As a boy, my parents sent me to a private academic school in Edmonton called Tempo. I can say with certainty that the harm inflicted on my spirit and psyche by the school far outweighed any good that may have come from my time there.[36] Not once did I ever feel as though I fit in, or that something good or worthwhile was happening. My parents, but mainly my father, wanted to ensure I had a high-quality education that could set me up for future success. I cannot necessarily blame them, because they thought it was the best thing for me.

Throughout my childhood, my father imposed Polish and other European cultures on me (and my mother), working to emphasize their importance. Whether deliberately or not, I perceive it as him separating me from my nêhiyâw culture. He sought to connect me with the other side of my family and the culture overseas, believing that should take precedence. He considered European—especially Polish—culture(s) to be superior, and "Canadian culture," let alone Indigenous cultures, to be inferior. To this day, I still sift through the wreckage, reckoning with and processing the damage that was caused. These experiences added to my early trauma and scarred me. Looking back, the totality of my being was colonized, early and often.

Despite any of the afflictions I endured in my youth and early adulthood, I ultimately had material comforts and a level of stability at home. I do not necessarily seek to lay blame, and I have forgiven my parents for the past. I am simply telling my truth. And I am more or less at peace with what transpired. However, I can acknowledge that my early upbringing set me on a stilted path that took more than twenty years to heal from. And I have not yet recovered.

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[36] It not just my perception. During the years I attended, children were still being physically punished, and were emotionally and psychologically abused. I always liken the environment to what Roald Dahl portrayed in "Matilda". In hindsight, I now recognize there are some parallels to the residential school system, albeit less severe.

anohc (Today)

Identity is complex. I have struggled greatly with mine throughout my life, which makes the matter of it important to me, because culture and identity are at the heart of this Capstone. Much of modernity, and post-modernity, is intertwined with Western notions of progress; the social, technological, and scientific advancements driving the illusion of a linear human development. My Capstone attempts to bridge, if not juxtapose, social and cultural contexts with a topic that is commonly thought as objective or devoid of spirit: digital connectivity. For the first time in my life, in part due to the experience of researching and writing this Capstone, I feel as though I am getting closer to my authentic self. My identity has evolved, particularly in the past five years, so it bears mentioning because I've infused myself into this project.

My lived experience is different from visibly Indigenous (racialized), female, non-binary, Two Spirited, gay, queer, or trans people. To an extent, the racial and sociopolitical aspects of my personhood complicate my "belonging" status.[37] At least, that's how I perceive it. Sometimes, I (sardonically) refer to myself as môniyâw iýiniw – a white ("not one of us, not a Cree") person of the land.[38] I do not refer to myself as "mixed" because that is a loaded concept which plays into colonial and racial conceptions of identity which I would rather avoid.[39]

In the past, when struggling with my sense of self, I would often question who I'm "supposed to be" based on my ethnic, national and cultural background. Today, one often correlates blood quantum with the amount or density of who or "what" one is. These thoughts and ideas are dangerous, often damaging, and usually make for painful conversations. But here

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[37] I briefly expand upon this conscious awareness in my methodology chapter.
[38] It is an oxymoron.
[39] This is not to delegitimize or work against the notion of race. Race is a critical concept that helps us to better understand, analyze, and interrogate dominant logics which continue to wreak havoc not only on racialized/non-White people, but on mainstream/Whitestream society, as well as individual and collective identities.

we are. Naturally, skin colour plays a part in identity. I did not get the phenotype that could necessarily distinguish me as someone who is a settler, "Native" or non-White. In fact, I will go so far as to say that I have been ashamed of my Whiteness. Sometimes I hate it, and I take no pride in it whatsoever.[40] Though I wish my identity or sense of self weren't so intimately attached with or constantly delineated through an inner narrative of *in contra*. The reality is race—a social construct—insists upon itself and plays into perception.

Part of what "makes" being a "Native" person who they are (and therefore unique) is the history and on-going reality of what it means to be a human being whose existence is indissolubly linked to an extant piece of racist and oppressive legislation – the *Indian Act*. In so many ways, Indigenous people have internalized it. Our kin are still directly impacted by the implementation and enforcement of provisions therein. And despite the *Indian Act*, Indigenous people continue to survive—in some cases even thrive—amid life in a settler-colonial Leviathan.[41] Indigenous communities continue to make political, legal, social, economic and cultural gains which strengthen our community capitals and sovereignties.[42] We're leveraging, reshaping and appropriating digital connectivity to suit our own needs. A global Indigenous movement strives to create an alternative to Western hegemony, one that can be a benefit to those who seek it. We're relying on modern medicine, science, and the arts to make sense of this discombobulated mess our globalized society is now in. Indigenous people are not apart from it; on the contrary, we're very much within it, are agents in it, and we're affected by it. And while we promote self-governance and increased local self-reliance, we're also forced to participate.

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[40] Detaching whiteness/racial identity from culture is hard.

[41] Indigenous Peoples are inherent rightsholders who have real sovereignty (not granted), but the Canadian state rules with hard power.

[42] "Community capital" refers to the holistic social, economic, political, and cultural capital within/without an Indigenous nation, group, community, reserve, band etc.

The eminent Black social theorist W.E.B. DuBois famously coined the concept of *double consciousness*, which continues to inform and shape my perspective as a nêhiyâw.[43] The idea of being "between worlds," or of a passive allegiance or concordance with the Whitestream/mainstream oppressor, resonates with me. I can identify with that. On the flipside, I can also recognize the inherent good; the value that is present in this Western way of life, and what it can positively contribute to Mother Earth and all her people. We needn't throw the baby out with the bath water. An apt way of describing my sentiments come from Jobin (2023) and her concept of *colonial dissonance*, referring to the dissociation and internal conflict that results from Indigenous people breaking their connections with their culture and traditions as we move through the dominant system (pp.137-138). Somewhat ironically (but not in a humorous way), these modern disciplines and schools of thought, the very ones that are in so many ways culpable for much of what has transpired over the past 150-200 years, are those which, in part, equip us with the tools and knowledge we now must apply to untangle ourselves from real-world issues, to try and recover what's been lost. So, again, part of "Native" or "Indigenous" identity is legitimately and unavoidably caught up in the struggle, opposition, and the colonial political system.[44] But it's like my Aunty Betty said: it doesn't do much good to worry about reconciling the different pieces or parts of yourself because "you can't be less than a whole person."

Lastly, I should clarify that I write from an insider/outsider perspective (Innis, 2009; Kovach, 2021), and from a very particular standpoint. I am an urban band member who has always lived off reserve, which added a layer of sensitivity and tension to the entire research process. The reality is that in contemporary Canadian society, being (or claiming to be)

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[43] https://plato.stanford.edu/entries/double-consciousness/
[44] By "colonial political systems," I am referring systems of political economy such as Marxism, capitalism, neoliberalism, and colonialism itself.

Indigenous grants one social and cultural capital; it has become a form of currency, particularly

within academic institutions. For my part, additional work has always been needed to establish

trust or to "fit in".[45] That said, my community has always welcomed me, and the trust goes both

ways. So, while aspects of this work were done with community members and my relations, it

was chiefly a solitary endeavour, and I cannot speak on behalf of Saddle Lake Cree Nation. My

experiences and approaches to this project are my own. While I use pan-Indigenous language to

make points and connect ideas, overall, this project may be considered a piece of situated

knowledge.[46] As Haraway (1991) explicated, knowledge can neither be objective nor impartial

and is rooted in a particular "standpoint" that acknowledges all knowledge is local, limited, and

mediated by a variety of social, political, and historical (overwhelmingly heteropatriarchal)

contingencies. I do not claim objectivity in this project. However, Kim Tallbear (2014), herself

an adherent of Indigenous-feminism and a disruptor in the academy, echoes Haraway's analysis,

stating quite simply, "[if] we promiscuously account for standpoints, objectivity will be

strengthened." (p.3)

âpi'win / kîsikâwin (Positioning)

Why do culture and identity matter to a research project focused on the internet and

digital connectivity? Why do I feel compelled to start my Capstone project by clarifying these

issues? The internet, as a technological medium, has played a huge part in exporting Western

media and culture around the world; it has penetrated deeply into communities and the daily

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[45] Especially if you're a White Native!

[46] For Indigenous peoples of the Prairies, knowledge is often place-based, meaning its accuracy, validity and reliability are tied to a particular land (place), territory (space), and people. For Indigenous peoples, knowledges are plural—there is no singular Truth—and directly related to a specific Indigenous epistemology and ontology. In her seminal work that expounded on feminist epistemology, Haraway (1991) coined the phrase "situated knowledges" to emphasize the importance of understanding knowledge production within specific contexts, generational forces, epistemologies, and institutional power dynamics.

lives of people everywhere. I am worried about nêhiyawak and other Indigenous communities being able to sustain their languages, knowledge systems, and traditional ways in a time of rapid globalization via digitalization. Conversely, digital connectivity can improve our standards of living, while holding the potential to preserve and potentially even enhance our cultures, ways of life, and abilities to thrive. Works both ways. Digital connectivity is becoming a necessity.

With this project, and through my own experience in the field, I examine the tension that I perceive between culture and digital connectivity; that should be evident through this exposition.

I have always been interested in digital connectivity, modern media, and how they intersect with cultures and worldviews. In particular, I'm curious how Indigenous people view, use, or approach digital connectivity—me being among them. Digital connectivity is complex and entails a set of wide-reaching dependencies, many of which cannot feasibly be reconciled when a First Nation is trying to consolidate or assert its sovereignty. The highly technical aspect of digital connectivity makes the process of explaining and unpacking it—or, demystifying it, if you will—somewhat onerous. When the internet first came about and was starting to be available on reserve, communities were excited and hopeful that it would be a connection to the outside; that it could be a boon for our social, economic, and political development. The feeling was different from the arrival of television, which many Indigenous people claim has been a destructive force in the home (Cuthand, 2007). Television became popular and quickly ruled the (First) nations. But digital connectivity is undoubtedly different. We are not passive consumers; we help shape it and can use it however we see fit.

I am also interested in non-market-based forms of cultural reciprocity, exploring whether Indigenous worldviews, knowledges, and value systems can be equitably and faithfully

integrated with(in) digital connectivity. For lack of better descriptors, I am interested in whether the internet—in whole or in part—can be Indigenized and decolonized.[47] One can easily argue that digital connectivity has accelerated globalization (or globalism) and is a locus for "the digital economy." For example, Pickard (2015; 2019) claims media commercialization and the growth of digital economies drives a pervasive "market ontology." While this concept specifically relates to the (d)evolution of mass media, it is transposable (and/or analogous) to the current "state" of internet and broadband, and the discourse around it.

For as long as I can remember, I have been curious about—and critical of—"progress" as a notion and its inherent association with societal and cultural development. I see digital connectivity almost as a paragon, as emblematic of the Western modernist paradigm of development. There is a lack of diversity in the architecture of the internet, as well as in these processes that govern its development and operations. By "lack of diversity," I mean in relation to "digital equity" and "digital inclusion," as well as in the broader EDI/DEI movement.[48] Common thought holds that discrimination, systemic inequality and underrepresentation can be addressed through equity and inclusion campaigns. But do these campaigns support true digital diversity? To provide an example, the domain naming system (DNS) has integrated different

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[47] I specify "decolonized" because the concept itself is abstract, like how the internet is perceived in some ways. Anti-colonialism is associated with on-the-ground acts (or activism) that counter colonialism in more immediate and obvious ways. In terms of scale, I view anti-colonialism as happening at the micro/meso level, and decolonization as more of macro/societal; the latter being more about attitudes and changing worldviews than, for example, working for a remote First Nation on an ecological research project that will serve the needs of the community. In delineating those terms, Max Liboiron shared their interpretation of anti-colonialism with me through a concrete example. They and their research team helped an Indigenous community determine what was happening with the health of a species of fish in their territory. Their research lab didn't retain any of the data or information for themselves – it all went back to the community. That is data sovereignty in a truer sense. This defies what settler-colonial institutions want and typically expect. They also honoured the remains of the fish that were gathered for the study, in accordance with protocols that local elders/local knowledge keepers requested. Decolonization occurs on a structural level over time or is something bigger, like, land back for instance.

[48] EDI (sometimes arranged as DEI) stands for "equity, diversity, inclusion". It is a broad initiative that revolves around themes of social justice, intersectionality, and cultural change in professional settings. The goals of EDI campaigns can be varied.

language scripts to foster inclusivity and accessibility through what's known as "Universal Acceptance."[49] Ideologically, the controlling interests of standard setting bodies such as the Internet Committee for Assigned Names and Numbers (ICANN) and the Internet Engineering Task Force (IETF) are still North American and Western European. Another example is seen in proposed solutions to the digital divide. While typically geared towards other marginalized and minority groups in their appeals, these solutions are not necessarily compatible with or applicable to Indigenous realities. To start, Indigenous communities are inherent rightsholders, and due to a complex set of legal, economic, and geographic circumstances, Indigenous people do not necessarily share the aspirations of their non-White, fellow minority subjects when it comes to social justice or matters of inclusion and equality. Our communities (urban or otherwise) emphasize/prioritize sovereignty and self-determination, including in the ways we view solutions to digital divides. Therefore, the digital inclusion/equity goals of Indigenous communities vary widely; in many cases, we do not seek approval, acceptance or absorption into the Canadian/mainstream body politic.[50]

In this Capstone, I am interested in examining the interplay between digital connectivity and the Indigenous Peoples of Turtle Island, as viewed by citizens of Saddle Lake Cree Nation. Recognizing that digital connectivity is changing the world and the ways we relate to each other in real time, I am concerned by digital connectivity's homogenizing effects. Indigenous Peoples are being forced to adapt to these effects without having enough time or opportunities to either provide meaningful input into how digital connectivity is being developed, or in how digital

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[49] https://www.icann.org/ua

[50] In a way, this is what EDI/DEI and correlating initiatives seek to do. For instance, one can legitimately argue that *reconciliation* is a form of state subversion; that it is nothing more than a colonial ploy towards the assimilation of Indigenous Peoples and means to reify a collective consciousness that solidifies the myth—the project—of Canada. See Alfred (2013), McCall and Hill (2015), Younging (2018).

connectivity is being implemented. For the latter point, Indigenous participation is still confined

to parameters as set out by Canadian legal and political authority. At the same time, I also see

enormous strides being made as Indigenous Peoples are taking ownership and control over

digital connectivity in their communities, with many having established their own internet

service providers (ISPs).[51] Another positive development is Canada's federal mandate to boost

Indigenous procurement; the ministry of Infrastructure, Science, and Economic Development

(ISED) and the Canadian Radio-television and Telecommunications Commission (CRTC), two

federal bodies responsible for managing media and digital connectivity in the country, are

included in the order. In addition, organizations such as the American Indian Science and

Engineering Society (AISES) also continue to expand the network of Indigenous students,

scholars and industry professionals working in streams of science, technology, engineering, arts,

and math (STEAM).[52] Something positive is happening in our communities, undoubtedly.

In this broad context, the purpose of my study is to contribute to nuanced discourses

around Indigenous digital connectivity. Specifically, I explore and critically interrogate the

assumption that "good" (affordable, accessible, reliable) connectivity improves individual and

collective wellbeing, or that it strengthens Indigenous sovereignty and self-determination efforts.

In fact, little evidence or data exist around how digital connectivity impacts Indigenous

communities in a holistic sense.[53]

In the coming chapters, my capstone draws upon my own experiences in the field of

Indigenous digital equity (through my on-going involvement with the Indigenous Connectivity

Institute) and presents insights into how research participants (community members of Saddle

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[51] Some examples are KNET, Eeyou Communications, and Arrow Technology Group.
[52] https://aises.org/about/
[53] There is a general lack of data (quantitative and/or qualitative pre and post-test evaluations) related to what happens when broadband is introduced or further developed in an Indigenous community.

Lake Cree Nation) reckon the holistic impacts—positive, negative, or otherwise—of digital connectivity for their community. By reflecting on these experiences, this project philosophizes on the interplay and interface between digital connectivity and the contemporary realities of Indigenous Peoples.

In the next chapter, I present a deep literature review to position my work in relation to other research and theory in this space. Then I present my methodology in Chapter 3, which includes the research design guiding my project and approach to data analysis. Chapter 4 is a narrative centred around my experience working in the Indigenous digital equity movement over the past 24 months. The final chapter is equal parts conclusion and reflection. It synthesizes and juxtaposes insights gained from the talking circle in Saddle Lake Cree Nation with my own experiences in the space, while also comparing some of those themes with the secondary research of the literature review. The interplay between culture, identity, and digital connectivity, is further explored and I expound on the notion of negotiating different worlds and worldviews.

Chapter 2: Literature Review

"Technologies are only the tools through which we carry our relationships with nature. The great accomplishments of Indian technology are almost all related to food, clothing, housing, and medicine. In the early days of colonization in North America, there was a meeting of technologies—Indian and European. Measured by the needs of the common man, the commodities Indian nations had to offer in the greatest abundance were the ones European man most lacked. What the Europeans had to offer in consideration for having their basic needs met was the techniques with which to do the same job better."

- *George Manuel and Michael Posluns, "Mutual Dependence", The Fourth World*

Introduction

This capstone explores the interplay and impacts between digital connectivity and Indigenous Peoples.[1] Most of the chapter employs a pan-Indigenous approach. This is done for two reasons. Firstly, Indigenous communities the world over share similar experiences living with/through colonialism and contemporary globalization; on the latter point, particularly so with respect to the West's preoccupation towards and transition to a digitized (or digital) society. In terms of sheer numbers, Indigenous Peoples largely exist within borders and boundaries that have been imposed by Euro-American imperials. The adoption and integration of digital connectivity come with complex and often indiscernible real-world impacts for Indigenous cultures. The internet has a profound impact on global society and Indigenous people are not apart from it; we exist within and are affected by it. But we resist, adapt, and ultimately survive

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[1] Digital connectivity encompasses the internet, the internet of things (IOT), ICTs, digital devices, and other communications technologies.

in the face of a settler-colonialism that continues to innovate and utilize digital connectivity to expand its power, profit, and purview. Indigenous digital equity, Indigenous data sovereignty, and Indigenous digital sovereignty movements are evidence of increasing coordination and cohesion between diverse Indigenous rightsholders, all of whom seek to meaningfully address what digital connectivity entails for their communities.

Secondly, while Indigenous communities undoubtedly vary in terms of their specific customs, norms and traditions, they tend to share similar philosophical orientations. Many Indigenous people and cultures hold that relationality and reciprocity are paramount to good life and human/social organization; we may call this taking a holistic view of the world.[2] The natural and human worlds are together, not separate. Indigenous epistemologies often contrast with universalism or liberal democratic philosophy, much of which is central to the "spirit" and spread of the internet. That spirit, still extant in the culture of digital connectivity today, is what Barbrook and Cameron (1996) famously coined as the "Californian ideology," a paradoxical belief among the early internet developers which "simultaneously reflects the disciplines of market economics [...] the freedoms of hippie artisanship [...] with the entrepreneurial zeal of yuppies."[3]

Philosophically, the modern global internet is based in a confluence of values, from communitarianism and social-democratic sensibilities to laissez-faire/neoliberal logics which were promoted and proliferated through an ethos of "networked individualism" (Rheingold, 2012, p.208) among its builders and adherents. The internet, at all levels of the stack—from its concrete qualities to its ethereal abstractions—is inherently Western. I delineate the internet as

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[2] A web of interconnectedness that includes our relationships with animals (the four legged), animate and inanimate things, such as plants, rocks, air, and water.

[3] In the same article, Barbrook and Cameron neatly described the Californian ideology as an "amalgamation of opposites."

uniquely "Western" (as opposed to strictly capitalist) because its spirit encompasses a spectrum of social, economic and political ideologies emanating from the United States, Canada, the UK and Western Europe. That spirit has been adopted and adapted by many non-Western countries and peoples. This is mainly a result of the Bretton Woods system being imposed post-WWII, which established a new global order in political and economic management for nation-states. The internet has played a significant part in exporting Anglo-American culture and human-centred neo-liberalism, which came from the Bretton-Woods model, across the world.

For Indigenous people, knowledge (or truth) isn't only relational, it's often place-based and rooted to land of a specific area. Overall, the push for universalism and global standards has an assimilatory—colonial—tenor. In this way, I believe that pan-Indigenous language, perspectives and approaches are appropriate; not only for interrogating the research questions, but also as a way to push back. These are the underlying beliefs which guided the search and selection of literature. In unity, one coalesces a global Indigenous narrative that can hold power to account and challenge how we—or perhaps the mainstream—both conceive of and approach the issue.

Research Question and Overview

The literature review highlights concurrent challenges, opportunities, ambiguities and complexities that digital connectivity uniquely present for Indigenous communities. Concepts such as Indigenous digital sovereignty, digital and data colonialism, and Indigenous digital equity elucidate the effects of and interplay between Indigenous Peoples and digital connectivity. In addition, I seek to demonstrate how Indigenous communities are leveraging digital

connectivity to promote aspects of their cultures, and to assert sovereignty and self-determination in sociotechnical spaces.

The research questions informing my literature review are as follows:

- What do Indigenous communities use digital connectivity for?

- How do Indigenous communities approach or engage with digital connectivity?

- What are the holistic impacts of the internet for Indigenous people?

- How does digital connectivity interact with Indigenous culture and tradition?

In broad strokes, this capstone investigates the social and cultural impacts and implications of digital connectivity vis-à-vis Indigenous Peoples, and vice versa. I also interrogate whether digital connectivity can help or harm Indigenous sovereignty and self-determination. Yet another goal of this Capstone is to broaden conceptions around Indigenous digital equity, digital sovereignty, and what they could entail for our communities.

Settler-Colonialism, Extractivism and Digital Connectivity

Facts about Indigenous Peoples and the historical injustices we have endured, and which we continue to go through, are well-documented. As both a phenomenon and a system of governance imposed upon the First Peoples of Turtle Island, settler-colonialism involves a nexus of mutually reinforcing political, sociotechnical, scientific, and legal mechanisms (still) undergirded by Western liberal philosophy of the Enlightenment-era. Settler-colonialism is also somewhat contradictory, in that, while ostensibly based in scientific and objective rationalism, it has equally been impelled by an oxymoronic strain of Christian-secularism. In Canada and the United States, early waves of European settlers served to advance the agenda and apparatus of a White heteronormative state (Tallbear, 2018). Tallbear (2018) acerbically notes, "[as] part of

efforts to eliminate/assimilate Indigenous peoples into the national body, both church and the state evangelized marriage, nuclear family, and monogamy" (p. 147). Settler-colonialism and extractivism serve to dispossess and exploit Native lands while destroying the foundation of the Indigenous social unit (Tuck & Yang, 2012; Tallbear, 2018, p.148). As the infamous saying goes, settler-colonialism is a structure, not an event (Wolfe, 2006).

The internet, a growing necessity central to many of our lives, is built on a blend of historical and contemporary foundations, a confluence of American and Western European value systems. In part, the internet was created to solidify America's position as the global superpower in the emergent post-WW2 order; it is an invention designed and co-created as a joint venture of the United States military (the US Department of Defense), and American science and academic communities (Curran, 2012; Bosch, 2022; Deibert, 2020; Duarte, 2017; Kenyon, 2019; Wemigwans, 2018). Harari (2014) coined this partnership as the "scientific-industrial-military complex" of the imperialist era, one which sought to standardize Western life and proliferate governmentality on a global scale (Jasanoff, 2006).[4] The internet isn't inherently colonial or imperial, but as noted, traces of both can certainly be found in its genealogy.

For clarity, it's important to define some of the key terms in the literature. These are *settler-colonialism*, *coloniality*, *data colonialism*, and *digital colonialism*. Tuck and Yang (2012) describe *settler-colonialism* as,

> different from other forms of colonialism in that settlers come with the intention of
>
> making a new home on the land, a homemaking that insists on settler sovereignty over all

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[4] French philosopher Michel Foucault described governmentality as "organized practices (mentalities, rationalities, and techniques) through which subjects are governed." See: https://www.oxfordreference.com/display/10.1093/acref/9780199231805.001.0001/acref-9780199231805-e-1413?rskey=k6P2VZ&result=1150

things in their new domain […] [and where] the most important concern is

land/water/air/subterranean earth.[5] (p.5)

Regardless of one's cultural background, religion, or political ideology, settlers and newcomers integrate to the status quo. Even if one personally opposes it, eventually, we accept that private property and individual liberty (individualism?) are core not only to the foundation of Canadian society, but globally. In the context of Canada, over time, the settler-colonial logic is rationalized, internalized, and further normalized.

Succinctly stated by Baker et. Al. (2022), *coloniality* refers to "[s]tructures and practices derived from settler-colonialism and colonial governance that continue to influence social institutions and relations in the present, even though they originally are derived from an era that many now believe is in the past." (p. 150).

Couldry & Mejias (2021) define *data colonialism* as, "an emerging order for the appropriation of human life so that data can be continuously extracted from it for profit […] extraction is operationalized via *data relations* […] [which are] ways of interacting with each other and with the world facilitated by digital tools." (p.2) They further explain, "[through] data relations, human life is not only annexed to capitalism but also becomes subject to continuous monitoring and surveillance." (2019, xiii). Lastly, *digital colonialism* is,

an insidious new phenomenon [...] a structural form of domination [...] exercised through

the centralised ownership and control of the three core pillars of the digital ecosystem:

software, hardware, and network connectivity, which vests the United States with

immense political, economic, and social power. [...] Assimilation into the tech products,

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[5] In Indigenous legal contexts, "subterranean earth" has sometimes been referred to as "title" i.e., ownership of what exists on the surface and all below.

models, and ideologies of foreign powers—led by the United States—constitutes a

twenty-first century form of colonisation. (Kwet, 2019, p.5)

These are some of the underlying logics and methods driving growth for the largest and most

influential companies in the world. Historical colonialism is in the past, but its contemporary

cousins—digital and data colonialism—are pervasive. Scholars argue these deceptive new

variants still enacts the "4E's" albeit less explicitly, and that they are intimately connected with

the proliferation of digital technologies and the rise of "Big Tech" (Couldry & Mejias, 2018;

Kwet, 2019; Zuboff, 2019).[6] For Indigenous Peoples, these new realities elicit mixed reactions.

