“Hena kiksuya mayanipte ye!”

‘Remembering’ for Indigenous Data, Research, and Spectrum Sovereignty

by

Ashley J. Wacanta Daniels

A Thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

In partial fulfillment of the requirements of the degree of

MASTER OF ARTS

Department of Indigenous Studies

University of Manitoba

Winnipeg, Manitoba

Abstract

This research calls for epistemic justice where Treaty One, Oceti Sakowin, and the Red River Métis Nation can exercise rights over data, and research that is free from the constraints of settler colonial oversights and manipulation. This research stands alongside Indigenous research sovereignty scholars' who provide the rationale for critiquing settler colonial infrastructures by placing rights-based frameworks at the forefront to advance the broader movement of Indigenous data sovereignty. I do this research through evaluation and analysis of settler-imposed policies in place-based context, referring to the University of Manitoba and administrations' external influences, including the provincial and federal government. My thesis is rooted in the core methodologies of truth-telling, remembering, telling it straight, and takes a language revitalization approach to invoke collective memory and to assert Indigenous data, research, and spectrum sovereignty. I argue that language reflects place-based and nation specificities as dialects differ from nation to nation, place to place but also re-make relationality to data, law making, science, and technologies. Through the synchronized kinetic energy produced within this thesis, I identified a limitation of place-based and nation-specific infrastructures or collective collaboration, consent, and consensus with treaty and inherent rights holders of Treaty One, Oceti Sakowin, and the Red River Métis Nation at the University of Manitoba. By transmitting kinetic energy, this thesis contributes to the larger field of Critical Indigenous Studies through centering Anishinaabeg and Dakota Oyate ontologies, epistemologies, and methodologies to demonstrate nation-rebuilding practices of re-making relationality beyond and outside of colonial bounds that further Indigenous data, research, and spectrum sovereignty movements. My thesis is here to remind Indigenous Peoples to refuse the ongoing colonial harms, and colonial ideologies within data, and research ecosystems.

Acknowledgements

Many people I would like to say chii-miigwech/wopida for the help in getting me here today. I thank the matriarchs who come before me for sharing their unconditional love, mentorship, guidance, and kindness with me, during our time together in this camp. I would like to extend my deep gratitude to my tiwahe, and tiospaye including four-legged relatives: Bobbi, Bella, Bree, Mighty, Minnie, Marley-iban, and the ones who are helping me from the next camp. As collectively and individually, my tiwahe and tiospaye have a tremendous impact on who I am as Anishinaabekwe-Dakota winyan.

I thank my thesis advisor, Dr. Merissa Daborn and my committee members, Dr. Mylène Yannick Gamache and Dr. Kiera Ladner for their support in this academic journey. I would also like to acknowledge the *Iapi Debwewin Aansaamb* co-lab members and my cohort in the Indigenous Studies Program for their encouragement, inspiration, and support during my time in the program. I would also like to extend many miigwech(s) to Gaa-biskigamaag's Post Secondary Department for supporting me in my academic journey.

Table of Contents

Table of Figures

Relationality

Settler states like Canada have historically used data as a weapon to surveil and police Indigenous Peoples through unethical extractive research practices (Andersen et al. 2017; Mosby 2013). This is tied to maintaining white power dynamics over Indigenous Peoples to further colonization and maintain settler state security (Moreton-Robinson 2015). Unethical extractive research practices can be seen in historical and contemporary examples, such as: census population data excluding Métis and non-Status Indian stolen data, tuberculosis research, malnutrition studies, death reports of children in Residential Schools, policies like the Indian Act, and stolen data in scholarly research taking place across institutions in Canada (Andersen et al. 2017; McCallum 2017; Mosby 2013; Wiwchar 2013).

In our current context "damage-based" research is sanctioned by "regulated university-based standards" including allowing non-Indigenous Peoples to do research on us that does not embody Indigenous ways of knowing (Tuck 2009; Walter & Andersen 2013; Luby et al. 2017). Damage-based research devalues the use of Indigenous methodologies and informs policies and programs, which has furthered setter state security (Tuck 2009, 413). Tyendinaga scholar Kyle Willmott (2023) draws on linkages with "damaged based" research in his article "Colonial Numbers, Quantification, Indigeneity and the Politics of Fiscal Surveillance." Willmott (2023) explains that "quantification" is the main way Canadians understand Indigenous Peoples and through this use of "quantification" the settler state compares Indigenous Peoples to Canadian society to maintain Indigenous Peoples as a deficit to society (19). This is done through census population data and without the involvement or consent of Indigenous Peoples; deficit-based census data then gets used and re-transcribed within research involving Indigenous Peoples (Gaudry 2011; Walter and Andersen 2013).

Furthermore, Williams et al. (2020) urges Indigenous Peoples to move away from using "damage based" research as rationale for "research sovereignty" (2). Thus, it is important to highlight how Indigenous Peoples have been taking steps towards Indigenous data sovereignty through initiatives like the First Nations Information Government Centre, the National Strategy on Inuit Research, Kahnawà:ke's digital data management, and the Mi'kmaw Ethics Watch, which oversees research in Mi'kma'ki **(**McMahon 2015; First Nations Information Governance

Centre 2016; Brant-Castellano 2004). In order to continue the momentum of the Indigenous data sovereignty movement, Duarte et al. (2019) suggests Indigenous data researchers "would benefit" from being grounded in Indigenous knowledge, literature, and language, along with "approaches to library and information management" (173-174). Indigenous knowledge researchers "would benefit" from investing in "Indigenous sovereignty" discourse, especially regarding "intellectual property practice and law" (Duarte et al. 2019, 173). Duarte et al. (2023) re-affirms that Indigenous data sovereignty and nation-rebuilding are intertwined as Indigenous data sovereignty includes governance, laws, and self-determination (Walter et al. 2020; Hudson et al. 2023).

Dibaajimowin

Before I continue it is critical to respond to the action required by researchers as stated in *Decolonizing Methodologies* (2021). Māori author Linda Tuhiwai-Smith addressed "[g]iven the history of unethical and exploitative research on Indigenous [P]eoples, it is important for a researcher to be clear and open about who they are and what they are seeking and to locate themselves in context" (2021, 193). Tuhiwai-Smith (2021) is urging the importance of situating yourself, so "Indigenous [P]eoples and communities [are] not hav[ing] to guess a researcher's identity or their agenda" (194). Therefore:

> Aaniin. Boozhoo. Ashley nizhinaakaaz. Gaa-biskigamaag ando Wipazoka Wakpa indoonji. Binesii nindoodem. Winnibiig indizhaa noogoom. Bungi eta indanishinaabem zhigo nibwaanim.

In Anishinaabemowin, I shared that I speak a little Anishinaabemowin and Dakota iapi. To translate, my name is Ashley, belonging to the Thunderbird clan, and I come from Swan Lake First Nation and Sioux Valley Dakota Nation. Today, I live in Winnipeg. More specifically, I am a Anishinaabekwe and Dakota winyan, registered band member to Swan Lake First Nation. My spirit grew up in Forest Hills, one of Swan Lake First Nation's land and I acknowledge that I have paternal connections to Sioux Valley Dakota Nation, as well as spending an equal amount of time there. At times while I am logged onto the dreamworld server, I somehow travel to either

Sioux Valley or Forest Hills. Therefore, I must honor both places, where my heart and spirit longs for.

Titling this subsection, dibaajimowin as part of the chapter *Relationality* grounds how my personal experience shape who I am in this present time: writing this thesis and conducting this research. For example, my first teaching in this lifetime was through observing and witnessing. I practice this in my day-to-day. When I think about what it means to be observing and witnessing, in terms of this research, I think back to the past decade observing and witnessing the University of Manitoba (U of M) from the inside out. From inside and within the Faculty of Science to the Faculty of Arts during my undergrad degree, witnessing the atrocious historical and contemporary settler colonial violence towards Indigenous Peoples on Fort Garry Campus; as echoed in Métis thinker and fellow U of M student Sarah Hourie's MA thesis, concerning the university's "lack of preventative measures creat[ing] a tolerance of anti-Indigenous violence in academic space" (2022, 28).

I also have lived experience in elected positions within regional and national organizations. This path began in 2018, after elected leadership suggested that I attend a conference hosted by the Southern Chiefs Organization that gathered Anishinaabeg and Dakota Oyate youth from Southern Manitoba. This conference had entailed informing the participants that there would be an election for the First Youth Chief of Southern Chiefs Organization. In a turn of events within a few days, I was nominated and unanimously elected as the First Female Youth Chief of Southern Chiefs Organization. This position was the first of its kind where youth had a vote with the Chiefs-in-Assembly. During my time in this elected position, I have met youth across Southern Manitoba and was appointed to be the Manitoba Representative of the Assembly of First Nations National Youth Council. During my time in various areas of advocacy and elected positions, I vocalized the need to act on the collective responsibility for knowledge mobilization across generations including those who are yet to be born. Through this experience, I dedicated myself to localized contexts for the purpose to fulfill my role as winona for the future generations. My research will reference to Treaty One, Oceti Sakowin, and the Red River Métis Nation. More specifically, I am speaking from an Anishinaabekwe and Dakota winyan perspective, but I do not speak on behalf of the Anishinaabeg or Dakota Oyate. I have decided to include the Red River Métis Nation because we are in place together. I refer to the term Oceti

Sakowin, because that is the governing and accurate naming of the Dakota, Lakota, and Nakota collectively. I use the term Treaty One because it involved both Anishinaabeg and Ininiwak relatives. Moreover, "I invite others [Red River Métis, Nakota, Lakota, and Ininiwak] to further apply… insights or knowledge gleaned from this research on their own nation-building exercise" (Baskatawang 2023, 14).

Reflecting on where I am today, I have so much gratitude for my family, ancestors and mentors for their sacrifices that allows me to be who I am today and in graduate studies. With this love for my relations, I step into the role as messenger or oshkaabkwe/wokiya, by standing strong in who I am/who I am becoming. Therefore, "I don't 'walk in two worlds'… I [will not] divide myself for anyone's comfort. I walk on this land like I belong to her" (Barker 2024). In practical terms of this thesis, I will be honoring the present, past, and future by integrating language wherever I possibly can. I refuse to push the language to the side into the margins of footnotes or endnotes of pages, they belong here on the page with me.

Inter-relationality between Indigenous Data, Research, and Spectrum Sovereignty

In this literature review I will begin by framing how Indigenous research sovereignty is in relation with Indigenous data sovereignty discourse with a focus on the scholarship by Hudson et al. (2023), Williams et al. (2020), Riley et al. (2023), Johnson et al. (2023), Garbra et al. (2023) and chapters in *Indigenous Data Sovereignty and Policy* (Walter and Carroll 2020; Rowe et al. 2020) that are based on a rights-based frameworks. I articulate that the complex layers of Indigenous data and research sovereignty must be understood by the U of M before creating decisions that will impact Indigenous Peoples' data and research ecosystems.

The relationship between Indigenous data sovereignty and Indigenous research sovereignty discourse is captured in the article "Indigenous Peoples' Rights in Data: A Contribution Toward Indigenous Research Sovereignty" by Hudson et al., (2023). The article guides readers through a rights-based perspectives while framing that "Indigenous Research Sovereignty, or Indigenous self-determination in the context of research activities, has been focused on the relationship between Indigenous Data Sovereignty and efforts to describe Indigenous Peoples Rights' in data" (Hudson et al. 2023, 1). Hudson et al. (2023) explains the

field of Indigenous research sovereignty embodies work of other "sovereignty discourse" including: "Network Sovereignty...Food Sovereignty... Energy Sovereignty, and Data Sovereignty" as they all apply to the "broad research system" (1). Therefore, it is safe to say that Indigenous research sovereignty is a form of "nested sovereignty," a concept engaged by Mohawk Scholar Audra Simpson (2010) when referring to the notion that "sovereignty may exist within sovereignty" (10).

Similarly, Williams et al. (2020) agrees that Indigenous research sovereignty does build off Indigenous data sovereignty in the article "Advancing Indigenous Research Sovereignty: Public Administration Trends and the Opportunity for Meaningful Conversation in Canadian Research Governance." While it could be argued that Indigenous data sovereignty "can be applied within [a] research ecosystem," Hudson et al. references *Indigenous Data Sovereignty: Towards an Agenda* by Kukuati et al. (2021) to remind readers that "research attracts significant funds, serves as a key driver for policy, and influences that allocation across society" (2). William et al. (2020) further the argument by explaining that research is designed to "advance capitalism" through being "situated globally and nationally as a commodity" (4). An example provided by Tsosie et al. (2021) in "We Have 'Gifted' Enough: Indigenous Genomic Data Sovereignty in Precision Medicine" brings attention to how "[c]ommercial exploitation of DNA taken from Indigenous people...[gain] corporate profit, while those Indigenous communities fail to benefit from medical innovations that might improve health income" (74).

Another example of William et al.'s (2020) argument is how research has been designed as a 'commodity,' as proposed by Riley et al. (2023) in "Wrangling the system: How tenure impacts Indigenous Research," they demonstrate direct linkages between the "tenure system" and Indigenous research sovereignty. For example, the definition of "service" within the tenure contracts are centred on "service" for benefit towards universities while "community service is not rewarded" (Riley et al. 2023, 47). While Indigenous Peoples in tenured positions are trying to balance the workloads depending on if the position is "research-focused" or "teaching-focused," the set "criteria" for tenure is measured through "peer-reviewed publications" (Riley et al. 2023, 47). Indigenous Peoples with tenure positions have various of competing priorities not only from the university but also "indirect pressure from the Indigenous community" (Riley et al. 2023, 47). Although, tenure structures have access to funding through the entangled research ethics

system, Indigenous Peoples also must navigate the university normalcies of research ethics boards in-order to access funding (Riley et al. 2023, 49). These various "pressures" and "imbalanced" to workloads that Indigenous Peoples within tenured positions leads to "stress and burnout" (Riley et al. 2023, 47). Therefore, tenure structures are beneficial to have access to funding opportunities but research outside tenure structures holds more space to center relationality as the main priority (Riley et al. 2023). Amending academic tenure structures would be desirable for Indigenous Peoples retention and overall morale working within universities (Riley et al. 2023). Johnson et al.'s (2023) article "Indigenous research sovereignties: Sparking the deeper conversations we need" also confirms Riley et al.'s argument for much needed adjustments to tenure structures to be able to build relationality (5).

Both the Hudson et al. (2023) and Williams et al. (2020) express the importance of rights-based discourse in asserting Indigenous data sovereignty, and research sovereignty. Williams et al. (2020) go further by explaining Indigenous research sovereignty must go beyond framings of "epistemic violence" of the harmful research on Indigenous Peoples (2). Therefore, I argue that Indigenous research sovereignty movement would amplify by critiquing "research policy in mainstream" (Williams et al. 2020, 2) while applying "Indigenous-onto-ethico-epistemologies," as is proposed by Riley et al. (2023). Similarly, Williams et al. (2020) also critique settler colonial structures including the Tri-Council Policy Statement (TCPS2), especially the Social Sciences and Humanities Research Council of Canada (SSHRC), while providing "recommendations" categorized into two sections: "Enhance the Ability of Community-Based Research Organizations to Govern Indigenous Research" and "Funding Mechanisms for Indigenous Research at Mainstream Institutions Should Advance Indigenous Research Sovereignty" (10). These are both examples of "challenging the ways in which governments have historically used Indigenous data to develop policies and programs," as stated by Maggie Walter and Stephanie Russo-Carroll (2020), in the opening chapter of *Indigenous Data Sovereignty and Policy* (4).

The overall objective of the collection of chapters in *Indigenous Data Sovereignty and Policy* is to provide context regarding what Indigenous data sovereignty is and how it is linked to policy (Walter et al. 2020, 21). Nevertheless, this text urges Indigenous Peoples to "create or demand...change [as] Indigenous Peoples [who] have always engaged with data, and knowledge,

holding, and using such information to care for and support collective rights and interest" (Walter and Carroll 2020, 34). *Indigenous Data Sovereignty and Policy* has a chapter dedicated to the Canadian context. In this chapter, Rowe et al. (2020) notes specific policies which have "acted as...active resistance," like the *Truth and Reconciliation Commission* (TRC), the *Royal Commission on Aboriginal Peoples*, the *National Inquiry into Missing and Murdered Women, Girls, and Two-Spirit Relatives*, and the *United Nation Declaration on the Rights of Indigenous Peoples* (UNDRIP) (Rowe et al. 2020, 144). Rowe et al. (2020) also share the historical influences that OCAP® [Ownership, Control, Access, and Possession] Principles have in Canada. For instance, in 2007 the Assembly of First Nations had endorsed OCAP ® Principles, which is a fundamental tool to support First Nations data, and research sovereignty in Canada (Hayward et al. 2021, 411).[1]

The connection between data sovereignty through data governance and management is described in two sections of Hudson et al. (2023) article titled: "Data for Governance" and "Governance for Data," which engages the right to "govern data" as it contains "intellectual property" (3-4). Indigenous data governance is part of the Indigenous data sovereignty movement, as indicated in the seminal text *Indigenous Data Sovereignty and Policy,* which holds space to explain existing tools like FAIR and CARE Principles to achieve Indigenous data sovereignty and governance (Walter et al. 2020). The CARE Principles [Collective benefit, Authority to control, Responsibility, and Ethics] were designed to be complementary to FAIR Principles [Findable, Accessible, Interoperable, Reusable] to ensure "action and responsibilities" take place "across the data lifecycle and ecosystem" (Carroll et al. 2021, 4). The FAIR and CARE Principles support the "operationalized" aspects of Indigenous data sovereignty "via Indigenous data governance, which harnesses Indigenous decision-making across data lifecycles and ecosystems to assert Indigenous rights and interest" (Walter et al. 2020, 34).

---

[1] First Nations Information Governance Centre offers OCAP® training and resources for researchers working with First Nations data. It also hosts the First Nations Data Centre that houses research data conducted with partner First Nations.

In their article titled "Indigenous Peoples and research: self-determination in research governance," Garbra et al. (2023) explain that the CARE Principles under "Authority to Control" confirm research sovereignty through two requirements: 1) Indigenous rights-frameworks, and 2) "creating data governance mechanisms in external institutions that reflect Indigenous Peoples' expectations" (3). Garbra et al. and Johnson et al. both reference Hudson et al. (2023) to re-affirm the argument of how deeply intertwined data sovereignty and research sovereignty are to one another, including exercising jurisdiction over data, and research ecosystems. As mentioned earlier, Hudson et al. (2023) also argues that Indigenous network sovereignty or spectrum sovereignty is a part of an entangled relationship with Indigenous data and research sovereignty discourse.

Indigenous Research Ethics: Claiming Research Sovereignty Beyond Deficit and the Colonial Legacy by George et al. (2020), a collaborative anthology composed of co-written chapters, is where I learned about place-based and nation specific examples of a First Nations community who has asserted their right to spectrum sovereignty and data management. Chapter 5, titled "Data Ethics and Data Governance from A Māori World View," explains the influence of OCAP ® in the Canadian context, which "has been used by a number First Nations" including the Kahnawà:ke to develop their own "Digital Data Management" strategy (West et al. 2020, 121; McMahon et al. 2015). The basis of "electromagenetic spection" or spectrum as Dene scholar Darrah Blackwater (2020) explains, refers "to the invisible and nontangible frequencies over which we transmit data" (97-98). Spectrum is "natural resource" that exists since "time immemorial" (Blackwater 2020, 97-98). Electromagenetic spectrum is measured in gigahertz (GHz) where the "range of frequencies [are] fixed and limited by the physics of the universe" and "most wireless networks today are built on low-band spectrum" (Blackwater 2020, 97-98).

Building off of this, I will discuss spectrum and my hopes for my future studies, which aligns with my desire to practice *remembering* to re-make kin with electromagnetic spectrum. Blackwater et al. (2023) argue in "Spectrum Sovereignty on Tribal Lands: Assessing the DIGITAL Reservations Act," that inherent rights over spectrum exist when we insist that Indigenous Peoples have "ceremonies, songs and oral stories" about how "rainbows, lightning and sunlight are all apart of spectrum" (12-13). In my future work I want to (re)amplify and *remember* Indigenous Peoples' existing relationship to electromagnetic spectrum and their

"rights to harvest electromagnetic spectrum" (TallBear 2017; Lewis et al. 2018; Toso and Forward 2023., 305). Building relationality with spectrum supports our inherent rights to care for and protect natural "resources," furthers our data management and access to technologies, and supports our nation-rebuilding process as it pertains to Indigenous data and research sovereignty (Wemigwans 2018). Spectrum has the abundance of space to store data but also can be used as a tool to communicate and share between other Indigenous Peoples, communities, and governments that exceeds colonial borders.

Rationale for Critique

Universities are vital to the Indigenous data and research sovereignty movement as highlighted in my literature review, and echoed by Rebecca Filopoulos (2023), who recently defended her thesis at the U of M. Therefore, my research focuses on critiquing the University of Manitoba, as my literature review pronounces a critical analysis of settler colonial research ecosystems, and modes of "settler governmentality," to intervene into the practice of subjecting Indigenous Peoples to be "data dependen[t]" on harmful and un-useful data (Carroll et al. 2019; Crosby and Monaghan 2018). The term "settler governmentality aims to dispossess [I]ndigenous [P]eoples of their land and, once reduced to minority populations, target them with strict population management systems" (Monaghan 2013, 493). In terms to inter-relation to data, the term "data dependency" means Indigenous Peoples are reliant on settler sanctioned data that has been manipulated consciously or unconsciously for the benefit for settler-state, not "for Indigenous Peoples benefit," because it is not using Indigenous methodologies (Carroll et al. 2019, 3). For example, Treaty No. 1 or Stone Fort Treaty in its written form is:

> [i]n fact…a carbon copy of secretly pre-written agreement that went on to become that Crown's cookie-cutter template for future negotiations. What this written document does not reflect is what was actually discussed and agreed…It even had to be amended four years later to include a list of the 'outside promises' that had been agreed to but never integrated (Treaty One 2021).

A witness of Treaty No. 1 negotiations shared the following perspective to a newspaper journalist in 1872: "[s]o the Treaty was signed, the commissioner meaning one thing, the [Treaty One Chiefs] mean the other" (Treaty One 2021).

Breathing life into the Stone Fort Treaty: An Anishinaabe Understanding of Treaty One by Anishinaabe-Métis Lawyer Aimée Craft says "[p]ut simply, Anishinaabe inaakonigewin co-existed with other systems of law at the time of Treaty One negotiations and therefore should be considered in order to better understand and interpret the treaty" (2013, 69). Anishinaabewin and Anishinaabe inaakonigewin are integral to understanding the Treaty One creation. This lens sheds light on how Anishinaabeg governance systems operate through ongoing collective consent, consensus, and collaboration, as being an integral component to decision-making processes. As Craft (2013) states, the creation of Treaty One was "founded on protocols of waiting for others and not speaking for others without proper authority. These protocols illustrate the reliance on substantive principles of non-interference and respect for the autonomous jurisdiction of smaller collectives, and individuals" (74). Consulting others and not speaking for others, as grounded within the creation of Treaty One happened in different places or all at once to ensure every member was involved (Craft 2013, 74). This process of decision making was based on respect, kindness, and relationality, grounded in Anishinaabewin and Anishinaabe inaakonigewin (Craft 2013). More specifically, many depictions of Treaty One from Anishinaabe linguistic and legal perspectives showcase that Treaty One was set up to be a "sharing treaty" (Craft 2013, 61). Arguably the agreement of a shared space is in alignment with Anishinaabeg's previous Treaty of Peace with the Dakota Oyate and the Red River Métis Nation at the Fort Gary, a decade prior to the signing of Treaty One and creation of the *Manitoba Act* (Voth 2020).