Digital Opportunities

Digital connectivity has been a means for empowerment and presented great

opportunities for Indigenous Peoples. Indigenous communities continue to appropriate existing

sociotechnical infrastructures for self-determination needs (McMahon, 2013; Duarte, 2017),

implement data sovereignty measures (McMahon et al., 2015; Kovach, 2020; Roberts and

Montoya, 2022; Russo Carroll, Duarte and Liboiron, 2024; Tournier, 2016) and create initiatives

for cultural revival and resurgence by prosuming digital media (Carlson, 2013; Lalancette and

Raynauld, 2020; Napier, 2020; Winger-Bearskin, 2022; Wemigwans, 2018). These are all forms

of flexing individual and collective agency.

Broadband has facilitated connections between Indigenous people situated in rural and

remote communities (McMahon, 2013; McMahon, 2014; Budka, 2015) while improving access

to vital resources such as telehealth, telemedicine, and various forms of education (McMahon,

2014; Hudson, 2020). Young (2021) observes, "[the] Internet is a particularly powerful tool […]

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[6] The 4E's are "extract," "exploit," "exterminate," and "explore."

because of its ability to bridge geographic distance, thereby broadcasting messages to large and dispersed communities" (p. 245). At its base, digital connectivity improves quality of life and strengthens kinship networks.

Social media also plays a part in cultural revival, as Bronwyn (2013) notes, "that Aboriginal people embody rather than disembody their identity and cultural engagements when interacting online on social media sites" (p. 148). Caranto Morford and Ansloos (2022) agree, asserting that, "[social media] based Indigenous language-learning networks can be conceived of as navigation and mapping devices that offer digital bridges and pathways to connect language learners with their homelands and communities." (p. 302). The "Idle No More" movement, largely coordinated through social media, is a case study in how Indigenous Peoples effectively use digital connectivity to facilitate social and political mobilization. While herself highly critical of social media, Simpson (2017) acknowledges:

> [it has] played a critical role in providing a vehicle to bypass Indigenous representations in the mainstream media and self-represent our interest, our voices, and our movement to the Canadian public directly. But we didn't use social media just for self-representation. We used it as a tool through which to amplify, to organize, and to build the movement. (p. 220).

Can seemingly disparate modes or systems of cultural expression reciprocate or be reconciled? Caranto Morford and Ansloos (2021) argue yes, transsystemic exchange can be achieved via digital connectivity. Their own empirical research revealed, "through digital technology, Indigenous Peoples are connecting to their lands in dynamic, culturally grounded, and holistic ways." (p.302). According to Loyer (2022), Indigenous kinship is also strengthened through

digital connectivity in what she describes acts of "Indigenous relationality in digital spaces."[7]

Loyer's claim that digital connectivity enhances communication and kinship between Native folk

is concurred by Morgan (2022), who calls these digital relations forms of "digital kinship."[8]

Wemigwans (2018) also attests to positive impacts of the internet and its transformative

capacities for Indigenous Peoples, stating:

> "[in] continuing to create digital bundles and to come together to decide on the future of
>
> an Indigenous presence on the Internet, Indigenous communities will control information
>
> and thus shape the minds of their people in ways that support healing and regeneration
>
> […] [and they] will be better equipped to counter and resist domination by educating
>
> Canadians on what really occurred in Canada [...]" (p. 227)

On the network side, McMahon notes, "Indigenous peoples are providing alternatives to

sociotechnical development paths that position state and corporate entities as the dominant nodes

in a centralized network society[,]" explaining that, "[the] efforts on the parts of Indigenous

groups, nations, and communities to create and have control over smaller-scale, non-corporate

telecoms infrastructures are indicative of broader resistance and resurgence efforts […], which

have been labelled as acts of 'digital self-determination'" (McMahon, 2013; McMahon, 2014).

Digital Equity and Digital Inclusion

In our digital age, the internet is frequently spoken of as a basic necessity, sometimes

even as universal human right. A lack of reliable and affordable access has spurred the

Indigenous digital equity movement which, in turn, has also heightened public awareness around

Indigenous data governance, as well as *digital inclusion*. In the past several years, largely as a

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[7] https://www.youtube.com/watch?v=ucPL06lPUJo
[8] https://jasmorgan.com/category/digital-kinship/

result of the COVID-19 pandemic, calls have been amplified—within and without Indian

Country—for increasing and improving internet access (Indigenous Connectivity Summit, 2022;

Gilliland et al., 2019). Ragnedda (2020) has referred to an urgent need to "connect the digital

underclass," arguing that digital connectivity has become a barrier to social mobility (p.20). Even

in its nascent stage, the Indigenous digital equity movement is effectively galvanizing and

actuating digital self-determination in theory and practice.

Digital equity has several overlapping definitions and interpretations. First Nations

Technology Council (FNTC) defines digital equity as, "a state in which every Indigenous person,

community and Nation is fully equipped to access and effectively use technology to contribute,

thrive, and succeed in today's digital society while preserving self-determination."[9] The FNTC

goes onto stipulate that digital equity "is more than just access to computers and the internet, it is

about influence over the trajectory of technology and its impacts on society […] [and is] a

prerequisite for innovation, self-governance, entrepreneurship, education, economic and cultural

wellbeing, and nearly all aspects of rights implementation in the digital age." This is a distinct

interpretation of digital equity, one which acknowledges Indigenous Peoples as inherent

rightsholders, and which reflects the reality of Indigenous life within a settler-colonial state.

Realizing digital equity is complicated because of how multistakeholder digital

connectivity is. Digital connectivity is an encompassing term that refers to the composite pieces

and products that constitute the global internet, including ICTs, digital platforms and the world-

wide-web.[10] Many of those pieces are built, shaped, and innovated by different parties, some of

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[9] First Nations Technology Council is a British Columbia based and Indigenous-led non-profit that works to advance digital and technological skills, capacity, and infrastructure for First Nations communities. https://www.technologycouncil.ca/our-work/our-story/
[10] The world-wide-web is an application developed to use the internet, distinct from the internet itself: https://www.lifewire.com/difference-between-the-internet-and-the-web-2483335

which are public and a great many private. For instance, Google, Meta, and other major

companies are invested in building and owning the subsea cables that make up the global

internet.[11] That is to say, there is significant private investment in not only growing but

safeguarding the internet backbone.[12] But a great deal of research and innovation comes from the

public sector, academic institutions, and private citizens themselves.[13] Beyond Big Tech or the

major telcos, though, global finance is thought to be a major driver of innovation in the space.[14]

Causality is difficult to establish, but innovation in digital connectivity is deeply intertwined with

the financial industry and "Fintech."[15]

A broader, less political definition of digital equity is, "the state of all members of a

community having equal access and sufficient digital literacy to use communications

technologies." (Tribal Broadband Bootcamps, 2022). Yet another interpretation is provided by

Davida Delmar (Navajo), a digital inclusion manager with AMERIND Critical Infrastructure,

who succinctly states,

> Digital equity is a condition in which all individuals and communities have the
>
> information technology capacity needed for full participation in our society, democracy,
>
> and economy. Digital equity is necessary for civic and cultural participation,
>
> employment, lifelong learning, and access to essential services.[16]

The organization she works for is one of the first and only Indigenous insurance companies in

the United States that works to "Keep Indian money in Indian Country, and to create affordable

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[11] https://www.economist.com/business/2023/12/20/big-tech-and-geopolitics-are-reshaping-the-internets-plumbing
[12] In technical terms, the act of strengthening and building resilience (safeguarding) internet networks is called building "redundancy." It means including extra back-up systems, components or paths to ensure that the global internet remains operational, even if one or more of its constituent parts fails.
[13] I briefly expand on the idea of a "digital commons," FLOSS (free, libre, open-source software), and intellectual property later in the chapter.
[14] Personal communication from Matt Rantanen (Cree), a.k.a. "The Cyber Warrior".
[15] https://en.wikipedia.org/wiki/Fintech
[16] https://amerind.com/digital-equity-in-indian-country/

and sustainable insurance products and services for Indian Country."[17] Davida and AMERIND

put stock in the Indigenous digital equity movement, and do so through investments into public

awareness campaigns, and by providing digital trainings to Tribal citizens on/off Tribal lands.

What these definitions have in common is the recognition that digital connectivity is a

growing necessity that enables many aspects of our everyday lives, and that it is essential to

participation in the digital society. What makes digital equity challenging to realize or implement

lies in its respective layers that communities must negotiate, often on their own time and with

their own resources. Digital connectivity is not cheap, highly distributed, and takes capacity to

understand and manage. Due to the pace of innovation, the landscape is constantly changing, the

targets always moving.[18] Federal policy also has a significant impact. As the network society

grows, and the digital divide along with it, Indigenous digital equity and inclusion plans will be

needed in all aspects, from multigenerational technical training, digital literacy, policy and

advocacy work, to planning, development, and implementation of digital equity initiatives

themselves.

In most cases, the major decisions being made with respect to digital connectivity are

actioned outside reserve lands, occurring in a mix of public (federal), private (corporate) and

transnational domains.[19] For example, the International Telecommunications Union (ITU) is a

UN agency with stated goals to, "facilitate international connectivity in communications

networks, […] allocate global radio spectrum and satellite orbits, develop the technical standards

that ensure networks and technologies seamlessly interconnect, and strive to improve access to

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[17] https://amerind.com/about/mission-vision/
[18] Tracy Monteith, a member of Eastern Band of Cherokee and a senior software engineer at Microsoft, once told me that the technology Big Tech is developing is so far beyond what is currently in circulation that Indigenous communities need to be thinking "15-20 years ahead at a minimum" in terms of their digital equity plans: https://news.microsoft.com/life/written-in-the-sky/
[19] There have been efforts to change this: https://www.un.org/esa/socdev/egms/docs/2013/ict/innovation-technology-indigenous.pdf

ICTs to underserved communities worldwide." It is a leading transnational body that seeks to

establish "consensus, to advance the development of information and communication technology

across the world." However, no "sovereign" First Nation or Indigenous community in North

America is a member or granted a delegation to attend proceedings. The ITU has a digital

inclusion initiative, but the programs and frameworks it utilizes to bridge digital divides or make

technologies more inclusive are altogether ambiguous and have not been designed with

Indigenous Peoples.[20] It is a form of virtuous paternalism, conceived from a deficit viewpoint

that seeks to build capacity so that Indigenous communities are "not left behind." Many of these

digital inclusion theoretical frameworks are similar in how they are based in neoliberal

conceptions of human rights and human/sustainable development. While these programs can be

incredibly helpful at local levels, it's uncertain whether reciprocity is taking place, or if these

policies and programs are affecting change the macro level, in either private or transnational

domains. The message is still: digital connectivity is here, it's not going anywhere, we have to

deal it; that is, the approach is predominantly top-down. Hence, Indigenous fights to be

involved—to be at the table and assert their rights—in these processes is often constrained to

national contexts.[21] These fights occur on legal and political fronts. The political aspect entails

(we hope) consultation with federal departments, often meaning discussions are held in a mix of

colonial/corporate settings.[22]

 In legal and advocacy spheres, there are calls for Indigenous oversight and direct

involvement into design and implementation aspects of digital connectivity, as well as in the

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[20] https://www.itu.int/en/ITU-D/Digital-Inclusion/Indigenous-Peoples/Pages/default.aspx

[21] As I will describe in the following autoethnography chapter, "Indigenous Connectivity – A Vantage," there are cross-border/international fora where Indigenous rightsholders gather to discuss digital connectivity on their own terms, but they are few and far between.

[22] These can be public agencies and organizations such as the FCC (Federal Communications Commission) in the United States, or the CRTC (Canadian Radio-television and Telecommunications Commission), or ISED (Innovation, Science and Economic Development) in Canada.

crafting of international telecommunications policy ("Indigenous Connectivity Summit", 2022). Most of the language in these ethical and policy appeals is informed by universally recognized human-rights and social justice frameworks such as the United Nations Declarations on the Rights of Indigenous Peoples (UNDRIP), the Declaration on the Rights of Indigenous Peoples Act (DRIPA) and the TRC's calls-to-action.[23]

A third arena for digital equity and inclusion initiatives comes from the non-profit and philanthropic sector. These endeavour to boost Indigenous youth participation in higher education and workforce development through a blend of financial investment, granting, and community engagement. Programs seek to encourage Indigenous involvement in science, technology, engineering, arts, math (STEAM) and participation in network certification programs.[24]

Mechanisms for accountability are legal documents such as MOA/MOUs (memorandums of understanding/agreement) and international, non-binding resolutions such as UNDRIP. Efforts are being made to "braid legal orders," (Borrows et al., 2019) whereby resolutions such as UNDRIP would be integrated into the policies and processes of state governments and international agencies such as the ITU, effectively requiring them—in theory and in law—to adhere to a set of universally agreed upon terms and conditions. So, while progress is being made to strengthen international and corporate accountability, as we shall see, many of these mechanisms are still symbolic.[25]

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[23] DRIPA is the province of British Columbia's version of UNDRIP. See: https://www.bcdripa.org/
[24] Network operators can be IT (information technology) professionals who also assist in the design, management and implementation of networks in their communities.
[25] The corporate social responsibility (CSR) movement is driven by capitalism. It still takes paternalist "inclusion," and "affirmative action" style approaches to equity-deserving groups. For example, Telus and Rogers are two major Canadian telcos with Indigenous reconciliation plans. They claim these plans are proof of their efforts to meaningfully engage with Indigenous rightsholders. Yet they continue to wage (legal/political) battles against First Nations, Inuit and Métis people and their self-determined efforts to provide connectivity for their communities. In essence, these companies are denying digital equity.

The Language of Human Rights and Recognition Frameworks for Equity and Inclusion

In the Canadian context, the *Indian Act* is a piece of federal legislation that demarcates Indigenous identity and rights. Indigenous and Northern Affairs still exists and is organized in two departments, Indigenous Services Canada (ISC) and Crown–Indigenous Relations and Northern Affairs Canada. The reserve system is also still in place. Modern and relatively historic treaties between Indigenous Peoples and the Canadian government are still in effect, some of which have resulted in negotiated forfeits to land and title on the parts of Indigenous nations.[26] Nation-states such as Canada and the United States devise mechanisms to manage and meet the demands of "their" Indigenous populations through a combination of universal/human rights-based frameworks (Mamdani, 2020; Moreton-Robinson, 2015; Diabo, 2020) and a politics of recognition (Coulthard, 2014). For Moreton-Robinson (2015), these are colonial tactics masquerading as magnanimity; virtue is "deployed by patriarchal white sovereignty" through "white possessive logics" that further Indigenous dispossession.[27] For example, since UNDRIP's adoption, no measures for accountability, progress or "enforcement" have been put in place; it is a non-binding resolution. In theory, international law and justice are administered through the International Criminal Court (ICC) and International Court of Justice (ICJ), or "World Court." But none of Canada, the United States, Australia or New Zealand have been held to account for their roles in the genocide and dispossession of Indigenous Peoples.

On national fronts, policy can be enacted and legislation passed, and supreme courts are sometimes able to do their part in keeping federal, state or provincial governments in check. On

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[26] British Columbia is entirely unceded territory, as well as parts of Algonquin territory in Ontario (Toronto and Ottawa), the Maritimes, and areas in Quebec. Treaties are often a point of dispute for many First Nations, especially those who have signed historic treaties. These nations assert they have never surrendered their rights to the crown or the federal government through in any of their agreements.

[27] https://www.tandfonline.com/doi/abs/10.1080/10383441.2011.10854714

the legislative side in Canada, Bill C-15, "An Act Respecting the United Nations Declaration on the Rights of Indigenous Peoples," was passed which seeks to "take all measures necessary to ensure that the laws of Canada are consistent with [UNDRIP], and [the Government of Canada] must prepare and implement an action plan to achieve the objectives of the Declaration." Presumably, this could mean federal bodies such as ISED and the CRTC will need to factor UNDRIP into institutional/departmental mandates. But as Diabo (2020) notes, Bill C-15 is folded within "section 35 of the Constitution […] making UNDRIP subject to existing Canadian laws." Diabo goes onto say, "by subjugating UNDRIP to section 35, the government is taking away all of the rights the declaration was designed to recognize." In its active state, C-15 may be ineffective and tokenistic, diluted by the state's legal authority.

The Canadian government continues to operate in duplicitous ways that seeks to assimilate and dispossess First Nations, Inuit and Métis people. The Yellowhead Institute (2019) points to Canada's enduring push for federal municipalization, on-going for decades, as an sustained attempt to implement the "White Paper 2.0."[28] This would eliminate the Indian Act, override/neuter Native self-determination and make bands the responsibilities of the provinces.[29] As Schmidt articulates, federal municipalization is the, "threefold process that subverts Indigenous authority to the state, then delegates forms of state authority to Indigenous Peoples, and concludes by asserting that delegated authority satisfies the terms of Indigenous self-determination." (p.1) Part and parcel of federal municipalization also proposes the introduction of private property rights (fee simple), and an end to tax exempt status for First Nations.[30]

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[28] https://yellowheadinstitute.org/wp-content/uploads/2018/06/yi-rights-report-june-2018-final-5.4.pdf
[29] https://yellowheadinstitute.org/wp-content/uploads/2019/09/fnlma-report.pdf
[30] https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/what_we_heard_report_first_nation_registration_of_land_updated_may_2024.pdf

In the United States, the Bureau of Indian Affairs (BIA), housed under its parent agency of the U.S. Department of the Interior, "manages public lands and minerals, national parks, and wildlife refuges and upholds Federal trust responsibilities to Indian tribes and Native Alaskans […] [in addition to being] responsible for endangered species conservation and other environmental conservation efforts." (2022).

All this to say that the terms and conditions for/of Indigenous sovereignty and being as distinct entities in North America operate under and are circumscribed by colonial governments. As Mamdani (2020) argues, the realization of the current version of Indigenous sovereignty is a form of indirect rule, quintessentially colonial, which has created groups of "domestic dependent nations"—tribes and bands—that remain under the guardianship of colonial governments (p. 42). The concept of indirect rule echoes Memmi's (1991) infamous "pyramid of petty tyrants," in which colonized people, having internalized colonial practices over time, adopt the governing structures of the colonizer within their own communities.

Rehashing these discussions may seem redundant, but it's all important to note since these struggles and realities continue to play out. They harken back to the initial critique of inclusion, which I interpret as a veiled push towards assimilation and incorporation to the body politic—even if at a distance. Many believe colonialism is a thing of the past, or that Canada and the US are no longer colonial countries; that the history has been settled. The facts should be laid bare and clear. Says Mamdani, "[until] the BIA is abolished, and the structures of tribal governance it designed and authorized are scrapped in favor of democracy and self-rule, supposedly sovereign Indian tribes will remain protectorates of the US government." (p. 85). As the popular saying goes, "the road to hell is paved with good intentions." And as Couldry and Mejias (2018) note, the internet by its very nature is "inescapably capitalist" which means,

depending on the community, digital equity initiatives can be narrow in their conception and what they're realistically able to deliver. We live in a globally interdependent free market system that accelerates economic globalization, and which wreaks havoc on the earth's ecology and climate (Kwet, 2022). Presumably, these facts are antithetical to the spirit and philosophies of many First Nations, Inuit and Métis communities across Turtle Island.

That is to say, Indigenous Peoples are between a (government) rock and a (capitalist) hard place. If Indigenous Peoples aren't the beneficiaries of international agreements, receiving settlements, or generally being accommodated by legislation on behalf of "virtuous racial states" (to borrow a phrase from Moreton-Robinson), there is the market option. Economic development is a popular theme among Indigenous groups, often seen as a viable alternative to government/state reliance. In her critique of Indigenous land and property ownership, Jobin (2020) wonders "the extent to which [Indigenous] understandings of identity [won't be] conditioned by market liberalism […]" and questions, "the value of developing state-sanctioned mechanisms that promote Indigenous empowerment through land." In absence of adequate resources, redress or government restitution, the result is "the [Indigenous pursuit] of self-determination in ways that comply with the constitutional order and Western models of self-sufficiency, including economic self-sufficiency often embedded in extractive capitalism." (p.96) Eventually, a precarious "market citizenship" emerges (Altamirano-Jiménez, 2004). Neoliberalism trends towards Western hegemony; and even though it's decentralized, without locus (though this could easily be challenged, or at least clarified), it's an orthodoxy that has spread across the world.

The language that Indigenous Peoples use to define themselves, their struggles and their places within this world employs a moral virtue instilled by that of the colonizer, as Kolopenuk

says, "the manner in which one raises political awareness by seeing a particular set of problems is formed through the same kinds of power relations that shape the problems themselves." (p. 25) She goes onto say, "[while] *inclusivity* carries a tone of altruism for its connotation of equality, its assimilative feature operates in ways that uphold the coloniality of Indigenous and non-Indigenous relationship." (p. 28). As previously mentioned, pushes for Indigenous (digital) equity in sectors of society ultimately work through (digital) inclusion. And what does Native sovereignty and self-determination look like if we remain isolated in "traditional" territories with limited resources? Ideas of sovereignty, equity, and inclusion sure sound and feel good, but what do they *actually* mean, and could they potentially work against our own interests? Smaller nations tend not to fare well in matters of statecraft or in the global (colonial) political theatre. Many First Nations bands struggle with trauma, a lack of capacity, and any other number of social, economic, cultural, and political issues. There is a high level of dysfunction across the board. Maybe we need to shift our goals and aspirations. Coulthard (2014) doesn't mince words:

> Our present condition demands that we begin to shift our attention away from the largely rights-based/recognition orientation that has emerged as hegemonic over the last four decades, to a resurgent politics of recognition that seeks to practice decolonial, gender-emancipatory, and economically nonexploitative alternative structures of law and sovereign authority grounded on a critical refashioning of the best of Indigenous legal and political traditions. (p. 179)

Piecemeal offerings—good faith "negotiations," providing inclusive and equitable access, or permitting First Nations to exert their "rights," symbolically or otherwise—won't suffice. Can Indigenous Peoples make a better internet for themselves? Or could digital sovereignty further lead to isolation; potentially even foster fascism within reserves? If we seek to decolonize and/or

Indigenize digital connectivity, one strategy, as Tallbear (2020) notes, is to achieve a "critical mass" of Indigenous thought within structures and institutions throughout society. For Indigenous digital equity to be achieved, we need Indigenous people to occupy high level decision maker positions in "tech." We also need to be our own bosses, while also owning our own networks, infrastructure, telecommunications companies and ISPs. We're aways from that.

Digital Challenges

The flipside of this discussion revolves around the social and cultural impacts of digital connectivity and meeting the specific needs of diverse communities and peoplehoods. That is to say, digital connectivity produces challenges! Duarte (2017) states that, "[read] against the century of US anti-Indian campaigns and imperial expansion, narratives of technological advancement function to satisfy societal desires for Enlightenment-era values of progress and scientific evolution in spite of the colonial fabric of Indian eradication." (p. 11). The paradox lies in the fact that Indigenous peoples can't afford *not* to engage with and have increased access to digital connectivity. Wemigwans mentions, "[there] is a general feeling that if Indigenous Peoples do not stake out a claim on the Internet, they will become colonized in that space too because of their absence." (p.29). Indigenous youth are often told by their Elders, "you need to be there, we need you there." Younger generations willingly take on the duty of perimeter scoping; carefully observing, then obtaining knowledge or information from an area that is not well known and bringing it back to the community for further consideration. This is a common sentiment across Indian Country. As the President of the Sovereign Nation of Hawai'i Dennis "Bumpy" Kanahele says, "the internet needs more aloha!" The internet is a tool, but we cannot

say it is devoid of culture or that it doesn't in some way embody the ideologies of its makers.

Culture, Compatibility, Commensurability

Yet another unsettling aspect to consider is that Western philosophies are not necessarily commensurate to—or even potentially compatible with—Indigenous ways of knowing and being. Indigenous ontologies and epistemologies have commonly entailed loose forms of communal property "ownership" (Younging, 2015) with more fluid and decentralized configurations of social cohesion and coexistence (Tallbear, 2013; Coulthard, 2014; Jobin, 2014; Manuel & Posluns, 2019). Pre-contact, complex legal and customary practices—sometimes referred to as *cultural protocols*—had governed Indigenous systems of political economy and our relationality with and among each other for millennia (Younging, 2015, p. 1079).[31] Many of these traditions and cultural protocols are at risk of extinction; it's altogether uncertain whether digital connectivity—the sociotechnical architecture(s) underlying colonial modernity—are appropriate modes and tools for translation, capturing, or transmission. Younging (2008) heeds us that:

> incorporating new ways of doing things, and new uses for [TK], should be carefully considered in consultation with community and Elders and according to Customary Law; […] if a new technology or methodology goes against fundamental cultural values and/or might lead to negative cultural impact, or breeches Customary Law, then it should not be adopted. (pp. 63-64)

Bear Nicholas (2008) reinforces the notion that certain mediums for communication may be inappropriate and altogether insufficient if they're intended to transmit knowledge or information

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[31] "Cultural protocols" are sometimes called Traditional Knowledge (TK); see Younging, G. (2015). Traditional Knowledge Exists; Intellectual Property is Created.

of a sacred nature, stating, "[for] Indigenous Peoples, language is not just a form of communication, but also a priceless archive in which the knowledge necessary for survival is embedded" (p. 22).

To this point, the possibilities for Indigenous Peoples to create their own sociotechnical architectures—ones that could be more representative or reflective of their value systems—are altogether limited. Gehl (2015; 2017) and Gillespie et al. (2014) promote free and open-source software (FOSS) models as a way to simultaneously empower the individual and counter the internet's neoliberal turn towards hyper-commodification and closed-system platform economy models (Srnicek, 2017). However, the open-source movement encounters an obstacle—or becomes limited—in the context of Indigenous data (and digital) sovereignty. While digital "repatriation" of Indigenous data and information can be good and contribute to sovereign agendas (Gaertner, 2023, p.59), it remains to be seen how (or if) these philosophies to digital creation and data management can coexist; or whether Indigenous rightsholders could create their own "digital commons" from existing frameworks.