The settler-written agreements and policies are among the many examples how "settler governmentality" uses "discriminatory [by] design" laws and policies are forms of (infra)structural violence to displace Treaty One, Oceti Sakowin, and Red River Métis (Crosby and Monoghan 2018; Benjamin 2019). Furthermore, months prior to official signing of Treaty No. 1 in 1876, the Dominion Government created the Indian Act, which we were unaware of at the time of signing. As well, the U of M reaped the benefit from the Province of Manitoba and the Government of Canada, or at the time, the Dominion Government. Caitlin Harvey (2023) indicates in her article "University Land Grabs: Indigenous Dispossession and the University of Toronto and Manitoba," that in 1878, the U of M's "application to the Dominion Government for a grant of…[Indigenous] lands," which was done without consent or consultation by Treaty

One, Oceti Sakowin, or Red River Métis Nation, a decade and was the request was approved a decade later (482). Harvey (2023) explains that the U of M adopted the United States model by "turn[ing] Indigenous spaces into seed funding for universities" (482-487). Since conception, the U of M has benefited from "discriminatory [by] design" policies through land dispossession, and the infringement of Treaty and inherent rights with help of the Province and Federal Government (Harvey 2023; Benjamin 2019).

I do want to make note that I am not an Indigenous legal scholar, and that it must be affirmed that I am not looking at Canadian constitutional law. Instead, my research interacts with Anishinaabeg inaakonigewin that were part of the "protocols and procedural laws in the context of the Treaty One negotiations" (Craft 2013, 12-13). However, I will continue to lean on others like Anishinaabe legal scholar John Borrows. In this chapter "Canada's Colonial Constitution" which appears in a co-collectively authored book: *The Right Relationship: Reimagining the Implementation of Historical Histories* (2017). Borrows argues that the Province of Manitoba, amongst other Provinces in Canada, has directly benefited from the historical "dispossession" of Indigenous Peoples (2017, 32). This is due to previous accounts by "[t]he Supreme Court of Canada [that] has acted to enhance provincial development and control of First Nations' lands" under Provincial and Federal laws (Borrows 2017, 39). Borrows (2017) elaborates by explaining that the Government of Canada has not done enough to fulfill their fiduciary duty to Indigenous Peoples and their "actions have always been problematic, the provinces became a significant source of First Nations misery as confederation continued to decentralize across the land" (32). The case that Borrows makes provides insight as to why the U of M is under the bi-lateral government structure with the Province of Manitoba and would be unwilling to shift power dynamics as it would mean losing "benefit[s] from [I]ndigenous lands" but also research ecosystems (38).

Harvey (2023) points towards this connection by also "[c]onsidering Canadian universities as settler-colonial landholders [which] has important implications for the study of empire, colonialism, and Indigenous dispossession. University landholding made institutions of higher education the beneficiaries of Indigenous remove and agenda of colonization" (470). Together the Province of Manitoba and the federal government (or the settler state and its governance structures) influences the university's priorities through "funding, monitoring

performance, and holding institutions accountable to the public" (Tamtik 2024, 8). It is critical to understand that the U of M would not exist without the Province's *University of Manitoba Act* or the financial support that "produced an enormous wealth transfer in land from…" Treaty One, Oceti Sakowin, and Red River Métis lands to the U of M, without free, prior, and inform consent by the Dominion Government (Harvey 2023).

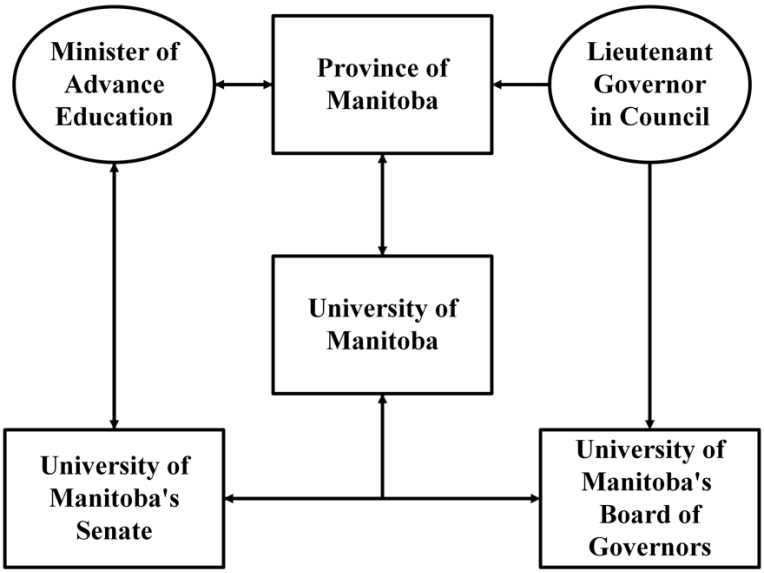

Figure 1: U of M's Governing Structure

The University of Manitoba Act mandates the governing body of the university under the so-called Board of Governors, I created Figure 1 to visually contextualize the governance structure (University of Manitoba 2024c). The U of M's Board of Governors consists of 23 members, with "12 members appointed by the Lieutenant Governor in Council" (University of Manitoba 2024c). The "Lieutenant Governor in Council" means the approval of the recommendations by the Provincial cabinet with the Lieutenant Governor, who is supposed to act as the Crown representative within the province (Manitoba L.G. 2025). The role of the Lieutenant Governor of Manitoba is essentially an in-province representation of the British Crown and is "guardian" to ensure the Province of Manitoba is "functioning" as a part of the *Canadian Constitution* (Manitoba LG. 2025).

The U of M's Board of Governors' responsibility is "financial and resource-related decision making" and ensures accountability to the Province of Manitoba's "priorities" (Tamtik

2024, 8). This raises crucial questions about the dedicated funding and delegation approval by the Board of Governors in supporting a future towards Treaty One, Oceti Sakowin, and Red River Métis rights to govern data, and research. One other thing the U of M must consider is that they are also in-debt to the Treaty One, Oceti Sakowin, and Red River Métis Nation by historically occupying, operating on lands without consent, and possessing jurisdiction over post-secondary education that infringes on both Treaty and inherent rights. I reference post-secondary jurisdiction because within my literature review, I point to how universities are a part of the research ecosystem. It must be remembered that education is a treaty obligation of Treaty No. 1, but also includes an inherent right to protect and govern knowledge mobilized within education infrastructures, which Anishinaabeg legal scholar Leo Baskatawang also discusses in his book, *Reclaiming Anishinaabe Law: Kinamaadiwin Inaakonigewin and the Treaty Right to Education* (2023, 80). Therefore, U of M and the Provincial delegation of education jurisdiction is an interference and infringement of the spirit of the treaty and inherent rights (Baskatawang 2023, 80).[2]

Understanding how U of M's "possessive logics" are operationalized within data and the research ecosystem is important in order to intervene in harm as stated by Goenpul Scholar, Aileen Moreton-Robinson (2015). Moreton-Robinson (2015) deploys two concepts in her book *The White Possessive: Property, Power, and Indigenous Sovereignty.* She explains "possessive logic" as "a mode of rationalization... [that is] invest[ed] in reproducing and reaffirming the nation-state's ownership, control and dominance." Furthermore, "white possessive logics are operationalized within discourses to circulate sets of meanings about ownership of the nation, as apart of commonsense knowledge, decision making, and socially produced conventions" (Moreton-Robinson 2015, xii). Applying Moreton-Robinson (2015) concepts of "possession" make it possible to understand why Treaty One, Oceti Sakowin, and Red River Métis Nation's

[2] Throughout this research I consider treaty rights, inherent rights, and relationality more broadly to understand how, and in what ways, U of M is obligated to Treaty One, Oceti Sakowin, and the Red River Métis Nation. However, I also extend discussion of treaty to situate inter-Indigenous relationalities and to highlight alternate modes of relating and possibilities for generating futurities.

data and research sovereignty may not be supported, as both undermine the settler states' security that produces power, status, and attracts funding, while also infringes on the rights of individuals and the collective who are invested in dismantling the reproduction and reaffirmation of "possession" over research ecosystem (xxiii).

Given this rationale, I am specifically studying the U of M because I understand it is an organ that is part of a larger network within a larger research ecosystem with the design to maintain "settler governmentality" (Crosby and Monaghan 2018; Monoghan 2013). I argue that it is time to re-build our own governance models for data and research through "epistemic infrastructure[s]" as it supports the notion that "knowledge-making can install material supports into the world" (Murphy 2017, 6). All while holding the university's obligation to our treaty and inherent rights, my research asks the following questions:

- What has the U of M done to honor this sharing agreement, specifically regarding advancing Indigenous data sovereignty with inherent rights holders in Southern Manitoba?
- What are the existing frameworks within the U of M research ecosystem, and do they have capacity to follow the legal orders and agreements protected in and by Treaty One, Oceti Sakowin, and the Red River Métis Nation?
- How can the U of M be held accountable to the laws of Treaty One, Oceti Sakowin, and the Red River Métis Nation?

Methodology and Approach

My research is situated within the discipline of Critical Indigenous Studies, and refers to Critical Indigenous Studies scholars (Moreton-Robinson 2015; TallBear 2014; Kolopenuk 2020a; 2020b; Gaudry 2011) whose works are committed to Indigenous futurities, densities, sovereignties, and relationalities. Like others in the field of Critical Indigenous Studies, I "study non-Indigenous People" but I do this in the "service" of Indigenous self-determination (Kolopenuk 2020a, 12; TallBear 2014). Through studying how "non-Indigenous Peoples, institutions and logics come to know," I too am "refusing to make our own people the subject of our research" (Kolopenuk 2020a, 12; TallBear 2014).

This act of "employ[ing] *power relations*" within my research builds upon other scholars before me to "generate a collective energy" and "movement of feelings" as Treaty One relative Jessica Kolopenuk writes in her dissertation (2020b) and article "Miskâsowin: Indigenous Science, Technology, and Society" (2020a). Referring to relationality, it is important to showcase the capacity and ability to achieve data and research sovereignty in place-based and nation-based contexts, but also to reiterate that "Indigenous research methodologies are grounded in understanding of relational accountability" (Hudson et al. 2023, 3 & 6). Through the utilization of Anishinaabe and Dakota methodologies within my research, I draw upon my own epistemologies and ontologies. My "ontological commitment" to my relations, the Anishinaabeg and Dakota Oyate, involves speaking from my heart/speaking truth – debwewin (Kolopenuk 2020a, 8). In utilizing debwewin, as Kolopenuk (2020a) shares "multiple truth (knowledge that are equally true) exist at once. When a truth collectively resonates among a cluster of relations, then it must be true" (8).

By speaking from the heart, I deploy my ability to "tell it straight" or owotanna wohdaka, which is one of my family's teachings (Wilson 2005). In "telling it straight," by speaking from the heart or enacting debwewin, my research is situated as "desire-based" and utilizes an "insurgent researcher" framework that supports Indigenous governance and self-determination in Southern Manitoba (Wilson 2005; Tuck 2009; Gaudry 2011). In remembering my families' teachings, I have communicated the importance of using language throughout this chapter (Tuhiwai-Smith 2021; Battiste and Youngblood Henderson 2000; Wilson 2005). Therefore, I will take a language revitalization approach to invoke our collective memory and to assert Indigenous data, research, and spectrum sovereignty. I argue that language reflects place-based concerns and national specificities as dialects differ from nation to nation, place to place, but also advance our relationality to data, law making, science, and technologies.

Through truth-telling as my core methodology, I will conduct an environmental scan of literature, frameworks, policies, and governance structures housed within settler-state institutions to build capacity with Indigenous Peoples, communities, and governments at the U of M. Through this environmental scan and literature review, I will consider governmental impacts and dynamics to understand how and where capacity is being built to support data, research, and spectrum sovereignty. There are limited place-based and nation-specific infrastructures now at

the U of M that have resulted from collaboration with treaty and inherent rights holders of Treaty One, Oceti Sakowin, and the Red River Métis Nation. I will then pair a critical discourse analysis with case studies external to the U of M to showcase place-based and nation-specific contextual differences and to reference what steps can be taken to support Indigenous research sovereignty in ways that feed into the Indigenous data sovereignty movement within academic institutions (Hayward et al. 2021).

In this act of 'researching back' the colonizers, I follow Tuhiwai-Smith's directive to examine the impact of colonialism to rediscover "ourselves" and strengthen "self-determination" (Tuhiwai-Smith 2021, 8). Therefore, my research objectives are to seek accountability to shift current unequal power dynamics; to intervene in "white possessive" processes within academia; and to investigate what capacity building is taking place to enable strength-based research and good data governance which uplift self-determination through data, research, and spectrum sovereignty (Moreton-Robinson 2015). I will showcase how investing place-based and nation-specific *remembering* will advance the futurities of Anishinaabeg and Dakota Oyate engagement with science, technologies, and governance (Tuhiwai-Smith 2021).

My thesis is also relevant to the field of Critical Indigenous Studies as it centers Anishinaabeg and Dakota ways of conducting research. By centering relational methodologies my thesis urges scholars invested in Indigenous sovereignty to fight back against the "intellectual colonialism" that takes place within setter state academic institutions (Gaudry 2011). This research is rooted within Indigenous sovereignty and reminds us of our power to speak up against ongoing "settler governmentality" and colonial ideologies (Monaghan 2013). While my research not only urges future generations of Indigenous scholars to remain true to their teachings, it is a reminder for all Indigenous Peoples of our power in refusing colonial harms.

My research encourages the enactment of Anishinaabe and Dakota laws by reminding the U of M of their position on Treaty One, inherent Oceti Sakowin, and Red River Métis lands, as they continue to overstep their fiduciary duties under existing laws to consult and collaborate with these Nations. In this work I will argue that the U of M needs to be reminded that they are an actor and part of Provincial and Federal "governmentality" (Monaghan 2013). Furthermore, since Treaty One and Dakota Oyate relationships are tied with and between the British Crown,

the University's authority does not precede Treaty and inherent rights. My research is here to remind them of that. Academic institutions must start making "systemic changes" to how they create policies and laws that affect Treaty One, Oceti Sakowin, and Red River Métis kin. Indigenous data, research, and spectrum sovereignty involves "systemic changes [which] require[] capability, leadership, support, time, courage, reflectivity, determination and compassion" (Tuhiwai-Smith 2021, 289). On the other hand, my research reminds treaty and inherent rights holders of the Treaty One, Oceti Sakowin, and Red River Métis of their power to hold the university accountable in creating policies and regulations that directly impose on our inherent rights. I will also tap into the collective and intergenerational "memory" that is held within language to re-make kinship with methodologies, numbers, electromagnetic spectrum, technologies and re-awaken the inter-Indigenous diplomacy between Anishinaabeg and Dakota Oyate to further support collective collaboration towards self-determination (Tuhiwai-Smith 2021; TallBear 2014; 2018; Lewis et al. 2018).

Lastly, through engaging in conversation with other scholars within the field of Indigenous data sovereignty and governance, this research will be an investment towards learning from others and lessons learned with room for opportunity to re-envision. Enacting "power relations" through sharing experiences and stories can be used a tool to understand the complexities of how we can apply our rights to data, research, and spectrum sovereignty, which must remain in place-based contexts and nation-based perspectives to be truly achieved (Kolopenuk 2020a).

Overview of Chapters

In this introduction chapter, *'Relationality,'* I situated myself, and positioned myself as a Dakota and Anishinaabe researcher by providing my "epistemology, axiology, and ontology" and "social position" (Walter & Andersen 2013, 46). I lead with this to frame why I am utilizing debwemowin, owotanna wohdaka, and "remembering" as core methodologies throughout my thesis (Kolopenuk 2020a; 2020b; Wilson 2009; Tuhiwai-Smith 2021). I explained how Indigenous data sovereignty, research sovereignty, and spectrum sovereignty are interconnected. Providing this necessary context for data, research, and spectrum sovereignty, I introduced the

rationale for investigating U of M and the external influences of the broader research ecosystem through deploying "relational accountability" or *inawediwin* (Reo 2019).

Chapter 2, entitled *'Possession'* is based on two objectives that both encompass debwewin and owotanna wohdaka (Kolopenuk 2020a; 2020b; Wilson 2005; Tuhiwai-Smith 2021). The objective of this chapter is to provide an environmental scan and critical analysis of settler-imposed policies in place-based context, therefore referring to the U of M and the administration's external influences, including the provincial and federal government, which impact Indigenous data and research sovereignty. I argue the university-wide strategies like U of M's *Momentum: Leading Change Together (2024-2029), Change Through Research: Strategic Research Plan (2024-2029)* do not capture Indigenous Peoples as "epistemologically dense," which impacts our futurities, and ultimately is a reflection of the relation the U of M has with Treaty One, Oceti Sakowin, and Red River Métis Nation (University of Manitoba 2023; Andersen 2009). The chapter will demonstrate how the U of M situates itself as "innocent" while using "tokenized gestures," as conceptualized by Unangax̂ scholar Eve Tuck and K. Wayne Yang (2012), while drawing attention to how U of M's governance structures are part of maintaining settler security through an imbalance of power-dynamics, and how they play a role in the ongoing infection of Indigenous data and research ecosystems (Tuck 2009; Carroll et al. 2019).

In Chapter 3, *'Continuance,'* I provide case studies of the Mi'kmaw Ethics Watch and the "The Manomin Project" as examples of how research sovereignty can be achieved in partnership with universities (Hayward et al. 2021; Luby et al. 2021). I also outline the importance of rights-based frameworks and the unwillingness of the U of M in preventing the spread of infection of Indigenous Peoples data (Carroll et al., 2019). I discuss why place-based context matters and provide a glimpse into how *remembering* works to generate "collective capacities" for Indigenous data, and research sovereignty (Whyte 2017; Tuhiwai-Smith 2021).

In Chapter 4, *'Remembering'* the first objective is to explain the importance of "remembering" through language revitalization (Wilson 2009; Tuhiwai-Smith 2021). The second objective is sharing how language empowers place-based and nation-specificities practices of re-"making kin" with data, governance, science, and technologies that can further provide

awareness of Indigenous data, and research sovereignty discourse (TallBear 2018; 2017; Lewis et al. 2018; Craft 2013; Lee et al. 2017; Simpson 2017). I provide further context here on what spectrum sovereignty is and how it relates to Indigenous data, and research sovereignty (Duarte 2017; Blackwater 2020). I point towards existing settler sanctioned policies in Canada that prevent Indigenous Peoples from enacting rights, and flag these for analysis within my future studies. I conclude this chapter by situating Indigenous women in leading Indigenous data, and research sovereignty movements (Hernandez 2023).

In the concluding chapter, *'Futurities,'* I provide a summary of my research findings to answer the three key research questions posed in this chapter, discuss how I came to my research findings, and then conclude by sharing how this thesis generates energy towards my own futurities.

Possession

The year 2024 was filled with hopeful changes for the future, especially for the University of Manitoba (U of M) through the launch of two new university-wide strategic plans: *Momentum: Leading Through Change (2024-2029)* and *Change Through Research*: *Strategic Research Plan (2024-2029),* along with the university's draft of the *Truth and Reconciliation Framework: Time for Action (2024-2029).* However, we must keep in mind how much "more weight" both *Momentum* and *Change Through Research* have, in comparison to the *Truth and Reconciliation Framework* draft. As Meril Tamtik (2023) explains, university-wide strategic plans contain the priorities in the coming years, including financial investment to ensure achievement (9). I am interested in how the U of M supports "epistemic infrastructure[s]" towards Treaty One, Oceti Sakowin, and Red River Métis' data and research sovereignty (Murphy 2017; Tuhiwai-Smith 2021). In this context, Sarah Ahmed (2021) highlights in her book *Complaint!,* how the university through "new policies and procedures" creates a "public" image that it is fostering a complaint-friendly culture (55). However, she explains "behind closed doors, the culture was unchanged," revealing the persistence of structures that are hidden from "public gaze" (Ahmed 2021, 55). This distinction between public appearance and private realities aligns with Aileen Moreton-Robinson's (2015) concept of "possessive logics" in *The White Possessive: Property, Power, and Indigenous Sovereignty*. Moreton-Robinson defines "possessive logics" as "a mode of rationalization... [that is] invest[ed] in reproducing and reaffirming the nation-state's ownership, control and dominance" (2015, xii).

Therefore, in this chapter, I will conduct an environmental scan and critical analysis of settler-imposed policies in place-based context, therefore referring to the U of M and its administrations' external influences, including the provincial and federal government, which impacts Indigenous data, and research sovereignty. Although, I am not enacting a "critique for critique's sake" (Tallbear 2014, 3), critiques or complaints as Ahmed (2021) writes is a way of "provid[ing] a lens, a way of seeing, noticing, and attending a problem in the effort to redress that problem" (14). By "researching back" (Tuhiwai-Smith 2021) against "settler governmentality" (Crosby and Monoghan 2018), this research is striving to re-centre one "frequently overlooked and overvalued" aspect of Indigenous research sovereignty: namely, research evaluations (Johnson et al. 2023, 7). Within an Indigenous research sovereignty

paradigm, research evaluations are designed to limit biases within research while utilizing Indigenous methodologies to ensure Indigenous Peoples have full control of the evaluation process (Johnson et al. 2023, 7). The reference to "bias" here, as mentioned in "Indigenous research sovereignty: Sparking the deeper conversations we need" by Johnson et al. (2023), is not centred on validation but instead calls in "internal bias" as unchecked "bias… [can unintendedly] harm[] or even potentially harm[], Indigenous Peoples" (8).

I will enact the methodologies of debwewin and owotanna wohdaka to conduct an environmental scan and critical analysis of settler-imposed policies in a place-based context. This will involve examining the U of M and its administrative practices, along with the external influences from provincial and federal government, which affect Indigenous data and research sovereignty. I will begin by illustrating how the U of M situates itself as "innocent" through the use of "tokenized gestures" as discussed by Unangax̂ scholar Eve Tuck and K. Wayne Yang (2012) in their article "Decolonization is not a metaphor." From there, I will highlight how U of M's governance structures perpetuate settler security through power imbalance, contributing to the ongoing infection of Indigenous data and research ecosystems (Tuck 2009; Carroll et al. 2019).

The Direction

My research is not new, to say the least. Conducting this environmental scan and critical analysis, I noted others who conducted critical analysis of Canadian U15 universities or who are working within Indigenous research sovereignty discourse (Tamtik 2024; Gardiner Milln 2024; and Filopoulos 2023). Tamtik (2024), Gardiner Milln (2024), and Filopoulos (2023) refer to Métis Scholar Adam Gaudry and Danielle Lorenz's "Indigenization as inclusion, reconciliation, and decolonization: navigating the different visions for indigenizing the Canadian Academy" (2018). Gaudry and Lorenz (2018) co-created a "spectrum" of "Indigenization" in universities and analyzing using referents on the Indigenization scale. The first being the starting point called "Indigenous inclusion" which refers to "visual elements" or, in other words, expecting "Indigenous [P]eople to bear the burden of challenging colonial logics and structure" (Gardiner Milln 2024, 68). This involves spotting how "Indigenous inclusionary policy" (Gaudry and Lorenz 2018) are examples of how the U of M would appear "innocent," a concept by Tuck and

Yang (2012). This shape shifting to innocence is a way to "assimilate Indigenous sovereignty, ways of knowing, and ways of being by remaking a collective-comprised...identity into an individualized...identity," while the U of M will get "professional kudo or boost in their reputation for being so sensitive or self-aware" (Tuck and Yang 2021, 22). This is a mechanism of how the university can "attempt[s] to relieve...feelings of guilt or responsibility...without having to change much at all" (Tuck and Yang 2012, 22).

Meanwhile the midline of the "Indigenization" scale is referred to as "reconciliation Indigenization," which is the phase of "attempt[ing] to alter the University structure including educating Canadian faculty, staff, and students to change how they think about, and act toward Indigenous Peoples" (Gaudry and Lorenz 2018, 222). Perspectives by a collective of anonymous scholars disclosed they have experienced being "invited in and dismissed as two parts of the same action" and that teaching Indigenous course content "is not Indigenization. It is Truth and Reconciliation," instead confirming that "Indigenization means changes led by Indigenous [P]eople" (Gazette 2019). Another critique of this level of "Indigenization" as stated by Gardiner Milln (2024) is that this course of action "do[es] not challenge the underlying colonial logics governing institutional functions" (66). Thus, I search for evidence in my research of the second policy phase of the scale, "Treaty-Based decolonial indigenization," which operates to "fundamentally reorient[] knowledge production" in order to "transform existing academic institutions into universities governed on treaty principles" (Gaudry and Lorenz 2018, 225-225). Treaties driving systemic changes to the U of M would reflect the ideas of Anishinaabe legal scholar John Borrows (2017, 45) who writes: "Provincial power relative to First Nations must be rolled back and First Nations should be empowered to reject reconciliation with colonialism," in his chapter in *The Right Relationship: Reimagining the Implementation of Historical Treaties* by John Borrows and Michael Coyle.