Stakeholders from public, Indigenous and nongovernmental domains cite four avenues to counter centralization and monopolization by major ICT developers and service providers: "decolonization" of the digital (Benjamin, 2019; Couldry & Mejias, 2019; Mohamed et al., 2020; McLean, 2020); inclusive and co-creational approaches to policy development and digital literacy campaigns (McMahon; 2020); ethical design of "people-centred" technologies to bridge cultural gaps and narrow systemic inequities for marginalized and displaced peoples (Gilliland et al., 2019); and Indigenous digital sovereignty (Delmar, 2023). These are good propositions. But questions remain around accountability, sustainability, and incentive; not to mention the phenomenon of network effects, "market ontology," and concerns around scale (Gillespie, 2020).

Consumer tech—no matter who (or what) develops it—designed for common use wants to be free and have an opportunity to hit the open market. While digital connectivity is universal in that the building blocks are open-source and anyone can enter the fray at any level of the stack, if one is proficient enough, resourceful, or has proclivity to information technology (IT), there is a good chance their skills or ideas (IP) will be acquired by a larger company or be monetized.[32] In this way, when innovation occurs at a layer in the stack that improves efficiency, speed and/or convenience etc., especially that which meets a consumer/user (market) demand, there is a high likelihood of corporate (monopolist) acquisition. This inherently makes it difficult for innovators to retain their ideas (IP) or substantively address concerns around scale. At present, innovation in digital connectivity is increasingly commoditized, geared towards scalability, and largely exists in the private (for-profit) sphere.

At present, digital connectivity is concentrated in a commercial realm that has little impetus to design truly inclusive or diverse technologies which could pose risks to their instrumental rationale.[33] For example, only one of the Truth and Reconciliation Commission's (TRC) 94 calls-to-action is dedicated to the role of business. But capitalism and the private sector are directly implicated in settler-colonialism (Couldry & Mejias, 2019; Coulthard, 2014; Simpson, 2017). Simpson (2017), contemplating the big picture, rhetorically questions "on a very basic level, I wonder how the Internet, as another structure of control whose primary purpose is to make corporations money, is at all helpful in building movements [,]" going onto speculate whether, "this is a digital dispossession from ourselves because it further removes us

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[32] The "stack" in this case refers to OSI and/or TCP/IP models, consisting of 4 to 7 "layers" that form the basis of the internet. These are the network/interface layer, internet layer, transport layer, and application layer. For a simple introduction to the stack and internet networking, see:
https://www.cloudflare.com/en-ca/learning/network-layer/what-is-the-network-layer/
[33] Is there an equivalent to a "Hippocratic oath"—a code of ethics—in fields of computer science or engineering?

from grounded normativity."[34] (p. 221) Though Gehl (2017) notes that digital skills development (learning how to code, manage and operate networks, engineer software, etc.) can counter mass corporatization of digital connectivity, stating, "tackling sociotechnical problems requires more than critique; all of us need to learn from the knowledge gained by critical inquiry and apply it to specific, grounded, viable sociotechnical solutions" (p. 8).

In discussions around transsystemic (or cultural) exchange, and the possibilities of ethical integration between digital connectivity and Indigenous ontologies, it's possible for us to get even more "abstract." Indigenous ways of knowing and being involve holistic governance systems that acknowledge all things are related (Jobin, 2014; Whiskeyjack & Napier, 2021). Plains Cree (nêhiyawak) people call this "wâhkôtowin," a concept that "explores how we are related to each other […] [extending] to the way we are related to nonhuman beings (i.e., animals, plants, the air, the land, etc.)" (Jobin, 2014, pp. 158-159). wâhkôtowin is encompassing in that, it consists of a set of principles and laws which govern economic, social, political, spiritual relationships (Jobin, 2014). For nêhiyawak, all of life—animate and inanimate—is relational. And yet this set of laws and principles, core to nêhiyâw philosophy, is also extant in other Indigenous cultures. From her Lakota standpoint, Kite (2018) speaks of a compromised relationship between humans and communications technologies:

> Stones are considered ancestors, stones actively speak, stones speak through and to humans, stones see and know. Most importantly, stones want to help. The agency of stones connects directly to the question of AI, as AI is formed from not only code, but from materials of the earth. To remove the concept of AI from its materiality is to sever this connection. Forming a relationship to AI, we form a relationship to the mines and the

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[34] Coulthard (2014) refers to "grounded normativity" as the need to (re)connect with our traditions and our physical lands (p.13).

stones. Relations with AI are therefore relations with exploited resources. If we are able to approach this relationship ethically, we must reconsider the ontological status of each of the parts which contribute to AI, all the way back to the mines from which our technology's material resources emerge. (p.11)

Ironically, digital connectivity can rupture and disconnect Indigenous Peoples from their cultures and ways of life. The internet is a physical structure, made of minerals, metals, and stones, and is powered by electrical grids that still run-on fossil fuels. Wemigwans (2018), herself an internet enthusiast, promotes it but with two huge caveats. She hedges, making two stipulations regarding the internet as an appropriate medium (tool) for protecting and promoting Indigenous knowledge: (1) she doesn't believe that Traditional and/or Ceremonial Knowledge can be communicated online, stating "I do not believe [the internet] can fulfill that function because […] people must go to their communities and engage with Elders and Traditional Teachers and languages and ceremonies to truly grasp Indigenous Knowledge" (p. 118); and (2) there are debates whether Indigenous knowledge online can be classified as such, or rather, if they are instead "Indigenous information" (pp. 118-123).[35] Semantic debates over classifications and definitions put us in murky water, particularly for Indigenous and non-Indigenous peoples who adopt postmodernist orientations.[36] These technologies are powerful and complicated, and present a variety of ethical and cultural issues for Indigenous Peoples. Sandvig (2012) explicates the conundrum some Indigenous communities are unfairly faced with when discussions around necessity ("proper" or "effective" use) and basic human rights (unconditional and equitable access) inevitably arise, stating:

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[35] It is unclear whether Wemigwans is referring to a distinction between knowledge expressed by Indigenous individuals (lone actors) versus communally stewarded Indigenous knowledge.
[36] A plurality of truths and possibilities, based on the positionality (time and space) of the individual who is experiencing.

> Because of funding policies and sometimes also terms of use, [Indigenous] people often
>
> find themselves in a difficult position: 'to justify their expensive and heavily subsidized
>
> use of the Internet they [the indigenous people] must perform difference – they must act
>
> like disadvantaged Indians who seek uplift and the preservation of their culture, despite
>
> the fact that, they may be more interested in MySpace or soccer games'. But to deny
>
> indigenous people the mundane appropriation of Internet technologies and
>
> services only reinforces their attributed marginal status as dependent people outside of
>
> 'modern' society. (as cited by Budka, 2015, pp. 140-141).

In contemplating all this, the tradition/modernity dialectic becomes evident. Shalene Jobin

(2014) coopts Festinger's (1957) concept of "cognitive dissonance," thought of as an internal

state of discord or disharmony arising when "[…] a person's or group's actions are contrary to a

certain belief system they hold, [and] can also include a condition when a person or group holds

more than one set of beliefs that are contradictory." Jobin appropriates this definition but

modifies it to create and posit her own theory of "colonial dissonance," which she describes as a

condition where (and how), "settler colonialism […] not only [impacts] cognition but also the

physical, emotional, and spiritual aspects of Cree personhood and peoplehood." (pp. 197-202).

Modern Indigeneity is complex, and it's more than simply our connections to land and

languages, to be sure. At the same time, as Indigenous Peoples, we have to guard against the

politics of authenticity or purity. Andersen (2009) challenges us deepen and expand our

conceptions, and our understandings of what it means to be "Indigenous" — to transcend the

traditional/modern dichotomy. As iyiniwak (First Peoples), perhaps we can remember forward.

Chapter 3: Methodology

I preface this chapter with something of a disclaimer. This Capstone was influenced by Indigenous and Western paradigms. This made the task of picking and sticking to a single theoretical "perspective" or "framework" to guide my inquiry somewhat confounding. Given my own subjectivity, it did not seem appropriate to root the methodology in a single (either Western or Indigenous) sphere. In this way, the Capstone is theoretically promiscuous. Therefore, this study employs a braided method; my process of attempting to "answer" the research questions relied on concepts, guidelines and appeals from Indigenous and non-Indigenous scholars, from both paradigms, within and without academia. This was my proclivity that lasted throughout the project. And while the MACT program is one of social science and the humanities, my own positionality combined with the broader "Indigenous" element of my project had me invested in applying an Indigenous research methodology (IRM) as part of a greater imperative towards decolonial Indigenization (Gaudry and Lorenz, 2018).

A corollary (or "meta" aspect) of this was capstone was achieving a semblance of cultural reciprocity through the methodology. I am uncertain as to whether a literature review can be considered part of an IRM or capable of generating Traditional Knowledge, but some may argue it is. Conversely, a talking circle format and the boundaries of its analysis may differ from (or challenge) standard applications of a Western qualitative method. However, I have found there to be theoretical concepts in Western traditions that effectively frame my observations and interpretations of the research topic, which suitably fold in with a nêhiyâw epistemology and IRM, and vice versa—particularly with respect to implementing a qualitative method. There are congruences and commonalities in both paradigms.

As Indigenous people, we exist on Turtle Island along with everyone else. And while distinct, our identities and cultures are not—cannot—be decoupled from our modern colonial reality. We co-exist in this world and share the river of life.[1] In his seminal article on critical Indigenous studies, Andersen (2009) stated, "Indigenous studies […] must use all available epistemologies, not just those which apparently distance Western disciplines from Indigenous studies analysis." (p. 81). Theories and concepts in the social sciences not only serve as heuristics; they enrichen our research tool kit. Overall, my methodology was a blend of Indigenous, critical, and interpretive frameworks.

Braided Theory

Before my exposure to theoretical perspectives in Native/Indigenous studies, I gravitated towards and was swayed by the likes of Pierre Bourdieu, Michel Foucault and Jürgen Habermas; sociologists, postmodernists and political theorists whose analyses and interrogations of power and contemporary sociality almost inexhaustibly provide insights. But I did not conduct a critical discourse analysis, rely on statistical modelling or other quantitative methods to "test" my thinking or "answer" my research questions. However, I did apply a reflexive thematic analysis (Braun and Clarke, 2013; Byrne, 2021) to the primary research findings. So, while aspects of those scholars' social theories have undoubtedly shaped my own perspective, I must be transparent about the limits of their influence and why I opted to design and carry out the study the way I did.

Without a researcher engaging in critical reflexivity, the practice or (indirect) promotion of a Western methodology often has the effect of perpetuating, if not reifying, an academy

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[1] https://www.treatytalk.com/

institution that is inherently colonial (Tuhiwai-Smith, 2021).[2] In a way, this fact puts the very

"purpose" of the research at odds with a greater imperative of decolonial Indigenization (Alfred,

2013; Gaudry & Lorenz, 2018; MacFarlane & Schabus, 2017). It's a catch-22. But I

acknowledge that, as the principal investigator of this project and a student at a Canadian

university, I give air and credence to the Western paradigm.[3]

On principle, this project sought to emphasize and apply an IRM. As such, I limited the

methodological authority of Western social science while concurrently promoting elements of

Indigenist resurgent/insurgent methods and a general ethos of refusal (Gaudry, 2015; Tuck and

Yang, 2014).

My work was also firmly situated in the Indigenous insider/outsider reality.[4] As such,

there were immediate limitations to enact the IRM as I had neither an Indigenous supervisor nor

an Indigenous advisory committee, and this work did not take place in an Indigenous program.

Direct community involvement—while significant—was narrow and confined to a single section

of the study. Ideally, an Indigenous research project should engage with community at all phases,

even if one is simply "writing about" a community and experiences therein. Furthermore,

academic research involving Indigenous subjects or topics should be in service to Indigenous

communities and strive to build meaningful relationships (Fast and Kovach, 2019; Kennedy et

al., 2020; Tinkler et al., 2014). An insider/outsider ought to establish and maintain good relations

with the community one is attempting to learn from or about, while also building trust. In stating

this, I did not—and do not—want to "throw the baby out with the bathwater" with respect to

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[2] The Truth and Reconciliation Commission's (TRC) final report, as well as the resulting 94 calls-to-action, implicate the Western education system which includes universities, colleges and post-secondary institutions, and their on-going role in colonialism and the historical colonization of Indigenous people.
[3] This holds for knowledge production, creation, ownership, etc., as well as in terms of philosophical, systemic, structural, ideological aspects. I recognize the role the academy plays in Euro-American (now global) hegemony.
[4] I explained this in my introduction chapter.

Western epistemology. In theory, when Indigenous and Western research paradigms converge, a Two-Eyed Seeing (Marshall, 2012, p.335) Shared Space-Liminal Space (Kovach, 2021, p.190) framework may emerge and be considered a logical description of what's being enacted. However, I do not consider those to be an accurate representation of this project.

Key to social science and the scientific method are replicability and generalizability of findings. But this research study is not necessarily intended to be extrapolated or transferable to other contexts. What it could be suitable for is to provide readers, researchers, policy analysts, citizens and/or allies of Indigenous communities with a qualitative, detailed account from people on the ground. This Capstone is a piece of collective truth-telling.

nêhiyâw Epistemology and Indigenous Research Methodology

To imbue this project with a distinctly Indigenous bent, I leaned on the nêhiyâw concept of wâhkôhtowin, which are the laws/principles that govern all relationships and kinship (Jobin, 2023; McAdam, 2015; Whiskeyjack and Napier, 2022; Wildcat, 2013; Wildcat and Voth, 2023). A *relational approach* is key in any Indigenous research project. It starts with building trust and authentic connections, not only in terms of the relationship between the researcher and participant(s), but also between the researcher and the core ideas (intellectual; psychological; spiritual) of the project itself (Wilson, 2008). Relationality means that knowledge comes in relation to/with; objectivity cannot necessarily exist because humans, plants, animals and life systems are not only interdependent but interconnected. Knowledge and coming to know are conditional, and often granted or passed down rather than discovered. Variables of life cannot be isolated or treated as such. As Little Bear (2000) aptly stated, we are a "spiderweb of relations" that we cannot—should not—disentangle ourselves from. (p. 79) Kovach and Wilson played

significant parts in how I conceived my research inclinations and guided me through working with community. As Wilson notes, "[the] main focus [Research is Ceremony] rests with the positive effects of maintaining, transmitting and clarifying an Indigenous way of doing and being in the research process—the basis of an Indigenous research paradigm." (2008, p. 19).

The nêhiyâw epistemology requires that region/people-specific processes and protocols are followed and upheld. Community, place, and land-based relationships must be honoured and maintained (Kovach, 2021, p.74); this transcends academic research. In addition to an act of ceremony taking place during primary research, the project itself could be considered a piece of ceremonial knowledge unto itself. As Makokis et al. (2010) succinctly states,

> Indigenous research methods are based in the fundamental principals [sic] and values that all knowledge is relational, that it is shared with all living things in creation and, so it cannot be owned or discovered – it has to be lived and experienced. (p.27)

To the best of my abilities, I strive(d) for this with my Capstone and continue to carry this feeling with me in my daily life.

Critical Tradition and Postmodernism

The critical school of thought furnishes us with analytical tools for interrogating power structures in Euro-American, globalized society. It also helps us gain a sense of modern intersubjectivity, and how our relations are influenced by and filtered through dominant logic in abstract and concrete senses.

Merrigan et al. (2009) mention, the Frankfurt School sought to expose and challenge systems of oppression and hegemony (pp. 222–223). According to Griffin et al. (2019), it did so through a range of analyses: of language – as a (strategic and deliberate) tool of control to

perpetuate power imbalances and reinforce hierarchies (p. 42); of the scientific methods and quantitative, empirical works of/in "value free" knowledge production (p. 42); and of "mass media's [role] in dulling sensitivity to repression" (p. 43). In a settler-colonial state such as Canada, postmodernist and critical analyses can help elucidate how national (and international) political, legal and economic entities assert and advance dominant logics, often invisibly.

Postmodernism, which frequently is accused of engaging in circular reasoning or logic, is a branch of the critical tradition and concerns,

> [the] disintegration of colonial systems historically ruled by imperial nation-states, and the subsequent dispersal of people, traditions, information, and commodities at accelerated rates across geopolitical boundaries (e.g., through immigration) […] [and] increasing suspicion and rejection of 'foundational' narratives that traditionally have authorized the dominant institutions of modern Western culture (e.g., religion, politics and science), including [post]positivism, patriarchy, liberal democracy, and Christianity. (May & Mumby, 2005, p.116-117)

I gravitated to postmodernism because it disrupts Western epistemology and questions the nature of knowledge, mainly those emanating from the Enlightenment era or modernist project of Europe (Tuhiwai-Smith, 2021, p.32). It also questions the idea of a universal history and a "totalizing discourse." (Tuhiwai-Smith, 2021, p.33). Simmons (2020) swiftly synopsizes that postmodernism is,

> a rejection of the proclaimed universality of the Enlightenment values of reason, liberty and progress and a deep-seated skepticism towards any universalizing of totalizing ideologies — the so-called grand narratives or metanarratives — that claim to speak on behalf of all of us. (p.314)

I do not seek to generalize, I do not purport to be objective, and I am not interested in Truth. However, I can attest that this Capstone reliably, honestly, and accurately conveys my position, as well as the perspectives of the participants who willingly shared their stories and insights.

Autoethnography

I incorporated an auto-ethnographical element to this project, not only to round out the data, but because I have professional experience in the research topic area. My account strengthens the capstone's validity and is a particularist narrative that gets to the heart of the issue. Mayan (2009) describes autoethnography as a "self-narrative that connects the personal to the cultural by placing understanding of self within a social context." (p.41) Some scholars also claim autoethnography is a decolonial method (Augustus, 2022; Williams, 2021; Nisa-Waller, 2024) due to its highly subjective, non-traditionally scientific approach to inquiry. Ultimately, autoethnography achieves a "meta-goal" of this study and serves the purpose of the research.

Design

The Capstone explores and adds nuanced discourse to intersectional discussions around contemporary Native life and digital connectivity. I also sought to critically interrogate assumptions or narratives around the holistic impacts of digital connectivity for Indigenous communities. Beyond its necessity, some think that good digital connectivity—affordable, accessible, reliable—has decidedly positive social and cultural aspects, particularly for those living on reserve in rural and remote areas. Common thought holds that digital connectivity improves Indigenous welfare, having capacity to address a range of socioeconomic challenges from health and education to economic development and cultural preservation. I did not set out

to confirm or deny these assumptions, or even to definitively answer the research questions for that matter.

A main goal of this project was to gain and share insights into how community members of Saddle Lake First Nation, myself a citizen of the nation who lives off-reserve, think about digital connectivity, and its holistic impacts—good, bad, or otherwise.

A separate goal of this project was to realize and IRM through practice, which has an ethical imperative built into it that emphasizes the need promote Indigenous experiences and truth-telling. In this way, the Capstone may also be viewed as a vessel for their/our knowledge and stories.

The research conversation (or talking circle) sought to elucidate what a select group of participants—thought leaders from Saddle Lake Cree Nation—think about the current "state" of digital connectivity for their community and culture. I also wanted to clarify and specify the current problem areas they and the community were experiencing with respect to digital connectivity. Lastly, the study was an exploration of the influence and interplay between digital connectivity and contemporary Native identity, culture and sovereignty.

For the primary research, the research questions I explored were as follows:

1. How do citizens of Saddle Lake Cree Nation think about or approach digital connectivity?

2. What do citizens of Saddle Lake Cree Nation use digital connectivity for?

3. What are the holistic impacts of digital connectivity for Saddle Lake Cree Nation?

    a. "How does the digital connectivity impact Indigenous communities"?

4. What are the social and cultural impacts of the internet vis-à-vis members of Saddle Lake Cree Nation?

In broad strokes, this project investigates the holistic impacts/implications of, and interplays between, digital connectivity and First Nations people, with members of Saddle Lake representing (but not being a proxy for) a segment of Indigenous experiences. I unpacked some of the challenges and opportunities, pros and cons, of digital connectivity for/with Indigenous Peoples in the literature review. I did so by explicating concepts such as digital equity, digital and data colonialism, digital inclusion, and via a critique of (neo)liberal/progressive humans rights framework and the politics of recognition.

I reviewed legal scholarship, and literature from the social sciences, humanities and Indigenous studies. A goal of the capstone is to bring a sense of clarity and scope to the unique challenges and opportunities that digital connectivity presents for Indigenous communities.

My research process involved planning, organizing, internet library and database searches, mapping and free writing. My system for organizing consisted of using pen and paper (notebooks), project management software (Asana), a reference manager (Mendeley) and Microsoft OneDrive (cloud storage) to sync sources across all my devices.

Community Participation

I extended invitations to participants upon receiving approval from University of Alberta's Research Ethics Board. Everyone I asked agreed to participate. I had not facilitated a talking circle before; the entire process of implementing an IRM was novel to me. As I embarked on this daunting leg of the capstone, I asked the Creator, the ancestors and my relations for their help in guiding me through.

In preparation, Kovach's "Indigenous Methodologies" (2021), Wilson's "Research Is Ceremony" (2008), Tuhiwai-Smith's "Decolonizing Methodologies" (2021), Bastien's

"Blackfoot Ways of Knowing," and McAdam's "Nationhood Interrupted" (2015) were all indispensable resources which neatly dovetailed; in effect, they re-invigorated my own perspective through the research process, and helped prepare me for the talking circle.

Each of the participants had previous experience either taking part in academic research or projects of a scholarly variety. In my initial invitation, I asked for their council on the appropriate format to ensure this part of the project would be carried out in a good way. And while it was me who initiated this project and extended the invite, the decision for participating in the talking circle was theirs – the community members. And even though I am a member of Saddle Lake Cree Nation, I do not live in community; I cannot speak to realities of life on reserve, and I do not have sufficient knowledge of the ceremonial or traditional realm.

Protocol

Before we started, I offered protocol to participants—tobacco and linen cloth (can also be a blanket).[5] This is a necessary step in the ask. I also offered each an honorarium. In Cree and other First Nations' cultures across Turtle Island, when asking someone for something or inviting participation, gifting and/or offerings are standard procedure. For example, when someone (e.g., researcher) is asking for knowledge, story, guidance, participation—something deemed as meaningful/important—be it from a community member, elder, knowledge keeper, Creator etc., protocol is required. Otherwise, those being asked will not be inclined to participate, share, or answer questions. Tobacco is used for rituals (ceremony), gifting, medicine, and prayer.[6]

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[5] Blankets or linen cloths are gifted for life events, and are "universal symbol of protection" https://witnessblanket.ca/about-the-blanket
[6] https://www.fnha.ca/wellness/wellness-for-first-nations/wellness-streams/respecting-tobacco

Talking Circle

The participants were my cousin Ben Steinhauer, a relative Shannon Houle, my Aunty Diana Steinhauer, and my Uncle Stewart Steinhauer. I have already introduced Ben and Stewart earlier in the Capstone. But I need to mention who the other two participants were. Shannon Houle works for Alberta First Nations Information Governance Centre (Alberta FNIGC), was a council member for Saddle Lake Cree Nation, and was an active member and co-organizer in the Idle No More movement. Her area of expertise is data sovereignty. She is a distant relation who was invited to participate on a recommendation from my Aunty Diana. My Aunty Diana Steinhauer is a knowledge keeper, educator, community organizer and activist with over 30 years of teaching experience. She has worked with UAlberta, Yellowhead Tribal Council, nuhelot'įne thaiyots'į nistameyimâkanak Blue Quills (UnBQ), and number of other Native and non-Native institutions across Canada. To say it was a privilege having these people join is an understatement.

The talking circle took place in a sacred, ceremonial lodge at Ben and Stewart's home in Saddle Lake. Ben refers to it as the "Inner Sanctum." There is no connectivity in the ceremonial lodge. Participants granted me permission to bring audio recording gear. The talking circle was carried out in three intervals, with the entire event being completed in one sitting that lasted approximately 3.5 hours.

To start, a prayer was given that was not recorded. I was also gifted an eagle feather (for strength and courage) by my cousin Ben. I began with a positioning statement that gave an overview of the Capstone, which expressed the purpose and intent of the project. I also explained what I hoped to achieve through the talking circle. Smudge was lit and kept burning for each interval, with the group taking 10–15-minute breaks between each round. Responses came from

the left, in a clockwise format, with each participant formally introducing themselves to the group to start.[7] Upon conclusion, we gathered in the home for a meal and an informal debrief.

The research conversation yielded a significant amount of detail. The format is conducive to a tangential aura as respondents are free to speak their mind for as long as they need. It's an opportunity for participants to speak their truth, and to share their knowledge and perspectives, all at once. At times, a response to a single question would meander; semi-disparate issues and topics were touched upon, either directly or indirectly related to digital connectivity. Colonialism, sovereignty, and some of the societal challenges of living on reserve were raised. Success stories and positive experiences were shared. Some responses ostensibly diverged from what a question would be attempting to prompt, but those data were not irrelevant or unimportant; on the contrary, they spoke to the complexity and dynamic nature of digital connectivity, what it entails, and what it can evoke.

Reflexive Thematic Analysis

Approximately 15,300 words were recorded. A goal of the talking circle was to reveal and illuminate some of the overlapping, holistic aspects (cultural, social, political, economic, etc.) of digital connectivity within an Indigenous community—Saddle Lake Cree Nation. Responses give scope to the complexity of the various intersecting challenges, opportunities, positives and negatives that digital connectivity presents.