In *Indigenous and Decolonizing Studies in Education: Mapping the Long View* (2018), Māori scholar Linda Tuhiwai-Smith, Unangaχ scholar Eve Tuck, and K. Wayne Yang invite readers to a new perspective by considering:

> The critical questions in terms of the call to "Indigenize" are, *Who is making the call? Who is controlling the way that call is articulated? What Indigenous capacity is being*

> *developed and how is that being sustained over the long term?* (Tuhiwai-Smith et al. 2018, 8)

In response, who has the final say, and "controlling" the call in terms of Indigenization at the U of M rests in the hands of the Board of Governors and Senate, as mentioned in the introduction to *Momentum* (Tuhiwai-Smith et al. 2018, 8). The *Where We Are Today* report synthesizes the feedback from consultation, which lead to five strategic themes that included "Reconciliation and Decolonization" (University of Manitoba 2023c, 5). However, the final strategic *Momentum* report omits the draft theme of 'Reconciliation and Decolonization' and instead makes one of three "fundamental commitments" which include "Advancing Reconciliation for Transformative Change" (University of Manitoba 2024g, 5-10).

Regarding *Change Through Research*'s final document, it is noted that the second discussion topic during the consultation process was "Indigenous Research," and that one of the seven final strategic themes is dedicated to "Research For, With, By Indigenous People" (University of Manitoba 2024e, 14-15). As one of the strategic themes of *Change Through Research* is "Research For, With, By Indigenous Peoples," Indigenous Peoples involved should have had final approval prior to dissemination of this strategic research plan (University of Manitoba 2024e). Discussions in Senate Meeting Minutes on January 10th 2024, and April 3rd 2024 depict a different story. For example, during the January 10th, 2024, Senate meeting, members of the Strategic Research Planning Committee [SRPC] raised concerns of not have a chance to review the draft of *Change Through Research* prior to it being presented to the public (University of Manitoba 2024k, 8). Yet, the Vice-President of Research and International [VPRI] who co-chaired SRPC, alongside the Associate VPRI and the Director of Research Ethics and Compliance, stated that the "Senate Executive Committee and the Senate Committee on University Research [SCUR]" had provided feedback prior to the Senate meeting (University of Manitoba 2024k, 65). Although it is noteworthy that the VPRI is also the chair of SCUR and that another question regarding consultation arose during the Senate Meeting on April 3rd 2024. Due to the meeting minutes being revised, I am only able to relay the VPRI's message, who confirmed that Indigenous Faculty, including Indigenous Senior Leadership, had been "consulted on an earlier draft" of *Change Through Research* along with having the opportunity to provide comments during an earlier Board of Governors meeting (University of Manitoba 2024k, 9).

Therefore, this calls to question if this initiative was based in "crafting an idea and then inviting [Indigenous People] in…after it is formed [which] is not Indigenization" (Gazette 2019).

According to the finalized document of *Change Through Research* is its apparent alignment with the draft of U of M's *Truth and Reconciliation Framework: Time for Action (2024-2029)*. Further, in the Board of Governors meeting agenda in February 2024, it was noted that *Momentum* is aligned with the "institutional Reconciliation Action Plan" (University of Manitoba 2024e; 2024c, 13). It is essential to mention that when *Momentum* and *Change Through Research* were released, and the bulk of my research had been conducted, the U of M's *Truth and Reconciliation Framework* was not finalized and released in draft until June 2024 (University of Manitoba 2024l). I am fascinated by how both *Momentum* and *Change Through Research* successfully aligned with the draft *Truth and Reconciliation Framework* ahead of June 2024.

Therefore, I had to refer to *Walking Together: Final Report on University of Manitoba Indigenous Senior Leadership Projects* in an effort to grapple with the direction or context of this suggested alignment. The *Walking Together Report* does provide valuable insight on the origins of the *Truth and Reconciliation Framework* as it emerged from consultations that were compiled to create the "What We Heard Report" in 2019 (University of Manitoba 2023b; 2019a). Although I did note some irregularities from what was mentioned in the "What We Heard Report" prior to 2023 (University of Manitoba 2019a). For instance, the intent of the *Truth and Reconciliation Action Framework* was that it be aligned with "rights-based frameworks" and with 'Principles of Reconciliation' (University of Manitoba 2019a, 17 & 22). However, the final *Walking Together* report only calls for the U of M's *Truth and Reconciliation Framework* to be aligned with the Truth and Reconciliation Commission's (TRC) Call to Actions (University of Manitoba 2023b).

Through my environmental scan, I made notes of synergies integrated within *Momentum* and the draft *Truth and Reconciliation Framework*. One example is the "core values" of "mino-pimatisiwin [good life] and mino-ayawin [good health]" or "mino-bimaadiziwin and mino-ayawin as integral values" applied in both *Momentum* and the draft *Truth and Reconciliation Framework* (University of Manitoba 2024l; 2024g). While *Change Through Research* remains

disconnected to the draft *Truth and Reconciliation Framework* and *Momentum* as strategic values are based on "Haudenosaunee (Iroquois) philosophy," I question whether reconciliation is one of the "seven values" of "seven sacred teachings or laws in Indigenous culture" (University of Manitoba 2024e, 6). *Change Through Research* denotes that the entirety of the strategic plan is to use "Two Eyed-Seeing" to incorporate Indigenous and Western knowledges together, to "embrace community-based research, working for and with communities, while others lead to knowledge translation and commercialization" (University of Manitoba 2024e, 24). The U of M importing Indigenous principles and approaches instead of connecting with the peoples and place of Treaty One, Oceti Sakowin, and Red River Métis Nation reflects understanding of Indigenous Peoples as not "epistemologically dense" (Andersen 2009), which I will discuss further in the next chapter.

Feedback in the *Where We Are Today* Report attempts to hold the U of M accountable to Treaty One, Oceti Sakowin, and Red River Métis kin (University of Manitoba 2023c): "Respondents express[ed] a strong desire to strengthen bonds of respect, trust, and shared benefit with Indigenous communities in Winnipeg, Manitoba" (University of Manitoba 2023c, 7). Additional aspects of the feedback that gets pushed aside without mention of future actions was for the much-needed revisions to the U of M's land acknowledgement to capture the Northern Social Work Program that operates within Treaty 5 Territory (University of Manitoba 2023c). I mention that this feedback as pushed aside because in the draft version of *Momentum* referenced during the December 2023 Board of Governors meeting, the land acknowledgement had included language around "upholding Treaty Rights," but by the February 27th 2024 meeting, the new revisions included removing the word "upholding" and replacing it with "respecting the Treaties made" (University of Manitoba 2024c; 2024e; 2024g). This revised statement now appears within both of the plans. The U of M attempts to integrate Indigenous knowledge, while the U of M's decision-makers are trying to maintain the imbalanced power structures by removing and disregarding feedback provided in *Where We Are Today,* which would also be considered "strategic inefficiency" as Sarah Ahmed (2021) defines. I question how can the U of M's university-wide strategic plan engage the values of mino-bimaadiziwin while remaining disconnected from Treaty One "kinship obligations" specifically since, as Anishinaabe-Métis lawyer Aimée Craft explains in her book *Breathing life into the Stone Fort Treaty: An*

*Anishinaabe Understanding of Treaty One, "*mino-bimaadiziwin" was the foundation of the treaty to ensure the sustaining and maintaining of Anishinaabewin (93).

In my analysis, following Gaudry and Lorenz' spectrum of Indigenization, I am leaning towards indicating that the U of M rests within Indigenous inclusion, where other universities in Canada are similarly positioned as Gardiner Milln (2024) argues. Like other Universities in Canada, the U of M is "preserv[ing] colonial logics embedded in institutional processes, norms and purpose" as the values and actions of the final decision makers of these strategic plans continue to halt at Indigenous inclusion (Gardiner Milln 2024, 68). Ultimately, the Board of Governors' values and actions are in alignment with ensuring that the U of M is in "compliance with political and public pressure rather than as a value-driven desire for transformative change" (Tamtik 2024, 10). With consideration of the chosen vocabulary within the strategic plans, it also underscores that they are "vague and detached from action" as stated by Tamtik (2024, 10). The U of M's strategic plans using language like "we advance," "we aspire," and "work towards," which are code-words that symbolizes vagueness as Tamtik's argues (University of Manitoba 2024g; 2024e). Furthermore, Gardiner Milln (2024) notes that U15 universities have a specific "genre of communication," where almost every university refers to themselves as "leaders of reconciliation," one way or another (70). With U of M as part of U15 universities' alliance, it becomes even more evident by the specific "genre" of terminology used within *Momentum*, which overtly identifies the university "[a]s a leader in reconciliation" in *Momentum* (Gardiner Milln 2024; University of Manitoba 2024g, 5). Noteworthy to mention, the U15 collective identifies "three pillars of activity," one being "Stewardship of the Research Ecosystem" (U15 n.d.). The illusion within the U of M's newly created strategic plans re-affirms Tamtik's argument that "[i]t is easy to prioritize and make promises in institutional plans, yet these initiatives require substantial institutional resources. The documents often remained vague about or failed to disclose budgets for these initiatives" (2024, 15). Therefore, the argument advanced by Tamtik gives additional rationale to sift through "universities' operating budgets" to get a better understanding of the true agenda that the U of M strives for (2024, 17).

The Budget

The previous U of M strategic plan had funding commitments of "$500 million for Indigenous achievement, graduate student support, research excellence, an outstanding student experience, and enhanced places and spaces," as mentioned by Tamtik (2024, 15). So, what funding supports were earmarked to implement *Momentum* and *Change Through Research*? The newly released 2024 "Annual Financial Report" explains that the "surplus relating to faculty and unit carryover and operation of the NCTR [National Centre of Truth and Reconciliation] and other Indigenous initiatives" will receive 8.3 million for the 2024-2025 year (University of Manitoba 2024a, 14). There is no break down on how much of this money is split between the NCTR and "other Indigenous initiatives" and no mention of how stable the funding will be in following years to achieve the strategic plan's vision (University of Manitoba 2024a). Questioning funding to fulfill reconciliation activities is not new. First Nation's leaders have spoken about the lack of reconciliation efforts within the newly released Federal Budget (Forester 2024). Therefore, there are clear gaps in financially backing the U of M to become the university to follow in terms of reconciliation, as was touted in *Momentum.* Advocating for financial commitments is required if this is to be achieved (University of Manitoba 2024g).

The U of M holds power to advocate for funding, especially as the university positions themselves as "11th in Canadian universities overall and 8th amongst the U15 Group of Canadian Research Universities. U of M's top 1.4 percentile position globally is based on its ranking of 289 of the totals evaluated; regionally for USA and Canada, its ranking is 102" (UM News 2024a). By denoting these power rankings within the world of academia, U of M demonstrates the ability to attract an abundance of financial resources. Being in a position of power to advocate for resource funding was discussed on May 17th, 2023, during a Senate meeting the President shared their feelings of "disappointment" that "the federal budget did not include an increase in Tri-Council funding for research or for graduate students. The University will continue to lobby the government for these things" (University of Manitoba 2024k, 9). Since this statement was made by the President, while later in the year, the Federal Budget 2024 had "proposed to provide $825 Million over five years, starting in 2024-25 with 199.8 million dollars per year ongoing to increase Tri-Council graduate student funding" (Government of Canada 2024a), in addition to dedicating "$30 Million" to Indigenous Researchers and Communities "over three years, starting in 2024-25, to support Indigenous participation in research, with $10

million each for First Nations, Métis and Inuit partners" (Government of Canada 2024a). Considering that $10 million is shared between First Nations Peoples, this funding commitment is low considering there is over 600 First Nation Reserves in Canada. Within Manitoba, there is 63 First Nations across the province.

Furthermore, U of M positions itself to contribute "2.93 billion to GDP [Gross Domestic Product] Growth," which means 2.93 billion dollars were from "research and development in the province" (University of Manitoba 2023a). I argue that this data is skewed as political leverage so the U of M can maintain the province's financial investment into the university. For example, the U of M gets 43.7% of "total revenues," which totals to $481 Million dollars of "provincial grants" (University of Manitoba 2024a, 18). These revenues also include "research-related revenue through the issuance of grants and contracts," which the federal government provided 50% of U of M revenue, with the "majority" from the Canadian Research Tri-Council (University of Manitoba 2024a, 18-20). This is possible through the U of M policy called, "Institutional Cost of Research: Recovery and Distribution" approved by the Board of Governors and delegated under the VPRI (University of Manitoba 2019b). This policy entails that for any research funding granted or agreed upon, an administration fee must be paid to the University at a set rate, depending on the agreement, and/or grant (University of Manitoba 2019b).

To better understand the financial flow within research funding at the U of M, consider the "Institutional Costs of Research: Recovery and Distribution" policy, which specifies how a portion of research funding is allocated (University of Manitoba 2019b). Under Clause 2.6, "Institutional Costs" are recovered at different rates under clause on the type of agreement: 30% for "Research Agreements" and "Clinical Trail Agreements", 40% for "Technical Services Agreements", and 15% for "Research Grants" (University of Manitoba 2019b). Furthermore, according to Clause 2.9 of the policy, "100%" of the revenue from "Institutional Costs" is distributed to the "academic unit" from "Research Agreements, Clinical Trail, and Research Grants" (University of Manitoba 2019b). From this clause, it outlines that 25% of revenue is allocated to "Researchers", while 75% is allocated to the "researcher's Dean or Director" of the "total Institutional Costs" (University of Manitoba 2019b). For "Technical Service Agreements," the entire "Institutional Costs revenue" is allocated to the "researcher's Dean or Director" to maintain and upgrade research infrastructure (University of Manitoba 2019b).

Mathematically, say a researcher from the U of M, received one million dollars for a research project in partnership with an Indigenous community. Under Clause 2.6 of the "Institutional Cost of Research," the project follows under Research Grant, therefore the rate of recovery of 15% (or .15) of that amount is taken for Institutional Costs (University of Manitoba 2019b). Furthermore, under Clause 2.9, the researchers receive 25% or (.25) of amount of Institutional Cost revenue (University of Manitoba 2019b). To find the percentage of the Dean/Directors share from the Research Project, requires finding the Total Institutional Cost Recovery, following the Researchers, and Dean/Directors' share from the Total Institutional Cost Recovery, and then finding the percentage of the Dean/Directors shares from the one-million-dollar research project, I created Figure 2 to demonstrate the steps taken.

1) Total Institutional Cost Recovery:

$$0.15\ x\ 1{,}000{,}000 = 150{,}000$$

2a) Researcher's share from the Total Institutional Cost Recovery:

$$0.25\ x\ 150{,}000\ = 37{,}500$$

2b) Dean/Directors' share from the Total Institutional Cost Recovery:

$$0.75\ x\ 150{,}000\ = 112{,}500$$

3) The percentage of the Dean/Directors shares from the one-million-dollar research project:

$$112{,}500/1{,}000{,}000 = 0.1125\ x\ 100 = 11.25\%$$

Figure 2: Equation to demonstrate U of M's "Institutional Cost of Research" Policy

From calculations made in Figure 2, essentially, the university retains 11.25% (or 112,500) of the total one-million-dollar funding, which is used to support "the repair and upgrade [….] of research infrastructure and equipment" as outlined in clause 2.10 of the policy (University of Manitoba 2019b). This means that the funding research in partnership with Indigenous communities is also being used to sustain the university's infrastructure and administration systems. Given this policy, there must be additional considerations and research conducted to understand how much GDP the university puts back into the economy with the support of Indigenous Peoples. Especially when we calculate the immense impact of Indigenous Peoples' contributions to the GDP within Manitoba: according to the *Indigenous Contributions*

to the Manitoba Economy report (2019), for instance, Indigenous Peoples contributed "2.3 billion Dollars to the Provinces' GDP" in 2016 (38).

The list of U of M funding sources, which is publicly available, confirms a lack of internal financial support and dedication from the U of M's trust fund or support in the name of economic reconciliation to build "epistemic infrastructure[s]" (Murphy 2017). Other areas of financial commitments include "three Tier 2 Indigenous Canada Research Chairs," as stated by VPRI at the March 2024 Board of Governors meetings. It is also of interest that another priority area for VPRI is "digital and archival storage with Indigenous communities" but there are no financial commitments tied to this priority (University of Manitoba 2024c). Digital infrastructures are noted within *Change Through Research* along with improvements to the universities' research infrastructures (University of Manitoba 2024e, 24). According to the U of M's Research Data Management [RDM] website, the RDM "Steering Committee" explains they are working towards "co-develop[ing] a policy with First Nations, Inuit and Métis peoples on Indigenous data sovereignty" that will be undertaken in the "next five-years" (University of Manitoba 2024i). Again, the U of M's RDM is only interested in consulting internal "Indigenous members" from the University as part of the consultation process on this plan (University of Manitoba 2024i). However, they do not mention that having RDM plans in place are now mandatory as part of the new requirement made by Canadian Research Tri-Council in order to qualify for funding (Filopoulos 2023, 26).

Expanding on this discussion of financial commitments, in recent news, the U of M announced that it is in "partnership with University of Saskatchewan, Alberta and Calgary" to receive "57 million Dollars" dedicated to "enhance domestic vaccine development and biomanufacturing capacity, including $19 million for research capacity and $29 million to build two innovative research facilities on U of M campuses. Remaining funds will be administered to other partner institutions" (UM News 2024b). This funding will "support innovative and world-leading research and science in the areas of vaccines, therapeutics, diagnostics, and surveillance" as noted by the Federal Minister of Health in an interview (Global News 2024). Additionally, funding increase for future research at the U of M with their external partner Research Manitoba, a "provincial research agency" in which U of M's VPRI and Vice-Provost of Health Science serve as the Board of Governors to this agency, was also selected to receive an increase of

financial support from the Province of Manitoba's budget (Research Manitoba 2024b; 2024c). The overall objective of Research Manitoba is to ensure the:

> funding of research excellence and innovation in health, natural and social sciences, engineering and the humanities in Manitoba... [while delivering] supports [to] local talent development by providing research support to early career researchers and graduate students, along with fostering strategic partnerships to strengthen research and innovation in Manitoba (Research Manitoba 2024a).

Research Manitoba has been working towards a "provincial initiative" called "Research Improvements Through Harmonization in Manitoba [RITHIM]" (Research Manitoba 2024d). The overall intent of RITHIM is "to build a best-in-class provincial program for health research," which strives to "harmonize ethics, privacy and institutional impact review processes, creating a more efficient process for health research reviews in Manitoba" (RITHIM 2023). The concerning aspect is that while the U of M, Research Manitoba, and the Province of Manitoba are working together, there is no mention of how this would impact or coordinate with the emerging initiative to support Indigenous "epistemic infrastructure[s]" regarding data, and research sovereignty (Murphy 2017).

With what is yet to come for bio-science research at the U of M, RIHIM's initiative, and its hopes for "commercialization" as stated in *Change Through Research*, (University of Manitoba 2024e, 24) raises concerns as there is no visible direction forward for "Indigenous health . . . [and] economy," as well as a lack of infrastructural supports for Indigenous data, and research sovereignty (Tsosie et al. 2021, 73). Which "is [considered] fundamentally flawed" as Tsosie et al. (2023, 73) argues in "We Have 'Gifted' Enough: Indigenous Genomics Data Sovereignty in Precision Medicine." Tsosie et al., further explain that we must think about data as "on-a-loan" by quoting Arbor and Cook (2006). The perspective Tsosie et al. (2021) brings comes from a response to the failed considerations made within another article regarding "colonial power relations" when applying the "gifting" ideology (73). The response underscores the "ongoing resistance of Indigenous peoples to protect and exercise their sovereignty, self-determination, and governance as it leads to the problematic framing of Indigenous participation in research as being a matter of 'gifting' and 'reciprocity'" (Tsosie et al. 2021, 73). The argument Tsosie et al. (2021) that "gifting" or "reciprocity" alludes to having "trust" in "research institutions" (73).

While current "structural power imbalances" has led to "inequitable relationships" with universities who "control access and funding," a resolution would be redressing policies to prevent "exploitation" of Indigenous Peoples' data and research (Tsosie et al. 2021, 73). Without addressing this "policy gap," it will result in the continuation of the university receiving benefits while "perpetuat[ing] harms and fail[ing] to address Indigenous demands for governance of the research that affects them" (Tsosie et al. 2021, 74). Tsosie et al. (2021) coined this ongoing phenomenon as the "cycle of victim-blaming and cohesion" (74), which could be applied when Indigenous Peoples are offered "better health care for under-served populations" which is what *Change Through Research* insinuates (University of Manitoba 2024e, 11), without considerations for Indigenous data and research sovereignty. *Change Through Research* and external partnerships provide evidence of the U of M having "a publicly funded research agenda with a clear path to commercialization but without a clear path for Indigenous health or economy is fundamentally flawed" (Tsosie et al. 2021, 73).

Without considering Indigenous Peoples in this equation or supporting rights to Indigenous data and research sovereignty, I am suggesting that the university is perpetrating (infra)structural violence because it is intentionally continuing the ongoing infection of Indigenous Peoples' data and research ecosystems (Carroll et al., 2019). The article "Indigenous Data Governance: Strategies from United State Native Nations" by Carroll et al. (2019) explains that without the infrastructures invested towards Indigenous data and research sovereignty, the cycle of being subjected to "data dependency" will only continue. Carroll et al. (2019) conceptualize the term "data dependency" to refer to "the Indigenous data ecosystem" as contaminated by the settler states' viral infection, making the data not readily available as it is controlled and owned by outsider entities (3). At the same time, the infected data becomes "inconsistent, inaccurate, and irrelevant to Indigenous Peoples," which then leads to "community mistrust of data resulting from exploitative research and policies" (Carroll et al. 2019, 3). Therefore, asserting Indigenous data and research sovereignty ensures Indigenous Peoples can disrupt the settler colonial research ecosystems and prevent the spread of infection (Carroll et al. 2019, 3).

For Context

The rationale for looking into "universities' operating budgets" provides more insight into how the "larger goals for institutional change" requires the continuation of a performative narrative, as when strategic plans make use of certain code-words and "tokenized gestures" to appear "innocent" (Tuck and Yang 2012, 17). For instance, the U of M must abide by the Canadian Research Tri-Council's standards in order to access funding. I argue that the U of M is behind on meeting the standards due to outdated policies. For example, strategic plans use the term "reciprocal" (University of Manitoba 2024e; 2024g) but in 2014 Tri-Council Policy Statement (TCPS2) under Article 9.13 titled "Mutual Benefits in Research" (TCPS2 2014, 128) and the current TCPS2 of 2022, directly states that research regarding Indigenous Peoples "should" be "reciprocal" (TCPS2 2022, 170-172). Ensuring "reciprocity" is not stated in U of M's "Ethics of Research Involving Human Policy" regarding research with Indigenous People (University of Manitoba 2024f). While the U of M's research ethics policy was developed in 2011, renewed in 2020, and set to be revised on November 12th, 2030, the section regarding research with Indigenous Peoples is still outdated (University of Manitoba 2024f).

Here is where I demonstrate how the U of M's governance structures are also "tokenized gestures" to give the illusion of the U of M's "innocence" (Tuck and Yang 2012). I created Figure 3 to illustrate the current governing structure of the U of M's research ethics outlined in the "Ethics of Research Involving Human Policy" and associated Terms of References to demonstrate how the U of M Research Ethics Board [REB] structure is part of the "bicameral governance" structure that I described in the previous chapter (Tamtik 2024; University of Manitoba 2024f). The VRPI along with the U of M Senate had approved the Terms of References for SCUR which came to effect on December 7th, 2011, and revised November 12th, 2020 (University of Manitoba 2024f). SCUR's purpose is to oversee the U of M research ecosystem under the VRPI and coordinate "research-related bodies" including "Human Ethics Resource Committee" [HERC], while directing the implementation of "Ethics of Research Involving Humans Policy" (University of Manitoba 2024f). Within this U of M research ethics policy, it is indicated the university has four REBs aside from the HERC that oversee the U of M's "experience and knowledge of the Research Ethics Boards and REB administration" (University of Manitoba 2024f). HERC seats approximately five individuals from the U of M

with four "[c]hairs of the REBs" while acting as the central administrator for daily ethics operations and is held accountable by SCUR (University of Manitoba 2024f).