I applied a reflexive thematic analysis (RTA) to the transcript, done through a combination of inductive and abductive coding. As a qualitative process to data analysis, RTA is "an easily accessible and theoretically flexible interpretative approach [...] that facilitates the

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[7] In Cree tradition, all action in a ceremony (for instance, in a talking circle) or formal deliberation goes to the left in clockwise format.

identification and analysis of patterns or themes in a given data set [...] while eschewing any positivistic notion of data interpretation" (Byrne, 2021, pp. 1392-1393). The researcher is encouraged to "embrace reflexivity, subjectivity and creativity as assets in knowledge production." (Braun and Clarke, 2019)

I chose not to employ a content analysis method that would have had me tally codes and then create larger categories or themes based on the number or frequency of tags. Instead, the first round of revisions involved me collating, editing and removing codes. This was a highly iterative process, with multiple rounds of revisions, winnowing and "boiling down" the data. Each phase of the RTA often necessitated a full reading and review of the transcript to ensure the accuracy and reliability of the data, and to crystallize my interpretations.

As previously stated, I do not live in community where data was collected. There is significant distance between me and the participants. They also do not have great connectivity on reserve. Therefore, this part of the data analysis was slow and solitary. I emailed participants once a week with progress updates, providing them with access to the transcripts, my notes, the coding book and general process to data analysis. Initially, there were 135 codes inductively generated. My goal was to stay in synthesis and avoid deconstructing what was said.

I employed a semantic and latent approach to analyzing respondent data. While there was an interpretive element here, it was mainly an inductive exercise where small tags and categories were generated from participants' words (denotations).

Chapter 4: Indigenous Connectivity -- A Vantage

As I entered the second year of the Master of Arts in Communications and Technology (MACT) program, I was becoming attuned to the dynamic if not intersectional issues which communication technologies were presenting around the globe. The study of their cross-sectoral impacts is interdisciplinary and often foregrounded by Western European and North American research in the Global North. At the beginning of the program, most of the literature I surveyed about the cultural and societal impacts of digital connectivity were written by settler/non-Indigenous academics, industry organizations, civil societies, and think tanks. Most of them are Western-based, and/or did not necessarily analyze and critique the sociocultural aspects of or interplay between digital connectivity vis-à-vis specific ethnocultural groups.

Significant contributions to the field of digital connectivity have also been made by people-of-colour (POC), Black, queer, non-binary, and feminist scholars, many of whom I read in preparation for the Capstone and who continue to inform my views. Comparatively speaking, Indigenous voices in this field are somewhat sparse, even though First Nations in Canada have a storied history of leveraging, critiquing, and adopting (often borne of necessity) Western media and digital technologies. To the credit of the MACT program at UAlberta, they offered a course that I audited in Winter 2023, "Digital Media and Connectivity in the Context of Settler-Indigenous Relations" that gave an overview of the current "state" of digital connectivity for First Nations in Canada. But certainly, I had not yet been exposed to—at any great length—the diverse perspectives, approaches or conceptions of Indigenous communities or schools of thought that could more critically interrogate these matters.

Indigenous connectivity work has been on-going for the better part of the last three decades, with some of the original movers and shakers having undoubtedly paved the way for

where we are today. In Canada, people such as Bill Murdoch[8] (Clear Sky Connections, First Mile Connectivity Consortium), Tim Whiteduck (First Nations Education Council), Denise Williams (formerly at First Nations Technology Council), Alfred Loon[9] (Eeyou Communications), Madeleine Redfern[10] (CanArctic Networks), Jesse Fiddler and Penny Carpenter[11] (KNet) have all been instrumental in different ways, from expanding access by building networks to serve their home territories—when no one else will—to attracting investment and advocating on behalf of Indigenous communities on the national stage, including through the national association First Mile Connectivity Consortium (FMCC).

On an international level, key figures like Matt Rantanen[12] (FCC Native Nations Broadband Task Force, GoldenStateNet), Antony Royal[13] (Tū Ātea, Maori Spectrum Commission), President Dennis "Bumpy" Kanahele[14] (Sovereign Nation of Hawai'i), Linnea Jackson[15] (Hoopa Valley Public Utilities District), Matthew "Speygee" Douglas[16] (Acorn Wireless), Danae Wilson (Nez Perce Tribe, Indigenous Connectivity and Technology Division, BIA) [17], Davida Delmar[18] (AMERIND Critical Infrastructure), Darrah Blackwater (University of Arizona), and the collective Rhizomatica[19] have all forged unique paths into Indigenous connectivity—each having distinct interpretations and visions of what digital connectivity can do for their communities—that have advanced Indigenous Peoples' quest for claiming a stake in the

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[8] http://firstmile.ca/fmcc-2/founding-directors/
[9] http://firstmile.ca/ecn/
[10] https://macdonaldlaurier.ca/cm-expert/madeleine-redfern/
[11] https://knet.ca/meet-the-team/
[12] Co-founder of the Tribal Broadband Bootcamps; https://www.internetsociety.org/author/rantanen/
[13] https://www.tuatea.nz/who-we-are
[14] https://www.nationofhawaii.org/international-team/
[15] https://iltf.org/about-us/leadership/
[16] https://events.cenic.org/ajax/speakerBio/matthew-douglas
[17] https://www.bia.gov/news/indian-affairs-opens-indigenous-connectivity-and-technology-division
[18] https://amerind.com/digital-equity-in-indian-country/
[19] https://www.rhizomatica.org/about/

burgeoning digital society. Beyond holding federal, state and provincial governments to account, these are solutions-driven people who have made tangible efforts to bridge the digital divide and improve the lives of citizens for their communities.[20]

Indigenous digital equity is a niche area in a nascent stage of development; a variety of stakeholders are increasingly paying closer attention to the Indigenous connectivity and digital equity movements, respectively. Involved parties come from public and private spheres, philanthropy, as well as non-governmental organizations (NGO) and non-profits (NPOs). As momentum grows and capital flows into Indigenous digital equity initiatives, so too, do vested interests from non-Indigenous political and economic actors. A diverse set of impacts and implications have arisen for industry and legacy (incumbent) telecommunications companies in Canada. Long-standing business models and their modes of delivery, including their monopolistic practices, have come under heightened scrutiny from Indigenous and non-Indigenous publics alike; in some cases, they are even being challenged.

Indigenous Digital Equity and Digital Sovereignty

Using both the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Truth and Reconciliation's (TRC) Calls-to-Action as frames for reference, there is growing demand for the colonizers to atone. There are also calls for healing, and for the restoration of good, mutually beneficial relations; or, as Manuel and Posluns (1974) described, to (re)establish a "mutual dependence" between Native nations and settler-newcomers (p.13).

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[20] I must emphasize that Indigenous connectivity work, apart from the Indigenous digital equity movement, has been on-going for over 30 years, if not longer. There are many more names than those in the above list that could be acknowledged.

Redress and reparations on the part of nation-states, monarchies, and federal governments could all be viable means towards reconciliation.

In a Canadian context, part of a resolution or path forward could be through what has specifically been referred to as "economic reconciliation." This may be understood as an ethical, moral and potentially legal imperative on behalf of government and industry to expiate for their roles in imperialism and colonization. The goal, or the obligation, is to reduce barriers to entry and increase Indigenous involvement, access, partnership and opportunity in public and private sectors.

Intrinsically, calls for economic reconciliation are rooted in the truth that Indigenous communities understand they are owed a debt from Canada for broken Treaty promises, racist policy, ostracism, and being denied the ability to modernize or develop as they see fit; that is, to have a right to self-determination.[21] As an example, a recent ruling by the Supreme Court of Canada deemed federal and provincial governments to have made "egregious" refusals in their Treaty obligations and a "mockery" of extant covenants with the First Nation signatories of the Robinson-Huron Treaties (Cecco, 2024; Dufour, 2024).[22]

Economic reconciliation is also positioned as enabling Indigenous Peoples to have "the power and potential to lead their own economic resurgence." (Vanloffeld, 2024). Indigenous rightsholders and their allies validly assert that they should have financial autonomy with a goal

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[21] Carol Ann Hilton has astutely observed that mainstream narrative and language used around the socioeconomic "gap" or disparity between Native and non-Native (settler/newcomer) populations in Canada is a disingenuous misrepresentation. This language/narrative distorts the facts that First Nations, Inuit and Métis communities have been deliberately (and unjustly) excluded from the economy and Canadian society because of racist and paternalist policy. The "gap" narrative persists and inculcates a soft bigotry among Canadians and non-Indigenous people, and continues to drive a deficit view of Indigenous communities, one that often has a core belief that the responsibility (and inability) lies with (is because of) the communities themselves; that their poor socioeconomic standing is a direct result of their own (in)action or inferior ability.

[22] https://decisions.scc-csc.ca/scc-csc/scc-csc/en/item/20554/index.do

of full economic sovereignty.[23] For many Tribes, as well as Tribally owned businesses or social enterprise, there is a continuing theme of vertical integration and local self-reliance (or self-dependence). Essentially, this means increasing Indigenous ownership and control over all aspects of business operations, including infrastructure and assets.

Indigenous digital equity aspires to bridge the digital divide and bring Indigenous communities "up to par" with that of settler/mainstream society. It's about Indigenous communities levelling up through affordable access, good devices, and having the transferable skills to effectively (and appropriately) utilize digital connectivity on their own terms. In this way, a large piece of Indigenous digital equity concerns our communities strategizing and pivoting towards the digital economy.

Advocacy in the movement appeals to support work/employment and policy that will facilitate Indigenous communities being digitally self-determined. In particular, Indigenous digital equity campaigns seek to create and enhance opportunities for Indigenous communities in rural and remote environments through engagement in their homelands. Social and economic participation drive key messaging and core beliefs in the digital equity endeavour.

Digital sovereignty is a subjective and sometimes polarizing term. It is subjective because it can be defined several ways depending on whose interpreting; polarizing because it implies exclusivity, fragmentation/particularism, and closed/inaccessible digital environments to operate in. These notions run counter to the "spirit" of the internet, and the system of rules and protocols that globally constitute it. Digital connectivity is built on tenets of universality, interoperability, standardization, and decentralization. But for Indigenous communities, digital

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[23] A common talking point among Indigenous leaders and their allies is that their communities, regardless of where they might be geographically situated, ought to be "brought up to par" with the rest of settler/non-Indigenous society, and that Indigenous peoples should have a comparable quality of life to the urban mainstream.

sovereignty is less about controlling their digital environments (although that is also a part of it), and more about having increased ownership and control over their digital data and network infrastructure. Digital sovereignty is an attempt to build, reclaim, and (re)form our communities in ways that protect the past, support the present, while setting up for the future.

Implicitly, digital equity and digital sovereignty operate under the assumption that digital connectivity is not going away; that it has irreversibly changed global society's course. It's time for Indigenous Peoples not only to "deal" with digital connectivity, but to harness it for today and future generations.

Indigenous Connectivity Institute: Background and Embryonic Phase

My own journey into the world of Indigenous connectivity officially commenced in September 2022, when I began work as an intern for a new organization called the Indigenous Connectivity Institute (ICI).[24] The ICI is a non-profit start-up dedicated to enhancing digital equity for Indigenous communities across Turtle Island and Inuit Nunangat.[25] The organization engages in multifaceted work that includes policy advocacy, research, workforce development and digital literacy training for Indigenous communities across Canada.

As it presently exists, the ICI was formed under the aegis of the Internet Society (ISOC), a global charitable organization that, according to its mission statement, seeks to "keep the Internet a force for good: open, globally connected, secure, and trustworthy."[26] A publicly available financial statement filed to the Internal Revenue Service (IRS) from 2022 states the

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[24] I should note that my position at the ICI was initially brokered by Rob McMahon and UAlberta. I published a blog cross-posted for UAlberta and the ICI that detailed my experience as host/emcee at the 2022 ICS in Winnipeg: https://www.ualberta.ca/en/arts/faculty-news/2022/12-december/reflections-from-ics.html

[25] Translates to the Inuit territory in Canada, which can include Turtle Island, as well as arctic and sub-Arctic regions of what is now known as North America. The Inuit Nunaat refers to the world of the Inuit homeland internationally.

[26] The organization is colloquially referred to by its acronym, ISOC, which is enunciated as "eye-sock".

organization's mission or most significant activities are, "to promote the open development, evolution, and use of the internet for the benefit of all people throughout the world."[27]

ISOC's co-founder Vint Cerf is regarded as one of the "fathers of the internet," and has also served as vice-president at Google.[28] Vint's formal job title, wherever he has been employed, has primarily been "Chief Internet Evangelist," the nomenclature of which is unsarcastically apropos given the intention and purpose of his later career: to deliver from his digital pulpit the message of an open, interconnected, globally distributed, and safe internet as a universal good.[29] However, some argue that his work is in service to Big Tech, which has exacerbated internet commodification and monopolization.[30] Through Vint and an extended line of directors, trustees and advisors at ISOC—leadership are mainly based in Canada, the United States and Western Europe—one can trace the genealogy, and therefore the influences, that shaped the ICI.

With respect to the evolution of the internet and global connectivity, ISOC remains one of the more influential civil society organizations in the arena. It has a direct hand in increasing internet adoption and shaping transnational narrative (agenda) around global connectivity. It is a frequent intervenor in national, international and global affairs, especially when it comes to consultations on policy and legislation. For example, in Canada, ISOC and its Canadian contingent actively campaigned against the Government of Canada's Bill C-18, *The Online News Act*.[31] It also wrote an open letter, endorsed by key stakeholders in the internet governance forum, condemning Bill C-10, *An Act to amend the Broadcasting Act*.[32] In addition to submitting

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[27] https://www.internetsociety.org/wp-content/uploads/2023/11/Internet-Society-2022-Form-990.pdf
[28] https://www.forbes.com/sites/peterhigh/2018/03/26/the-father-of-the-internet-vint-cerf-continues-to-influence-its-growth/
[29] For more on Vint, see: https://www.internetsociety.org/author/cerf/
[30] https://www.theguardian.com/technology/article/2024/aug/14/google-antitrust-monopoly-ruling
[31] https://www.internetsociety.org/resources/doc/2023/internet-impact-brief-how-canadas-online-news-act-will-harm-the-internet-restricting-innovation-security-and-growth-of-the-digital-economy/
[32] https://www.internetsociety.org/open-letters/open-letter-to-government-of-canada/

official comments on federal records, ISOC enacts broad training and advocacy programs, such as with campaigns for expanding internet access, closing the digital divide, capacity building (sometimes also described as nurturing "internet and/or community network champions"), and in promoting the virtues of a global internet – particularly for so-called developing communities and people in the Global South.[33] A large portion of ISOC's programming and foci are directed towards communities in the Middle East, Eurasia, Africa, and South America. ISOC's staff largely consists of seasoned bureaucrats, lawyers, academic researchers, and individuals with extensive public and private sector experience. The organization is sustained through a patchwork of funding; individual donations are supplemented by more significant patronage from Big Tech corporations such as Meta and Google. Financial support also comes from a few smaller but still-influential players in the space, such as from Internet Engineering Task Force (IETF) and Internet Committee for Assigned Names and Numbers (ICANN).

A significant challenge the ICI initially faced was in the limited scope of participation from Native people and their direct involvement in the workings of the organization. To the best of my knowledge, aside from an Indigenous Advisory Committee (AC), no Indigenous person was operationally involved in the creation and spin-off of the ICI.[34] While Indigenous individuals were engaged in the genesis of the ICI, their degree of meaningful input remains opaque. Ultimately, I believe the ICI's conceptualization and initial development was led by non-Indigenous individuals. In addition, non-Indigenous peoples appointed the AC and established the ICI's operational plans. Granted, these individuals have extensive professional experience working with Indigenous Peoples through public service and are well attuned to contemporary Native affairs; they can be seen as trustworthy allies who deeply care about the work they do.

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[33] https://www.internetsociety.org/blog/2022/03/what-is-the-digital-divide/
[34] The ICI was established in October 2022.

However, I believe Indigenous rightsholders would have preferred if this initiative had a more organic if not endogenous evolution. This problem continues to persist—that non-Native people take important positions, or make key decisions, which ought to be done by Native people themselves. Decisions are still made about us and for us—even with altruistic intentions—without us always being at the table.

The ICI works closely with and continues to be influenced by organizations such as ISOC. Along with having been the ICI's original incubator, they provided a blueprint from which the ICI developed some of its core activities, particularly with respect to policy engagement and technical training. The ICI's work often dovetails with initiatives and the wider mandate of ISOC, and both organizations ultimately exist to get more people online, especially for under-represented and under/unserved groups. So, while aspects of their mandates diverge, a deep connection between organizations exists.

The Indigenous Connectivity Summit

Starting in 2017, ISOC was involved in establishing a significant event curated for Indigenous communities, the Indigenous Connectivity Summit (ICS).[35] A major reason for the ICS was boosting active participation of Indigenous people and their allies in the overwhelmingly non-Native ecosystem of broadband and digital connectivity. The ICS aimed to enhance Indigenous visibility and amplify their voices with a platform that could legitimately create space for their interests and representation.

Since the inaugural edition in Santa Fe, New Mexico, the ICS has become the premier gathering place for Indigenous rightsholders, advocates and allies, network operators, industry

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[35] https://indigenousconnectivity.org/indigenous-connectivity-summit

experts, Tribal social enterprise, policymakers, and community leaders to converse on

Indigenous connectivity. Topics vary year to year based on exigencies or current trends, and the

agenda mainly covers building, implementing and strengthening Indigenous capacity and

awareness in the space. Some examples of main topics for plenary sessions have included:

- "How do we get Indigenous leadership interested in broadband?"

- "Community-based approaches for digital equity research"

- "Building an Indigenous workforce in networks" and,

- "What does it mean to have digital sovereignty?"

While the ICS effectively tailors content to increase relevance and salience to the host

communities and its participants, the degree of Indigenous involvement, from the host

community or otherwise, in forming an agenda fluctuates.[36] The conference planning committee

walks a delicate balance between inclusivity and refinement; great care goes into ensuring safety

of the space (for example, vetting attendees) and making sure content is culturally appropriate.

Due to the limited time and capacity of the ICI and its Indigenous partners, decisions regarding

the agenda generally rest in the hands of the ICI's "inner circle," which consists of organizational

staff and the 10-person Indigenous Advisory Committee (one of whom, Sally Braun, is non-

Indigenous). In some instances, to help shape topics and content covered during the event, ICS

organizers have disseminated qualitative surveys to previous attendees, as well as through the

ICI's extended network. Responses were collated then reviewed by the planning committee.

Other times, responses that were difficult to clearly define or categorize, or which touched on

loosely related areas, were synthesized into a broader theme that a curated panel could then

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[36] The ICS annually revolves between Indigenous communities, or regions with a strong Indigenous presence, in the United States and Canada. For instance, the 2023 ICS was held in Anchorage, Alaska, while the 2024 ICS took place in Membertou First Nation, on the island of Unamaki (Cape Breton), of what is now Nova Scotia.

tackle. These organizing procedures added a democratic element and transparency to the event planning process. That said, development of the conference agenda was frequently driven by media monitoring, experience and availability of speakers/panelists, input from prominent voices (special interests), with suggestions from the host community.[37]

For example, the 2023 ICS in Anchorage, Alaska was heavily influenced by the ICI's key liaison there, an Alaskan Native, politically active and socially adept organizer/galvanizer named Brittany Woods-Orrison.[38] Through gentle but firm persuasion, Brittany ensured that regional Indigenous interests were allocated enough time at the ICS in her home state. Her dignified goal was to call attention from Indian Country and the rest of "the lower 48" to the challenging state of digital connectivity for Alaska Natives as a whole.[39]

Outside pressure has also impacted choices and the shaping of the ICS agenda. External factors/constraints and colonial authority continue to sway agenda development and decision-making. Time is also afforded to settler-colonial corporations and institutions. Major topics often hinge upon election cycles, funding and government initiatives/programs, and various political campaigns occurring in the United States and Canada. For example, when the Government of Canada released its Indigenous Spectrum Priority Window (IPW) and sought consultations with Indigenous rightsholders, it was granted time to present.[40] Whether in the United States or Canada, the ICS has had federal delegations and agencies participate. An ancillary function of the ICS has been for consultations and negotiations between Tribal leaders and different levels of

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[37] These included members of the ICI's Advisory Council, vendors, bureaucrats, public intellectuals, industry advocates (lobbyists), etc.

[38] Brittany is an activist, artist, influencer, and self-described broadband advocate who is a rising star in Indigenous connectivity: https://www.vogue.com/article/tokala-rampart-alaska

[39] https://indigenousconnectivity.org/in-conversation-with-three-young-indigenous-community-leaders

[40] https://ised-isde.canada.ca/site/spectrum-management-telecommunications/en/spectrum-allocation/spectrum-and-indigenous-priority-window

colonial government.[41] There are pros and cons to this aspect of the ICS. On one hand, many Indigenous attendees appreciate the opportunity to speak on behalf of their communities and have a direct line to the levers of power; bilateral relationships can be developed or strengthened. On the other, the ICI has been cautioned it could be catering to the state; that the organization accommodates an opposing force. One way or the other, we are still forced to play the federal government's game, on their terms. It's unavoidable.

There is also the matter of honouring agreements made with funders and sponsors. In the case of the ICS, agenda development often correlates with the interests and activities of settler/non-Indigenous granting institutions, private enterprise, and colonial philanthropy. From this, one can justifiably conclude with yet another question: whose (or what) interests are being protected, promoted, served or addressed at the ICS?

In fairness to the organizers and the ICI, Indian Country is still hamstrung by internecine feuds, capacity issues, and a predominantly fragmented—saturated—broadband and digital equity ecosystem in North America.[42] The increase in federal funding for broadband and digital equity in the US and Canada has led to a dizzying number of new players (organizations) in the space, and with them, a swell in predatory vendors and "snake oil salespeople." As a result, it is often hard to distinguish who people/organizations are and what their motives/intentions may be. Vetting lone agents (consultants) is exceedingly difficult. This is all compounded by the pre-existing moral minefields that Native affairs and Indigenous economic development are.[43] There is considerable internal debate over who is invited and what "should" or "ought to" take

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[41] The Canadian government has sent delegations from the ISED, while federal representatives have attended on behalf of the American government's National Telecommunications and Information Administration (NTIA).
[42] This is another reason for why the ICI came to be. The organization seeks to build bridges between Indigenous communities in an effort to create a united front in Indigenous-public/private relations.
[43] Bill Murdoch, Executive Director (E/D) of Clear Sky Connections and acting E/D of the ICI, has commented that when dealing with vendors or consultants, an Indigenous community's operating assumption should be, "wrong until proven right!"

precedent. In Indigenous affairs—or, in this case, Indigenous digital equity—considering how inexorably multi-stakeholder digital connectivity is, there is always an ethical grey area (swamp!) to trudge through.

As a result, several presentations and subject matter therein are generated from agendas set by non-Native or "Indigenous led" entities. Again, I have had moments during ICS planning sessions where I have asked myself: whose interests are we promoting? Whose stories are we sharing? Who (or what) are we platforming, and why?

Having been directly involved in organizing the ICS for two years, I can attest to the vacillating and contrasting thought processes with respect to whose voices are given time and priority. Consensus can be arduous. For Indigenous participants, Tribal enterprise aligned with the free market values, modern and sophisticated, could be privileged over more grounded or community-oriented content. But this is not the rule. And one can say that Indigenous enterprise—for profit or not—are always under pressure to present a certain image. I am not saying that type is inauthentic, but rather, there is always a performative aspect baked in, especially when non-Native/White entities are in the room. We want to impress. A large part of digital connectivity is reasonably tied to economic development and the world of business.

And the ICS does make room for smaller Indigenous owned and operated networks, along with community success stories. In Canada, a clear example from an urban Indigenous community is the North End Connect (NEC) project, which the ICI has sponsored.[44] In the United States, the Hoopa Valley Tribe's ongoing broadband expansion illustrates the perseverance and skill of building a community-owned network for a remote Indigenous

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[44] https://www.internetsocietymanitoba.ca/northendconnect/

community.[45] Both of these grass-roots community projects continue to be mainstays at the ICS. So, while it is critical for Indigenous communities of all sizes and persuasions to engage in the ICS, the Summit must ensure that developments from within Indigenous communities get top priority, and that the balance of time weighs in favour of self-determined story. We should be highlighting the situations, good and bad, of Native nations themselves. Having said all that, I recognize nothing is free, and that there are almost always concessions to be made, compromises to be had. What the ICS does well is create a platform that has the capacity to uplift under-represented voices and messages. When it comes to representation and featuring community leaders, there are no "playing favourites." Small, remote communities are afforded time to share their stories and willingly serve as case studies for other Indigenous communities to learn from. As ICS attendees like to say, it's about "Natives helping Natives."

The Indigenous Connectivity Institute

Indigenous communities on Turtle Island and the Inuit Nunangat are among the continent's least connected, with an estimated 65% of Indigenous households on reserve not having access to the CRTC's universal service standard of 50mbps download and 10mbps upload speeds (Mundie, 2022). And with the COVID-19 pandemic, calls from Indigenous leaders to bridge the digital divide for their communities intensified.[46] The AFN also published its own report in 2024, "Closing the Infrastructure Gap 2030"; research conducted found that 61% of First Nations households "did not have adequate high speed internet access [that meet the

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[45] https://tribalbusinessnews.com/sections/economic-development/14489-hoopa-tribe-partners-with-california-on-first-ever-broadband-co-build-signaling-a-potential-paradigm-shift
[46] https://thetyee.ca/Analysis/2022/04/25/Bridge-Digital-Divide-Indigenous-Communities/

CRTC's universal standard of 50mbps/10mbps download/upload speed]."[47] Much of the work

the ICI has embarked on, including its current workplan, seeks to play a role in filling some of

the gaps identified in the AFN's report.[48]

Shortly after ISOC expanded its portfolio to include Indigenous connectivity, their

leadership soon realized work would be most effectual when fully in the hands of Indigenous

rightsholders themselves. There was a belief—and an understanding—within ISOC that

Indigenous Peoples must be the ones to lead their own digital futures. Establishing the ICI would

be the first order of business. With that in mind, the Indigenous Advisory Committee (AC) was

soon appointed, and I became the first (Indigenous) hire at the ICI.