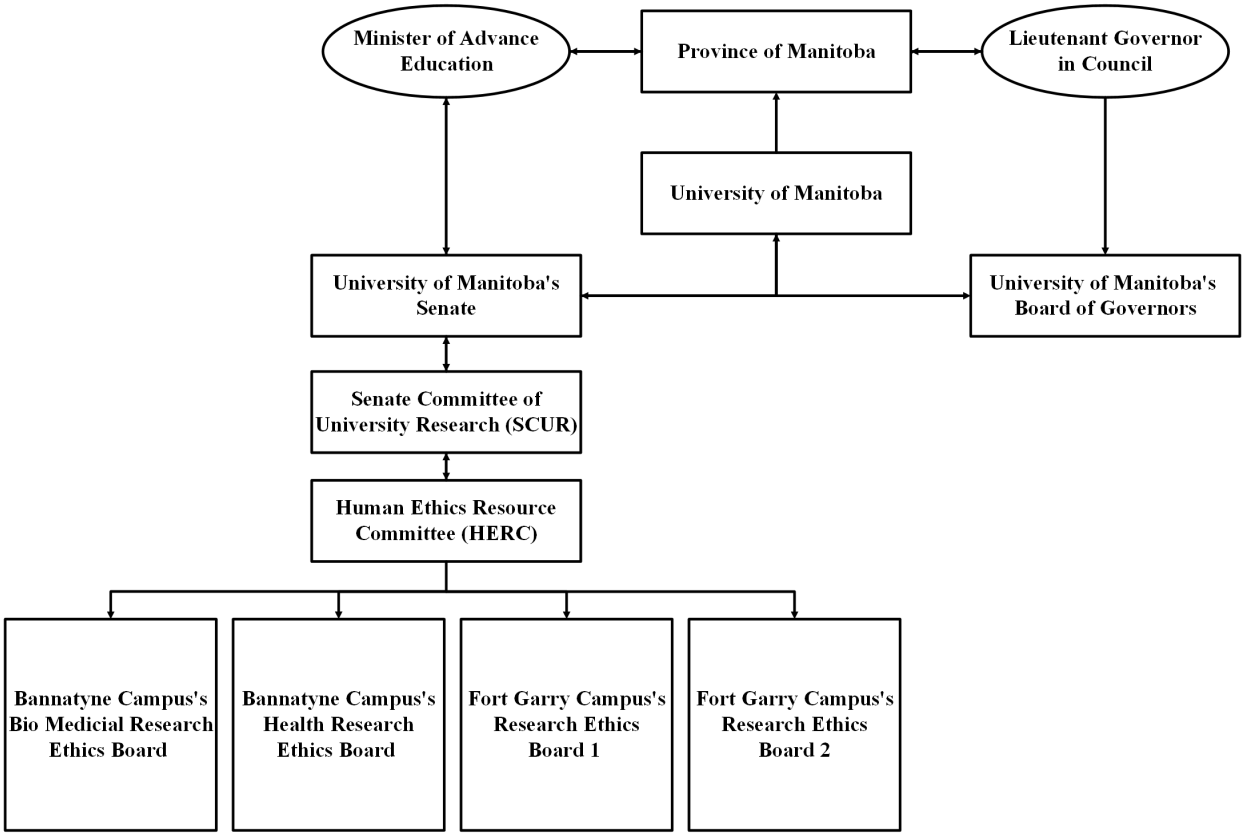

Figure 3: U of M's Governing Structure including Research Ethics Boards

HERC also has a Terms of Reference that applies to all four of the U of M's REBs and in the Term of Reference states"[w]herever possible, the board will seek to include a First Nations representative," which is clearly outdated due to the exclusion of Métis and Inuit, but also gender diverse people (University of Manitoba 2024f). I argue that the addition of three seats to a colonial structure provides a direct example of a "tokenized gesture" towards "innocence" as it does not create any systemic changes or disrupt structures of power (Tuck and Yang 2012). Therefore, the U of M's current strategic plans are also not making substantial changes other than trying to be compliant to TCPS2 in order to access funding. As TCPS2 (2022) states under the "application" of Article 6.5, providing a clear indication that a "regularly required" review of research "related to Indigenous Peoples" calls for a modification to the "REB membership…to ensure that relevant and competent knowledge and expertise of

Indigenous culture are captured within its regular membership" (101). Given that U of M is located in an Indigenous city with the largest population of Indigenous Peoples in Canada, there should have already be a mechanism in place since the TCPS2 article 6.5 dates back to 2014 and the last revisions to the U of M's research ethics policy were made four years ago (University of Manitoba 2024f).

The emphasis of U of M's strategic momentum to appeal to "innocence" while using "tokenized gestures" means that U of M's strategic plan will not be making changes to current U of M's governance structures (Tuck and Yang 2012). It instead allows room for Provincial Ministers and Provincial Legislation, actors who have historically authorized violent and extractive research on Indigenous Peoples, to continue to dictate research agendas. For instance, I am reminded of the study by Wall-Wieler et al., (2019) titled "Prenatal care among mothers involved with child protection services in Manitoba: a retrospective cohort study" and the response article by Indigenous scholars Janet Smylie and Wanda Philips-Beck's (2019) "Truth, respect, recognition: addressing barriers to Indigenous maternity care." The data for Wall-Wieler et al.'s study came from the "data housed at the Manitoba Centre for Health Policy [MCHP] within the Department of Community Health Sciences, in the Max Rady College of Medicine, Rady Faculty of Health Sciences at the University of Manitoba" with the approval by keyholders at U of M REB's and the Province of Manitoba Minsters (CMJA 2024). Smylie and Philips-Beck (2019) explained in the response article that Wall-Wieler et al.'s research was conducted without "Indigenous community engagement" and with clear "systemic disregard for Indigenous peoples and knowledge in research," given "common knowledge" of the "overrepresentation of First Nations children in the Manitoba child welfare system" (Smylie and Philips-Beck 2019). Wall-Wieler responded in the comment section of the Smylie and Philips-Beck (2019) Canadian Medical Association Journal [CMAJ] response article, stating the Indigenous-specific analysis "goes beyond" their research study but moving forward they will "ensure that Indigenous representation and engagement is present in relevant research using routinely collected data" (CMJA 2024). Following this, the Director of MCHP responded, explaining that the process of ethical consent by the HREB at the U of M, Health Information Privacy Committee of the Manitoba government, who are also custodians of the data, was approved by the "Ministry of Families" to authorize the research to take place (CMJA 2024). The response by the researchers

and U of M staff who conducted this unethical research demonstrates their inability to understand any wrongdoing by deflecting responsibility and failing to critically consider how this research could impact Indigenous Peoples. To me, it screams: *'we just did what we were told, blame the process.'* The U of M researcher "shift[ing]" to appeal to "innocence" by not taking responsibility and blaming the U of M's current research ethic structures fails to use their privilege or powers to make structural and systemic changes at both institutional and provincial levels (Tuck and Yang 2012).

An example of the changes needed at the provincial level reflects existing legislation that was put in place to authorize research to be conducted on Tuberculosis [TB] in Manitoba. In 1986, the Province of Manitoba instituted a governing body under *Sanatorium Board of Manitoba Act* (San Board) as a "provincially-funded flagship sanatorium at Ninette and at the St. Boniface Sanatorium," on which then U of M's President served as a board member (Manitoba Indigenous Tuberculous History Project n.d). The overall purpose of "TB hospitals" was to "survey, institutionalize, and rehabilitate First Nations, Métis, and Inuit with TB," while the province and the U of M were linked to TB research as acting members of the San Board (Manitoba Indigenous Tuberculous History Project n.d). The Government of Canada also delegated the responsibility to the San Board "to operate" three other "TB Hospitals" in Manitoba (Manitoba Indigenous Tuberculous History Project n.d). In 2022, the Province of Manitoba repealed the *Sanatorium Board of Manitoba Act,* but this is not the only provincial act which contributed to extractive and harmful anti-Indigenous research while demonstrating a direct link to the U of M's involvement.

More recently, involvement between the province and the U of M under Manitoba's provincial *Heritage Act* of 1986 authorized the U of M's possession of "Indigenous ancestors and belongings without consent" (University of Manitoba 2024j). In the first few months of thesis writing the U of M publicly apologized for "housing" "Indigenous ancestors and belongings" for the "past 130 years" that were "displayed" and studied at the university (University of Manitoba 2024j). During the June 2024 public apology, two students from a Treaty One and Dakota community shared their experiences upon learning that the U of M is a cultural/heritage possessing university. One of the students shared her story that dates back over a decade ago of when she heard "whispers" of the U of M having "Indigenous ancestors and

belongings" and it was considered an "open secret" by students, staff, and faculty members (University of Manitoba 2024j). The apology raises deep concerns and suspicions about other infractions which the U of M might have to answer to. I was able to learn about the U of M's possession of "Indigenous ancestors and belongings" by attending a public event in February 2024 hosted by the U of M (University of Manitoba 2024j). During the *Indigenous Research Symposium,* I was provided more extensive insight than what was explained during the public apology in June as presenters in February 2024 provided a timeline, identified researchers who were involved, and provided context for how deeply entangled the province was in this process. For instance, the Province of Manitoba launched the *Heritage Act* of 1986 after stealing "Indigenous ancestors and belongings" and treating them as institutional and provincial property (University of Manitoba 2024j). So even though the U of M apologized, why are they still protecting individuals who were apart of these atrocities?

The repealed legislation of the San Board and the current *Heritage Act* are just two examples of the provincial government and U of M working together through a bi-lateral structure on research agendas since conception. Together these two entities were able to presume jurisdiction over Indigenous Peoples' data and research. Both provincial legislative acts demonstrate how entangled the U of M's research ecosystem is embedded within the settler state. This provides rationale for why it is important to be aware of how the historical and current research ecosystem is structured and how it can affect Indigenous Peoples. Facilitating a conversation regarding Indigenous data and research sovereignty is ever so critical now, with upcoming bioscience research in Manitoba as mentioned in the previous subsection along with the "harmonize[d]" provincial research ecosystem yet to come (RITHIM 2023). I question how these "initiatives" will impact Indigenous Peoples, especially since the City of Winnipeg is home to the largest Indigenous Population in Canada, and since the U of M had previously granted the provincial ministry access to "data housed at the Manitoba Centre for Health Policy" without prior consent from or consensus with Indigenous Peoples (Smylie and Philips-Beck 2019; CMJA 2024). Considering all these factors, how can Treaty One, Oceti Sakowin, Red River Métis, and all Indigenous Peoples interacting with the U of M ensure that our data is safe, and that research conducted is ethical and consensual based on our terms?

Chapter Summary

In conclusion, this chapter conducts an environmental scan of settler-imposed policies in place-based context through debwewin and owotanna wohdaka while assessing how the U of M's administrative external influences, including the provincial and federal government, govern in ways which directly impact Indigenous data and research sovereignty. The intent of this environmental scan is to locate if the U of M strives to maintain settler state security through "possessive logics" (Moreton-Robinson 2015). This chapter contains an evaluation of U of M's governance, external partners, policies, and recently released university-wide strategic plans, where the U of M uses "tokenized gestures" to appear "innocent" and deflects from "relational accountability" to whom they are guest to (Gaudry and Lorenz 2018; Tuck and Yang 2012).

Through evaluating and analyzing, this chapter concludes that the U of M operates at the frequency of "Indigenous inclusion" rather than "Treaty-Based decolonization Indigenization" on the "Indigenization" scale of Academy framework laid out by Métis Scholar Adam Gaudry and Danielle Lorenz (2018). Residing within an "Indigenous inclusion" frequency, this chapter discusses how U of M desires to sustain settler security through "tokenized gestures" to maintain imbalance of power-dynamics that play a role in the ongoing infection of Indigenous data, and research ecosystems (Tuck 2009; Carroll et al. 2019; Tuck and Yang 2012; Gaudry and Lorenz 2018).

Continuance

We must be attentive to how power structures and determines which narratives, modes of understanding our world, and the web of relationships in operation are given primacy. Furthermore, we must untangle how these narratives have ordered how we relate to one another and to creation. Too often, conventional Western knowledge is willing to turn to the relational only insofar as this attention to relationships doesn't threaten the stability of the state.

— Gina Starblanket and Heidi Kiiwetinepinesiik Stark (2018, 180)

Embodying "power relations" and debwewin together in my research is acting on what Ininiwak scholar Jessica Kolopenuk acknowledges there being "multiple truth (knowledge that are equally true) exist at once. When a truth collectively resonates among a cluster of relations, then it must be true" (2020a, 8). This collective process of truth-telling is empowered by "power-relations" created through "[s]haring knowledge sends out lines of connections to other whose own experiences are linked to a collective one" (Kolopenuk 2020a, 12). In this chapter, I am in conversation with those who come before me to "generate…collective energy...[a] movement of feelings from one body to another: power relations" with scholars working within the field of Indigenous data, research, and sovereignty (Kolopenuk 2020a, 12). For instance, in the chapter *Relationality,* I included scholarship by Riley et al. (2023), Hudson et al. (2023), Williams et al., (2020), and *Indigenous Data Sovereignty and Policy* (2020) to provide rationale for critiquing settler colonial policies and frameworks by prioritizing Indigenous Peoples' rights, particularly through Indigenous research sovereignty and the overarching movement to assert Indigenous data sovereignty. These scholars had supported my rationale to critique the University of Manitoba (U of M), and I will continue to "send out lines of connections to others" (Kolopenuk 2020a, 12).

This chapter is rooted in "power relations" to demonstrate the U of M's unwillingness to prevent the spread of infection of Indigenous Peoples data, and research ecosystems through conversation between my research findings in *Possession* and literature I had engaged with in *Relationality* (Carroll et al. 2019). I will discuss why place-based context matters and provide a glimpse to how *remembering* works to generate "collective capacities" for Indigenous data, and research sovereignty (Whyte 2018; Tuhiwai-Smith 2021). I will conclude by providing two case studies of the Mi'kmaw Ethics Watch and the "The Manomin Project" as examples of how

research sovereignty can be achieved in partnership with universities (Hayward et al. 2021; Luby et al. 2021).

‘Power Relations’

To engage in a conversation with centers “power relations” involves actioning concepts by Potawatomi relative and scholar Kyle Whyte (2017) who defines “collective capacities” as the “overall degree of adaptative capacity,” which consists of “human institutions that are organized in ways that are suitable for adjusting to potential changes, learning from the past, and mobilizing members of society to tackle hard problems” (10). Capacities generate into “collective continuance,” which Whyte (2017) refers as “society’s overall adaptive capacity to maintain its members’ cultural integrity, health, economic vitality and political order into the future and avoid its members from having to experience preventable harms” (10). Indigenous Peoples are aware of how settler colonialism has “directly targeted” Indigenous Peoples' relationalities amongst each other through “strengthen[ing] their own collective continuance... at the expense of another society’s collective continuance” (Whyte 2017, 13). In this research I think through how the U of M is involved in maintaining their own “settler governmentality” (Crosby and Monoghan 2018) for their own “collective continuance” (Whyte 2017).

While U of M does not engage with place-based context or rights-affirming frameworks, this is also an act of picking and choosing or limiting relationality amongst Indigenous Peoples, which can be found in the current tenure structures that limits Indigenous People’s ability to maintain relationality while employed at the university. In the critical analysis I conducted, I located where the U of M holds itself within the frequency of “Indigenization” framework that was co-created by Métis scholar Adam Gaudry and Danielle Lorenz (2018). The U of M operates within a frequency of “inclusionary policy” by fueling and maintaining the universities’ “collective capacity” through the labour of Indigenous Peoples with no systemic changes to the university entity, which I'm interpreting as a “tokenized gesture,” as defined by Unangax̂ scholar Eve Tuck and K. Wayne Yang (2012). It also reveals the tactics of how U of M maintains its own “collective continuance” as Indigenous People in tenure positions maintain services for the university and meet “promotional” standards with no systemic changes that would support their own responsibilities and obligations to mitakuye oyasin within and beyond the confines of the

institution (Riley et al., 2023). It is integral to combine this conversation regarding "inclusionary policies," with one already articulated in the chapter, *Relationality*, where I engaged with Riley et al., (2023) who speak to how critical tenure positions are in moving towards Indigenous research sovereignty.

Riley et al., (2023) argue that universities "should do more than merely state their desire to hire more Indigenous faculty" and instead "take meaningful steps to accomplish this goal" by changing "promotional policies" (53). This is necessary because "[w]ithout support from their institutions and sufficient mentorship, this pressure can quickly lead to burnout, decrease productivity, and ultimately leaving academia altogether. Wearing many hats create an imbalance and an insurmountable pressure, which can lead to stress and burnout" (Riley et al., 2023, 48). It is integral to problematize how "Indigenous inclusionary policies" at the U of M are hijacking Indigenous "collective capacities" towards Indigenous research sovereignty (Whyte 2017; Riley et al., 2023). Thus, if the U of M was well versed in Indigenous data and research sovereignty discourse, they would understand that their current mode of "Indigenous inclusionary policies" is ineffective and impacts Indigenous Peoples' "collective continuance" (Gaudry and Lorenz 2018; Whyte 2017).

By conducting an environmental scan, I was able to demonstrate how the U of M "shifts to innocence" through "Indigenous inclusionary policies" and through selective use of vocabulary to evade responsibility and accountability (Gaudry and Lorenz 2018; Tuck and Yang 2012). For instance, the U of M's land acknowledgement provides an "alibi for doing the hard work of learning," yet ignores the fact that their headquarter structures and campus buildings, including Fort Garry, Bannatyne, and Research Centers in southern Manitoba, are built through "discriminatory [by] design" policies that dispossesses Treaty One, Oceti Sakowin and Red River Métis (Benjamin 2019). This ongoing disconnection to place is part of the operations of "settler governmentality" deployed by the U of M, alongside their financial parent, the Province of Manitoba, including the Lieutenant Governor of Manitoba, who is supposed to be the Crown representative (Crosby and Monoghan 2018). The Lieutenant Governor of Manitoba has a duty to the *Canadian Constitution*, including Treaty rights and inherent rights on behalf of the Crown, as well as a duty to appoint members to the U of M's Board of Governors in partnership with the Province of Manitoba.

It seems to me that Indigenous "right-relations" and right-affirming discourse is a direct threat to the U of M's stability, especially through the course of actions taken to avoid their obligations to Treaty One, Oceti Sakowin and, Red River Métis Nation, which supports Indigenous data, and research sovereignty (Borrows 2017). In the following, I will provide examples through certain aspects of the newly created university-wide strategic plans, *Momentum: Leading Through Change* (2024-2019) and *Change Through Research: Strategic Research Plan (2024-2029)* grounded in Indigenous data sovereignty and research sovereignty discourse. It could be counter argued that data and research sovereignty is a new discourse, as recent graduate student Rebecca Filopoulos (2023) suggests in her research rationale (6). Although, illustrated in my literature review, Indigenous data and research sovereignty is entangled in sovereignty discourse, and includes alignment with right-affirming frameworks. Through Mohawk Scholar Marlene Brant-Castellano's intellectual contributions (2004), the establishment of OCAP® Principles (2007 – AFN), and through Mi'kmaw scholar Maria Battiste and Chickasaw scholar James (Sa'ke'j) Youngblood Henderson's *Protecting Indigenous Knowledge and Heritage: A Global Challenge* (2000), we see examples of the Indigenous data and research sovereignty movement spanning the past two decades in the Canadian context.

Brant-Castellano's article "Ethics of Aboriginal Research" (2004) points to the *United Nations Declaration of Rights of Indigenous Peoples* (UNDRIP) under her eight ethical directions as supporting Indigenous Peoples' rights to govern research (109-110). Scholarship by Hayward et al. (2021) and Davis' chapter (2016) in *Indigenous Data Sovereignty: Toward an Agenda* also articulate how UNDRIP Articles 3, 4, 5, 15(i), 18, 19, 20(i), 23, 31, 32, 33, 38, and 42, all support the rights, interests, and mandates for Indigenous-led data and research sovereignty. Furthermore, UNDRIP is underlined in various Truth and Reconciliation Commission (TRC) Calls to Actions. UNDRIP also gets linked back to the U of M within the original intent of the *Truth and Reconciliation Framework* as directed under "Report and Recommendations for Indigenous Senior Leadership," which points to ensuring that U of M strategic plans are responsive to "rights-based frameworks" and the "implementation of Principles of Truth and Reconciliation" (University of Manitoba 2019a, 4&7). The first 'Principle of Reconciliation' calls for the use of UNDRIP as "the framework for reconciliation at all levels and across all sectors of Canadian society" (TRC 2015b, 3). Under this "ninth"

principle it is stated that "[r]econciliation requires political will, joint leadership, trust building, accountability, and transparency, as well as a substantial investment of resources" (Truth and Reconciliation Commission of Canada 2015b, 4). Additionally, "Treaty, Constitutional and Human rights" is the second 'Principle of Reconciliation' (TRC 2015b, 3).

U of M's *Momentum* also cross references two university strategic plans, 1) U of M's *Climate Plan* and 2) U of M's *Change Through Research,* which includes the United Nations' Sustainable Development Goals (UNSDG) into one of three strategic theme areas (University of Manitoba 2024g, 11-13). *Change Through Research* does mention UNDRIP with no action behind implementation. While UNSDG gets implemented within the U of M's university wide strategic plan, *Momentum,* UNDRIP does not (University of Manitoba 2024g). Yet UNSDG does affirm the Government of Canada's Royal Assent of UNDRIP and Section 35 of the *Canadian Constitution* in support of Treaty and inherent rights (Government of Canada 2019). The *Canadian Constitution* under Section 35 confirms that the Provincial and Federal Governments have a fiduciary obligation to Indigenous Peoples as Brant-Castellano (2004) had also pointed out in her eight ethical recommendations.

The *Walking Together: Final Report* presents an initiative aimed at expanding the U of M's REBs to include "representation of First Nations, Métis, and Inuit" (University of Manitoba 2023b*,* 33). This direction of action came from the literature review by the "Research that is Respectful of Indigenous People [RRIP]" committee, in which only three members out of the thirteen were Red River Métis, while one was from a Treaty One community (University of Manitoba 2023b*,* 33). The RRIP literature review referenced scholarship arguing that Indigenous Peoples' have the right to "govern their own research" (Steigman and Castleden 2015, 4-5). This central argument can also be found in Moore et al. (2017) who studied how Tri-Council Policy Statement (TCPS2) is "operationalized" within Mi'kma'ki, which specifically focused on "health research" and concludes that "policy recommendations" would further Mi'kmaw research sovereignty (2 & 15). This argument was referenced in RRIP's literature review along with two other articles that Moore et al. (2017) builds off of from Steigman and Castleden (2015), and Castleden et al. (2012). Yet while the central point that Indigenous Peoples' have the right to research governance is captured in the scholarship referenced by the RRIP (Steigman and

Castleden 2015; Moore et al. 2017; Castleden et al. 2012), it does not make it onto the page of literature review of RRIP (University of Manitoba 2023b).

Unwillingness to work alongside rights-affirming frameworks and/or in-partnership with Treaty One, Oceti Sakowin, and Red River Métis kin exposes the U of M as failing to meet the ninth 'Principle of Reconciliation' (TRC 2015b, 4). The U of M's choice of methods, literature, and direction underlines their unwillingness towards supporting Treaty One, Oceti Sakowin, and Red River Métis Nation's "inherent right to self-determination" over data and university research ecosystems (Sinclair 2024, 106). As I reflect on this chapter, the U of M has a lot of work ahead of them. Ironically, the very university that is home to the National Truth and Reconciliation Centre has yet to meaningfully commit to the "Principles of Reconciliation" or to the TRC Calls to Action.

Place Does Not Generalize

By applying the approach of 'power relations' in my research through demonstrating "collective capacities," (Whyte 2017) I have found alignment with Tuck and Marica McKenzie's (2014) explanation that Indigenous scholars have frequently had to address "land and place especially via conceptualization of tribal identity, sovereignty, and treaty rights" but "land/place" fails to be centered when "taken up by non-Indigenous and setter scholars" (1). In "Relational Validity and the 'Where' of Inquiry: Place and Land in Qualitative Research" Tuck and McKenzie (2014) introduce "Critical Place Theory" to "reconsider place and its implications...because place matters and place is always specific" unlike the "impossibilities of generalizability and universality" (5). Similarly, Kanien'kehá:ka scholar Sandra Styres (2018) speaks to the importance of why Indigenous Peoples' urge to remaining in place or "emplace" as Indigenous "existence in the intimate and embodied expression of place" (27-29). Both of these Indigenous scholars reminded me of Anishinaabe-Mohawk Vanessa Watt's concept "Place-Thought," which insists that "[t]he relationship we have to place is also one that we have with ourselves. When place is altered, we are altered as current and future inheritors" (2016, 151). These Indigenous Scholars shared a commonality of evoking placed-based consciousness, intercepting the settler colonial agenda in motion to remove or "erase" our relationality from land

and inherently place to "replace" for continuance of exploiting land and "resources" as stated by Patrick Wolfe (2006).

An additional reminder of the importance of place can be found in the article by Dene scholar Glen Coulthard and Nishinaabe scholar Leanne Simpson (2016) who co-conceptualized "grounded normativity" (254). Coulthard and Simpson (2016) define "grounded normativity" as "ethical frameworks…inherently informed by an intimate relationship to place…to teach us how to be in respectful relationship diplomatic relationship with other Indigenous and non-Indigenous nations with whom we might share territorial responsibilities…" (254). Through "grounded normativity," we can ensure critical engagement with "density" at the forefront of all decision-making, as "density" does not generalize Indigenous Peoples either (Coulthard and Simpson 2016, 254; Andersen 2009). The term "density" is deployed by Métis scholar Chris Andersen (2009) in "Critical Indigenous Studies: From Difference to Density." The term "density" is intended to de-center notions of Indigeneity associated with "whiteness" and "settler governmentality (Andersen and Gabel 2023, 67; Crosby and Monaghan, 2018). Density holds space for Indigenous Peoples to be in the present, here and now, while engaging with the "interweaving of histories, cultures and traditions" at the same time (Andersen and Gabel 2023, 67).

Density is an important concept to grasp given that Indigenous Peoples in Canada have been categorized into three sub-groups: First Nations, Métis, and Inuit who are all "epistemologically dense" (Andersen 2009, 97). While First Nations is also an umbrella term, it must also be reminded that they are also "epistemologically dense" (Andersen 2009). For example, as someone who falls under the First Nations category, I am Anishinaabe and Dakota with home communities that are only a two-hour drive apart. While the relationship/experience with the Treaty One-British Crown and Dakota Oyate-British Crown are opposing to one another, Anishinaabemowin and Dakota iapi do not share the same linguistic group, despite sharing space together.

Ultimately, "grounded normativity" works through ways to ensure diplomacy for "inter-Indigenous relationships" and non-Indigenous People, which means investing in time with "whom we might share territorial responsibilities or common political or economic interests"

(Coulthard and Simpson 2016, 254; Wildcat and Voth 2023, 478). An example of "inter-Indigenous" diplomacy can be found in Nêhiyaw scholar Matt Wildcat and Métis scholar Daniel Voth's (2023) co-authored article, "Indigenous relationality: definitions and methods." Wildcat and Voth (2023) recalled the "inter-Indigenous" diplomacy of the Nehiyaw Pwat, which existed during the "mid 1880s" in the prairie region which includes Manitoba (478). The Nehiyaw Pwat is an alliance of kinships "comprised of people from different backgrounds, all while distinct language and traditions were maintained" (Wildcat and Voth 2023, 478).

In my first year in the Masters' Degree program in the Department of Indigenous Studies, I got the chance to work with four other graduate students and professors who have ties to Métis, and Anishinaabeg communities. In a brief time we co-founded a co-lab – *Iapi Debwewin Aansaamb*, and quickly found ourselves reading between the lines of Nicholas P. Vrooman's "*The Whole Country was... One Robe*," which prompted me to begin internally grappling with the villainizing terminology associated with the D/Lakota throughout his text. Although my Anishinaabeg relations linked back to the era of the Nehiyaw Pwat, at the same time, I am aware of Anishinaabeg having enduring relationships with the Dakota Oyate. This experience brought me profound understanding of how complex "Inter-Indigenous relationships" are but how we still had the "collective capacity" to maintain all our relationalities at once. Meanwhile the U of M cannot even manage the most critical relationship that includes "those who they are guest to" as I demonstrated in the chapter *Possession* (Wildcat and Voth 2023; Whyte 2017; Episkenew 2013). Vrooman (2012) and other settler colonial narratives strive to alienate D/Lakota kin to further the colonial project, as Wildcat's (2020) dissertation explains: "the settler society attempt to pit Indigenous mobility and rootedness to land against one another so we must find ways to successfully theorize mobility in that undercutting the importance of land and connection to territory" (143). The Nehiyaw Pwat and Anishinaabeg-Dakota Oyate alliances are historical examples of "collective continuance," within which Indigenous research sovereignty is entangled and can be used to consider "collective capacity" for data and research ecosystems in Southern Manitoba (Whyte 2017; Hudson et al. 2023). The complex practice of being in-relation accounts for the "collective capacity" to build "epistemic infrastructure[s]" that are reflective of "grounded normativity" (Coulthard and Simpson 2016; Whyte 2017; Murphy 2018).

It could be argued that the U of M has applied values systems of mino-bimaadiziwin within the new strategic plan, *Momentum*, as mino-bimaadiziwin is principle of Treaty One and Anishinaabeg inaakonigewin, but because of U of M's lack of relationship with Treaty rights holders, it then becomes a "tokenized gesture" (Craft 2013; Tuck and Yang 2012). The guiding quote of this chapter by Starblanket and Stark (2018) argues that the settler-state can pick and choose relationality based on who/what does not impact their "collective continuance" (Whyte 2017). Throughout this research, I noted the ongoing use of pan-Indigenous approaches, which reflects attempts to "generalize" Indigenous identity (Carroll et al., 2024). Carroll et al., (2024) in "Indigenous Data Sovereignty" further explain that "[Indigenous data sovereignty] practices are not universal, they are plurivers[a] and align through a common struggle against extractive and weaponized colonial knowledge practices" (223). Additionally, the U of M's *Truth and Reconciliation Framework* draft focuses only on human ethics (University of Manitoba 2024l), which does not embody knowledge systems that are part of generating "collective capacities" and "continuance." which in a later chapter I discuss further of how more-than-human kin are foundational to Indigenous knowledge systems (Whyte 2017). Again, the U of M's values of mino-bimaadiziwin are "tokenized gestures" when other efforts taken work to separate themselves from place, Treaty and inherent rights, and exclusive to only human species (Tuck and Yang 2012; University of Manitoba 2024l).

Furthermore, the U of M's *Change Through Research* speaks to how attempts to "incorporate Indigenous knowledge" without engaging the priority of multi-species relations to one another and place is harmful. As Carroll et al. (2024) states: "Indigenous systems of knowledge are safeguarded by sanctioned Indigenous People who sustain them through self-governance, philosophy, language, medicine, science, and ceremony. As such, [Indigenous knowledge] cannot be divorced from knowledge holders, community, protocol, and obligation" (214). In an attempt to "divorce" Indigenous knowledge "from the knowledge-keepers, landscapes, language, telling, aurality, and philosophies of its emergences is to designify the knowing, thus committing scientific extraction…" (Carroll et al., 2024, 215). Furthermore, Atwood et al. (2024) further this discussion with their statement that "knowledge systems are often dismembered (mined for their most 'useful' recurring elements), coded, and generalized as pan-Indian/pan-Indigenous knowledge" (771). Therefore, grounding or rooting Indigenous data,

and research in place does not "generalize or synthesis" and "without an anchor to their places runs counter to the spirit in which they were created" (Carroll et al. 2024, 221).

I argue for place-based methods and approaches to be applied in Indigenous data and research sovereignty to ensure research is "house[d] and produce[d]" in place-based and nation-specific "practices and procedures, based on deep reciprocity, that are inherently informed by an intimate relationship to place" (Coulthard and Simpson 2016, 254; Styres 2018). Marisa Duarte's *Network Sovereignty: Building the Internet Access Indian Country* (2017) also explains how to intercept the "design" and modes of "colonial system by colonial authorities" that aim to "subjugate [Indigenous] ways of knowing" and dismantle Indigenous systems of knowledge through place-based specificities by "re-claiming" of names and place (129-131). Remaining "emplace" ensures we are "not importing principles from another context, or misinterpreting principles" (Carroll et al. 2024, 221; Styres 2018). Indigenous research sovereignty scholars like Johnson et al. (2023) also confirm my call for the importance of place-based relationality within research ecosystems by explaining that "trust-building is place-based, requiring [...] researchers, [universities], and communities to come together with good intentions, investing themselves into the messy coexistence of" sharing space together (5). Even Riley et al.'s scholarship on tenure systems recommendations are an in-direct link to Duarte (2017) by emphasizing that we must collectively enact inter-generational knowledge mobilization to intercept the "colonial systems" that attempt to dismantle Indigenous knowledge systems (122).

It is clear through engaging with truth-telling, the U of M still has work to do retain "grounded normativity" with Treaty One, Oceti Sakowin, and Red River Métis Nation (Coulthard and Simpson 2016). Other scholars within the field of Indigenous research sovereignty like Ball and Jaynst (2008), Moore et al. (2017), and Filopoulos (2023) have collectively called for "cultural literacy" and being educated on "socio-political history" and "power-dynamics" of those serving on institutional REBs, as well as "financial service administrators, faculty and students" to strive to further Indigenous data and research sovereignty (Moore et al. 2017, 15). With every step of this research, my instincts grew stronger about the level of "collective capacity" and "emplace" relationality needed to be established by the U of M before making decisions that would cause interference or further harm (Whyte 2017; Styres 2018).

Requirements to demonstrate "collective capacity" must understand the current mandates, rights, and priorities that already exist (Whyte 2017). Hayward et al.'s (2021), "A New Era of Indigenous Research: Community-based Indigenous Protocols in Canada," highlights a total of "twenty different Indigenous ethics boards, frameworks, and protocols across Canada," including in Manitoba (141). Interestingly enough, Hayward et al. (2021) all have a connection the U of M and they observed that the university ought to provide

> tools needed to build relationships and meaningfully engage Indigenous peoples in order to understand, support, and adhere to local ethical guidance that may not yet be formalized in Western institutions and research approaches (Hayward et al. 2021, 414).

Hayward et al., (2021) further argues that universities like the U of M need to engage with relationality in order to "improve competency" on Indigenous data and research sovereignty, and "work collaboratively and creatively" to speak to Indigenous Peoples' "densities" based on "grounded normality" (414; Andersen 2009; Coulthard and Simpson 2016). Therefore, this echoes my argument that place-based relationality is needed regarding research ethics, and that it must be required individually and university-wide. As the U of M is currently and actively overstepping its jurisdictional reach by creating actions towards research ethics without collective consent and consensus from Treaty One, Oceti Sakowin, and the Red River Métis Nation, it also does not align with rights-based frameworks that affirm a "grounded normativity" approach; which would ensure that research and research ecosystems including research ethics standards are responsive to protocols, approaches, languages, and methods (Ball and Jaynst 2008; Filopoulos 2023, 75; William et al. 2020, 12-13; Coulthard and Simpson 2016; Carroll et al., 2023).

Case Studies

Doing "[t]he work before the work" requires taking the time for "developing literacy in Indigenous content, critical self-reflection, and building relationships with Indigenous [P]eople and community" as stated in U of M's Community Engaged Learning literature called "Working in Good Ways: A framework and resource for Indigenous community engagement" (Ferland et al., 2022, 16). Engaging in Indigenous content should include "meaningfully supporting Indigenous self-determination and challenging colonial systems and practices, within and beyond

our partnership and in community-direct ways" (Ferland et al., 2022, 16). Furthermore, "demonstrat[ing]" one's own grounding within Indigenous content literacy is showcased through the ability to "avoid pan-Indigenous approaches" by engaging place-based, "nation- and community-specific literacy…[but also] to avoid the embarrassment and harm that can come from ignoran[ce]" (Ferland et al., 2022, 24). Therefore, the U of M applying pan-Indigenous approaches and not engaging with place within their strategic plans, demonstrates the inability or unwillingness to be in-relation with Treaty One, Oceti Sakowin, and Red River Métis Nation.

The previous mentioned literature by Hayward et al. (2021) highlights the "Health Information Research Governance Committee" (HIRGC) research ethics board that oversees "research that identifies First Nations in Manitoba," along with the "Manitoba Métis Federation Research Ethics Board" that focuses on Métis Research (407). HIRGC is housed out of the First Nations Health and Social Secretariat of Manitoba [FNHSSM], which is an arm's length department of the Assembly of Manitoba Chiefs [AMC], where Treaty One and Dakota communities in Manitoba are members of (Hayward et al. 2021). Given that Hayward et al. makes mention of "epistemic infrastructures" in Manitoba, I have wondered: how does the U of M support "collective capacities" for future "continuance" of these established infrastructures within Manitoba (Benjamin 2019; Whyte 2017).

Ironically, I already knew the answer because the direction outlined in the RRIP's literature states that "[t]he Office of Indigenous Research would work to ensure that researchers and Indigenous communities and governments do not need to go through multiple processes that are TCPS2 and OCAP[®] compliant" (University of Manitoba 2023d, 28). I do give grace to RRIP for not understanding that Indigenous Peoples are "epistemologically dense" along with having no context regarding Indigenous data and research sovereignty discourse (Andersen 2009). I state this because one of the arguments for the U of M to create an office that allows the by-passing of OCAP® Principles is due to the fact "...some Indigenous governments in Manitoba use different frameworks" but RRIP does not elaborate on what other frameworks are currently in operation (University of Manitoba 2023d, 17). Although RRIP does make note that Inuit do not follow OCAP ® Principles and yet state the U of M's "Indigenous REB process that would support research with, around, and concerning Indigenous communities on all U of M campuses" (University of Manitoba 2023d, 17 & 28). If the U of M is concerned about Indigenous Peoples

that the U of M campuses are guest to, then the U of M clearly needs to be aware that OCAP® Principles are an extension of Treaty One, and Oceti Sakowin's collective efforts to ensure data and research sovereignty due to being a part of the make up the AMC. AMC is affiliated with the First Nations Governance Centre, as AMC is directed to "appoint" a board member to serve on behalf of the Manitoba First Nations to provide education on OCAP® Principles and "research processes" here in Manitoba (Hayward et al. 2021, 410).

Place-based relationality is re-enforced by the TCPS2 (2022) under Article 9.2 which states that "[t]he nature and extent of community engagement in a project shall be determined jointly by the researcher and the relevant community and shall be appropriate to community characteristics and the nature of the research" (154). There is a much-needed conversation for "self-determination in research overall," including how "research methodologies and approaches means assuring Indigenous ethical protocols and standards are adhered to in the research process," and that the research has "reviewed Indigenous community ethical protocols [to] advocate for research methodologies" (Hayward et al. 2021, 412). Indigenous research methodologies further dismantle the ongoing structures that "historically academic research did not undergo" including "ethical and moral engagements" which lead to the infection within Indigenous data, and research ecosystems (Hayward et al. 2021, 412; Carroll et al. 2019).

Through the "upholding of culturally grounded" and rooted in place-based contexts, Indigenous research methodologies then hold space to enact "researcher relational accountability, reflexivity, and the balancing of power" (Hayward et al. 2021, 412). Even in my previous literature review of Indigenous research sovereignty scholarship, Garba et al. (2023) provide a variety of "[a]ctions for institutions" which include engagement through "appropriate mechanisms" to create and implement "research policies and practices" with "local Indigenous Peoples…while incorporating…rights and interests into institutional guidelines and policies" (5). Furthermore, the U of M must "strive to follow the ethical guidelines, protocols, and processes established by the specific community involved" as reiterated by Leona Star, the Director of Research at FHSSM, in the TCPS2 document under Chapter 9, titled "Research Involving the First Nations, Inuit and Métis Peoples of Canada." Star further elaborates in Hayward et al., (2021) that

> chapter [nine] is designed to serve as a framework for the ethical conduct of research involving Indigenous peoples. It is offered in a spirit of respect. It is not intended to override or replace ethical guidance offered by Indigenous peoples themselves (Hayward et al. 2021, 413; TCPS2 2022, 147).

If we understand that TCPS2 is a guide for Indigenous Peoples which offers best practices that incorporate place-based and nation-specific governance systems, this in turn generates "power" as stated in as stated in *Spiral to the Stars: Mvskoke Tool of Futurity* by Mvskoke scholar Laura Harjo (2019, 94). Harjo (2019) explains the "mode[s] of knowledge production, dialogue, collectively, and writ[ing] stories," while also maintaining "[o]versight, ownership and control of our own knowledge and its presentation and narration is power" (94). Therefore, I will provide the following two case studies in the Canadian context that enact autonomy towards futurities through research sovereignty grounded in place-based and nation-specific context (Harjo 2019).

"The Manomin Project"

The article "Beyond Institutional Ethics: Anishinaabe Worldviews and the Development of a Culturally Sensitive Field Protocol for Aquatic Plant Research" by Luby et al. (2021) empowers my research. Luby et al. argue for the importance of using Anishinaabemowin and Anishinaabewin when working with the Anishinaabeg and explain why placed-based specificities are important to research sovereignty discourse (3). Luby et al. (2021) explain how "[t]he Manomin Project," a research partnership between the Niisaachewan Anishinaabe Nation [NAN] and the University of Guelph [U of G], created "space" to improve research ethics for future projects regarding "Aquatic Plant Research" (1). "The Manomin Project" displays how research partnerships can restore Indigenous Peoples' research governance structures to establish a code of conduct that (re)aligned invited researchers with Anishinaabe ethics through asserting rights to research sovereignty (Luby et al. 2021, 2). The partners and researchers with the Manomin Project were able to showcase how current structures of REB (Research Ethics Boards) and TCPS2 of 2010 "fails to consider" Anishinaabewin, which "mitigate harm against other-than human beings in Anishinaabe-Aki" (Luby et al. 2021, 1-6). The NAN-U of G partnership included the co-creation of the "Culturally Sensitive Field Protocol" and recommend that TCPS2 be "broadened" to "address Anishinaabeg teachings about plants and animal

relations" (Luby et al. 2021, 1). The "Culturally Sensitive Field Protocol" ensures the incorporation of Anishinaabeg methodologies, Anishinaabewin, and ethics within research conducted with the Anishinaabeg Nation (Luby et al. 2021, 4 & 6). To do so, researchers must be familiar with Treaty discourse, and in this specific case, researchers must foster an understanding of "1873 treaty negotiations with the crown, The Paypom Treaty" [Treaty Three] and the use Anishinaabemowin within the research project" (Luby et al. 2021, 3-6).

Through reviewing "The Manomin Project," two important concepts for research ethics that embody Anishinaabeg futurities emerged: 1) emplacing Anishinaabeg worldviews by enacting relationality with more than-human relations, which goes beyond TCPS2; 2) focusing on language revitalization and knowledge translation to future generations of Anishinaabeg youth by revitalizing relationality with Manomin (Mehltetter 2024). Another additional outcome out of "The Manomin Project" was the development of the "scope framework" by Anishinaabekwe Britney Luby that can be found in Mehltetter's dissertation (2024). This framework is called the "EAUX principles" that operates by "incorporating themes such as relationality, benefit to Indigenous Peoples, continuous communication, and respect for all knowledge systems" (Mehltetter 2024, 53). The "EAUX Principles" stands for "Equity, Access, Usability, and eXchange" and is a "French word for waters" (Mehltetter 2024, 42). "The Manomin Project" demonstrates the possibility of investing in tools and building Anishinaabeg specific ethics protocols, which would have not been possible without partnership with NAN and/or by utilizing a universal pan-Indigenous approach. Importantly, it also showcases how settler scholars can work towards paying off "loans" individually, in a way that does not infect Anishinaabeg and Anishinaabewin research ecosystem, and which can create material systemic changes at the U of G; while going beyond guidelines provided within TCPS2 framework by putting forth the futurities of Anishinaabewin at the forefront (Tsosie et al. 2021).

Mi'kmaw Ethics Watch

During my time researching, I have reviewed "nation-specific ethics watches and community-based research review committees, within academic institution alliances" demonstrating the call to "create and demand" within existing literature that both critiques settler colonial state policies and assesses research ethics guidelines in Canada along with Indigenous

Peoples' recommendations through research partnerships (Walter and Carroll 2020, 34; Hayward et al. 2021, 408). Hayward et al. (2021) share how one of the highlighted themes, "upholding culturally grounded and ethical principles," highlights the Mi'kmaw Ethics Watch (408). William et al. (2020) also elaborate on the investment towards structures like the Mi'kmaw Ethics Watch and how it "could result in more effective protection of Indigenous knowledge, culture, language, and perspectives" (11).

The formal name of Mi'kmaw Ethics Watch is Espuinapink, which refers to the "grand council's wigwam," which communicates the responsibilities of "guarding the door" and "directing...protocols...seating for discussion" while protecting "Mi'kmaw knowledge" and research (Mi'kmaw Ethics Watch 2023, 3). The "Mi'kmaw Ethics Watch" begun in 1999 at Potlotek (or Chapel Island) after they faced issues with "colonial researchers" and within the next following year, Espuinapink, a "community-based initiative" was birthed (Mi'kmaw Ethics Watch 2023, 3). Today, Mi'kmaw Ethics Watch operates independently and is based at Cape Breton University's Unama'ki College [Mi'kmaq College Institute] (Cape Breton University 2025). Mi'kmaw Ethics Watch (2023) also adheres to UNDRIP due to the "inherent rights of Indigenous Knowledge" (6). In the Canadian context, it is noted that

> Indigenous knowledge is an Aboriginal right protected in Section 35 (1) Constitution of Canada and the article 6 of Indigenous Language Act (2019)...[and additionally]...The Nova Scotia Mi'kmaw Language Act is a source of protection and source of strengthening Mi'kmaw language use and access (Mi'kmaw Ethics Watch 2023, 6).

Mi'kmaw Ethics Watch's (2023) seven-page document outlines principles and protocols to be followed to conduct research, by which researchers must abide through seeking multiple approvals by REBs including by Mi'kmaw Ethics Watch, the researchers' institution, and any added REBs that might be required under TCPS2. Additionally, the researchers must outline methods used in research and the dissemination process of research, which includes data storage and management of the research data in the application to Mi'kmaw Ethics Watch (Mi'kmaw Ethics Watch 2023, 9). If the researcher's application is approved, they must "deposit their final report to the Mi'kmaw Resource Centre (MRC) at Cape Breton University or in a local community resource bank" (Mi'kmaw Ethics Watch 2023, 10). If the researcher(s) are not

seeking Mi'kmaw Ethics Watch, they also must complete an "exemption form" (Mi'kmaw Ethics Watch 2023, 3 & 7).

Mi'kmaw Ethics Watch encompasses "enforcement measures to support their legislation and policies" to safeguard research regarding Mi'kmaw placed within Mi'kma'ki (Garba et al. 2023, 4). For example, a lawsuit has been filed against two Dalhousie University researchers who conducted a study that involved Mi'kmaw participants from Pictou Landing First Nation without their consent or acknowledgement (The Globe and Mail, 2024). The Mi'kmaw Ethics Watch's safeguarding research in Mi'kma'ki showcases the "epistemic infrastructure" with mechanisms that support "Indigenous jurisdiction over research includes the rights to address violations of law" (Garba et al. 2023, 5; Murphy 2017). In the Canadian context, Mi'kmaw Ethics Watch is prime example of the possibilities of creating "epistemic infrastructure[s]" that are place-based and nation-specific that protect language, knowledge, autonomy over data, and research sovereignty while implementing OCAP® principles (Murphy 2017).

Chapter Summary

In conclusion, this chapter engages with "power relation" synergies (Kolopenuk 2020a) to further the terms of "collective capacity" and "collective continuance" (Whyte 2017). This chapter discussed how the use of "Indigenous inclusionary policy" and pan-Indigenous narratives fuels settler state's "collective continuance" (Gaudry and Lorenz 2018; Whyte 2017). This chapter also highlights two case studies of the Mi'kmaw Ethics Watch and "The Manomin Project" to provide examples of "epistemic infrastructure[s]" in place-based and nation specific context to support "collective capacity" for "collective continuance" within Indigenous data, and research sovereignty discourse (Hayward et al. 2021; Luby et al. 2021; Whyte 2017).