A milestone that predates my involvement, which had a significant impact in the growth

of the idea of the ICI, was a small but ambitious community connectivity project in Hawaii in

2019.[49] A multistakeholder group of academics, researchers, activists, and internet/networking

technicians brought their expertise to bear on a community network deployment in Waimānalo.[50]

This endeavour catalyzed the ICI's early inspiration and has since gone on to become legend.

More recently, though, the appeal for Indigenous broadband was foregrounded by the

COVID-19 pandemic. Long-standing socioeconomic disparities, and not only with digital

connectivity, came to the fore and were exacerbated. It was at this point that the ICI concept

came into sharper focus. While no formal vision or mission statement was drafted, ISOC and the

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[47] The full report and subsequent recommendations for bridging the digital divide, including implementation plans, are available here:
https://afn.bynder.com/m/367574a3a5cb5abe/original/1-AFN-Closing-the-Infrastructure-Gap-by-2030-National-Cost-Estimate-English-report-1.pdf
https://afn.bynder.com/m/58b56c77671c16bc/original/3-AFN-CTIG-2030-Prioritization-and-Implementation-Plan.pdf
[48] The ICI is not mandated by or formally affiliated with the AFN.
[49] https://ilsr.org/articles/hawaii-community-broadband-blp-episode-88/
[50] My supervisor, Dr. Rob McMahon, was involved in this project. An overview of this project can be found here: https://www.cogitatiopress.com/socialinclusion/article/view/6638

Indigenous AC knew the digital divide presented a unique problem for Indigenous communities. The pandemic accelerated the ICI's development and put the planning wheels in motion.

In essence, the ICI started as a nebulous idea: digital equity for, by, and with the First Peoples of Turtle Island and the Inuit Nunangat. Due to its robust pre-existing network that had been established through the ICS and prior work with ISOC, the ICI would be well positioned to advance Indigenous interests in digital connectivity from aspects of public relations, awareness, infrastructure and technical training. The new organization would conduct its work across Indian Country, on both sides of the imaginary border.

In 2022, the Indigenous AC, together with a knowledgeable and adept group of non-Indigenous allies, collaborated to co-develop the ICI's mandate. The vision was for Indigenous communities to have the capacity, support, knowledge, and financial resources needed to drive their digital futures, in their respective communities, on their own terms, and under their own leadership. Ideally, the ICI would establish itself as a trusted partner that could work with Indigenous communities on their connectivity projects, while advising and facilitating on community-driven solutions. This would be achieved through a range of activities and a holistic approach to digital equity. Some points from the ICI's mandate are as follows:

- Capacity-building to cultivate new leaders and expertise, including technical, policy, administrative, project management, and governance trainings.

- Enhancing human networks by building, nurturing, activating and supporting a continent-wide network of Indigenous peoples and their allies to advance culturally appropriate community connectivity solutions.

- Stimulating research that supports innovative and cutting-edge technology and effective approaches to digital equity.

- Policy advocacy to ensure policies, programs, funding programs at federal, regional and municipal levels are delivered in a matter that facilitates the development of an enabling environment for Indigenous-led connectivity solutions in Canada and the United States.

- Developing strategic partnerships with civil Society, the public sector, academia, and the philanthropic community to ensure new initiatives meet the unique needs of indigenous communities.

- Providing access to capital that supports the deployment of Indigenous-owned networks.

The mandate would be enacted through a combination of events and programs. The main event to be organized and delivered by the ICI was the Indigenous Connectivity Summit (ICS). Following the model that was established during past ICS events, the programming consisted of advocacy and policy training, Tribal Broadband Bootcamps (TBB), Indigenous Connectivity Workshops (ICWs), and the deployment of Indigenous owned and operated community-networks. Core to the pragmatic rational of the ICI is the opinion that expanding community access to broadband, through promoting and developing community owned and operated networks, can help alleviate some of the more pressing/immediate connectivity gaps for a community. The assumption being, if those community networks are well managed and capacity develops, some of them could evolve into full-fledge Indigenous ISPs in the mid to long run. Alternatively, they could become viable Tribally owned enterprises or part of a First Nation's infrastructure and utility services. An even grander ambition posited the benefits of Indigenous rightsholders acquiring a stake in the network backbone.

In 2023, the ICI received a keystone $3,700,000 CAD grant from the MasterCard Foundation (MCF) that officially launched the organization. Work began to develop a series of

programmes and initiatives that would build off the existing mandate, and which were rooted in "enhancing Indigenous digital equity."

To realize the ICI's vision and goals, some of the core objectives are as follows:

1) Enhancing digital equity in Indigenous communities through the establishment of the Indigenous Connectivity Institute

2) Enhancing the capacity of Indigenous youth to build, operate and manage community networks, and to engage in policy advocacy

   a. growing the Indigenous workforce in tech and networking

   b. refining and expanding "Tribal Broadband Bootcamps" [now called "Indigenous Connectivity Workshops"] within Canada

3) Increasing collaboration across Indigenous and non-Indigenous organizations to address the digital divide

   a. fostering a community among Indigenous rightsholders, engaging with community, and creating an Indigenous broadband coalition that includes non-Indigenous allies

4) Expanding the knowledge base regarding community network technologies ideal for rural and remote communities and policy aspects of digital connectivity in Indigenous communities

   a. creating effective and culturally sensitive digital literacy training for/with Indigenous communities

       b.   promoting affordable access to digital connectivity for Indigenous communities

           should they want it.[51]

   5) Strengthening Indigenous digital connectivity and supporting Indigenous-owned

       community networks

A separate goal was to develop a coherent public identity that would be conducive to a

positive/good reputation which, in time, could establish the ICI as a trusted partner for

Indigenous communities.[52] A significant part of this work involved relationship building and

educating settler non-Indigenous publics on the contemporary realities of Indian Country, not

only with matters of digital connectivity per se. While the ICI was largely autonomous, being led

by a majority-Indigenous AC, there were a set of deliverables as part of the MCF partnership.[53]

To comply with the terms of the grant, the ICI developed a communications strategy. Three

primary stakeholders were targeted: funders, Indigenous communities and youth, and non-

Indigenous organizations.

     A byproduct of ICI's core activities would be to function as an organization that

promoted success stories around Indigenous connectivity. In a sense, the ICI would promote a

strength-based narrative by incorporating a media and public relations angle in its work. The

organization would document (and capture) how its programming and community partnerships

were changing the Indigenous connectivity landscape for the better. Case studies would be

generated that included surveys responses, media, and community feedback, all of which would

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[51] These encompass federally recognized Tribes, bands, peoplehoods, and sovereign nations within North America which may include but are not necessarily limited to: American Indian/Native American, First Nation, Inuit, Métis, Native Hawaiian, Alaska Native, and Puebloan people.

[52] At the time, the ICI was considering developing an online clearinghouse of digital equity related information and educational resources. However, this plan was ultimately abandoned when a partnership with a parallel organization fell through.

[53] Mastercard Foundation formally requests for their grantees to refer to them as "partners," versus strictly being thought of as a granting agency, funder, etc.

demonstrate the ICI's positive impact towards Indigenous digital equity. In theory, a combination

of narrative and data-driven storytelling would entice funders and philanthropists to contribute to

the Indigenous digital equity movement. This work is presently on-going.

tâwâyihk / tusta'wayi (In the Middle)

At the time of my recruitment, the ICI was being incubated by a new American non-profit

based out of San Francisco.[54] This company consisted of social entrepreneurs, people from

"tech," finance, and government relations. A neoliberal ethos permeated its culture. Personally, I

viewed the incubator (the ICI's new host-org) as a questionable fit, soon realizing there were

some core philosophical divergences between us which I don't believe the host-org had

thoughtfully considered. In hindsight, the host-org made a slew of promises it couldn't keep,

perhaps knowingly.

The ICI was supposed to be separate from the broader digital equity work the host-org

engaged in, operating at an arm's length, while receiving their administrative support. However,

within months of the new partnership, it was evident they assumed the ICI could integrate (or

politely conform) with their own agenda. There was trouble from the start. The ICI's tenuous

status as an autonomous division—and our relationship—became further stressed after the MCF

partnership was procured.[55]

I was originally hired as an intern and became the de facto Indigenous representative. I

served as a rapporteur for key meetings, developed the ICI's social media strategy and key

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[54] From their website, "Connect Humanity is a non-profit impact fund […] combining tailored investments, strategic advice, and technical guidance so that everyone can connect to fast, affordable, reliable internet access." The organization seeks to bridge the digital divide and expand affordable access for the under/unserved (often rural, remote and marginalized communities).
[55] More on that below in the chapter.

messaging, was copywriting, and even emceed the organization's flagship ICS.[56] I also provided editorial support to non-Native colleagues who were writing "on" or about Indigenous communities and issues. I was the only Indigenous person at either organization (the host-org/incubator and the ICI), having limited support. My bandwidth soon ran low.

In January 2023 my role transitioned from that of part-time intern to a full-time contracted position as "Community Relations Manager." Still being the only Indigenous person at either organization (incubator/host and the ICI), I was the main individual assigned to manage, complete, and respond to any project, task or request with any trace of an Indigenous element. My presence immediately lent an air of legitimacy to the organization, and I quickly took on a pivotal role. While I appreciated this to an extent, the job verged on overwhelming and soon made me uncomfortable. I became frustrated and resentful when I had to ask for support to complete tasks that should've been done by an Indigenous (or even non-White) person. Soon after my on-boarding, I also started receiving work unrelated to the ICI proper. At the risk of digressing, I must say this. As a nêhiyâw in the non-profit space, I can attest—as I'm sure many of our Indigenous compatriots would concur—that our people are often saddled with much additional work, in many cases more than what we initially agreed to. It is rare that we are fairly compensated for all the extra intellectual and emotional labour we are expected (often implicitly) to take on, or which comes with the territory, which is so spiritually taxing.[57] This is especially the case if you are one of the only Indigenous people in an organization; even more so if you are visibly Indigenous. The burden continues to fall on us to do the heavy lifting. That is not

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[56] Meetings were with internal and external stakeholders, including (but not limited to) salespersons, special interests groups, company (non-profit, philanthropic and private) reps, and senior leadership with partnering (analogous/similar) organizations.

[57] nêhiyawak are told by their Elders and knowledge keepers to "think with the heart, not the mind"; Kisha Supernant, Director of the Institute for Prairie and Indigenous Archeology and a Professor in the Department of Anthropology at the University of Alberta, has called this "heart-centred practice": https://www.ursus-heritage.ca/research-projects/archaeologies-of-the-heart

necessarily to criticize the organizations I've worked for—that is simply a statement of fact, a reality of the situation. I have found this to hold across the non-profit industry in Canada (and the US); many Indigenous colleagues have expressed similar sentiments. It is more an indictment of the current system itself, that is, the non-for-profit sector and philanthropy. There are precious little monies for operational expenditures—and therefore employee salary and adequate compensation—but plenty of budget allocated for piecemeal contract work and capital expenditures. Organizations are squeezing blood from stones to realize aspirations that are motivated by tokenism and virtue signalling. Many companies are checking boxes on crude colonial balance sheets.

As Community Relations Manager, my primary duties were a blend of community engagement and communications, for in-person and virtual settings. I attended to the needs and asks of the ICI AC, acted as a point of contact for the organization, conducted media monitoring on Native affairs, wrote briefing notes and blogs, held webinars on pertinent Tribal broadband issues, researched Canadian and American telecommunications policy, managed the ICI's social media, assisted with fundraising, and acted as our delegate on the broadband and digital equity event circuit. I also directed a promotional documentary.[58] However, as the only Native person in the operation, I was also the main individual responsible for copyediting, proofreading, and vetting all internal, external, and public facing materials to ensure they were culturally appropriate. In addition, I began developing our theory of change model and speaking about the ICI's work at industry events such as the National Tribal Telecommunications Association's (NTTA) Broadband Summit, the Tribal Broadband Bootcamps (TBB), the ICS, and academic conferences such as the Indigenous Innovation, Data Economies and AI Summit (IDEAS) at

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[58] https://vimeo.com/942279317

Arizona State University (ASU). My biggest strength was in relationship building and establishing good connections, whether in developing new partnerships or in recruiting sponsors for the ICI's programs and events. While I did have some support, I gave the Indigenous "stamp of approval" on most marketing and communications. This was exhausting. After eleven months of constant travel, and being the face of a new organization, I was burnt out.

When I left in December 2023, the ICI was in the late stages of spinning-off from its host-org and transitioning to a new incubator, an Indigenous non-profit based in Canada.[59] The split took approximately 6 months. Primarily, it was because of the host-org's fiduciary responsibility to the ICI and the terms of the MCF grant. When it was ascertained that the MCF funds were not applicable or transferable to any of the host org's programmatic work in the United States, their enthusiasm (and willingness) to work with Indigenous communities plummeted. Yet, they advertised themselves as a global non-profit with an international scope, having stakeholders and initiatives across the world.

Another major factor contributing to the split was the host-org wanting the ICI to acquire—essentially, to buy-out using grant funds earmarked for the ICI—the intellectual property (IP) of some of our partnering organizations. One of these organizations was the Tribal Broadband Bootcamps (TBB) and its affiliate Tribal Resource Center.[60] This caused a great deal of discord within our small, tight-knit network. Again, I was thrust into yet another (new) role as interlocutor, almost a mediator, between several different parties, many of whom considered me to be a friend. Relationships and trust were damaged, which I had to manage or attempt to fix. Almost overnight, crisis communications had become the ICI's modus operandi.

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[59] The ICI's new home is Clear Sky Connections: https://indigenousconnectivity.org/indigenous-connectivity-institute-takes-the-next-step-in-its-journey
[60] https://tribalresourcecenter.net/

The split slowly but steadily devolved. The ICI's capacity was greatly reduced due to painstaking legal negotiations and the daily grind of strategy while confronting a critical (internal) situation. As a result, the ICI was struggling to deliver on its mandate. Much of the workplan was stalled. This was incredibly frustrating, especially since the ICI was just getting started; our group knew we had immense potential. We also speculated whether the host-org was stonewalling the spin-off. The tension grew.

Within that friction, a pain point—another source of conflict—lay in philosophical orientations and approaches towards proprietary data and IP. The host incubator firmly believed in Creative Commons (CC) licensing and wanted to claim ownership over (or retain copies of) the ICI's productions—our intellectual labour, otherwise known as "works." But the ICI firmly believed in the principles of OCAP, the First Nations guidelines of "ownership," "control," "access," and "possession" over Indigenous data.[61] The host-org was unreceptive and seemed unfamiliar with the principles; they were also reluctant, or hesitant, to acknowledge Indigenous data sovereignty even though their executives were initially supportive. But when it came time to honour and practice Indigenous data sovereignty, their tenor changed again.

Ultimately, the host-org did not understand, educate itself on, or seek to distinguish between Indigenous and non-White/marginalized people. This was evident in how they "developed" and applied their programmatic/theoretical frameworks. Their approach to digital equity was universal. While Indigenous communities undoubtedly share similar experiences with those of their non-White (BPOC) allies, their/our situations are incommensurate and not entirely comparable. A key distinction is the fact that Indigenous Peoples are sovereign and inherent rightsholders; the host-org could not seem to grasp this. The ICI viewed its host-org as

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[61] https://fnigc.ca/ocap-training/

aggregating/consolidating us all together. This did not sit well with the ICI AC, me, our director, or any of our Indigenous partners.

Tribal Broadband Bootcamps

A main ingredient towards Indigenous digital equity came in the form of the Tribal Broadband Bootcamps (TBB).[62] This is a program that seeks to bridge the digital divide through "fostering a network of Indigenous people across Indian Country to build broadband networks and develop the best practices needed to ensure communities have quality Internet access if they want it" (TBB, 2023). They were designed to enhance the skills, knowledge and capacity of Indigenous communities in the United States, with a starting point of "demystifying the internet." The TBB's were spearheaded by Chris Mitchell, from the Institute for Local Self-Reliance (ILSR), and Matt Rantanen a.k.a. "The Cyber Warrior."[63] Their vision was to expand access, capital, and capacity for/of Indigenous communities in the world of digital connectivity. Ultimately, the goal is to help Native nations realize digital (and network) sovereignty.

Two key political developments in the United States served as impetuses which greatly accelerated the growth of the TBB's. The first piece was the Federal Communication Commission (FCC) establishing the Tribal Priority Window, which provided a unique opportunity for federally recognized Tribes to apply for direct access to unassigned 2.5 GHz spectrum over their lands.[64] The other was Tribal Broadband Connectivity Program, which provided upwards of $3 billion to bring high-speed internet to Tribal lands, with goals to "improve quality of life, spur economic development, and create opportunities for remote

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[62] https://tribalbroadbandbootcamp.org/
[63] https://ilsr.org/what-is-local-self-reliance/
[64] https://www.fcc.gov/25-ghz-rural-tribal-window

employment [...]" among other aspects.[65] Both these federal programs sought to grant access and funds for Tribes to enhance digital connectivity within their territories.

The TBBs are a mobile operation that bring programming directly to Indigenous communities. Each edition of the TBB spans three days, with in-depth content and demonstrations that provide instruction on how to build, deploy, and manage networks. The curriculum is modular and often co-developed with a host community to determine their needs or what aspects of digital connectivity are most relevant. The initiative is also multi-stakeholder, as the TBB's frequently partner with local Tribal ISPs or Tribal utilities, as well as universities and colleges, to co-create parts of the program agenda. In this way, each TBB is unique because of the community context that grounds it. Some nations prefer to focus on network design, while others may prefer more of an introduction to the internet, networking and digital literacy. It all depends on the status, condition, wants or needs of a given Indigenous community; there is no "one-size-fits-all." Some examples of sessions include:

- IP Addressing and Routing

- Software Licensing FAQs for Tribal Environmental Professionals

- Ethernet Cable Crimping

- Digital Equity

- Building and Deploying a Fiber Network

- Business Models and Sustainability Considerations

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[65] https://www.ntia.gov/page/tribal-broadband-connectivity-program

I was fortunate to have attended 4 of the TBBs in-person.[66] As the ICI's Community Relations Manager, my role was to establish and build relationships with key stakeholders in the Tribal broadband and digital equity space, which the TBB's personified and had become a locus for. The ICI was a new player and unknown entity on the scene; at that point in the ICI's story, our reputation was that of a small-scale funder which engaged in policy research and advocacy.

At the time of our involvement, the ICI had partnered with the TBBs and helped facilitate logistical, financial and communications aspects of their operation. Personally, I was more of an unobtrusive observer, and I can say our intellectual contributions to the TBBs were miniscule. I positioned myself as connector who could disseminate information about the ICI and the TBBs, with an aim to develop a cross-border coalition on the landscape of Indigenous connectivity. As we liked to say, a mutual goal of the partnership was to "cross-pollinate ideas" between the United States and Canada and share intelligence. Mainly, though, I aimed to strengthen the "human network" aspect of the partnership. Again, it always comes down to building and maintaining trust with our Peoples.

Each time I went to a TBB, there was something to new to learn, with novel insights from Indigenous network builders and operators who would share their trials and tribulations. The "state" of Indigenous connectivity is in flux; sustaining Native networks is an arduous endeavour that requires translation and enormous amounts of public, private, and Indigenous engagement. I am grateful for having been able to attend the TBBs and become a friend to many inspirational people. From my vantage, the TBBs—and the broader Indigenous connectivity movement—are rooted in the belief that Indigenous rightsholders need more ownership and control over their

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[66] Another credit should go to Rob McMahon and MACT program, who got me in the circle and helped introduce me to Matt Rantanen and the small but mighty TBB network.

digital connectivity; that we ourselves are the ones best suited to lead our digital futures. That is,

to be digitally sovereign and self-determined.

CHAPTER 5: SADDLE LAKE TALKING CIRCLE

"Through the internet I feel like I'm watching this monster called the West self-destruct. And of course I'm cheering it on. But it means that I am right in the middle of it because the West has engulfed Turtle Island; sits on top of Turtle Island. I'm in a race between my death and finishing my projects I want before the collapse of Western civilization, and the internet is playing an interesting role in all of that."

– Stewart Steinhauer

The following chapter contains excerpts from our research conversation in Saddle Lake which took place on Sunday March 10th, 2024. It was done via talking circle format. Responses have been lightly edited for clarity, flow, and concision. Participant data are organized and presented in a non-linear format to effectively frame the categories and themes of our talking circle, and to provide a more nuanced understanding of the subject matter. I chose to include some extended responses to honour the integrity of what was said, and refrained from combining pieces of quotes from separate responses as that could compromise the spirit of what was expressed. Analysis and interpretation of the responses are included in this chapter. As previously discussed in the methodology, this particular approach to analyzing and presenting findings adheres to the process (method) promoted by Kovach (2021) in Indigenous Research Methodologies, and by Wilson (2008) in Research is Ceremony.

There was consensus from myself and the participants that digital connectivity is a necessity. Whether explicitly or implicitly, each participant conveyed the impacts and inextricable links between modernity, colonialism, capital(ism), and trauma in their community. This was not a case of the group deficit theorizing, disparaging, or laying blame. Rather, it was a sincere commentary on contemporary Native life in an on-going settler-colonial occupation

which has caused incalculable damage. And yet, they continue to persevere and do the very best they can in the face of great adversity. There is hope, yet.

Categories / Tags

The first phase of coding generated 135 categories or tags. These were reviewed and then combined into 25 categories. This first round of winnowing involved merging and collating the categories while eliminating others altogether. The second round was a final synthesis of categories, further reducing the number to 15.

The following list is arranged according to what participants deemed as positive, negative, or neutral aspects of digital connectivity.

Positive aspects

1. *Digital connectivity can assist in protecting, promoting and sustaining nêhiyâw ways of knowing and being.*

2. *Digital connectivity can contribute to individual and/or community wellness.*

3. *Digital connectivity can help strengthen Indigenous sovereignty and self-determination.*

4. *Digital connectivity can reduce barriers, increase opportunities and improve socioeconomic outcomes.*

5. *Community capacity is enhanced through digital connectivity.*

Negative aspects

1. *Access and affordability to digital connectivity are a concern and present challenges for people and community.*

2. *Dependencies have been created or intensified through digital connectivity.*

3. *Capacity, resources and capital associated with digital connectivity are limited of/for the community.*

4. *Digital connectivity is problematic for Indigenous sovereignty and self-determination.*

5. *Digital connectivity can cause harm and/or adversely impacts community and culture.*

Neutral aspects

1. *Digital connectivity has some confounding aspects that lead to feelings of ambivalence.*

2. *Digital connectivity has intersectional and dynamic impacts.*

3. *Digital connectivity is a necessity that enables the community in different ways.*

4. *Digital connectivity is an integrated tool with diverse applications that is part of daily life.*

5. *Digital connectivity impacts social, political, and economic capital.*

Themes

From these 15 categories came 5 consolidated themes:

1. *Digital connectivity can cause harm and poses concerns for culture and community.*

2. *Digital connectivity can contribute to the wellness of culture and community.*

3. *Digital connectivity is paradoxical and challenging to reconcile.*

4. *Digital connectivity is a necessity that is fully integrated.*[1]

5. *Digital connectivity evokes a sense of powerlessness, skepticism and distrust.*

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[1] Digital connectivity is intertwined with almost every aspect or facet of individual and communal life. It is used (and relied upon) in schools, for work, at home, and for mundane tasks.

Data Presentation (The Talking Circle – A Research Conversation)

The talking circle began with participants stating their name, age, gender, and any other information they wanted to share. In clockwise order of the talking circle, the participants were my cousin Ben Steinhauer (28/M) who is Stewart's son, a family friend and distant relation Shannon Houle (54/F), my relative (Aunty) Diana Steinhauer (61/F), and (Uncle) Stewart Steinhauer (72/M). While I moderated, I did not actively participate in the conversation. My role was to ask questions and prompt, sometimes to clarify. Participants are all residents and citizens/members of Saddle Lake Cree Nation.

Internet service in Saddle Lake is largely provided by Xplore,[2] MCSNet,[3] and Starlink.[4] Presently, Saddle Lake gets all internet service as fixed wireless connections through cable and fibre optic lines, spread across five towers throughout the Nation. In 2022, Saddle Lake broke ground on a new fibre broadband project that would expand cellular and fixed wireless connectivity for citizens on reserve.[5] This project was spearheaded by Saddle Lake Cree Nation, which received funding for the project through Indigenous Services Canada and the Rural and Northern Communities Infrastructure Stream under the Ministry of Housing, Infrastructure and Communities Canada. The project will be built and co-managed by Lite Access Technologies Inc and Rigstar (RSG telecom).[6]

There are no cellular towers on reserve, the nearest one being in the neighbouring town of St. Paul, Alberta. To the best of the participants knowledge, no residents in Saddle Lake have access to fibre-to-the-home (FTTH) connections. According to Shannon Houle, who previously

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[2] https://www.xplore.ca/blog/how-to-get-internet-in-rural-canada-fixed-wireless-and-fibre-optic-solutions/
[3] https://mcsnet.ca/about/
[4] https://www.pcmag.com/explainers/what-is-starlink-spacex-satellite-internet-service-explained
[5] https://www.lakelandtoday.ca/local-news/saddle-lake-breaks-ground-on-two-large-scale-projects-5807752
[6] https://www.newswire.ca/news-releases/lite-access-and-rigstar-to-complete-fibre-upgrade-project-valued-at-1-858-million-for-saddle-lake-cree-nation-alberta-869441202.htm

served as a Saddle Lake council member, the only (anchor) institution with a wired fibre optic

connection is the Saddle Lake Health Centre.[7] This service is likely provided through the Alberta

SuperNet.[8] The majority of the network backbone is owned by Telus, and previously, a lesser

stake by Shaw. For residential services, regional ISPs use/provide a combination of fixed

wireless and low-earth-orbit (LEO) connectivity.[9] Each of the participants have plans with

MCSNet, and their actual speeds are consistently below the CRTC's broadband universal service

standard (currently 50/10 Mbps).[10] I asked a few of the participants if they had considered using

Starlink given the better overall service it could provide. The answer was mainly "no," almost on

principle due to Elon Musk's history and reputation.