By evoking "power relations," it becomes evident throughout the chapter that place does not "generalize" Indigenous Peoples, that place protects from the attempts towards "divorcing" Indigenous knowledge systems, and ensures that data and research (including ecosystems) are responsive to place-based and nation-specific context protocols, approaches, languages, methodology, and methods (Ball and Jaynst 2008; Filopoulos 2023, 75; William et al. 2020, 12-13; Whyte 2017; Carroll et al., 2023). Calling on "power relations" to *remember* Indigenous

data and research sovereignty is not new endeavor, and this chapter re-iterates the call for place-based and nation-specific, or “grounded normativity” approaches to be applied to Indigenous data and research sovereignty endeavors (Coulthard and Simpson 2016; Kolopenuk 2020a).

Remembering

Futurity is space, place, and temporality produced socially by people, including relatives located in the past, present, and future. It invokes many other temporalities, other spaces, and yet-to-be-imagined possibilities: it is a practice of conceiving imaginaries. Indigenous futurity places us in conversation or in a dialectic with the unactivated possibilities of our past, present, and future relatives; these conversations include spaces and places that are rich with meaning and experience.

— Laura Harjo, *Spiral to the Stars: Mvskoke Tool of Futurity* (2019, 30).

Remembering is a common occurrence in our daily lives to reflect on the paths crossed and the ones that came before us that had a hand in our present-day life experience. I previously demonstrated through literature from over two decades ago in Canada that references what is now known as Indigenous data, and research sovereignty. The intent was to give you a chance to start channeling memory in preparation. In this chapter, I will enact the critical method of *remembering*, reinforcing the importance of "memory" or *remembering*, as it is proposed by Māori Scholar Linda Tuhiwai-Smith through her twenty-five projects in *Decolonizing Methodologies* (2021). As Tuhiwai-Smith (2021) states "one of the largest projects for Indigenous [P]eoples is survival and the revitalization of their entire knowledge systems, including language and reconnecting to their places, artefacts…" (189). I relate to Tuhiwai-Smith's remembering practice through the efforts of "[re-]making kin" with relations, research methodologies, ethics, data management practices, governance, spectrum, and cosmologies in this research (TallBear 2018).

Through this critical method of *remembering,* I will begin this chapter by situating how *remembering* is "to speak back on the dismemberment of Indigenous epistemologies and [to] re-centre ways of being that restore Indigenous futurities," as Nishinaabekwe thinker Hope-Ann Ace writes in her MA thesis (2021, 32). Following, I will provide a language revitalization approach, as language empowers place-based and nation-specific practices of "[re-]making kin" with data, law making, science, and technologies that can further provide awareness to Indigenous data and, research sovereignty discourse (TallBear 2018; 2017; Lewis et al. 2018; Craft 2013; Lee et al. 2017; Simpson 2017). I provide further context here on what spectrum sovereignty is and how it relates to Indigenous data and research sovereignty (Duarte 2017; Blackwater 2020). I point towards existing settler sanctioned policies in Canada that prevent

Indigenous Peoples from asserting their rights, and flag these for analysis within my future studies. I conclude this chapter by discussing hope for the future, while situating Indigenous women who have taken the leading role within Indigenous data, research, and spectrum network sovereignty movements (Hernandez 2023).

Syncing Kinetic Energy

In *Spiral to the Stars: Mvskoke Tool of Futurity,* Mvskoke scholar Laura Harjo (2019) shares: "I choose to focus on futurity because it is a more robust concept than future," because future is temporal and futurity "means that we do not have to wait to see hopeful possibilities materialize in our communities" (30). I find myself sharing the same attention to futurity as Harjo, regarding Indigenous data and research sovereignty. I spent most of the final years of my undergraduate degree, until today, in this space of futurities considering every angle or possibility. My investments continue to be locked into Anishinaabeg, Oceti Sakowin, and more-than-human-kin futurities, specifically, as I engage in "the work of relationality and of creating and disseminating narratives in a range of ways [as...] it informs my thinking on tools of futurity and kinship" (Harjo 2019, 30). Working with relationality goes beyond human kin, it involves "...spaces and place," which "all embody energies" of the ecosystems from mitakuye oysain [all my relations] including plant, animal, more-than-human, and "spiritual entities" (Harjo 2019, 31). The concept of "kin-space-time" involves interacting with "(re)imagin[ing] and re-member[ing] a space-time continuum of the past, present, and future that is modulated by human and more-than-human relationships" (Harjo 2019, 26).

Empowering *kinetic energy*[3] to re-call memory or practice *remembering* is to invest in Indigenous futurity as it opens a space for "thinking about how we (re)imagine our communities and epistemologies in the face of prevailing technologies and conditions" (Harjo 2019, 28). Engaging in "futurity is an action; it's a practice" of holding space to be intimate with Anishinaabeg and Dakota Oyate thoughts and theories "outside of logics of settler colonialism" (Harjo 2019, 38). Therefore, critical inquiry is needed to understand how "settler futurity" is entangled in disrupting Indigenous futurities through methodologies in the past and present. Unangax̂ scholar Eve Tuck and Ruben A. Gaztambide-Fernández (2013) explain that "settler futurity," is related to Wolfe's (2006) explanation of "settler colonialism," which refers to the "project of replacement" (80). Kanaka Maoli scholar Noelani Goodyear-Ka'o̲pua (2018) also references Tuck and Gaztambide-Fernández by stating that "settler futurity" is investment towards "settler colonialism," which includes the denial of "Indigenous futurities" (2018, 86). Therefore, the use of settler methodologies also relates to the shaping of how settlers know about Indigenous Peoples, also known as "settler epistemologies," which hijacks Indigenous futurities.

As mentioned in the chapter *Relationality*, Tyendinaga Mohawk scholar Kyle Willmott (2023) argues that numbers are the only research methodology used by the settler colonial state to allegedly "represent" knowledge about Indigenous Peoples, as it is the only form of communication by the setter state (16-17). Willmott (2023) elaborates by explaining that "numbers, quantification, counting, and surveillance processes are not new to the analysis of Indigenous-settler relations" in Canada (16-17). The concept "colonial numbers" is the "quantification and fiscalization of settler attempts to make Indigenous life legible to settler political goals," which supports Willmott's second concept of "fiscal surveillance" (Willmott

---

[3] The term *kinetic energy* emerged as I reflected on the memories triggered by reading Laura Harjo, who states, "our actions or absence of actions are energy transfers that have the power to include or exclude" (2019, 102). This idea of relational power reminded me of Jessica Kolopenuk's (2020) concept of "power-relations" and the "poly-kinetic" introduced by *Iapi debwewin aansaamb* co-lab in a forthcoming article (2025). These relational exchanges, or energy transfers that happen when being in relation, led me to recall the concept from my chemistry training: *kinetic energy...*

2023, 17). Willmott (2023) explains that "fiscal surveillance" is how nation-state procedures and methods like "budgets, accounting, market, and bureaucratic devices, and other[s]" are used "to enact close monitoring of Indigenous life and governments" (16). Willmott (2023) alludes to the making space to "critiquing the production of knowledge about Indigenous [P]eoples and supporting number for sovereignty" (25). Métis scholar Chris Andersen's scholarship is referenced in Willmott (2023) by explaining that "colonial numbers can reduce density," but we can "combat" this through Indigenous methodologies and Indigenous data sovereignty (Willmott 2023, 17-23).

Métis scholars Chris Andersen and Chelsea Gabel (2023) argue that "the field of Indigenous methodologies" in the Canadian context is a "popular subfield of research methodologies" that has been based on "difference" and pan-Indigenous approaches (68). I argue that Indigenous methodologies is part of Indigenous research sovereignty as well. As articulated in the earlier chapter, we must remain "emplace" regarding methodologies and approaches as well, instead of the universal approaches that the U of M's new *Change Through Research: Strategic Research Plan (2024-2029)* relies on (Stryres 2018; University of Manitoba 2024e). Two-Eyed Seeing is mentioned in Andersen and Gabel (2023, n2) and is identified there as a "guiding framework for conducting research with Indigenous Peoples," yet one that "researchers have used [] to attempt to apply Indigenous ways of knowing" (74). The Two-Eyed Seeing approach is grounded in Mi'kma'ki and identified by "Mi'kmaq Elders Albert and Murdera Marshall" in 2004 (Andersen and Gabel 2023, 74). However, Two-Eyed Seeing has been heavily co-opted by settler researchers and the U of M, as previously mentioned, instead of working "emplace" and in-relation (Stryres 2018, Harjo 2019; TallBear 2018).

Other examples have emerged for non-Indigenous Peoples conducting research with Indigenous Peoples in universal contexts that do not engage with 'densities' (Andersen 2009). These examples can be found in Ball and Jaynst (2008), Castleden et al. (2012), Steigman and Castleden (2015), Moore et al. (2017), and Bharadwaj (2014) who use "Community-based research participation [CBPR]," also known as "Community-engaged research [CER]" approaches. As Andersen and Gabel (2023) explain and argue, "CER is less a method than an orientation to research," which "has been growing popularity" (69). Within the Indigenous spectrum sovereignty discourse, Tricia Toso (n.d.) argues in favour of a similar approach to CER

and CBPR called "walking with," which was developed by Stephanie Springgay and Sarah Truman in *Walking Methodologies in a More-Than-Human World.* CER, CBPR, and "walking with" approaches are not new to Indigenous Peoples. As Williams et al. (2020) points out, Two-Row Wampum models "respectful Indigenous-settler relations" and can be used as a pathway toward partnerships with the settler state for Indigenous research sovereignty (10). Indigenous-settler relations are important but involve "grievance claims that appeal to the [settler-colonial state]," which have yet to acknowledge Indigenous Peoples' right to self-determination (Harjo, 2019, 101).

In realizing the amount of "time and energy" Indigenous Peoples have already invested and continue to invest in this Indigenous-settler relationship, we must question how much "time and energy" has been reciprocated (Harjo 2019, 101). Therefore, I propose ensuring that a flow of kinetic energy is invested in strengthening relationality, languages, remembering, and futurities. This will ensure that "our future[s] are [not] colonized and claimed by colonial logics" by allowing intergenerational knowledge mobilization to fully "engage them in self-conscious practices of future-making" (Harjo 2019, 101; Goodyear-Kaʻopua 2018, 90). It can also be argued that energy invested in place-based methodologies through *remembering* can overthrow the ongoing surveillance and policing of Indigenous Peoples in Canada (Tuhiwai-Smith 2021).

Remembering Methodologies

Understanding what Indigenous methodology is and how it is constructed, is summarized by Maggie Walter and Chris Andersen (2013) in *Indigenous Statistics.* Walter and Andersen (2013) do what "most research books do not do," which is define and conceptualize an "Indigenous quantitative methodological frame" (17). Walter and Andersen do this by conceptualizing "methodology" as comprising of "three components: standpoint, theoretical framework and methods" (Walter and Andersen 2013, 44). The three philosophical tenets of standpoint are "epistemology, axiology, and ontology," along with the "social position" of the researcher (Walter and Andersen 2013, 46). I argue that utilizing Indigenous languages with these methodological "tenets" will further create relations with Indigenous Peoples as 'epistemologically dense' in mind and in practice (Figure 4; Walter and Andersen 2013, 45). For example, in reference to Dakota research methodologies, Ten Fingers (2005) relied on Dakota

thought and language, which "allows us to see through our own eyes what this process of inquiry and learning means to us" (s62).

Combining Walter and Andersen (2013), Andersen and Gabel (2023), and Jerry Fontaine and Don McCaskill's *Di-bayn-di-ziwin (To Own Ourselves): Embodying Ojibway-Anishinaabe Ways*, I created Figure 4, to seek to link the structure of methodology through applied engagement with Anishinaabemowin (see Figure 4). If epistemology is defined as "how we know it" (Walter and Andersen 2013, 47; Andersen and Gabel 2023, 62), Fontaine and McCaskill (2022) in contrast refer to naanaagadawenjigewin, which translates to "how we came to think this way about our reality" (16). Fontaine and McCaskill (2022) use inaadiziwin to refer to "our way of being and way of life" (16) also known as ontology or "what we know" (Walter and Andersen 2013, 52; Andersen and Gabel 2023, 62). The concept of axiology is not defined by Fontaine and McCaskill, but Andersen and Gabel (2023) indicate that axiology refers to "what is ethical about it," while citing Shawn Wilson's concept of "relational accountability" (62). However, Nicholas Reo (2019) refers to "relational accountability" as inawediwin in Anishinaabemowin, which they suggest "involves sorting out honorable relationships, partnership by partnership, and reckoning what is ethically sound and respectful research according to the specific nations" (73).

Furthermore, social position "comprises and reflects much of who we are socially, economically, culturally and racially" (Andersen and Walter 2013, 46). In Anishinaabemowin, dibaajimowin encompasses both "social position" and "our personal stories and experiences" (Fontaine and McCaskill 2022, 9). Therefore, utilizing language can ensure our density through methodologies by being "nation and community-specific," and it also asserts that Indigenous Peoples have used and have understood research methodologies historically (Filopoulos 2023, 84; Andersen 2009).

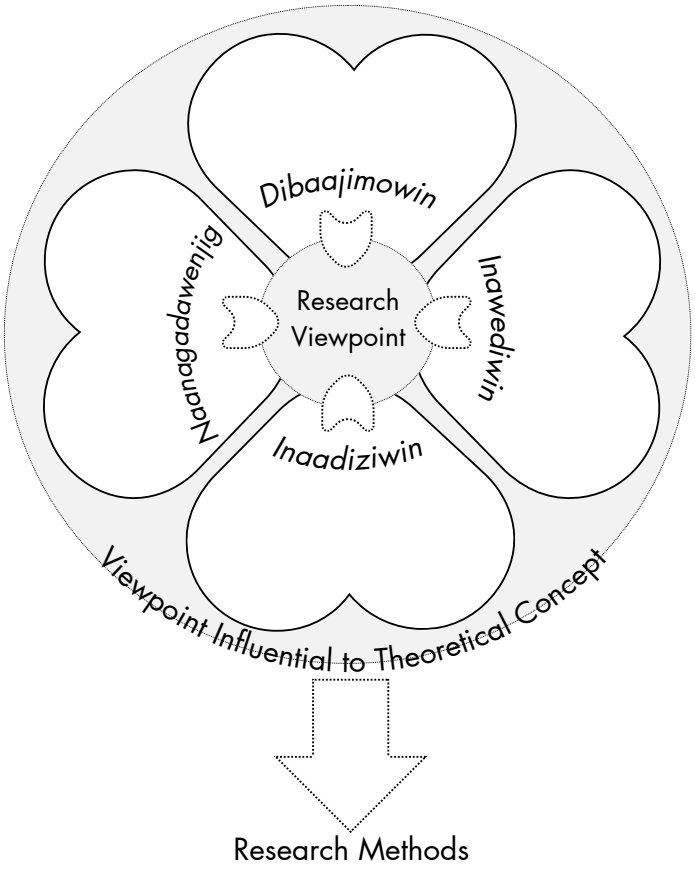

Figure 4: Sample of Walter & Andersen's (2013) "Conceptualization of a Research Methodology" in Anishinaabemowin.

With this understanding of how Anishinaabeg have always engaged with research methodologies, I can also argue Anishinaabeg have also been using similar approaches historically to CER, CBPR, and/or other relative approaches mentioned earlier. Fontaine and McCaskill (2022) reaffirm the Anishinaabeg historical application of these newer approaches through explaining the "protocols, practices and principles" in relationship-building (16). Fontaine and McCaskill (2022) explain bezhig onaagan gaye bezhig emikwan [One Dish, One Spoon] as referring to the "act of sharing a meal together," where the "one bowl" symbolizes "one land" and "one spoon" conveys the promise of mutual benefit (Fontaine and McCaskill 2022, 16). The authors refer to an act of practice called biindigedaadiwin, meaning "to enter one another's lodge" as a "process of coming together, setting side biases, to enter in agreement together" (Fontaine and McCaskill 2022, 132). To apply biindigedaadiwin in practice "both

parties" must understand each other's inaadiziwin, naanaagadawenjigewin and bishkaadijigewin or pedagogy (Fontaine and McCaskill 2022, 19). In using protocol of bezhig onaagan gaye bezhig emikwan and biindigedaadiwin as practice results in the principle of naawi aki [coming to middle ground], which is how we create diplomacy as a diplomatic principle to "bring peace and respect" and "creat[e] shared basis for interaction" (Fontaine and McCaskill 2022, 18-19). Finding naawi aki through biindigedaadiwin was used in "diplomacy and mediation" between the Anishinaabeg and Dakota Oyate (Fontaine and McCaskill 2022).

The Anishinaabeg and Dakota Oyate "crossed boundaries to create consensual space where both groups retained their own culture, identity and way of life while coming to a mutual accommodation," resulted in historical and contemporary partnerships (Fontaine and McCaskill 2022, 132-133). These acts towards naawi aki are expressed in the historical Sweet Corn Treaty and contemporary example of present-day Dakota Ojibway Tribal Council, which is also the first Tribal Council in Canada, located in Southern Manitoba (Little Red Feather 2023; Dakota Ojibway Tribal Council 2024). The approaches of CER, CBPR and "walking together" are not new to Anishinaabeg and Dakota Oyate, who have been using similar approaches since time immemorial. Focusing on place-based and nation-specific approaches are vital as it does not lean on the process of creating new Indigenous methodologies or new research ethics; but holds space to *remember* methodologies that were used historically as they can also be used to pave our futurities in relation with the peoples, nations, and places we are researching with (Tuhiwai-Smith 2021; Andersen and Gabel 2023).

As Willmott (2023) conveys, the current settler-state governed structures, methodologies, and numbers are closely related to the surveillance of Indigenous Peoples. I argue that to mitigate this ongoing harm, we must embody the importance of *remembering* or (re)making kinship with data, methodologies, research, spectrum, and technologies, as it is critical for buy-in and awareness that Indigenous Peoples have been doing this since time immemorial (Tuhiwai-Smith 2021; TallBear 2018; 2017; Lewis et al. 2018; Simpson 2017). Michelle Suina, and Carnell. T. Chosa (2020) in *Indigenous Data Sovereignty and Policy* also express that "significant effort" and "greater awareness" to understand the "global Indigenous Data Sovereignty Movement" on the ground level is essential (89). Suina and Chosa (2020) share that Indigenous Peoples are still "convinc[ing] tribal leaders" of the importance of

Indigenous data sovereignty and data prior to even being able to create or adopt "Indigenous data sovereignty frameworks" within their respective nations (Suina and Chosa 2020, 89). Nation-specific examples, as shared by Sunia and Cosa (2020) provides context to data sovereignty and governance being an emergent field with leaders, communities, and with the greater population of Indigenous Peoples. Through practicing *remembering* for methodologies like the Pueblo Nation, which is centred in place-based and nation-specific context, it is more effective in supporting Indigenous data, and research sovereignty, unlike out-of-place approaches (Tuhiwai-Smith 2021). *Remembering* creates concentrated energies towards relationality and rejects generalities through *remembering* our own "epistemological densities" that will lead into future research projects that are usable, reflective, and propel into futurities (Tuhiwai-Smith 2021).

Kiksuye ye!

The act of *remembering* through language revitalization can showcase place-based and nation-specific examples of governance, data management, science, research methodologies, and ethics. As they are stored within our language, it takes *remembering*, language revitalization, sharing stories and experiences with one another, to re-establish relationships amongst each other, to decode. It requires patience, care, and relationship-building, to *remember* where the file is stored, and spectrum gives us the tools to expedite that process. For instance, I have been constantly and unexpectedly reminded of my family's presence through the process of writing my thesis. Reading *Protecting Indigenous Knowledge and Heritage* by Mi'kmaw Scholar Marie Battiste and Chickasaw Scholar James (Sa'ke'j) Youngblood Henderson (2000) on my laptop with fiber optic access, I came across Eli Taylor, my late great-grandfather, who is directly quoted there saying:

> Our Native language embodies a value system about how we ought to live and relate to each other...[I]t gives a name to relations among kin, to roles and responsibilities among family members, to ties with the broader clan group...[T]here are no English words for these relationships...Now, if you destroy our languages, you not only break down these relationships, but you also destroy other aspects of our Indian way of life and culture, especially those that describe man's connection with nature, the Great Spirit, and the order of things. Without our languages, we will cease to exist as a separate people (68, quoting: AFN 1992, 14).

My late great-grandfather, Dr. Eli Taylor's legacy, lives within the text of *Remember This! Dakota Decolonization and the Eli Taylor Narrative* (2005) written by Dakota scholar Waziyatawin Angela Wilson. In this text, he reminds us of the importance of generational memory, language revitalization, and insists that *remembering* is key to our future as the Dakota Oyate (Tuhiwai-Smith 2021). He does this through sharing the concept hena kiksuya mayanipte do [you will carry those memories] because "[f]rom the Dakota perspective, when the stories are remembered and transmitted, past and future are intertwined as cultural memories are carried forward" (Wilson 2005, 236).

Anishinaabeg terms for stories include dibaajimowin and aadizookaananag or "scared stories and/or legends" (Mills et al. 2017). Mills et al. (2017) intertwines aadizookaananag through *remembering* and envisioning of *Anishinaabe* "constitutional order," however, aadizookaananag is "not the source of law" but "interaction within the natural world or the actions of community remember" in terms of guidelines to follow, like ethics (5). Aadizookaananag refers to "responsibilities: gifts and reciprocal needs that vary across kinds of relationships" thus reproducing a "mutual aid framework" that is a part of the "tripartite structure of Anishinaabe constitutionalism" (Mills et al. 2017, 5 & 7). The "mutual aid" refers to the "cycle of (i) gifting, which generates (ii) gratitude, which in turn generates (iii) reciprocity, which generates further (i) gifting, and so on" (Mills et al. 2017, 9). The other two dimensions of Anishinaabe "constitutionalism" involves the "ontological condition of interdependence" or inaadiziwin, as in "what we know," which is not "individual autonomy," but our relationality to one another as humans and mitakiye oyasin (Fontaine and McCaskill 2022; Mills et al. 2017, 7). The third aspect involves "harmony," as the "shared openness to the gifts and needs of self and…" to one another (7). Mills et al. (2017) talks about "interdependence, mutual aid, harmony" as what is Anishinaabe "constitutionalism" (18).

However, the understanding of Anishinaabeg inaakonigewin must be first understood by Anishinaabeg methodologies through "epistemology" or naanaagadawenjigewin and "ontology" or inaadiziwin (Fontaine and McCaskill 2022; Mills et al. 2017, 18). Thus, our interaction with aadizookaananag shapes "what we know" and "how we know" what we know (Fontaine and McCaskill 2022; Mills et al. 2017, 18). This aligns with Nishnaabekwewag Leanne Betasamosake Simpson and Edna Manitowabi (2013) in *Centering Anishinaabeg Studies:*

Understanding the World through Stories, where they talk about how aadizookaananag is "encoded through language," when taught to children to support their dibaajimowin, naanaagadawenjigewin, and inaadiziwin, creating Anishinaabeg "thought and theory" (280 & 287).

Re-Making Kin

Can we see ourselves as relating and exchanging power and reciprocity in support of a stronger tiospaye or extended kin network with both living relations and those whose bodies we come from, and whose bodies will come in part from us? I am thinking of both the human and more-than-human bodies with whom we are co-constituted.

—Kim TallBear, "Making Love and Relations Beyond Settler Sex and Family" (2018, 161-162).

Enacting Indigenous futurisms, thoughts, and theories for data, research, and spectrum sovereignty can be expressed in many forms and are all versions of a "present moment" while "dreaming of a (re)imagined future" (Harjo 2019, 28-30). Desi Rodriguez-Lonebear elaborates in *Indigenous Data Sovereignty: Towards an Agenda* about how "winter counts on animal hides" like buffalo hides are historical method used for data management and governance (2016, 54). If Indigenous data, research, and spectrum sovereignty focus on futurities and futurism for nation-rebuilding, then it is an act of resurgence outside colonial logics. This process also involves *re-making kin* with more-than-human, data, research, science and governance structures through tools, methods, and approaches (TallBear 2018).