Data presentation is deliberately structured to contextualize the entire interview/talking

circle. This makes sense as it effectively frames the preceding questions, discussion, and ties in

with some of the societal and cultural analysis from the literature review. Following a

recommendation from Diana Steinhauer, I opted to move responses from the final set of

questions regarding Treaty, wâhkôtowin, and sovereignty to the beginning of this chapter. Below,

I present these materials, starting with a statement that I used to preface the discussion of

sovereignty, Treaty, and wâhkôtowin in this context.

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[7] Shannon explains, "It was an initiative from Canada to provide all First Nations, and then [we were told] it was supposed to go to all homes for free, but that never happened. There was a lack of funds." (personal communication)
[8] https://www.servicealberta.ca/pdf/lt/SuperNet_Online_Map.pdf
[9] These are Xplore's available packages and speeds based on Saddle Lake's coordinates: https://www.xplore.ca/shop/internet-packages/?show=packages
[10] The universal service speeds are 50 megabits per second (mpbs) and at least10 mbps upload: https://crtc.gc.ca/eng/internet/internet.htm

> "*I'm thinking about the intersection of nêhiyâw culture with Western life, and the possibilities of cultural reciprocity while still maintaining—protecting, promoting, preserving, restoring—nêhiyâw ways of knowing and being. That is to maintain sovereignty, tradition, collective memory, and to uphold our inherent responsibilities to each other as nêhiyawak, to Mother Earth, askiy, to the Great Spirit (kise manitou) and to the ancestors. There has been a great deal of sharing, mixture, and adoption between societies: of technology, politics, science, etc. I am curious to hear your thoughts on how you think digital connectivity relates aspects of our traditions, our language, our identity, and our sovereignty.*"

Question 10: What is sovereignty; how would you define sovereignty?

Ben Steinhauer (BS):

> "*I don't really (entirely) believe in that word because the current system that supposedly uses it (which is the federal government, the Canadian government, and everything to do with the system of colonialism) will not allow that to exist when they're present anywhere because they can do whatever they want because they've engineered the system.*"

When Ben said he didn't necessarily "(entire) believe in that word [sovereignty]," my

interpretation was that he was referring to how it's understood—its meaning—and how it's

defined in English. He went on.

> "*So, I don't have an answer to what* [sovereignty] *is. I can answer what that is for our language, and our culture. At one time, we had our sovereign nation of Treaty. Not pluralized, like Saddle Lake, Kehewin, Goodfish… no… Treaty was one nation. There was no single exclusion. Like with the Treaty of Niagara. They started the Indian Trust Fund; that trust fund is applicable to all our nations, and the reason that is because when we made an agreement, an agreement was made with the knowledge of every nation on Turtle Island with their understanding and cooperation. So that's why we were one nation. There was no idea of constant separation and all of that. So, when we talk about sovereignty, I don't want to have too much to do with that in English terms and words because I have my own personal* [disagreements] *with the English ideology of sovereignty.*"

Sovereignty as an (English) word and ideology! In the West, we tend to interpret sovereignty as a

fragmenting concept; when it's uttered, we think borders and physical structures which define

and delineate—effectively reifying—power for a country/nation-state. It also has a connection to

supremacy, imperialism, royalty, nobility, and rigid hierarchy; its connotations make Ben

uncomfortable with how sovereignty is popularly defined.[11] For nêhiyawak, the "boundaries"—

the faded contours—are more fluid, but also more expansive and inclusive; this can be a vastly

different interpretation of "sovereignty" compared to Anglo/English, Western, or modern

definitions. Ben also mentioned *Treaty*, which is key because it is still in force and effect and has

direct association with sovereignty.

Shannon Houle (SH):

> "*Self-sustainability is key to sovereignty and* [the ability to] *exercise sovereignty. I would like to see our nation be more self-sustaining, and you're exercising your sovereignty, meaning, you have your power and no one can manipulate you, but you have your power to self-determine your future… all those things are connected – self-sustainability, self-determination are all connected to sovereignty. And it goes through all aspects of society: governance, health, culture, language, and so on... it's all interconnected that way. It's being like we used to be, and that was self-sustaining, and self-determining our own futures, and that's sovereignty. And that's what I'd like to see.*"

Hers is a holistic view of sovereignty that is somewhat unique. In popular (perhaps non-

Indigenous) conceptions of sovereignty, we may think of the state's military might, big

government that oversees socioeconomic and political systems of complexity, laws that grant and

protect certain rights, taxation and so on. These ideas are also rooted to a general ethos of

scarcity. But in the nêhiyâw worldview, we live in a world of abundance. And sovereignty is not

necessarily sutured with economics or the controlling of resources and commodities. Sovereignty

is spiritual, often involves sharing/benevolence, collective ownership (or stewardship), inherent

responsibility, and encompasses our ability to be healthy, balanced, self-sustaining, and self-

determined. Sovereignty subsumes economic, social, political, cultural "systems," as well as

spirituality.[12]

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[11] https://talkingtreaties.ca/treaties-for-torontonians/treaty-of-niagara/1764
[12] In "Upholding Indigenous Economic Relationships: nêhiyawak narratives" Shalene Jobin (2023) articulates how Plains Cree interpretations of sovereignty are fundamentally based in our worldview that holds relationality (and relationships) as paramount.

Shannon spoke bluntly:

> "*The ones like us who are trying to protect and maintain* [sovereignty] *are the ones who are going to be key to keeping what we have by exercising that so-called sovereignty. Because others are going to relinquish their jurisdictions over their own futures.*"

She was genuinely concerned at the possibility Saddle Lake could cease to exist, that the nation would dissolve. In her view, this was due to ignorance, short-sightedness, internal and external pressure, and a lack of knowledge (or understanding) getting transferred and spread through community.

Diana Steinhauer (DS):

> "*I'm going to quote or paraphrase Steven Newcomb, who is a Lenape scholar, who studied the Doctrine of Discovery most of his life, as well as his own traditions and knowledge as a Lenape person. He said sovereignty is a legal justification for the dominion over an object or item, property—whatever you want to fill in that blank—and within our knowledge systems we never had that type of ideology, ever.*"

Again, we see the representation of sovereignty as an "ideology" with the term/idea taking on a slightly negative connotation as its commonly understood. At an even deeper level, we can employ a critical lens which posits the interrelation between language, power, belief (thought/ideology), and epistemology. What's more, the Steven Newcomb example reveals how sovereignty is conceived of in another sense, one that is incommensurate with nêhiyawak, and in stark contrast to Plains Cree as well as other Indigenous interpretations. Diana continued.

> "*When Ben is talking about Treaty* [...] *and everything that defines us as nations because we entered into international Treaties with Great Britain… we have sovereignty. Just by nature of having the capacity to enter into an international Treaty, which is: land, language, peoples, governance, and the capacity to make Treaty. So, those are defining us as a nation and we still have* [all of] *that. We never gave it away or released or signed it over to someone else. Canada has what's called an 'assumed sovereignty' and they always have to prove or identify how that they're doing what they're doing right now on our lands. But our sovereignty is sovereignty… it's the real thing. In our languages, we don't have that ideology.*"

There is a significant difference between a (post)Westphalian Treaty form of sovereignty—one that established territorial integrity and gave rise to modern nation-states—with that which Indigenous cultures have experienced and traditionally maintained over time. Our sovereignty is inherent and doesn't rely on material or concrete manifestations which need physical "proof" or validation. How can these reasonably be squared? Diana went on.

> "*There is a* [Plains Cree] *term that means self-sustaining, self-governing (I can't pull it up right now from my memory) and it's absolutely different from the English language meaning. But because we're in the situation that we are, we have to use that terminology to identify who we are, and to be able to negotiate or position ourselves in that Treaty from our own lens of Treaty – otherwise we'd have been eliminated a long time ago. Treaty has sustained us. So, we need to understand what that means for our people and flex accordingly, which we're not doing all.*"

In listening to Diana share her wisdom, the links between language, thought, and ideology are apparent, and altogether curious. It's fair to assume language plays into orientation and belief. In response to Diana, Shannon echoed the sentiment around Canada's version of sovereignty.

SH:

> "*Especially with that perceived sovereignty Canada tries to claim. They're a state. Not a country. That's what people forget, they're a corporation. It's all propaganda they've done all these years.*"

SS:

> "*I have nothing meaningful to add, they've covered it very well, thank you.*"

There was consensus.

Question 11: What is Treaty; how would you define Treaty?

Ben led with a soliloquy.

> "*Definition of Treaty is unfortunately being interpreted a long time from the side and lens of the Canadian government and the Crown, which* [are] *incorrect interpretations of Treaty. First off, our Treaty – we were approached, we did not approach. And because of that, that changes the entire thing from what the modern interpretation of the Treaty is.*

We were approached on how they could live here with us. And we gave the Treaty. Treaty was an agreement with conditions on how [settler] *people were to live, behave and act.*

When I think of the Treaty, [its] *meaning is very deep when it comes from our side, which is why it's protected us. From the direction and knowledge I've been given around the Treaty, my understanding is that we signed a Treaty not necessarily between human beings in a sense. This is why when we make an agreement, we make an agreement that's not binding between humans,* [but rather] *we make an agreement that's binding between spirit. Because humans die, and humans do stupid things. So, when we make an agreement that is going to last forever, our witness to that agreement is not a human being, but the spirit and intent of that Treaty, which is Creator. The pipe – our constitution. The spirits we call upon to bear witness to the agreement being made between two parties. You see, that takes out the idea of human error, an element in the agreement."*

"When they brought the paper to us it said, 'sign.' Well, what good is a piece of paper when it can be manipulated, rewritten or burned. That's why we make our agreements with the Creator and these spirits as witness."

"So, from our interpretation of Treaty, that's why those things are in there: as long as the rivers flow, the grass grows, etc. All those things [are] *in there, because they're not a river outside, they're the river of women giving birth on Mother Earth. So, this Treaty cannot be broken by you for as long as women give birth. This means that human life has to cease to exist on Earth for this Treaty to be broken on its own. 'As long as the grass grows' is terminology about 'as long as the world is healthy and living, and there is life that is continuing to flourish.'*

"Basically, the conditions of our Treaty with them was... as long the planet exists and that we're not all extinct, you cannot break this. That was the [...] *interpretation and meaning of what we said, and is what was agreed upon by Alexander Morris and the Crown. And that's why our people are still here. Because the Crown realized that the only one who can break this Treaty is us* [the Crown]*, because we were the ones that created this Treaty. And we were the ones who were approached, in that sense."*

"Most important aspect today is [to understand that the Crown's] *constant manipulation and misunderstanding of the Treaty is all purposeful, and designed as propaganda to encourage the loss of our own understanding of the Treaty so that we, in turn, sell our own rights out; to lose what we have currently protecting us."*

SS:

"How much can they get?"

BS:

"That depends."

A bit of nervous laughter let out.

BS:

>"*The Treaty is a very deep and spiritual item, (again) because that's the only place an agreement is safe – is out of human hands. That is how our people determined the agreement. They understood human potential for good and bad. We were given free will by the Creator, and that free will can lead us astray. For that reason, every time we made an agreement, the agreement was made through spirit, because that agreement stands in a different place, these spirits do get involved and that's why we're still alive. That's our belief and that's why they haven't been able to break us down completely. We're hanging on by that thread of spirit.*
>
>*I'm going to pay mention to Peter O'Chiese's family. A single family, almost single-handedly, held onto our entire Treaty through their own knowledge of it, and passed that knowledge to a variety of us. And it's through that knowledge we're hanging on, but that's how strong that spirit is. Through a single person. Peter O'Chiese impacted many people. His father impacted many people. The story of his father, running that Sundance when it was illegal for peace. These are all spiritual things, because they understood and knew that the spirit is much stronger than human, because the human is only here temporarily. A spirit can be here forever.*
>
>*And the spirit of intent that they talk about. The intent to coexist in a healthy way for as long as this earth remains. Because in our understanding, we knew they would come, we knew what they wanted, and we knew [what] they'd ask for. We already knew what we had to do but there were many chiefs that didn't agree with the Treaty, but still signed on. They didn't agree with the Treaty because they didn't understand it. They didn't agree because they didn't want to suffer at the hands of the sick people, but because they understood that long ago it was said these people will return to your land and you must help them; Creator's first law is you be kind to all of my creation – and that's what we did. Because when they arrived, they had sick children. We saw their children and we wanted their children's future to be better than theirs. That's my interpretation and small understanding—the fast version—I can give you. The speed round version.*
>
>*This comes from amassed knowledge of 1000's of years, a culmination of our spiritual and cultural understanding of the truth of the world we live in. And it's woven intricately through every decision we make; that's why the Treaty cannot be properly understood by somebody who's not culturally aware, because it's based off our identity of culture and spirit and language and the connection it gives us to our lineage, and spiritual helpers.*"

This was a "mic drop moment." There was a pause.

SH:

"*In English, the best we can interpret that is, 'spiritual, sacred promise, two-sided.' We knew how to make Treaty before colonial people came. We did between nations. And the way it was done—the way it was passed through—was oral transmission.*"

We talk about our minds and how balanced and strong they were. When a Tribe made a Treaty before, what they used to do is they would have a family that they would choose within their Tribe to witness the making of this Treaty. So, there might be a warring between Blackfoot and the Cree for instance. Each side would have their witnesses. And each witness would have to know what was said – verbatim. Their responsibility was to pass that on from generation to generation as they were born; they have to carry that sacred promise and knowledge through the generations in case there was a breach of that Treaty. That's generational transmission. That's better than when you're whispering in one ear, it goes to this person and then to the next person, and it changes. No! We had it where you were taught from birth, that was your family responsibility."

"*It is hard to protect our Treaties, especially those done with colonials. Because their understandings are totally different. They own things. The origin of their teachings is that the planet is here for them to do as they will, and they pass* [this] *on in their religious contexts, their political contexts. Whereas, with us, that's not our teachings. We can't survive without the planet, but the planet can do fine without us. So, there's a different mentality that's happening. It's really a struggle to maintain that Treaty, but from my understanding, I truly respect the Treaties that we maintain. Like Ben said:* [the Treaty] *is spirit, and it's done through spirit. And there's always that third witness: Creator. There's not only two witnesses on each side; there's a third witness and that's what binds us.*"

Diana and Stewart concurred and agreed that Shannon and Ben summed Treaty up suitably. No

further clarification was needed.

Question 12: *What is wâhkôtowin?*

As a young adult, Ben is already a master storyteller at the age of 28. He stated:

"*That's a tricky one because our foundation of relationships has been broken down by residential schools, purposefully. wâhkôtowin was also a terminology* [speaks Cree, "miyo-wâhkôtowin"] – *what a community did. I'm going to tell you a little story that I was told. There was an elder from a community in Saskatchewan, and his grandson told us this story. His grandson is in his 80's now. His great grandfather was in his 100's when he told him this story. It was a story about relationship. I may not remember this story completely right, but I'm going to share a little bit of it. I only heard it the one time.*

The old man explained, he said, there will come a time when people will no longer recognize what a relationship is.

The first sign is their relationship with Mother Earth. When you see them take, and never give, and damage without consequence – that's the first sign. This is what his grandfather and his dad explained to him as being the Industrial Revolution.

The next would be the animals – the damage, the loss of understanding of what animals do for us, and the relationship we had there.

The third would be with other people; the wars, the violence, the sickness, the constant need to conquer, and the loss of understanding of what it means for camaraderie.

The fourth and one of the important things—because when it goes, all relationship is lost—the inability to have a healthy relationship with the person you will carry the future with. This is in Cree. I'm interpreting this for you.

The last one is the inability to have healthy children, but these last two go hand in hand. Because if mom and dad are unhealthy, kids are unhealthy. Right there, he said, when you see this, there will be no more healthy relationship. And in our culture, it's a sign of the time when we need to choose whether we all collectively live or make ourselves go extinct.

Elder's interpretation of relationship is our future. Our relationship with the Earth determines our existence here. Our relationship with the animals determines our existence here. Our relationship with each other determines our existence here. Our relationship with your mom, your dad, your spouse, the people you interact with determine your existence here. Because your children then will walk without any of that relationship to support them, alone, and wander in continual darkness until nothing is left. And that was what was told to them, because that is what was told by his grandfather. That's going back 300 years in that one lineage.

In our Cree culture, sometimes stories function as riddles. They're not necessarily about an end point, but rather, the process of figuring out. Lessons or truths are revealed or discovered. Stories furnish with the information and knowledge we need to help us better understand ourselves while keeping us moving in a positive direction, especially when faced with hardship or a tough decision. Coded elements and subtext are common in Cree storytelling, often to the point where the listener/receiver is left to wonder.

Other times, stories can take more literal meanings, serve as warnings, exemplars and so on. In this case, it's up to the listener to determine what to do with the information. The elder's story is somewhat prophetic. Ideally, we take it as a cautionary tale that can inform us how to act, while reinforcing the idea that we must continue prioritizing relationships with each other and the natural or "non-living" world. This applies in digital contexts as well.

Essentially, digital connectivity has expanded the constellation of kin and created a global interconnected web of relations. How to maintain good relations when much of our communication happens in digital environments, and often with strangers? Where we interface with each other increasingly through screens, devices, and platforms that are opaque, and which are out of our control. In some cases, we know digital connectivity influences the way people behave and interact with one another. And how is digital connectivity affecting our relationships with the natural resources and Mother Earth; with the materials harvested that make up the internet that facilitates this global village? Ben ended with this note:

> "*So, for me, when we talk about relationship and what it meant to our people, it's not as simple as* [it's understood] *in English. Because, that story for me sums it all up. It's* [relationship] *everything; not just your day-to-day relationship, it's your relationship with the life you live, everywhere you go. Every human being on this planet gives an answer every day to every one of those levels of relationships. I'll just leave you with that lil' tidbit*."

There was chuckle from the group.

SH:

> "*You explained it all Ben! It needs to be taught more*."

DS:

> "*One thing I would add is – appropriation. The example I'm going to give here is in relation to wâhkôtowin. One of the universities here used that word to describe* [their law]*, their legal department within the university. And that really put the shackles up on our people. But nobody followed up and they're doing what they're doing under 'wâhkôtowin law.' And it's really damaging for us. Yet, them, at the university—especially*

the co-opted people who gave them the thumbs up to do this, whomever they are, and who work in that area—they don't see the damage. To me [that is] *a critical assault. That's an example of we don't know who we are. Some of us don't know who we are.*"

Stewart had nothing to add.

Question 1: What do you use the digital connectivity for?

Dialing it back, my first question for the talking circle was straightforward. Ben, with an intonation that reflected a utilitarian or practical view, plainly stated:

"*I primarily use it to watch YouTube.* [That is] *my number one use of the internet, is watching YouTube. And texting and calling because we have poor cellular service in my home, and I rely on the internet to receive text and call. And those are the prime things. Of course, watching shows on the internet is the second thing, that is, streaming, [a] variety of streaming, I guess gaming could fall under that too, but I don't [game] very much. Mostly just streaming content, and YouTube is streaming as well. So, primarily streaming, text, and call, and that's really all I use the internet for.*"

When visiting Ben and his family, I have noticed that connectivity is constant in their home, even though their service is subpar. I have witnessed Ben and his partner use it for everything from watching YouTube to learn how to prepare recipes, to using it for market research and purchasing. They have used it for streaming lullabies, soothing music, and for programming that children in the home are amused by.

Shannon Houle (SH) presently works for Alberta First Nations Information Governance Centre (Alberta FNIGC).[13] Her organization's work is increasingly concerned with digital connectivity, particularly from the angle of data sovereignty.[14] She echoed Ben's response, but expounded:

"*I* [depend] *on the internet. For one, it allows me to work remotely* [...] *and cellular service is really bad here. I can't live without internet because of my work. I do the same things* [as BS]*, streaming. I use internet for news,* [and to use] *apps on my TVs. I live in*

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[13] As Shannon herself explained, "we use 'Alberta FNIGC' as the acronym so we don't get confused with the Assembly of First Nations (AFN)." (personal communication)
[14] https://fnigc.ca/what-we-do/first-nations-data-governance-strategy/

an RV so I'm very mobile; I have to be mobile. I need [internet in lieu of] cell service because it's so bad here, so I have to do a lot of wifi calling. Mainly, I use it for social media and research. It's also part of education for me. And I need high speed internet, which causes me to pay more. I use the internet for security reasons. All my cameras are through the internet and when I'm away from home I monitor my house and my area. So, that's what I use it for, too. And I do teachings and training for education, too."

As she was explaining, Shannon's voice struck an earnest tone that reflected the criticality of good internet access, along with its quotidian aspects. She is presently the admin of Saddle Lake's Facebook page.[15] To join and be able to participate, one must answer a series of questions and be approved by the admin. Saddle Lake's Facebook page is highly active and has approximately 4,000 members.[16] While anecdotal, Facebook remains the platform of choice for First Nations, Inuit and Métis people—in short, for Indian Country. In Saddle Lake's case, much information related to community news and events, as well as various on-going activities of the Nation, are circulated on their Facebook page. We also see the impact digital connectivity has as a form of research, and the role it plays in mediating and disseminating knowledge and information. Shannon continues,

"*The internet can be used in a lot of different ways. It can share a lot of knowledge. At the height of Idle No More, it's what got us to connect nationally. That was a great tool when it was used in that way. However, there's a lot of questions now. I have to be careful because, we always have to be aware of technology and how it's being used for protection of our own information too. Because of the work I do, too, I'm always conscious of what's being shared. I'm always trying to be conscious, too, of my grandchildren and how it's being used in their lives. Because, I'm always [having] to have some sort of management [of digital connectivity] when I had them with me. I'm always being careful what they're being exposed to. Because there's not enough protections for children. They're getting exposed to too much and they're being desensitized to a lot of stuff.*

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[15] Shannon stated, "It's no longer 'official' since I have been out of council; therefore, it is 'unofficial' now." (personal communication).

[16] A number of similarly sized (and slightly larger) First Nations groups exist on Facebook, which include Saddle Lake and other communities, where members discourse on everything from socioeconomic matters and Native Affairs to local politics and family history.

Digital connectivity entails much and can cause us to think about its wider-reaching, if not dynamic uses and potentials—good, bad, or otherwise. Shannon, shifting her inflection to a more serious tone, continued:

> "*And then with my dad it helps, because of where he's located, and because of the situation where* [he] *was having a heart attack and he couldn't phone or call out, nothing. He was running around with a heart attack in the middle of a rainstorm trying to get help. So, I had to get him a cellphone and make sure he's hooked up to wifi even though he's borrowing from someone else. But there's no good service here even though there's a tower right there in the townsite.*"

A gentle exasperation in her voice was evident. Her response speaks not only to the (sometimes vital) necessity of the internet, and how people—not just First Nations—have come to depend on it, but how we *expect* access to it. In the absence of access, we often respond with incredulous, frustrated reactions. The internet is integrated with daily life. In some instances, digital connectivity even affords us a chance to survive. It can be the difference between life and death.

The third speaker, Diana Steinhauer (DS), also works remotely from her home in Saddle Lake. She was initially modest in describing what she uses digital connectivity for,

> "*I do transactions — internet banking and stuff. I even go to gas up at Bison, the reserve gas station. And if the internet goes down, we can't get gas*. [The internet] *is attached to their pumps, gauges, everything. The system is set up that way.*"

Then, after pondering for a moment, she considered digital connectivity's other uses and applications:

> "*I use Wi-Fi and the internet to track my home solar array in terms of production. I also track my car in terms of what's going on with it, getting updates from it, because I do have an electric car. All of that is on an app on my phone, and it sends me messages when I need to pay attention to something. So, those are really important to me.*"

Again, this speaks to daily uses and the level of integration, and dependency, that digital connectivity has for us. She then spoke of some of its other aspects:

> "*I also work from home. Almost everything SH said applies to me. And I also use it for online teaching. So, whether it's asynchronous or synchronous, in-person, I really am*

> *dependent that way for livelihood on internet. My caution around that dependency is EMF. Radiation that comes off of things like routers, cellphones, all digital devices, TV, smart TVs.* [It's to the point where] *I invested some money in EMF protection on everything. And I don't use earbuds, just because of my concern about EMF radiation close to my brain – my source of livelihood!*"

The group laughed at the last comment, and Diana smiled. She further articulated:

> "*And maybe one more caution is surveillance; how much surveillance happens through the* [digital connectivity]*, so I'm really cautious about that, too. I shut off my phone just now. Maybe I could put it in my car.*"

This time the tenor of laughter was uneasy. Although the original question did not include any mention of cautions, concerns, real or perceived negative aspects, these elements were thought of and voiced. Before the talking circle started, participants were making jokes—facetiously and not—about how loaded digital connectivity was for themselves and the community.

The next speaker in the circle, Stewart Steinhauer (SS), was eloquent like the others in describing his varied use:

> "*I have a home-based business, I'm self-employed coming to just about 50 years, self-employed on reserve. My internet use, for me, even though it's not by percentage the largest volume of use, the most important use is communicating with suppliers of raw materials, tools, with potential clients, marketing agents. I have a network of marketing agents. I constantly have a back and forth around potential clients and discussing commissions. So, this does absorb me. My market — I guess because I'm focused on surviving on reserve without having to be dependent on chief and council, or ISC* [Indigenous Services Canada]*, or any of those entities that normally dominate your way of living and your source of living on reserve, I've discovered that I have got to have my own source, that means my own market and my market is outside the reserve.*"

As earlier mentioned, Stewart is an artist—a carver—who runs his own business. His response reveals the direct line between internet connectivity and economic sustenance. He continues to work out of his studio on reserve in Saddle Lake by choice, which digital connectivity enables. When the internet goes down, business is put on hold. He continues,

> "*I'm a writer and a reader. So, e-mail is a really important form of communication for me. I know that reading and writing is going out of style and I'm OK with that. It's like going back to an oral tradition in an interesting way, with all video and oral recordings,*

and I'm OK with that. My own vision, my reading vision is shot so I'm switching to listening. I use the internet to follow and to track world news. For instance, I see at least a recession, if not a depression coming for the region called the West. I don't really understand, there's longer cycles, but the colonizing West is now destroying itself... it doesn't make sense but that's what it looks like. And that means my market is going to be affected."

The question elicits a simple description while evoking feelings on a larger issue. As discussed throughout this capstone, digital connectivity transcends the lifeworld and the system[17]; it crosses political, economic, social, and cultural boundaries, occupying a liminal—perhaps relational—space that is rarely static or isolated to a specific area/field of life. Discussion around the internet is holistic, especially when Native folk are involved! We see the connections in everything. Initially, I detected a slight hesitancy in his willingness to share, but Stewart continued:

"I'm 72... reasonably I have very few years left. I do something that's very physical and physically demanding; so far, I'm getting away with it, but there's an end. So, through the internet I feel like I'm watching this monster called the West self-destruct. And of course I'm cheering it on. But it means that I am right in the middle of it because the West has engulfed Turtle Island, sits on top of Turtle Island.

It's hard to track what's going on in Gaza 'cause it's like getting a view into 200 to 300 years ago on Turtle Island; the kind of carelessness with which my ancestors were destroyed. And we now live in these little safe zones called reserves.

I guess CSIS uses the internet to follow me and there's nothing I can do about it. So a while ago I gave up on the notion of privacy because I know that CSIS is watching us and watching everyone who is Indigenous and who uses or focuses on the notion of sovereignty. They've come right out and said that, so it's not a question whether people in this circle are being surveilled. And then there's commercial surveillance, marketing surveillance...

At one time I'd say I used the internet for entertainment, but I don't find the world very entertaining at the moment. And so, [I primarily use the internet] *just to keep track.*

I'm in a race between my death and finishing my projects I want before the collapse of Western civilization, and [digital connectivity] *is playing an interesting role in all of that.*

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[17] Jurgen Habermas's theory of communicative action: https://plato.stanford.edu/entries/habermas/#HabeSociOnto

Reflecting on the comments from all four speakers, it's clear that digital connectivity has a paradoxical element. The sense of ambivalence in response to the initial prompt was palpable. Implicitly, respondents were revealing the difficulty and complexity of parsing (or separating) affordances and the sheer necessity of digital connectivity from its surveillance aspects and other perceived threats. Stewart commented on the Canadian Security Intelligence Service (CSIS) and how it watches him. His claim can be corroborated by a long list of Indigenous people—artists and activists, academics, community members, etc.—who have openly remarked about not only being followed/observed by the federal government, but also by private security groups.[18] Proulx (2014) has referred to this as the "colonizer's surveillance" and the "construction of an Indigenous terror threat." Digital connectivity involves a trade-off that no one in the circle has the power, knowledge, or skills to subvert or change. I detected a tinge of resignation in the group.

Question 2: Is the internet a necessity of life?

I reassured participants that our talking circle should have a loose format—that it was more akin to an unstructured focus group than a structured interview—and that they had flexibility to make it conversational, to their liking. This question generated very short answers.

BS:

"*I'll just answer yes.*"

SH:

"*Yeah! And you don't even realize all the things you need it* [the internet] *for, but through these questions you're beginning to realize. It just becomes unconscious after a while with how much you use it.*"

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[18] https://www.thestar.com/opinion/contributors/the-government-spied-on-me-without-a-warrant/article_6d122c95-f10a-547b-b9d9-9a4264d5fe2c.html

DS:

> "*In dead zones* [that lack connectivity]*, and there are dead zones—especially when we're doing ceremony, and like 4 days of ceremony consecutively—there's absolutely no internet used during that time at all. So, it's really interesting to be in those dead zones, if I can call it that, because it's liberating actually.*"

SS:

> "*Unfortunately, but absolutely.*"

Question 3: What does "data sovereignty" mean to you?

Ben Steinhauer was vaguely familiar with the term "data sovereignty" but admitted he did not

have an in-depth understanding of it. He did his best to answer:

> "*That's difficult to answer because of how complicated the internet is, and the whole notion of it. Can you ever really be fully sovereign with the data collected, created, used or that has anything to do with the internet? When you think about the system that's been put in place around it all, it's almost an impossible question* [or thing to consider]*. Because really, the people who put it in place do whatever what they want, whenever they want, however they want without anyone's consent at any given time. Regardless of what anyone says, or agreements made, that's not going to change someone's ability to do whatever they want. if you're smart and you know how to use the system then you can do whatever you want. So, you can claim data sovereignty all you want but in reality, is it possible, feasible? I feel the question of data sovereignty has an impossible answer. But in my opinion — no way.*"

Latent in Ben's thoughtful response is a subtext around the difficulty in demystifying the

internet, and of its obfuscated quality. There is also an air of frustration, a sense of impotence,

when he refers to "the system that's been put in place around it all." His comment equally spoke

to the power of those who control digital connectivity through sociotechnical systems they've

put in place, and those who do not have direct influence.

Throughout this capstone, I have touched upon the "ethereal abstractions" of the internet,

and of its many different layers and aspects, which could make the task of comprehending every

facet, grasping the totality of it, seem futile. On its surface, though, Ben's response reveals a

general understanding. He is aware of the layers of abstraction and understands the built-in

complexity, framing it as a paradoxically chaotic but structured system.

Shannon Houle works directly in the data sovereignty initiative through her role at

Alberta FNIGC and was keen to share thoughts.

> "*A lot of what I work towards is data management, but there's always that aspiration of sovereignty, and you do the best you can to achieve it. I work with the OCAP principles – ownership, control, access, possession. The organization I work for is created by First Nations for First Nations and we use those principles to support nations in reclaiming their information and their knowledge. My job is also to decolonize our knowledge because it's been turned into data. It's been used to abuse us and to harm us. Sovereignty* [...] *has its limitations. You can never guarantee it 100%. We try to assist the nations in managing their data, their information and their knowledge the best we can. At the end of the day,* [the nations, the communities]*, they're the ones who have to make their own decisions, and* [about] *the levels of sovereignty they want.*

Here we see how there are different interpretations of sovereignty apart from digital contexts.

There are limits to sovereignty, especially in the digital sphere. Shannon knows this. Sovereignty

is somewhat fluid and dependent on the mode/form it takes, or how/where it's asserted and

exercised. For First Nations, sovereignty is a form of soft power. She continues:

> "*What I like to work towards is empowering and teaching our people the best they can to self-determine their own futures and* [a] *way of conducting themselves regarding their data and knowledge. That includes our use of internet. For instance*, [Alberta FNIGC] *is creating a data management strategy and creating a platform for nations to house their data on our cloud — and it's going to be cloud-based. Because physical systems are not sustainable either, they can be destroyed. I've seen it so many times in Saddle Lake. I've been advocating for many years, since I returned home in 99, to* [get] *support for own nation in being able to manage our* [digital] *data and access internet better, in a more manageable, useful way.*"

> "*A lot of that* [digitized data] *can benefit in a good way because they're now using that data through information and technology* [systems] *to help support protection of our lands, our waters and our air, stuff like that. Everyone's at different stages. The frustrating thing is that people don't know what it means.*"

I clarified that SH meant "data sovereignty" when she said, "people don't know what it means."

> "*Yes. And yet that's what we did before colonial people came, we were sovereign with our data and our information. We did it through our stories, that's why we didn't need a*

written system because it was passed down verbatim. Children were taught from birth; knowledge transfer was done from birth. Our minds were [such] *advanced computers. More than I think a lot of other societies. The way we managed our brain systems—our computer systems—was amazing.*"

"*As Indigenous people, because of colonialism and genocide we've regressed, and we're not understanding what our knowledge is. It's data. And when we approach it in those colonial words or terms of data sovereignty… If you explain it to people in a knowledge-based cultural way, they understand it and they get it. But today we're using a lot of colonial systems to share information.*"

"*I really have issues with people sharing our ceremonial stuff online. I really have issues with people sharing pictures of our ceremonies. I've been in a Sundance where I've taken pictures myself, but I've never shared it on the internet, and I've seen other people have. I understand the spirit of the ceremonies. The spirit can be lost in the internet. And that violates data sovereignty altogether, from an Indigenous context. And as you stated, part of what we're doing is Indigenous-based what we're talking about. Ay hay.*"

There is much to unpack here. We have themes of decolonization, reclaiming, cultural preservation, of spirit in the machine, and the role of "cloud-based systems" in assisting nations to implement their data sovereignty plans. Digital connectivity ties it all together. Shannon also makes a comparison (if not likens) between the human brain and computer memory. Her winding comment touches on the questions explored in this capstone: regarding issues of cultural compatibility, and whether digital connectivity is consonant with our nêhiyâw ways of life—with our spirit. The response speaks to the idea of the "spirit of the internet," but not in a philosophical sense.

Diana built off Shannon's response and added her own insights.

"*I agree with everything SH said. Data — you can look at it from the angle of market or capital or money because who has access to* [that] *data can use it for their own purposes and to legitimate a project they're embarking on. They can count, because they have access to, say, SL's data, they can count our data into the legitimacy of their project because of population size and so on. If we had data sovereignty intact here in SL, then we would only have access to our data and we would be very adamant about protecting that data from exploitation from others, and by others I'm talking about* [non-Indigenous government authorities — federal, provincial, municipal]. *Because it's so important for us—if we want to say we're sovereign—to have captured that whole area as carefully and*"

> *to manage it as carefully as we possibly could for that purpose. And it is about protection as well.*"

Lastly, Diana went on to note,

> "*In terms of the pandemic and in terms of how much of our data—our health data—went out somewhere else for whose purpose? That should've been contained.*"

Diana used the words "market" and "capital" to describe data and spoke of it as a resource that could be harnessed and/or create a vulnerability for a First Nation. Digital connectivity in Indigenous communities is a double-edged sword—while it offers access to vital resources and opportunities, it also introduces challenges related to things like cultural preservation, autonomy, and digital surveillance. As the (awful) saying goes, *data is the new oil*.

SS:

> "*I have nothing to add to this question, it's been well answered.*"

Question 4: Do you ever worry about the influence of the internet in your household?[19]

Ben response was blunt, grinning as he spoke:

> "*Of course, that's an easy yes.*"

Shannon concurred but briefly expanded.

> "*Of course, especially with children. It can damage them in all types of ways, lure them… it's also affecting the way they're interacting socially. They're addicted, the dopamine. Worried about what they're accessing. A lot of kids are being desensitized. And security is a major issue, of course.*"

Diana nodded her head in agreement.

> "*I've talked about EMFs—that's my biggest thing.*"

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[19] At the risk of analyzing myself, when I see how I phrased this question, I also tend to perceive the internet as something that apart or separate from human/life systems, even though it is shaped by and requires agents (whether artificial/automated or not) to be used/actuated.

SS:

"*Yup. Ditto.*"

Previous responses had already mentioned some of the concerns they had about digital

connectivity in general. There wasn't much more to explain.

Question 5: Are you concerned about the influence of the internet in the wider community?

Ben paused for a moment, thinking.

> "*In reality, you're just worried about the influence of the internet on society itself. If some strange person does a trendy thing regardless of how stupid, violent or vulgar—or any context—it could... may suddenly influence the entire world's culture for 4-5 years and have anyone from the ages of 6-18 behaving in a certain manner, just because this strange person did it on the internet.*"

Of all the responses so far, this one defied my original thought process—or preconceived

notions, rather—with respect to digital connectivity and how it might influence culture in

community. I had previously thought of our reserve as almost existing in a vacuum, apart from

the rest of the world, as if it were in a different dimension. The internet pipes culture (brings the

outside) in. But that's not entirely accurate, or even necessarily true. Ben clarified:

> "*So, rather than answer about it for Saddle Lake—cuz Saddle Lake is a pretty small place in the scheme—it's more of worrying about what it does to everyone* [on the outside]. *Because honestly, we have to go shopping in the city... some of these trends encourage theft, violence, vandalism, and a variety of things that pose danger to everybody in the world, wherever you go. So, I'm more just worried about what it does to everyone, not just here, because we're a part of it, we're not excluded.*"

The thought of "[we're] not excluded" is an interesting one that brushes up against an inclusion

narrative. Saddle Lake exists in a bigger societal picture. Rather than worry about the internet

itself—perhaps as a negative gateway or being the independent variable—it's the people on the

outside who use and consume digital connectivity who are the real concern. Ben's comment

speaks to media effects, and to the fact that his concerns here are less about the digital

connectivity per se, and more about the wider use or normalization of digital connectivity; in

turn, external forces can weigh on community. His comment makes me think the internet is

malleable; that its current state ("predisposition") does not mean its future is predetermined.

SH:

> "*Tapwe* [what you say is truth]*! Big thing that bothers me about it: a lot of our people who are child-rearing ages, they're having kids. And they're wanting to be influencers on TikTok—that's the big thing—and these other platforms. And they're doing things that are so harmful to other people. And like you said—trending—there's trends they create that are very dangerous and it's affecting our culture so much. Just things I would never do as a young person… the* [amount] *of disrespect… harms… which they'll do outright, blatantly. And then there's people killing themselves over this. Very damaging. It's desensitizing us and a lot of our ethical and moral values and standards are kind of getting thrown out the window.*

Shannon's comments resonate with prior (and on-going) concerns by Indigenous people around

new forms of modern media, for example with radio and television broadcasting, and their

interaction (or mixing) with—and implications for—culture and well-being.

> Diana shared a different take, one rooted in social psychology.

> "*Mind control.* [Digital connectivity] *is the most effective… it's very effective, which we saw during the pandemic. And there was no escaping what was going on in terms of mass formation. So, that is a recent example of—what's the wording you used for this question—what's damaging, threatening to all of society. It was a world pandemic. And that was a mind control extravaganza!*"

Her assertion that digital connectivity is conducive to mind control is not uncommon. "Hive

mind," is a social phenomenon where "the thoughts and opinions of a group of people, especially

internet users, are considered together" (Cambridge Dictionary, 2024). Digital connectivity, and

especially (social) media—have reinvigorated the notion that digital technology impacts the

"what" and "how" of human attitudes and behaviour.[20] There are themes of power, influence, globalization, and the threats of unchecked, unshackled (dis and mis) information and digital connectivity itself. The internet is increasingly viewed as a tool that can cause damage on scale. The "no escaping" portion of her response also speaks the ubiquitous, omnipresent nature of digital connectivity. Additionally, I didn't mention anything in the prompt about the internet causing damage or threatening characteristics. But this is what was heard. There was another tonal shift in the talking circle.

SS:

"Ditto."

I asked Stewart whether he was agreeing with Diana, that digital connectivity facilitated mind control.

SS:

"You have to have a mind... so I'm exempt... but..."

The group chuckled again.

Question 6: Are you ever concerned about your own online privacy and/or security?

The group was silent for a moment, but several participants nodded, indicating yes.

BS:

"Yes."

SH:

"You got me on the record."

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[20] Kevin Kelly (1994) explored this idea of an emerging nexus and symbiosis between humans, the natural world, and digital technology in his seminal book "Out of Control: The New Biology of Machines, Social Systems and the Economic World."

DS:

> "*Me too.*"

SS:

> "*Take it up with CSIS.*"

I paused before moving onto the next question, then explained to the group what I was asking,

and whether they understood the distinction between online "privacy" and "security."

PSM:

> "*Security could be your ability to have your information—personal information, health data, family history, sensitive stuff etc.—stored somewhere about you in a safe, secure and encrypted place that would not be easily accessible outside of you. Whereas privacy pertains to your ability to say what you want with a level of anonymity, without being tracked, without people/things such as CSIS coming to bother you.* [Privacy] *in theory grants a level of anonymity and helps you speak freely.*"

Ben took a moment, then answered:

> "*Yes,* [your explanation] *makes sense in a way, but with the internet everything out there contradicts* [all/our] *formal privacy and security acts. So, it makes sense in theory. In a world where it was actually possible to have privacy, it would make sense, or in a world where it was actually possible to have security,* [trying to achieve it] *would make sense. The only people that have security, are the people that own everything.*"

This response shows a sense of skepticism, if not cynicism, towards digital connectivity and how

it intersects with legal systems and individual rights. One can argue that in addition to

contradicting, aspects of digital connectivity regularly contravene rules and regulations. Ben

reveals how the presence of the internet in their lives contributes to a feeling of vulnerability and

added exposure.

Shannon expounded:

> "*To have complete safety and security, you'd have to be totally off grid. And even that doesn't mean you're not being monitored. There are satellites all over the planet right now. Couple weeks ago, I looked at my house on Google, it was a picture taken from last summer. They're constantly monitoring you.*"

Shannon buttressed Ben's point and lent credence to the idea that privacy and security in these times are illusory. There may be security systems or safeguards in place, but digital connectivity—as well as infrastructures of connection—occupy this confoundingly liminal space, one which cuts through public yet deeply private spheres.[21]

SH goes further, emphasizing her previous comment:

> "*Even the stuff I was doing with Idle No More and other things, I show up on there; I show up on Google. I show up on the internet. People have posted me. And then when CSIS had guns on me during Harper times when I spoke up about the Education Act, and I had guns on me in Kainai… there's no freedom there… security is always something that's being threatened with our people anyways.*"

The question called to mind more consequential matters in her story—social and political aspects of a higher magnitude—and what it means to live under a regime that rules with hard power. Shannon was active on the front lines throughout Idle No More. For her, digital connectivity is an essential piece of state/government surveillance and control, especially in relation to Indigenous Peoples. This is a totally different reality from what many Canadians, Indigenous or not, live through. Presumably, Canadians and non-White people in our society are aware of what digital connectivity has the capacity to do. But could we be engaging in (or afflicted by) cognitive dissonance, on scale? The internet is increasingly a necessity; with respect to its broader implications, segments of the population have been lulled into a state of acquiescence and/or apathy. Often, we have no choice but to use digital connectivity. Conversely, we also have free will and the capacity to make choices—we still choose to opt in.

Diana reinforced the thought that digital connectivity enables state/government to abuse its power and (re)assert itself:

> "*Not only that, but during that trucker thing* [the convoy rallies in 2022]*, they just seized their bank accounts… that's really scary.*"

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[21] In "Media: Why It Matters" (2020), Couldry coined the term "infrastructures of connection" to describe a nexus of technological infrastructures that encompass digital connectivity, media, cultural agents and political institutions.

I am unaware if DS aligns herself with the convoy truckers or their agenda. But she recognizes the threat, even finding common ground in their case. Her response is a concrete example that, in my opinion, represents a wider cross-section of Indigenous views. Shannon was inspired by Diana's response, compelled to chime in once more.

> "*The stuff President Trump is/was doing… as soon as he became president, many people were getting killed out of racism, it's like he was giving permission. And when it comes to security, it's like… if it's the devil's advocate—which is safer* [online/offline environment, digital/real life]*? There's a catch-22 with everything.*"

This goes back to the influence of the internet, and how people think it's got intrinsic capacity that causes us to act in some way, as though it is a life-force unto itself; that it's not "just" a medium for amplification, but that the technology plays into the social world and human behaviour. Are there reciprocal effects?[22] There is a subtext of technological determinism here. The "catch-22" comment also reflects the dilemmas we face in using digital connectivity, almost daily. Digital connectivity and social/environmental conditions may lead to dynamic human reasoning and the application of situational logics. Perhaps digital connectivity—the mere presence of it—impacts human autonomy and our free will. Stewart agreed with everything that had been said, having nothing to add.

Question 7: What are some of the main benefits, or opportunities, of digital connectivity for yourself?

BS:

> "*The benefits for myself—and really the world when you think of it holistically—is simply, information. In a perfect world, that's all it would be for; is simply, fast and effective access of information that is collectively stored so we wouldn't have the level of loss of knowledge we do now. In a sense of being able to access… not everything… but enough of everything… so that, the old life skills could be maintained through many videos you*

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[22] Cree words tend to refer to people and things as either animate or inanimate. Is the internet animate, or inanimate?

could watch on YouTube. That is the—in my opinion—only positive: that it gives you the ability to access information and connect with those to access the information... in a perfect world, that's all the internet should be used for: to connect, and gather information more effectively and share with each other, and nothing more. There's many more negatives it can be used for than positives."

Ben implies that digital connectivity could have a positive impact in maintaining traditional ways of knowing and being. This is profound. But he is also critical, revealing his general distrust and skepticism of the internet. However, it is not understood whether this is in relation to the internet itself, or if it's a commentary on the ideology (or users) behind it.

I have witnessed a curious blend of Indigenous experiments/projects in digitally storing TK, cultural practices, and stories in audiovisual formats. These digital stores (Indigenous archives, in a way) are designed to protect and preserve, rather than to promote. In some cases, the digital stores are connected to the global internet and have robust security measures in place. A specific example of such a digital store is the Labriola National Indian Data Center.[23] I wonder whether this model is transferable, and how sustainable it is.

SH:

"*Using it as a tool for learning, education, history... of course, you always have to be conscious of where that history is coming from and what it is. But it can connect families. My aunt is in her 70s and she's so grateful she can* [easily communicate] *with family, her brother, and other family members through WhatsApp or Facebook, etc. She can connect with family members from all over and it helps us keep connected as much as we can.*"

Fundamentally, digital connectivity helps us communicate and be in touch, bridging vast terrestrial divides and geographic distances.

DS:

"*It's a time-saver. There are a lot a freebies. And* [digital connectivity helps with] *language translation.*"

Stewart agreed.

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[23] https://lib.asu.edu/labriola

Shannon picked up off Diana's comment about language translation:

> "*When it comes to language revitalization. I'm in the Masters of Indigenous Language Revitalization program* [at nuhelot'įne thaiyots'į nistameyimâkanak; UnBQ, Blue Quills University]*, and we use digital technology. And because* [the degree] *is about incorporating Indigenous content into education, digital technology is a big aspect of the program. Half* [the program] *is digital technology.*"[24]

This reflects digital connectivity's continued integration into sectors of society, notably, in

education. There is a reliance on it.

Question 8: What do you think are some of the main benefits, or opportunities, of the internet/digital connectivity for the community as a whole?

Ben's response was immediate.

> "*Number one — information. For schooling and education. And the ability to streamline, even though we're in a place that doesn't have very much connectivity, internet. All these things are not the best out here. There's a lack of emergency resources* [and service] *because of that. So, in general terms, the benefits—holistically speaking—are faster streamlined information, support, help and resources, in a very simple way.*"

Digital connectivity is part of the critical infrastructure. And even though the quality is poor in

Saddle Lake, the community depends on the internet, especially since cellular service is so bad,

in some spots non-existent altogether.

Shannon rhetorically answered:

> "*Our reserve refuses to have a website. People don't even know how to contact* [us]*... don't have access to phone numbers anymore. They want us to download an app, but they don't even keep that up to date. And* [the app] *is limited. How do we do business? When you're looking at trying to bring economic base into our Nation*?"

The frustration was evident. Digital connectivity is a key component of economic development,

and stakeholder relations therein. She went on:

> "*The biggest issue... is we have the most educated people in Canada out of all the* [First] *Nations, academically, and we can't even bring them home because we don't have the*

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[24] On review, Shannon said "Half of my first degree is in computer technology." (personal communication)

resources here [...] It's knowledge oppression that we have here. And sometimes I think internet is used in a more negative way than a positive on our reserve."

In Shannon's view, digital literacy, and appropriate/effective use of digital connectivity, are issues. I tried steering her comment back to positive potentials and opportunities.

"*We need to have better management over that connectivity. As much as I disagree with China on a lot of things, they regulate TikTok. So, again, it's data management, and ethical standards. But we do need it: for education, access to information, and for sharing positive information.*"

Taken broadly, her comment reflects the internet as a "double-edged sword," expressing its positive traits but also recognizing its capacity to cause harm. She—and Saddle Lake—need it and will take the good with the bad.

DS:

"*In our nation we have a lot of people who can do things, but they don't have the ability to get the word out. I think like, having a main hub… for instance, if you needed someone to make bannock for you at the last minute, they could find someone if they were all connected. People who want to sell something – they could use* [the hub] *as well. We could really beef up our people's capacity to earn a more basic living for themselves through the internet. It goes back to Ben and Shannon's point that we have very poor connectivity* [on reserve]."

SH:

"*We could bring… we could hire our own members who could work remotely. Because we don't have capacity to house everyone here right now. Or the resources to develop more housing. But, by hiring them, and remotely, it's a start to bringing them back home. Utilizing our resources through* [digital connectivity]."

Both women signal the practical elements of digital connectivity and how it can improve (share) capacity and efficiency, add convenience, and potentially expand community capital.[25] The absence of it brings those good aspects and potentials into sharper focus. There are great possibilities. Ben, hearing the discussion, decided to chime back in.

"*In general, having more of our educated members work for our community and be involved in our community, all working towards creating a healthier place to live, would*

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[25] Saddle Lake's social, economic and political capital.

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be good. I would never be against having remote access for anybody. We have such limited housing, funds, resources in general. So, having the ability to bring people in remotely, through the internet and connectivity would be a huge positive in my opinion, simply because we could employ a much larger workforce without impacting our current offices, or any of the actual infrastructure we are restricted by."

Even with the potential pitfalls and challenges with digital connectivity, all things considered, the group was in favour of expanding it on reserve. The back and forth continued as the talking circle warmed up to the question.

SH:

"*In the 80's when they told us, 'Go get an education and don't forget who you are, and retain who you are as nêhiyawak, and then come back and help us.' But when we came back it was like, 'we don't want you, you're a White person now.' You're this, you're that. I'm supposed to feel bad because I have an education, because I can support myself? And I use the technology? I don't like a computer smarter than me. A computer is just a tool, it's not a brain. It's a tool. This technology is the same thing. I use it as much as I can for efficiency and productivity.*"

Here we have themes related to race, identity, culture, survival, and their associations with digital connectivity. Even education is fraught and can be viewed—frequently is—as something that taints or dilutes Nativeness and is a course to assimilation.[26] It can be seen as something that reduces quality, waters down the spirit, rather than densifying or enhancing one's worth. I recall my uncle telling me as a teenager, when I was having great struggles in middle school, that if he had any advice, it would've been to drop out sooner. Perhaps he was being facetious, but I will always remember those words.

Stewart asked whether the question was hypothetical. I said I supposed it could be.