In the guiding quote of this section, Dakota scholar Kim TallBear (2018) provokes a critical question regarding "making kin" while explaining that the space in between tiospaye or extended family and oyate or people/nation is how "governance happens in ways that demonstrate the connection between the two" (148). TallBear provokes readers to consider how "resurgence is focused on developing culturally embedded place-based engagement with other-than human person as a replacement for the settler-colonial system and its institutions" as stated by Alexander Paterson (2018, 23).

In the previous chapter, I engage with "collective capacity" and "collective continuance" by Whyte (2017), while the "Manomin Project" highlights gap within the Tri-Council Policy

Statement, that does not include more-than-human kin, meaning that it fails to embody Anishinaabewin (Luby et al. 2021, 11). As *remembering* aadizookaananag is the "nucleus of Anishinaabeg identity" a focus on relationality is "central to Anishinaabeg" political structures and governance systems (Paterson 2018, 22). Aadizookaananag are a focus point in "framework[s] for understanding relationships" with more-than-human kin that "informs human to human diplomacy" like Anishinaabeg doodem governance (Paterson 2018, 22). Paterson (2018) argues that for the eighth fires of the Anishinaabeg prophecy to be ignited, the Anishinaabeg must "fully re-establish their political alliances with... [more-than-human kin]" (29). For example, the Anishinaabeg "constitutionalism" by Mills et al. (2017) was structured through aadizookaananag of other-than-human kin. As another example, Paterson (2018) highlights Kiera Ladner's thesis that studied "the buffalo as a method to understand the Siiksikaawa (Blackfoot) governance system" (36).

Engagement with more-than-human kin is the embodiment of "inclusive sovereignty" by *remembering* how to be kin or re-making kin or "being-in-relation" (TallBear 2018, 161; Wildcat 2020). Nêhiyaw scholar Tasha Hubbard's thesis (2016) shares how she dedicates herself towards raising "buffalo consciousness" through the revitalization of buffalo on the land with essential implications when it comes to "repair[ing] and renew[ing] understandings of Indigenous sovereignty" (183). To enact *remembering* through re-making relationality with Buffalo kin, it is "[t]hrough this relationship, [that] the buffalo is understood to be our teacher of good governance; in other words, the buffalo teaches us how to live as family, as kin, and as a people" (Hubbard 2016, 13). Hubbard (2016) provides awareness of how the buffalo dispossession from the prairies and their kin was a part of the "logic of elimination" (Hubbard 2006, quoted in Wolfe 2006, 387). These efforts to raise "buffalo consciousness" and to *remember* buffalo kin through acts of diplomacy between humans and the buffalo, led to the establishment of the *Buffalo Treaty* (See Hubbard 2016). The aim of the *Buffalo Treaty* is explained by Blackfoot intellectual Leroy Little Bear:

> We are all going to work together to restore the buffalo, to be amongst us so that our young people will see buffalo on a daily basis. Then these teachings that the buffalo have given us, those teachings will be in place for future generations (Hubbard 2016, 185).

Ojibwe and D/Lakota Annette S. Lee's scholarship is also centered on the focus on futurities through inter-generational knowledge mobilization by re-making kin with more-than-human kin like cosmologies that are taking place within the shared space of the Anishinaabeg and Oceti Sakowin. Lee et al. (2017) highlight the development of "Native Skywatchers" to engage the next generation of Dakota, Lakota and Anishinaabe youth with "Science, Technology, Engineering and Mathematics [STEM]" (2). Lee et al. (2017) engages with "emplace" and aadizookaananag of cosmologies that involves the interaction with language resurgence for Anishinaabe and D/Lakota youth (Styres 2018). "Native Skywatchers" begins to teach youth through their understanding of the north direction "to learn about the natural world, identify patterns in nature and develop tools" (Lee and Rock 2013, 2). This includes seasons. For example, nape is the constellation that teaches about Dakota virtues of "generosity" and responsibilities to one another, which the "Chief failed to do for his people" and led to "consequences" of losing his hand (Lee and Rock 2013, 2). In the wintertime, "we still see [nape] annually in the stars" as a reminder of the roles and responsibilities we have towards one another (Lee and Rock 2013, 2). Nape is an example of "[o]ne of the most important underlying ideas in both Ojibwe and D(L)akota star knowledge" called kapemni (Lee and Rock 2013, 4; Lee 2016, 49). Lee (2016) explains that kapemni in Dakota iapi refers to mirroring of the "below and above" as described is two tipis "stacked vertically connected at their apexes" (49). The "below" or the "bottom tipi" refers to the earth world, and "above" or "top tipi" refers to the "sky, star, and spirit world" (Lee 2016, 49). D/Lakota and Anishinaabeg are "striv[ing]" every day to stand in between the "two tipis," which enables the ability to "honour and remember...our ways of knowing" (Lee 2016, 51).

Previously, I engaged with Fontaine and McCaskill (2022) and Walter and Andersen (2013) in order to "see through our own eyes" research methodologies through *Anishinaabemowin* (TallBear 2018; TenFingers 2005, s62). Robertson et al. (2004) practiced remembering of Lakota methodologies to create research evaluation frameworks, as research evaluation is a part of Indigenous research sovereignty but often overlooked unlike research methodologies (Johnson et al. 2023). Robertson et al. (2024) draw attention to lakol wichoni: "Lakota ways are a means of overcoming colonial oppression of the oyate" (499). This "Lakota approach to research and evaluation" is deployed on the basis of "nation-rebuilding...wopasi

[research] and tokata wasagle tunpi [evaluation]" in support of Lakota sovereignty (Robertson et al. 2004, 450 & 499). Using Lakol ipai, wopasi and tokata wasagle tunpi has led to remembering the methodology called tiyuwosla icupi ["raising a tipi"]; this act of "making a home" in Lakol wichoni transcends into "[a] community with which the famil[ies] share space and resource[s]" (Robertson et al. 2004, 506-507). When tiyuwosla icupi is in action, "famil[ial responsibilit[ies]" and all oyate obligations towards "…care . . . reverence . . . skill . . . teaching . . . patience . . . and knowledge," result in re-energizing the kinetic energy needed to fulfill the dream of oyate wolakota kagapi kte ["to build a peaceful nation"] and tiwahe oaye yuwosla icupi [to "bring[] up the family/home in a healthy way"] (Robertson et al. 2004, 506). *Remembering* is engaged in futurities and futurism as an act of nation-rebuilding in-practice by re-establishing kinship relationships beyond and outside of colonial boundaries.

Intimacy with spectrum consciousness

A common denominator embedded in the examples I have engaged above is the act of "ghosting ourselves into the future" as Joshua Whitehead (2022) writes in *Making Love with the Land* (37) by engagement in intergenerational knowledge mobilization across multi-generations for "collective capacity" to empower a kinetic energy flow towards "collective continuance" (Whyte 2017; TallBear 2018; Tuhiwai-Smith 2021; Iapi Debwewin Aansaamb 2024). As Little Bear had stated in the documentary *Singing Back the Buffalo* (2024): "[w]e still have the songs. We still tell the stories. We have the ceremonies. But there's no Buffalo to be seen." Then Little Bear explains that "[w]e need to bring that Buffalo back so that our young will make the connection so that when they share the songs, they'll know what they're singing about" (*Singing Back the Buffalo* 2024). I question what would happen when we practice *remembering* and re-making kin with electromagnetic spectrum in an equivalent way to "raising Buffalo consciousness" (Hubbard 2016). Blackwater et al. (2023) point out that Indigenous Peoples have "ceremonies, songs, and oral stories" of interacting and/or speaking of "rainbows, lightning, and sunlight [which] are all apart of spectrum" (12-13). This step towards *remembering* the existing relationship with spectrum is vital to the nation-rebuilding process as its element required to access digital infrastructures for data storage and communication across and beyond settler colonial boundaries.

For instance, in *Network Sovereignty: Building the Internet Access Indian Country* (2017) Marisa Duarte introduces Indigenous Peoples to the "language of information science and sociotechnical systems" while integrating "Indigenous thoughts...into the broad fields of science, technologies and societies studies" and sharing lessons learned (6-7). All five articles by McMahon et al. (2015) Toso and Forward (2023), Blackwater (2020), Blackwater et al. (2023), and Duarte (2017) agree that Indigenous Peoples have a collective ability to share our stories, "...our failures, our visions..." that support self-determination and assert Indigenous Peoples' rights to electromagnetic spectrum as being an essential tool to Indigenous data sovereignty and Indigenous research sovereignty movements (Duarte 2017, 7; Wemigwans 2018). An example of asserting relationality with spectrum can be found in McMahon et al. (2015) who detail how a partnership with the First Nations Education Council (FNEC) established "digital infrastructures and information community technologies [ICTs]" (1). This was done so Kahnawà:ke can assert self-determination and nation-rebuilding practices to "manage their own community data" in the areas of "research, education, finance, health, membership, housing, lands and resources" and more (McMahon et al. 2015, 1). McMahon et al.'s article walks through the process of Kahnawà:ke establishing their digital data management as it includes having access to "digital infrastructures" and "technical infrastructure includ[ing] physical networks, connectivity, devices and software and applications," which are vital to establishing Indigenous data and research sovereignty (2015, 8). Today, Kahnawà:ke have set up their own "secure network called Tewatati," which now utilizes "fiber optics" within their governance sectors (McMahon et al. 2015, 8).

The Eeyou Communications Network (ECN) is another example of Indigenous Peoples within Canada who asserted their rights to spectrum, as expanded upon in Tricia Toso and Scott Forward's "Dispatches from Eeyou Istchee: Cree Networks, Digital, and Social Inclusion" (2023). Toso and Forward (2023) explain that ECN is "a not-for-profit, Cree majority-owned fiber optic network" and outline the steps taken to assert their rights to "electromagnetic spectrum" (305). The authors explain that "[t]he Cree have a long tradition of managing the resources" (Toso and Forward 2023, 305). Furthermore, they refer Diné lawyer Darrah Blackwater's article, "Broadband Internet Access: A Solution to Tribal Economic Development Challenges," which explains that "spectrum as a natural resource...is...also [about] recognizing

Native Nations' inherent rights over that natural resource" (113). Blackwater (2020) also critiques settler state laws and regulations like Federal Communications Commission in order to provide historical context regarding broadband.

I argue that settler sanctioned data management policies and regulations must be dissected to understand how to assert Indigenous spectrum sovereignty. Currently, in Manitoba and across Canada, electromagnetic spectrum is being extracted from Indigenous lands by large telecommunication companies, which the Government of Canada and the Province of Manitoba's *Natural Resource Transfer Act* of 1930, allots without any duty to consult with Treaty One, Oceti Sakowin, Red River Métis Nation, and Indigenous Peoples more broadly. My wish is to conduct further research within Indigenous spectrum sovereignty discourse to showcase how Indigenous Peoples can use spectrum to mobilize themselves to assert their inherent right; especially since spectrum sovereignty is vital to the larger Indigenous data and research sovereignty movement. My future research plans include providing case study examples of the steps taken by Anishinaabeg and Dakota Oyate in Manitoba to assert their rights to spectrum and to demonstrate the infrastructures currently in place to assist the Indigenous data and research sovereignty movement (Daley 2021).

Re-visiting

Reflecting on the research methodology of raising a tipi shared by Robertson et al. (2004), I was reminded that Dakota women-carried "exclusive responsibility" of the tipis as they were the ones who "carefully set up and inspected their tipis" (Henderson 2023, 98, referencing Ella Deloria, *Dakota Grammer*). In *We Are the Stars: Colonizing and the Decolonizing the Oceti Sakowin Literary Tradition,* Lakota scholar Sarah Hernandez (2023) amplifies the role Oceti Sakowin women play in protecting our nationhood and our knowledge systems through "reminding" us of our relationality with the "land/star narratives" since time immemorial (xxiii). I am reminded of Indigenous women's roles because, throughout this thesis, I also saw a pattern of Indigenous women (Stephanie Russo Carroll, Ashley Hayward, Maggie Walters, Desi Lonebear-Rodriguez, Marie Battiste, Marlene Brant-Castellano, Marisa Duarte, Darrah Blackwater, Sarah Henderson, Aimée Craft, and Keely Ten Fingers) who have been leading the discourse and movement regarding Indigenous data, research, spectrum, and sovereignty.

Furthermore, Indigenous women have developed the "sub-fields of Indigenous Studies" like Indigenous Science, Technology, and Society [I-STS] (Kolopenuk 2020a, 140). Perspectives of women have yet to be transcribed within discussion of leading data, research, and spectrum sovereignty futurities, especially as they have been impacted by settler colonial futurities as "Indigenous gendered systems and feminized bodies have suffered particular kinds of erasure and violences in settler colonial contexts" (Goodyear-Kaʻo̱pua 2018, 86). Therefore, it is important that my research assumes a *remembering* approach to foster the historical contexts of research sovereignty discourse through amplifying Indigenous women's scholarship (Tuhiwai-Smith 2021). This is especially relevant as arguments made by Ten Fingers' (2020) focused on how current Indigenous research ethics lacks gender inclusivity, while indicating the need for a larger discussion of "relation-based approaches" to be applied when making and developing research ethics (95). Ten Fingers also links "relation-based approaches" with nation-specific visibility that can further the support toward Indigenous data and research sovereignty (95 & 97).

Chapter Summary

In conclusion, this chapter engages with the critical method of *remembering* to ensure that "our future are [not] colonized and claimed by colonial logics" (Goodyear-Kaʻo̱pua 2018, 90; Tuhiwai-Smith 2021). It emphasizes intergenerational knowledge mobilization to "ghost ourselves into the future" in order to refuse "settler futurities" that hijack Indigenous Peoples' futures (Goodyear-Kaʻo̱pua 2018, 90; Whitehead 2022). As Indigenous data and research sovereignty is central to the nation-rebuilding process, it therefore requires remembering "emplaced" methodologies, language, and diplomacy to ensures investment towards having agency in our own futurities (Whyte 2017; Styres 2018).

This chapter acts on r*emembering* through a language revitalization approach, as language empowers place-based and nation-specificities towards "[re-]making kin" with data, law making, science, and technologies to support Indigenous data and, research sovereignty movement (TallBear 2018; 2017; Lewis et al. 2018; Craft 2013; Lee et al. 2017; Simpson 2017). I provide context within this chapter on what spectrum sovereignty is and how it relates to Indigenous data and research sovereignty. In conclusion, I point towards existing settler

sanctioned policies in Canada that prevent Indigenous Peoples from asserting their rights and flag these for analysis within my future studies (Duarte 2017; Blackwater 2020).

Futurities

Truth-telling is a law of Anishinaabewin and Dakota wichoni. Truth-telling is also one of the rooted principles for diplomacy. This research was based on enacting the methodology of debwewin and owotanna wohdaka. As Sarah Ahmed (2021) expands in *Complaint!*, "[t]o deny something is to refuse to admit its truth. To complain is to admit the truth of violence. To complain is to let the ghost in" (308). I find this quote by Ahmed aligns with the previous chapter, where I shared various ways that Indigenous Peoples are collectively working towards "ghosting ourselves into the futures," as Joshua Whitehead writes in *Making Love with the Land* (2022, 37). Ahmed references to "A Glossary of Haunting" by Eve Tuck and C. Ree (2013) who says, "decolonization must mean attending to ghost, and arresting widespread denial of the violence done to them" (647).

Ahmed's concept of "let[ting] the ghost in" refers to my approach of attending to the spirit of treaty and inherent rights by conducting myself as a "insurgent research[er] [and] therefore embodies an ethical commitment to Indigenous communities, going well beyond university-based standards" (Gaudry 2011, 113). Going beyond university-based standards includes the embodiment of debwewin, and owotanna wohdaka, while acknowledging that there are "multiple truths," and that if "truth collectively resonates among a cluster of relations, then it must be true," which then generates kinetic energy (Kolopenuk 2020a, 8). These research findings comes from the generated kinetic energy from Indigenous scholars that come before me and in this chapter, I will provide a summary of the results, and discuss briefly how those results came to be, then conclude by sharing my hopes for my own futurities to continue to "let the ghosts in" (Ahmed 2021).

Wohdaka

The purpose of this research is to critique the University of Manitoba (U of M), as my literature review offers a critical analysis of U of M settler colonial research ecosystems and administrative modes of "settler governmentality" in order to subject Indigenous Peoples to be "data dependen[t]" on harmful and un-useful data (Carroll et al. 2019; Crosby and Monaghan 2018). Anishinaabeg legal scholar John Borrows (2017) provides rationale for why the U of M,

which is under the bi-lateral government structure with the Province of Manitoba, would be unwillingly to shift power dynamics as it would mean losing "benefit[s] from [I]ndigenous lands" but also research ecosystems (38).

I have been thinking through this term: *in-debt*, to configure how settler-states have "dishonor[ed] all that has already been taken for the benefit of others" as stated in "We Have 'Gifted' Enough: Indigenous Genomic Data Sovereignty in Precision Medicine" by Tsosie et al. 2021, 74). The concept of debt is aimed to restore what has been interrupted, while also taking into consideration the philosophy of reciprocity; which has been taken from a settler-based perspective and applied like other terms like: 'risk' and 'benefit' within research ecosystems without Indigenous Peoples' input. Even the term 'reciprocity' or "gifting dishonors all that has already been taken for the benefit of others" (Tsosie et al. 2021, 74). Being *in-debt* instead takes into consideration all the imbalances created by the settler state's benefit, yet this term cannot be re-defined like others. How debt is paid off could be defined but would require being in-relation with who the outstanding balance is with, in order to set the standard of what repayment looks like.

Therefore, I want to propose thinking through the idea of the U of M being *in-debt* to Treaty One, Oceti Sakowin, and Red River Métis Nation. My initial three questions for this research were intended to search for what the U of M has done to honour the original sharing agreement and what the U of M has done to advance Indigenous data sovereignty with inherent rights holders in Southern Manitoba. I searched through existing frameworks within U of M research ecosystems, in efforts to answer these questions and determine if the U of M has the capacity to be held accountable to follow the legal orders and agreements protected in and by Treaty One, Oceti Sakowin, and the Red River Métis Nation.

In summary, my results have found that the U of M has done nothing to honour this sharing agreement, specifically, regarding the advancement of Indigenous data sovereignty with inherent rights holders in Southern Manitoba. The current existing frameworks within the research ecosystems that are at play at the U of M are centred on "settler futurities" and based on "settler governmentality" through "collective continuance" tactics like "tokenized gestures" (Gaudry and Lorenz 2018), "cycle of cohesion" (Tsosie et al. 2021), "generalizing" Indigenous

Peoples (Carroll et al. 2024) and "data dependency" (Carroll et al. 2019; Crosby and Monoghan 2018; Whyte 2017). The U of M does have the potential to follow the legal orders and agreements protected in and by Treaty One, Oceti Sakowin, and the Red River Métis Nation, if they desired, although they do financially and socially profit from the current infrastructural mechanisms along with their external partners. During this research, I kept my mind and heart open to the reality that not everyone within the U of M is playing a role in maintaining settler security or "settler futurities." Therefore, in addition to my three research questions, I found the need to create a collective consciousness of whose futures we are invested in, as some people are unaware or ignorant of "their role within the greater mechanism of colonialism" (Duarte 2017, 22).

Wohdakapi

I conducted an environmental scan and critical analysis of settler-imposed policies in a place-based context, therefore referring to the U of M and its administrations' external influences, including the provincial and federal government, which impacts Indigenous data, and research sovereignty in *Possession*. In this chapter, I demonstrate how the U of M "shifts to innocence" by employing "Indigenous inclusionary policies" and selective vocabulary to avoid being held accountable to Treaty One, Oceti Sakowin, and Red River Métis Nation (Gaudry and Lorenz 2018; Tuck and Yang 2012). For example, the U of M's new strategic plans *Momentum: Leading Through Change (2024-2029)* and *Change Through Research*: *Strategic Research Plan (2024-2029)* suggests that the university is responding to "public pressure" (Tamtik 2024). At the same time, the U of M's land acknowledgement provides an "alibi for doing the hard work of learning" (CBC 2019), while overlooking the reality that the university main campuses infrastructures: Fort Garry, and Bannatyne, including Research Centers in southern Manitoba, are built from "discriminatory [by] design" policies that continue to dispossesses Treaty One, Oceti Sakowin and, Red River Métis (Murphy 2017).

Even though the *Where We Are Today* reports that feedback taken up to create the draft version of *Momentum* had called for "a strong desire to strengthen bonds of respect, trust, and shared benefit with" Treaty One, Oceti Sakowin, and the Red River Métis Nation, this feedback was ultimately dismissed within the finalized version of *Momentum* (University of Manitoba

2023c, 7). The U of M's *Momentum,* and draft of the *Truth and Reconciliation Framework* uses the values of mino-bimaadiziwin, yet efforts to remove Treaty, inherent rights, relation to place, and disengagement with more-than-human kin demonstrate mino-bimaadiziwin as a "tokenized gesture" to appear "innocent" (Tuck and Yang 2012; University of Manitoba 2024l; 2024g). Moreover, *Change Through Research* denotes that the entirety of the strategic plan is to use "Two Eyed-Seeing," which is disconnected from place and alignment with other U of M's strategies (University of Manitoba 2024e, 24). Additional "tokenized gestures" contributing to "inclusionary policies" includes the recommendation of adding three seats to U of M's research ethics boards that seats 22 members. Meanwhile, this is already a requirement under Tri-Council Policy Statement (TCPS2) (Tuck and Yang 2012; Gaudry and Lorenz 2018; University of Manitoba 2024f; University of Manitoba 2023b; TCPS2 2022). Furthermore, the recommendations made by the "Research that is Respectful of Indigenous People (RRIP)" committee does not actualizing systemic changes to U of M's infrastructures. Without systemic changes, this allows the Province of Manitoba to delegate harmful and extractive research that previously approved by the U of M's REB (Smylie and Philips-Beck 2019; CMJA 2024; Wall-Wieler et al. 2019; Manitoba Indigenous Tuberculous History Project n.d; University of Manitoba 2024j). Additional recommendations by RRIP do not support existing "epistemic infrastructure[s]" within Manitoba, that Treaty One and Dakota Oyate are a part of (Murphy 2019; University of Manitoba 2023c; Hayward et al., 2021).

The U of M's current research ecosystem remains untouched and maintains "possessive logics" to secure "settler governmentality" by actively overstepping Indigenous jurisdiction and by refusing to align with rights-based framework that affirms a "grounded normativity" approach, where the conditions of collective consent and consensus from Treaty One, Oceti Sakowin, and Red River Métis Nation would need to be met (Moreton-Robinson 2015; Crosby and Monoghan 2018; Coulthard and Simpson 2016). As stated in U of M's Community Engaged Learning Literature, doing "[t]he work before the work" requires taking the time for "developing literacy in Indigenous content, critical self-reflection, and building relationships with Indigenous [P]eople and community" (Ferland et al. 2022, 16). Demonstrating that the work has been done happens through the ability to "avoid pan-Indigenous approaches" by engaging place-based, "nation-and community specific literacy" (Ferland et al., 2022, 24). By having relationality

grounded "emplace" ensures that research ecosystems are responsive to local protocols, approaches, languages, and methods (Ball and Jaynst 2008; Filopoulos 2023, 75; William et al. 2020, 12-13; Coulthard and Simpson 2016; Carroll et al. 2023; Styres 2023). Therefore, the U of M applying pan-Indigenous approaches and not engaging with place within their strategic plans, demonstrates their incapability to follow the legal orders and agreements by Treaty One, Oceti Sakowin and Red River Métis Nation.

A path forward to keep the U of M accountable would involve evoking "power relations" to "generate a collective energy" while "researching back" the ongoing "settler governmentality" and examining the impact of colonialism to rediscover "ourselves" and strengthen "self-determination" (Tuhiwai-Smith 2021, 8; Crosby and Monoghan 2018; Kolopenuk 2020a). This includes enacting debwewin and owotanna wohdaka to those in positions of power, like the U of M's Senate and Board of Governors, alongside their financial parent, the Province of Manitoba. Additionally, the Lieutenant Governor of Manitoba has a duty to the *Canadian Constitution* including Treaty rights and inherent rights on behalf of the Crown and delegated in partnership with the Province of Manitoba, to appoint Indigenous members to the U of M's Board of Governors, see Figure 1, and Figure 3 (Manitoba L.G. 2025).