"*It could be used to improve communication – that's one of our most serious problems here at Saddle Lake. And there's a lot of trauma that gets in the way, so the internet is not going to fix the level of trauma… But I do see young people* [using digital connectivity]*, they know how to communicate to organize and do stuff. And maybe its organizing to do stuff that's not very useful, practical, or even is self-destructive. But it could be turned*

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[26] Pierre Bourdieu theorized that systems of education are a form of "cultural capital" that uphold institutions of power and perpetuate social (and socioeconomic) inequality by design. (Edgerton & Roberts, 2014, p.195)

around. Doesn't mean that [despite] *how it's being used right now that it couldn't be turned around.*"

Even a realist can see the silver lining, if that's what it should be.

Shannon spoke again:

> "*My granddaughter learned the syllabics song through childhood, through the internet. Every night, playing the Jerry Saddleback song. She knows all her syllabics; she can sing it by herself and sing it to her brother now. When she didn't have the app, or she didn't have the internet, she could sing to her brother.*"

In relation to culture, Diana piggy-backed off Shannon's comment.

> "*It's also really good for… like, people who hunt—and others who don't—what I found in the other community is they had their backyard smokehouses going, and there was a lot of them. We don't see that very often in SL. They know that dry meat is a commodity. People say we have dry meat, and to put in your order, and they'd come and deliver. So, those are things we're not taking advantage of here. And I think people would be working, and be productive, and having something (even if it's as minuscule as selling a couple slabs of bannock), they'd have some extra money.*"

In a nexus of culture, digital connectivity, and the market, there is potential for good. In this specific example, Diana was (perhaps inadvertently) alluding to digital connectivity enabling local circular or closed loop economies. There is a sub-theme of digital connectivity playing a part in sustainability and even sustenance. In the on-going quest for sovereignty and self-determination, digital connectivity could provide ways of reducing external dependencies and strengthening resilience. There is also an underlying theme of digital connectivity and vertical integration.

Question 9: Would you support a SL owned-and-operated telecommunications company and/or internet service provider?

This was the last question of the section. Responses were all straight and to the point.

BS:

> "*Yes.*"

SH:

> "*Yes. I'd also support having... or being our own internet supplier, our own internet system. We supply our Nation's members. If you can get money spent within our nation, you're keeping it in our nation.*"

DS:

> "*Yes.*"

SS:

> "*Yes.*"

DS:

> "*Next question!*"

The group laughed.

BS:

> "*I like that aunty!*"

Even despite real or perceived insecurities in community, everyone was in favour of Saddle Lake

having its own ISP. Shannon was also in favour of Saddle Lake having control of and/or a stake

in the network backbone.[27]

Question 12: Is it appropriate for traditional and/or ceremonial knowledge to be stored online?

BS:

> "*You got to be careful there because you're getting into appropriation again. There are pieces of it that can be stored in that area for those looking how to access it. It's a very fine line of too far yet not enough. Very fine. But it's more like 10/90, 90% cannot be, 10% can be.*
>
> *The 10% that can be is basically for all those children, and everyone who grew up with absolutely zero understanding,* [or contact with it], *who are seeking an understanding*

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[27] The "backbone" of a network refers to the high-capacity telecommunications infrastructure that transports high volumes of data and connects a community (smaller local/regional network) to other communities, which enables and creates the global internet. Essentially, the backbone serves as the foundation of internet infrastructure.

without a single source, who can at least access a guide. And what I mean by a guide, is enough information to lead them in the right course to look for it, where it is. And that is as much as I would ever let be. Because our knowledge is always to be kept within our people, passed through oral tradition. The value in that, in European society and Western society is not seen."

Laden in Ben's response is an assumption that digital connectivity is powerful, potentially corrupt(ed). According to him, only certain specific amounts of TK/ceremonial knowledge can be stored digitally or made publicly available online. This indicates a lack of trust. From this, I infer that TK/ceremonial knowledge cannot overcome any of digital connectivity's intrinsic shortfalls/pitfalls, whether as a medium or because of its architecture. He articulated further.

At one time, every single group and organization on the planet—to my understanding and what my Elders explained to me—had this oral history. Because with writing, our law (there's a law around that) is giving yourself permission to forget. That's what it is and that's the view of it in our culture. This is why we did not write our most valued teachings down.

We had formal writing, which of course these colonizers claim to make up. But our formal writing system, the reason you don't see [it formally being used] *as a way of storing knowledge, but rather, just for occasional use in the forms of small messages and things like this… in all instances of importance, it was orally passed. Basically, you grew up training yourself to remember to never forget. This is the whole notion of it. Reading and writing is an excuse to let go – that's what they would always say. This is why when you go to an elder and you say, "can I write that down?" – no. Because you're here to learn. You're writing it down you're not learning. You're forgetting right there. Cuz you're saying, "I'll just get my paper!" Well, where'd your paper go? What if you lose your paper.*

Efficiency and convenience are two common themes inherent to digital connectivity with respect to what it brings, what it does. How do mediums or modes of communication impact/affect how a message is transmitted, received, processed, and interpreted? As McLuhan said, the medium itself is the message. If we think back to who created the internet, what precipitated or inspired its invention, and draw a line from its origins to where we are today, we may legitimately ask whether Indigenous and Western paradigms, communication, and culture are commensurate or even compatible. Could digital connectivity be re-wiring our brains and how we think and

interact with each other? Previously, we had also talked about computers (and other mediums) of communication functioning as a means to off-load the burden on the brain; that digital communication or the written word could simultaneously create space and help us make room for more important stuff. The technology helped us develop. But what happens if one mean/mode imposes itself on the other? Or when a mean/mode is core to our existence, our spirit, and our culture?

> *The idea is you're training your own brain to inherently understand, calculate, and carry the information being given, the same way it was given to you, so you can return that to others. It's a cycle, so there's no change. And how we maintain… cuz you can say, 'well, what if somebody wants to change something?' That's why we were brought up in a certain way. It was part of our education: to understand why we didn't change things. It's a feeling.*

> *In our culture, when people spoke our language, and they spoke well, even if you didn't understand our language there was mutual respect because of the feeling it gave you when you heard it. Everyone talks about this. This is a* [cross-cultural] *historical thing, "wow* [so-and-so] *gave a great speech!" It's not because you heard it, it's because you felt it. And that's the understanding of our knowledge and language, is you feel it. That's why you talk from your heart, not your mind. Your mind plays no part in what you say. Your mind is there to remember, your heart is there to interpret. Cuz your mind will make stuff up. That's all I have to say there.*

SH:

> "'*People don't remember what you say, it's how you make them feel.*'"
> *There's that spiritual part of culture and language that can't necessarily be passed on with technology. And, like Ben said, there's a limit to it.*

> *An example is Kevin Lewis's camp. It's online, he's got a website, but he doesn't plot all his stuff on there. He tells you where to go if you want to gain knowledge. Those resources and how to get there – it's a path to get there.*

> *There's all this interpretation, appropriation happening. You've got people who are getting degrees and accolades who considering themselves experts. But they have not one bit of… they're not even Indigenous, period. And it goes further than blood – it's past blood. I just don't like our… there's too much room for abuse and misinterpretation. I've seen cases online where even our own people share a little too much. And* [other] *people will see it and say hey, take that down! Get it off, take it down now! I just think of natural law.*"

Ben's comment about speaking from the heart and not the mind can be juxtaposed with Western social theory and concepts such as "communicative action" and "systematic distortion."[28] nêhiyawewin (Plains Cree language) is a living language spoken from the heart. It helps constitute our reality and our understandings of the world. Control and/or dominion are not intrinsic to the spirit of the language. Could this be a reason for the differences in worldviews and "ideology?" The question traverses critical and sociocultural traditions which draw connections between language, thought, human behaviour, and group/power dynamics. The throughline here is that of language's influence in thought and our philosophical orientations.

We're in this information age where sharing everything online, anonymously or not, is commonplace, even casual. These attitudes and behaviours have largely been normalized, mainly through social media. The group's responses give a sense that our media environment—modern culture—can induce a sense of needing/wanting to (over)share. The business of online/digital communication applies to information about us as well as others. However, there is a disconnect in how we process, consider or contemplate knowledge and information. There is also a disconnect between culture and being our authentic selves. One can legitimately claim that digital connectivity deepens impulsivity, self-gratification, and addictive tendencies.[29]

In conversation with Native friends and colleagues, they have shared the view that digital connectivity is a liberating force that allows us to connect with each other and get closer with our

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[28] Jürgen Habermas (2001) explicates his theory of communicative action in his essay "Truth and Society: The discursive redemption of factual claims to validity." Deetz (1992), meanwhile, surmised that "all communication is distorted to some degree," and that "systematically distorted communication operates like strategic manipulation, but without overt awareness." (pp. 173-198). He took a cynical view that posited all human communication functions to some strategic end and is influenced by (inherent appetites) for power and control, which creates a self-reinforcing/co-constitutive communication system.

[29] The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) formally classifies internet addiction as internet addiction/use disorder (IAD). According to recent literature on the subject, the diagnosis "is a compulsive-impulsive spectrum disorder that involves online and/or offline computer usage, and consists of at least three subtypes: excessive gaming, sexual preoccupations, and e-mail/text messaging." Retrieved from: https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp.2007.07101556

cultures. Many have also expressed they don't appreciate (or like) the notion of us being separated from—or more barriers being put up between—each other, our kin, and our stories. In this way, digital connectivity can be seen as an unsettling force. Some have even said concerns around online privacy and security, or even digital sovereignty, are overblown if not asinine because they lead Indigenous Peoples to perpetuate the colonial system and neoliberal ideologies, particularly with respect to rights and property. People have told me that digital sovereignty can work against Native interests because of pre-existing dysfunction and trauma within community. Realistically, and truthfully, why would we want to assist in further consolidating/fortifying power for chief and band councils which can be corrupt or morally bankrupt? I have heard the word "fascist" used when describing our circles of governance.

DS:

> "*In the 1930's, Blackfoot elders got together knowing things were going to change, and the potential because of what was going on with our ceremonies being banned by the federal government through their Indian Act. And, that you couldn't do these ceremonies. Their concern was, 'how do we maintain our ceremonies for the future generations under this type of situation?' That's a problem, right?*
>
> *So, they problem-solved and said, what we will do is—because, researchers from the universities want to do research within the communities—if they come to us then we will use them for our purposes. And what they chose to do is: because these researchers, mostly social scientists, use ethnography as their method, and they have to write everything down, the Blackfoot elders all agreed that* [the researchers] *would* [have to] *do it in Blackfoot, in the language. It didn't faze the ethnographers, they just wrote down the Blackfoot words the best they could. And so they captured the essence of specific Blackfoot ways.*

This comment counters fallacies or misconceptions that Indigenous people either didn't have agency or were unwitting when it came to colonial technology being used or moving into their environments. We're hearing about Blackfoot people (re)appropriating and leveraging foreign technology for their own means—for their posterity. They understood the task. We have themes of adaption, adoption, subversion, preservation. It also indicates an early awareness that media

technologies could be harnessed; that the Blackfoot elders understood what to do and what courses of action were needed. There was foresight, courage, and intellect. The pressure was on, to be sure, but there was also imaginative cunning. Going further, if technology may be considered as an output of culture, or an example of cultural practice, one could argue cultural reciprocity was occurring, even if it was an asymmetrical exchange.

DS:

> *The Blackfoot elders among themselves decided, we will use tobacco planting as one of the items we want them to preserve for us, and the other is the Beaver bundle. So, they gave their knowledge to these ethnographers. Ethnographers wrote down word for word all in Blackfoot, doing their best. And, of course, the Blackfoot people didn't give absolute explanations of what those Blackfoot words were in English. But what happened was… come the 80's and 90's… and few people knew how to plant tobacco anymore, few people knew what the Beaver bundle was about. But once* [the Blackfoot] *were able to access that which was saved by those ethnographers, they reinvigorated it. And that was the intention of the Elders in the 1930s – to make sure* [the knowledge and practice] *continued based on that adverse situation of the ban. So, when confronted with those kinds of situations, I think that's really excellent problem solving, the way they did it.*

The Blackfoot succeeded in what they set out to do. The story of Beaver bundle lives on today and has even been approved by their elders to be shared online.[30] Not every miniscule detail may be included in the digital format, but like Ben said, digital connectivity can be a gateway for those "seeking understanding;" a lifeline to the culture for those who haven't had exposure. There is value in having that on the world-wide-web. We can also assume that non-Indigenous people greatly benefit from having access to these stories; this could be evidence of digital "Indigenization" and/or decolonization occurring. The evolution of the Beaver bundle story is yet another example of a culture persisting and adapting to a situation while maintaining its traditional integrity. Diana went on.

> *And now you're talking digital in this question. What they used was written, in a book, in a manuscript. And now digital. Which has the capacity… I think if we did it in the same way and put it in our language, that would preserve it better than if it was in English and*

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[30] https://piikani.ca/about/origin-of-the-beaver-bundle/

accessible to anybody and everyone. So, that's a potential. But it would have to be… the circumstances would have to align where the people said this is the best way to do it. And I'm not in a position to say this is the best time to do this. We need to be in a critical state, because I'm not the one to determine that. And I don't think the Elders today are in a position where they might condone it. I agree with Ben and Shannon on that. But I just gave that example as it's doable, in certain invariables that will make sure it falls in the right hands in the future."

There is always a vision or callback to the Elders and ancestors and wondering what they would do. How would they guide us? How would they proceed? What would they condone? Would they endorse critical pieces of our stories beings translated into bits and bytes; to be stored in digital vaults or hosted online? Perhaps nêhiyawak are not at the point where the Blackfoot people were almost 100 years ago in terms of our cultural preservation. Transsystemic (or transmodal) exchange is not a given. Approval hinges on the collective of people and what their council of elders determine.

SS:

"I'll shift it to just focusing on carving in granite. Because it's using a different communication system, one that can't be appropriated, can't be interpreted. So, I guess it's kind of like Diana's example, but it's using a method of communication that Ben is talking about. And that messaging will be there... Granite's very long-life material, it's a billion years old now, it could last 100,000's of years and maybe way outlast human civilization... the human capacity to be on the planet. But to put it in some form that's easily understood and on the internet, I disagree with. Because, it just can't help but be misused. That's my own opinion."

Stewart's message is clear. There is always a sense of caution or skepticism with digital connectivity, especially regarding its integration with TK and sacred knowledge. For Stewart, digital connectivity ultimately poses a threat and cannot be trusted in serious or consequential matters. There are boundaries in digital connectivity's application. "[It] just can't help but be misused" walks the line between a narrative of technological determinism—or, at least, digital connectivity's capacity to undermine/influence human autonomy—and a skeptic's (realist) view

of modern society. By virtue of the technology's existence, anything that can happen, will

happen—the law of probability.

> The room breathed for a moment. Silence. Then Shannon spoke.

> "*I heard a story that Kevin Lewis shared about the origin of rock, being our first communication tool. And the way he… when he tries to relate to young people… he says if you ever want to communicate to the Creator, you just stop and pick up a rock and it's like a cellphone, like digital communication. And like you said, it's been there for millions of years.*

> *I think of the language like something with a safety lock on it. If you do not speak fluently or know the language with its spirit, you're not going to be able to access the true meaning of that knowledge the Creator has given us. And so, maybe one day everyone will learn it on an app, but it will not be the spirit of it.*

Shannon's comment speaks to limits, and communication systems being incommensurate. True

meaning is lost in translation between mediums. The onus is on us to learn and prioritize

speaking the language—our culture—ideally offline. The spirit cannot be converted or distilled

into the machine.

> *And like BS was saying – you have to feel it. The spirit of it has to be in there. And then someone else will tell you a different meaning to it. And then how it's being told to you, the origin of that word and how it came to be. Our teachings are connected to it.*

> *When* [Diana] *was talking about what the Blackfoot did, there was an episode of Star Trek we saw where they have those holograms. And this is where AI comes into it, too… and that's another thing because AI is coming fast in our environment of technology.*

> *There was an episode where they had a Native Star Trek guy, future...whatever... and he needed to access some knowledge from his people. He went into those holograms that they brought up, and he spoke in the language and relayed that message even though that person has been gone for 100's of years. And there's* [a hypothetical] *example of how it could be used in a good way, because that person knew the language passed it on. But like Diana said, you don't lose the spirit of it. If you can keep it in its true context, keep it sacred, there's very good potential for use in a positive way. But there's always that effect non-Indigenous influence that can corrupt it.*"

Who are the makers? Who is designing digital connectivity? Where are the materials harvested,

and how? Why are we using this technology? We need to maintain our authentic ways and stay

true to the spirit—the medium—of the language. As Cree people, we are told the oral tradition is

superior to all else; that it's core to our being. It connects us to our history, our memory, and

unlocks our knowledge systems. And yet, digital connectivity enables audiovisual

communication, without us even having to read or write. One can listen, speak, share, transmit

without using their hands, potentially even their eyes! Regarding the interplay between digital

connectivity and our culture, Stewart said earlier:

> *I know that reading and writing is going out of style and I'm OK with that. It's like going back to an oral tradition in an interesting way, with all video and oral recordings, and I'm OK with that.*

In response to Shannon, our talking circle ended with Diana's final thought.

> "*With* [Shannon's] *Star Trek example with the AI hologram, I was thinking... we don't need that because we have the capacity to do it. We don't need* [engineered] *technology to do what we need to access our ancestral knowledge – it's safeguarded within our DNA already*."

This makes me think of blood memory and epigenetic inheritance. The spiritual or metaphysical

with the biological. Our connections are intergenerational.

Chapter 6: Reflections and Conclusion

The Capstone was an exploration of the influence and interplay between digital connectivity and contemporary Native identity, culture and society, as seen by citizens of Saddle Lake Cree Nation. The "problem," as I interpret it, is the disconnect between aspects of Indigenous (nêhiyâw/Plains Cree) identity and culture with the growing influence and presence of digital connectivity in our lives. One of my concerns, or personal theories, is that digital connectivity has the potential—the capacity—to affect our authentic communication with each other, particularly with respect to sustaining nêhiyawewin and other Indigenous languages, which are core to Indigenous culture(s) and being. The language is not impenetrable or invincible; it is also living—polymorphous. In a way, my theory harkens to Marshall McLuhan's (in)famous "the media is the message" concept.[1]

Another issue is that Indigenous rightsholders have not had an adequate say (or stake) in how digital connectivity is being designed, developed, or implemented. But that is beginning to change. We see that with the rise of Indigenous digital equity and digital sovereignty movements. Native nations are taking greater ownership and control over digital connectivity in their communities, and much greater care over how their data are being (re)stored or (re)transmitted.

The ascent of digital connectivity in facilitating human/non-human (systems) interaction—and the business models (platforms) core to it—is having profound impacts on how we organize and communicate (Shirky, 2008). At present, a major challenge lies in digital connectivity tending towards commercialization (monopolization) and industry. Thus, one could legitimately say our communication has become colonized and commodified.[2] This could make internal development or implementation of digital connectivity for an Indigenous community

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[1] https://mcluhan.org/understanding-media/
[2] https://www.theatlantic.com/magazine/archive/2021/04/the-internet-doesnt-have-to-be-awful/618079/

difficult. Depending on a community's priorities or approaches to enterprise (or welfare), a digital equity plan could be a source of tension that ostensibly puts them at odds with their collective values or stated aspirations. The result could be more colonial dissonance. Addressing this issue—cultural dominance, or Western hegemony through digital connectivity—will be challenging for a host of reasons.

Firstly, capacity in Indigenous communities varies widely and is often limited. There is frequent reliance on outside/foreign assistance to manage or develop digital connectivity programs and projects. They entail nurturing knowledge, skills, and technical proficiency for safe and effective use, which is expensive, especially when bridging the digital divide consistently involves working at the state of the art.[3] Indigenous knowledge mobilization and training often mean putting one's (non-Indigenous) self or business out of a job, or sharing the space. In particular, broadband projects are viewed as poor investments by non-Indigenous businesses given geographic/terrestrial challenges and socioeconomic conditions in (especially rural and remote) communities. Internally, many communities struggle to get digital equity programs and projects off the ground, let alone sustain them, due to a combination of capital/resource limitations, digital redlining, and outside reluctance.

Secondly, digital connectivity has not always been considered a necessity for or prioritized by Indigenous communities up until the COVID-19 pandemic. It didn't necessarily figure into the hierarchy of needs for a given community. Concerns still linger (validly so) around the connections between digital connectivity and health, and of its cultural impacts. A

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[3] The pace of innovation in digital technology and ICTs is rapid, which makes the digital divide a bit of a moving target and very difficult to ever fully bridge, especially for Northern, rural, and remote communities.

report by the Brooksfield Institute (2017) found Indigenous participation in the tech-based occupations and digital literacy rates were lower than that of non-Indigenous Canadians.[4]

Designing culturally competent/appropriate curricula is yet another endeavour. Co-creating programs or technologies that engender a sense of shared pathways, which tactfully blend Indigenous and Western knowledge and worldviews, are typically multistakeholder. The effort requires time (patience), multi-disciplinary expertise, soft skills, and money. This begets its own set of logistical and political issues. The autonomy and integrity of a given community can be limited or altogether compromised. Power asymmetries in a multistakeholder dynamic can be substantial. Forging meaningful relationships with Indigenous communities takes time, often moving at the speed of trust. And due to capital limitations, funding and resources usually comes from multiple streams, which usually means strings are attached. While Indigenous people need help and the good faith of their allies (on their own terms), any external and/or non-Indigenous/settler interventions cannot force the issue.

One of the questions (or initial provocations) this Capstone sought to explore lay in the notion that digital connectivity has a decidedly positive impact for Indigenous Peoples. Through the talking circle and my own experiences, there is recognition of the significant and undeniable benefits digital connectivity can offer Indigenous communities, not only from the perspectives of nêhiyawak or the people of Saddle Lake. Amidst the many challenges, there is evidence that Indigenous communities are appropriating, leveraging, and harnessing digital connectivity for their own benefit, on their own terms. This could lead one to believe that digital connectivity, as a sociotechnical system that was created by humans with free will (which Creator gave us), has the potential to be changed for the better. As everyone in the talking circle agreed, digital

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[4] https://brookfieldinstitute.ca/wp-content/uploads/2023/10/BrookfieldInstitute_State-of-Digital-Literacy-in-Canada_Literature_WorkingPaper.pdf

connectivity is a necessity that's fully integrated with their/our daily lives, and it's become part of the critical infrastructure. It can holistically enable. Good digital connectivity—that is, affordable access to fast and reliable internet, paired with quality devices and the requisite skills for safe and effective use—can be transformative for the individual and the community. Our people and communities need it, depend on it.

A major takeaway is that digital connectivity is a paradox for Indigenous Peoples. That could apply for many other (Indigenous) cultures and people—not only for nêhiyawak. Through this Capstone, my perspective has shifted; I've realized that some areas of life are not well-suited to be mixed. Not everything needs to be fused together in a modern, multicultural sense. Previously, I determined there to be a problem in the relation/interface between culture, people, and digital connectivity. I was more concerned about the homogenizing effects of digital connectivity and its capacity to dominate culture. Part of the solution, I thought, could rest in increasing Indigenous accessibility, and having more equity, more diversity of data and philosophies into the underlying architecture; in short, for "ethical integration," perhaps even cultural equity in digital connectivity. Admittedly, though, the more I reflect, the more I am inclined to believe that certain cultural or traditional aspects of Indigenous life should almost be held separate; precisely because they are sanctified. Therefore, the internet does not need to be "Indigenized" in an authentic sense. And that's probably alright. The goal, then, would be determine the limits of synthesis and integration, mainly through the tenets of and coordinated approaches to Indigenous data sovereignty. When I began this capstone, I speculated whether cultural reciprocity was possible; now I question whether it's necessary or even good, to the extent that our languages, bio and genomic data, or traditional and ceremonial/ancestral knowledge can be transmitted or stored digitally. It is a lot to consider.

In reflecting on my own journey, I see many parallels and possibilities for peaceful and prosperous co-existence within the Western/Indigenous binary. I do not necessarily feel as though I "walk between worlds," as is sometimes said by people of "mixed" racial or ethnic backgrounds. Sometimes, my work in the Indigenous connectivity space is a bonafide bridge between cultures. Though most times my work is totally separate from traditional cultural aspects. And that is perfectly fine. I used to think that was a problem; I was waiting for a breakthrough of sorts. But digital connectivity is a tool, a means, not an end.

The internet doesn't have to be bad. And Indigenous cultures are not static. With respect to adopting and integrating digital connectivity in our lives, a challenge for Native people will be to figure out what that "10%" (or less, as Ben described) of our authentic selves *is* that we're comfortable digitizing. We also need to emphasize and restore some of our traditional ways of knowing and being, which is no easy feat in our digital age. As a colleague once told me, "I don't consider myself a capitalist, and sometimes I yearn for the old ways, but they've killed all the animals and taken the land." And so it goes.

Further study and future directions

Having further contemplated their words on my own, I ask myself: how does Treaty interplay with Prairie Indigenous digital connectivity? Or, how is digital connectivity impacting Treaty? What could be changing in the actions of honouring Treaty, strengthening Treaty, legitimating Treaty, or cultivating knowledge about Treaty by the presence of (or through) digital connectivity? How would our ancestors view this technology and what it could mean for/to our cultures, and for our spirit? I am genuinely curious—worried, even—about how Indigenous Peoples are honouring Treaty through our use and integration with digital connectivity and,

conversely, how settler-colonials are doing the same. How is digital connectivity playing into Treaty obligations, and even Treaty itself? There are many questions to consider. We live in an anxious age where there is a battle of wills for verifiable truth, information, and who gets to claim knowledge and story. Ultimately, though, I recognize life post-contact has always been about survival for our people, and digital connectivity is another piece of that. We'll take the challenges with the opportunities; it's not a Faustian bargain. Our people are survivors. Loving kindness, honesty, altruism, courage and determination drive us. Our people are strong. Maybe some of those distinctly Indigenous values and virtues can be instilled into the algorithms, models, code, bits and bytes that underpin digital connectivity.

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