Although this may seem like "scratch[ing] the surface. That scratching is learning. We learn how structures stay up from how they are justified. Remember: the more we complain [or critique], the more they have to justify" (Ahmed 2021, 308). Through our collective power, "we are louder" and "I invite others [Red River Métis, Nakota, Lakota, and Ininiwak] to further apply… insights or knowledge gleaned from this research on their own nation-building exercise" (Ahmed 2021, 26; Baskatawang 2023, 14). By centering debwewin and owotanna wohdaka against "possessive logics" is "[t]he refusal of Indigenous [P]eople to disappear…[to] shake the foundations" of the university (Moreton-Robinson 2015; Ahmed 2021, 308).

Mi-'Futurities'

This research has empowered me into my own future. In relationality, I shared how my dibaajimowin has shaped my present and future. Even throughout writing this thesis, I drew upon my previous experience reading and hearing performative political speeches and policies. I tried

to push away my intuition of the knowingness of the unknown hidden agendas. Even before drafting my thesis proposal to my committee, I had encountered the following words relayed by my great grandfathers in *Remember This! Dakota Decolonization and the Eli Taylor Narrative* (2005): "when the stories are remembered and transmitted, past and future are intertwined as cultural memories are carried forward" (236). It reminded me that I am being guided through the kinetic energies synergized through modes of "kin-time-space," towards my present-day reality and what is yet to come (Harjo 2019).

Another instance shaping my future through dibaajimowin in the present moment is by being a concurrent student in the Department of Indigenous Studies as a Ph.D. and Masters' student. This is due to my own personal circumstances of being so-called-behind on finishing this thesis 'on-time.' This was delayed due to the various changes made to some of my chapters since last binaakwe-giizis. Prior to, I had finished spending long one-hundred and forty some days of working 14 hours plus, during the last onaabani-giizis until manoominike-giizis. I could have been finished 'on-time.' However, I realized that critiquing or making a "complaint" or 'researching back' in itself "…is not only exhausting; for many, it is terrifying" as Ahmed (2021) explains, because doing so you may be "positioned as a trespasser" (218).

I was grappling with this reality of what would come from sharing this truth once publicly posted on MSpace for the world to see. I gave myself more time, not only to have more in-depth understanding about the functions of the U of M, which I had already hypothesized through years of witnessing. I was also giving myself time to channel into my own *remembering* of my responsibilities and obligations to kin, which surpassed the feelings of the unknown and potentially being viewed as a "trespasser" to others (Ahmed 2021). By spending this extra time with my research, and centering my own "power relations," I was able to remind myself this thesis was made from love, and I hold gratitude to mitakuye oyasin for "[g]iving support to limit the damage caused by the [critique]," while making the unknown feeling less terrifying (Ahmed 2021, 219; Kolopenuk 2020a).

Although this thesis may feel like a "scratch[ing] the surface," I had decided that I wanted to expand this research into a dissertation (Ahmed 2021, 308). I do take into consideration that the future is unknown, especially when the U of M's implementation of the

strategic plans is from 2024 to 2029. Given the timeline, I have three winters to witness and observe to provide an update to you all on the U of M's future course of action. I am also taking into account how holding the U of M accountable may change through time. Therefore, in-action keeping this critique or "complaint" into the future, means to "come back to haunt institutions. It is a promise" (Ahmed 2021, 308).

This isn't a goodbye.

I look forward to when we can share again.

Giga-ganoonidim miinawaa!

Reference

Ace, Hope-Ann. 2021. “Treaties: The Symbiotic Connection between Land and Body Sovereignty, an Exploration into Re-Presencing Indigenous Epistemologies to Re-Story Sovereignty.” Master’s thesis, University of Manitoba. http://hdl.handle.net/1993/35813.

Ahmed, Sara. 2021. *Complaint!* Duke University Press.

Andersen, Chris. 2009. “Critical Indigenous Studies: From Difference to Density.” *Cultural Studies Review* 15 (2). https://doi.org/10.5130/csr.v15i2.2039

Andersen, Chris, and Jean M, O'Brien. 2017. *Sources and Methods in Indigenous Studies*. Routledge.

Andersen, Chris, and Chelsea Gabel. 2023. “Deciding in Relation with Community: An Indigenous Studies Critique of the Canadian Indigenous Methodologies Field.” In *Indigenous Research Design: Transnational Perspectives in Practice*, edited by Sumida Huaman, Elizabeth and Nathan D. Martin. Canadian Scholars.

Atwood, Sandra Bartlett, Ninna Piiksii (Chief Bird), Mike Bruised Head, et al. 2024. “Níksókowaawák as Axiom: The Indispensability of Comprehensive Relational Animacy in Blackfoot Ways of Knowing, Being, and Doing.” *Society & Natural Resources* 37 (5): 769–90. https://doi.org/10.1080/08941920.2023.2180696

Baker, Twyla. (@indigenia.bsky.social). 2024. “I don’t ‘walk in two worlds’ anymore, I don’t divide myself for anyone’s comfort. I walk on this land like I belong to Her.” Bluesky, November 13, 2024. https://bsky.app/profile/indigenia.bsky.social/post/3laur2ndpps2p

Ball, Jessica, and Pauline Janyst. 2008. “Enacting Research Ethics in Partnerships with Indigenous Communities in Canada: ‘Do It in a Good Way.’” *Journal of Empirical Research on Human Research Ethics* 3 (2).https://doi.org/10.1525/jer.2008.3.2.33.

Baskatawag, Leo. 2023. *Reclaiming Anishinaabe Law: Kinamaadiwin Inaakonigewin and the Treaty Right to Education.* University of Manitoba Press.

Battiste, Marie Ann, and James Youngblood Henderson. 2000. *Protecting Indigenous Knowledge and Heritage: A Global Challenge*. Purich Publ.

Battiste, Marie Ann, and James (Sa'ke'j) Youngblood Henderson. 2024. *Protecting Indigenous Knowledge and Heritage: A Canadian Obligation*. 2nd Ed. University of British Columbia Press.

Benjamin, Ruha. 2019. *Captivating Technology: Race, Carceral Technoscience, and Liberatory Imagination in Everyday Life*. Duke University Press.

Bharadwaj, Lalita. 2014. "A Framework for Building Research Partnerships with First Nations Communities." *Environmental Health Insights* 8 (January. https://doi.org/10.4137/EHI.S10869.

Blackwater, Darrah. 2020. "Broadband Internet Access: A Solution to Tribal Economic Development Challenges." *The Indigenous Peoples' Journal of Law, Culture & Resistance* 6 (1). https://doi.org/10.5070/P661051240.

Blackwater, Darrah, Ilia Murtazashvili, and Martin B. H. Weiss. 2023. "Spectrum Sovereignty on Tribal Lands: Assessing the Digital Reservations Act." *Journal of Information Policy* 13 (October). https://doi.org/10.5325/jinfopoli.13.2023.0008.

Brant-Castellano, Marlene. 2004. "Ethics of Aboriginal Research." *Journal Of Aboriginal Health* 1 (1). https://jps.library.utoronto.ca/index.php/ijih/issue/view/1922

Brant-Castellano, Marlene, and Jeff Reading. 2010. "Policy Writing as Dialogue: Drafting an Aboriginal Chapter for Canada's Tri-Council Policy Statement: Ethical Conduct Research Involving Humans." *International Indigenous Policy Journal* 1 (2). https://doi.org/10.18584/iipj.2010.1.2.1.

Borrows, John. 2017. "Canada's Colonial Constitution." In *The Rights Relationship: Reimagining the Implementation of Historical Treaties,* edited by John Borrows and Michael Coyle. University of Toronto Press.

Borrows, John and Michael Coyle. 2017. *The Right Relationship: Reimagining the Implementation of Historical Treaties.* University of Toronto Press.

CBC. 2019. "'I regret it': Hayden King on writing Ryerson University's territorial acknowledgement." CBC New. Accessed January 10, 2025.

https://www.cbc.ca/radio/unreserved/redrawing-the-lines-1.4973363/i-regret-it-hayden-king-on-writing-ryerson-university-s-territorial-acknowledgement-1.4973371

CMAJ (Canadian Medical Association Journal). 2024. "Truth, respect and recognition: addressing barriers to Indigenous maternity care: Responses Tab." https://www.cmaj.ca/content/191/8/E207/tab-e-letters

Carroll, Stephanie Russo, Desi Rodriguez-Lonebear, and Andrew Martinez. 2019. "Indigenous Data Governance: Strategies from United States Native Nations." *Data Science Journal* 18 (1): 31. https://doi.org/10.5334/dsj-2019-031.

Carroll, Stephanie Russo, Marisa Duarte, and Max Liboiron, 2024. "Indigenous Data Sovereignty." In *Keywords of the Datafied State* edited by Jenna Burrell, Ranjit Singh, and Patrick Davison. Data & Society. https://datasociety.net/library/keywords-of-the-datafied-state/

Cape Breton University. 2025. "Mi'kmaw Ethics Watch." Accessed January 10, 2025. https://www.cbu.ca/indigenous-initiatives/mikmaw-ethics-watch/

Castleden, Heather, Vanessa Sloan Morgan, and Christopher Lamb. 2012. "'I Spent the First Year Drinking Tea': Exploring Canadian University Researchers' Perspectives on Community-based Participatory Research Involving Indigenous Peoples." *Canadian Geographies / Géographies Canadiennes* 56 (2). https://doi.org/10.1111/j.1541-0064.2012.00432.x.

Craft, Aimée. 2013. *Breathing Life into Stone Fort Treaty: An Anishinaabe Understanding of Treaty One*. Purich Pub.

Crosby, Andrew, and Jeffrey Monaghan. 2018. *Policing Indigenous Movements: Dissent and the Security State.* Fernwood Publishing.

Crosby, Andrew, and Jeffrey Monaghan. 2021. "Settler Governmentality in Canada and the Algonquins of Barriere Lake." *Security Dialogue* 43 (5): 421-38. https://doi.org/10.1177/0967010612457972

Coulthard, Glen, and Leanne Betasamosake Simpson. 2016. "Grounded Normativity / Place-Based Solidarity." *American Quarterly* 68 (2). https://doi.org/10.1353/aq.2016.0038.

Dakota Ojibway Tribal Council. 2024. “History of DOTC.” Accessed February 26, 2024. https://www.dotc.mb.ca/history-of-dotc

Daley, Hannah. 2021. “Broadband blues: the UBF and its discontents.” Accessed February 26, 2024. https://www.thewirereport.ca/2021/09/03/broadband-blues-the-ubf-and-its-discontents/

Duarte, Marisa Elena. 2017. *Network Sovereignty: Building the Internet across Indian Country*. Indigenous Confluences. University of Washington.

Duarte, Marisa Elena, Morgan Vigil-Hayes, Sandra Littletree, and Mirand Belarde-Lewis. 2019. "’Of Course, Data Can Never Fully Represent Reality’: Assessing the Relationship between ‘Indigenous Data’ and ‘Indigenous Knowledge,’ ‘Traditional Ecological Knowledge,’ and ‘Traditional Knowledge.’" *Human Biology* 91 (3). https://muse.jhu.edu/article/757040

Episkenew, J. 2013. “Indigenizing university administration of Tawaw ci? (Take 2).”*Transforming the Academy: Essays on Indigenous Education, Knowledges and Relations, edited by Malinda S Smith*. University of Alberta. https://web.archive.org/web/20181025204157/https://www.ualberta.ca/-/media/D2916F31E07E43B5BFF8AF3FE2923920

Ferland, Nicki, Anny Chen and Gerardo Villagran Becerra. 2022. “Working in Good Ways: A framework and resource for Indigenous community engagement.” University of Manitoba: Community Engaged Learning. https://umanitoba.ca/sites/default/files/2021-05/practitioner-workbook.pdf

Filopoulos, Rebecca. 2023. “‘Ogitchidaa,’ An Indigenous Perspective on Research Sovereignty in Canada: Anishinaabe, Nēhinan (Cree), Saulteaux and Red River Métis Voices from Manitoba and Saskatchewan.” Masters’ thesis, University of Manitoba. http://hdl.handle.net/1993/37975

First Nations Information Governance Centre. 2016. “Pathways to First Nations’ Data and Information sovereignty.” In *Indigenous Data Sovereignty: Toward an Agenda 38.,*

edited by Tahu Kukutai and John Taylor. ANU Press. http://www.jstor.org/stable/j.ctt1q1crgf

Fontaine, Jerry, and Don N. McCaskill. 2022. *Di-Bayn-Di-Zi-Win (To Own Ourselves): Embodying Ojibway-Anishinaabe Ways.* Dundurn Press.

Forester, Brett. 2024. "Omission of reconciliation 'glaring' and 'alarming' in budget speech, First Nations leaders say." CBC: News. Accessed June 14, 2024. https://www.cbc.ca/news/indigenous/first-nations-budget-2024-reaction-1.7176748

Garba, Ibrahim, Rogena Sterling, Rebecca Plevel, et al. 2023. "Indigenous Peoples and Research: Self-Determination in Research Governance." *Frontiers in Research Metrics and Analytics* 8 (November). https://doi.org/10.3389/frma.2023.1272318.

Gaudry, Adam, and Danielle Lorenz. 2018. "Indigenization as Inclusion, Reconciliation, and Decolonization: Navigating the Different Visions for Indigenizing the Canadian Academy." *AlterNative: An International Journal of Indigenous Peoples* 14 (3). https://doi.org/10.1177/1177180118785382.

Gaudry, Adam. 2011. "Insurgent Research." *Wicazo Sa Review* 26 (1): 113-136. doi:10.1353/wic.2011.0006.

Gardiner Milln, Danielle. 2024. "Institutional Logics of Indigenization in Canadian Higher Education: The Role of Critical Policy Analysis as a Research Tool to Activate Social Change." *Journal of Culture and Values in Education* 7 (3): 61–75. https://doi.org/10.46303/jcve.2024.28.

Gazette. 2019. "Indigenization is Indigenous: Indigenous students, faculty and staff at Memorial share what is, and isn't Indigenization." *Memorial University Gazette*. Accessed January 10, 2025. https://gazette.mun.ca/campus-and-community/indigenization-is-indigenous/

George, Lily, Juan Tauri, and Lindsey Te Ata o Tu MacDonald. 2020. *Indigenous Research Ethics: Claiming Research Sovereignty Beyond Deficit and the Colonial Legacy*, 1st ed. (Advances in Research Ethics and Integrity, 6). Emerald Publishing Limited. https://doi.org/10.1108/S2398-6018202006

Global News. 2024. “University of Manitoba receives federal funding for biomedical research.” Accessed June 14, 2024. https://globalnews.ca/news/10533842/university-manitoba-feds-biomedical-funding/

Goodyear-Ka‘o̲pua, Noelani. 2018. “Indigenous Oceanic Futures.” In *Indigenous and Decolonizing Studies in Education* (1st ed). Routledge. https://doi.org/10.4324/9780429505010-6.

Government of Canada. 2019. “Towards Canada’s 2030 Agenda National Strategy. Accessed January 10, 2025. https://www.canada.ca/en/employment-social-development/programs/agenda-2030/national-strategy.html

Government of Canada. 2024a. Department of Finance: Federal Budget. Accessed June 14, 2024. https://budget.canada.ca/2024/home-accueil-en.html

Government of Canada. 2024b. “Canada apologizes to nine Dakota-Lakota First Nations communities for longstanding injustice.” Accessed on July 31st, 2024. https://www.canada.ca/en/crown-indigenous-relations-northern-affairs/news/2024/07/canada-apologizes-to-nine-dakota-lakota-first-nations-communities-for-longstanding-injustice.html

Government of Canada. 2023. *Setting New Directions to Support Indigenous Research and Research Training in Canada Strategy.* Accessed February 26, 2024. https://www.canada.ca/en/research-coordinating-committee/priorities/indigenous-research/strategic-plan-2019-2022.html

Harjo, Laura. 2019. *Spiral to the Stars: Mvskoke Tools of Futurity*. The University of Arizona Press.

Harvey, Caitlin. 2023. “University Land Grabs: Indigenous Dispossession and the Universities of Toronto and Manitoba.” *Canadian Historical Review* 104 (4). https://doi.org/10.3138/chr-2023-0004.

Hayward, Ashley, Erynee Sjoblom, Stephanie Sinclair, and Jamie Cidra. 2021. “A New Era of Indigenous Research: Community-Based Indigenous Research Ethics Protocols in

Canada." *Journal of Empirical Research on Human Research Ethics* 16 (4). https://doi.org/10.1177/15562646211023705.

Hernandez, Sarah. 2023. *We Are the Stars: Colonizing and Decolonizing the Oceti Sakowin Literary Tradition.* 1st ed. Toronto: University of Regina.

Hourie, Sarah. 2022. "Indigenous Achievement and Institutional Accountability: A Review of University of Manitoba's Procedural Environment." Master's thesis. University of Manitoba. http://hdl.handle.net/1993/36858

Hubbard, Tasha. 2016. "The Call of the Buffalo: Exploring Kinship with the Buffalo in Indigenous Creative Expression." Ph.D., diss. University of Calgary. http://hdl.handle.net/11023/3272

Hubbard, Tasha, George Hupka, Jason Ryle, Leroy Little Bear, dir. *Singing Back the Buffalo.* 2024; Montreal, Canada: Cinema Politica. Buffalo Song Productions, Canadian Broadcasting Corporation. Documentary Unit., Aboriginal Peoples Television Network., and film distributor Cinema Politica. Streaming media, 1:38. https://stream-mcintyre-ca.uml.idm.oclc.org/uofmb/title/28548

Hudson, Maui, Stephanie Russo Carroll, Jane Anderson, Darrah Blackwater, et al., 2023. "Indigenous Peoples' Rights in Data: a contribution toward Indigenous Research Sovereignty." *Frontiers in Research Metrics and Analytic (8).* https://doi.org/10.3389/frma.2023.1173805

Iapi Debwewin Aansaamb. 2025. "Iapi debwewin aansaamb: a guide to inter-Indigenous co-labbing" in *American Indian Culture and Research Journal* (48) 2.

Iapi Debwewin Aansaamb. 2024. "Pininawawe Pesim: Co-reading haunting registers across (and beyond) the Indigenous Plains" at Indigenous Literary Studies Association: Crossing Genres, Crossing Borders: Literature and Literacy Criticism at the Junctions, Winnipeg, Manitoba, May 15-18, 2024. https://www.indigenousliterarystudies.org/2024-schedule

Indigenous Contributions to the Manitoba Economy. 2019. Winnipeg, MB: Manitoba Keewatinowi Okimakanak Inc.

Johnson, Jay T, Joseph P Brewer II, Mellissa K Nelson. et al., 2023. “Indigenous Research Sovereignties: Sparking the Deeper Conversations We Need.” *Environment and Planning F* 2 (1–2). *Special Issue: Indigenous Research Sovereignty* https://doi.org/10.1177/26349825231163149.

Kolopenuk, Jessica. 2020a. "Miskâsowin: Indigenous Science, Technology, and Society" *Genealogy* 4 (1). https://doi.org/10.3390/genealogy4010021

Kolopenuk, Jessica. 2020b. “Power and Echoes: Colonial Relations of Re/iteration and their Genomic Indigeneities.” Ph.D. diss., University of Victoria. http://hdl.handle.net/1828/11540

Kukutai, Tahu and, John Taylor. 2016. *Indigenous Data Sovereignty: Toward an Agenda.* 38. ANU Press. http://www.jstor.org/stable/j.ctt1q1crgf

Lee, Annette S, William Wilson, Jeff Tibetts, et al., 2019. “Celestial Calendar-Paintings and Culture-Based Digital Storytelling: Cross-Cultural, Interdisciplinary, STEM/STEAM Resources for Authentic Astronomy Education Engagement.” *EPJ Web of Conferences* 200: 01002. https://doi.org/10.1051/epjconf/201920001002

Lee, Annette S. 2016. “Ojibwe Giizhiig Anung Masinaaigan and D(L)Akota Makoċe Wiċaŋḣpi Wowapi: Revitalization of Native American Star Knowledge, A Community Effort.” *Journal of Astronomy in Culture* (1): 1. https://escholarship.org/uc/item/58mf9pq.

Lee, Annette, and Jim Rock. 2013. “Native Skywatchers and the Makoçe Wicahpi Wowapi – D(L)Akota Star Map – Building Community Around Native Star Knowledge,” Astronomical Society of Pacific Conference Series, ASP.

Lewis, Jason Edward, Noelanie Artist, Archer Pechawis, Suzanne Kite. 2018. “Making Kin with the Machines.” *Journal of Design and Science*, July. https://doi.org/10.21428/bfafd97b.

Little Red Feather, Sarah. 2023. “The Sweet Corn Treaty by Inkpa Mani.” Accessed February 26, 2024. https://giiwedinong.org/artists/the-sweet-corn-treaty-by-inkpa-mani

Luby, Brittany, Samantha Mehltretter, Robert Flewelling, et al., 2021. “Beyond Institutional Ethics: Anishinaabe Worldviews and the Development of a Culturally Sensitive Field Protocol for Aquatic Plant Research.” *Water* 13, 709. https://doi.org/10.3390/w13050709.

Manitoba Indigenous Tuberculous History Project. N.d. “TB History.” University of Winnipeg: Kishaadigeh Collaborative Research Centre. Accessed June 14, 2024. https://indigenoustbhistory.ca/history

Manitoba L.G., 2025. “Roles and Responsibilites.” Accessed January 10, 2025. https://manitobalg.ca/role/

McCallum, Mary Jane Logan. 2017. “Laws, codes, and informal practices: Building ethical procedures for historical research with Indigenous medical records.” In *Sources and Methods in Indigenous Studies* edited by Chris Andersen, and Jean M, O’Brien. Routledge.

McMahon, Rob, Tim LaHache, and Tim Whiteduck. 2015. “Digital Data Management as Indigenous Resurgence in Kahnawà:ke.” *International Indigenous Policy Journal* 6 (3). https://doi.org/10.18584/iipj.2015.6.3.6.

Mehltretter, Samantha L. 2024. “Braiding Anishinaabe and Western Knowledge Systems to Inform Manomin Restoration on the Upper Winnipeg River.” Ph.D. diss. University of Guelph. http://hdl.handle.net/1828/11540

Mills, Aaron, Karen Drake, and Tanya Muthusamipillai. 2017. “An Anishinaabe Constitutional Order.” *Articles & Book Chapters 2695*. https://digitalcommons.osgoode.yorku.ca/scholarly_works/2695

Mi’kmaw Ethics Watch. 2023. “Eskinuapimk: Mi’kmaw Ethics Watch Toolkit.” Cape Breton University. Accessed January 10, 2025. https://www.cbu.ca/wp-content/uploads/2023/11/MEW-Toolkit_2023_Final.pdf

Monaghan, Jeffrey. 2013. “Settler Governmentality and Racializing Surveillance in Canada’s North-West.” *The Canadian Journal of Sociology / Cahiers Canadiens de Sociologie* 38 (4). http://www.jstor.org/stable/canajsocicahican.38.4.487

Moore, Carla, Heather E. Castleden, Susan Tirone, Debbie Martin. 2017. “Implementing the Tri-Council Policy on Ethical Research Involving Indigenous Peoples in Canada: So, How’s That Going in Mi’kma’ki?” *International Indigenous Policy Journal* 8 (2). https://doi.org/10.18584/iipj.2017.8.2.4.

Moreton-Robinson, Aileen. 2015. *The White Possessive: Property, Power, and Indigenous Sovereignty.* University of Minnesota Press. https://doi.org/10.5749/j.ctt155jmpf

Mosby, Ian. 2013. "Administering colonial science: Nutrition research and human biomedical experimentation in Aboriginal communities and residential schools, 1942-1952". *Histoire Sociale.* 46(91). https://doi.org/10.1353/his.2013.0015

Murphy, Michelle. 2017. *The Economization of Life*. Durham: Duke University Press.

Omani. Leo. 2010. "Perspectives of Saskatchewan Dakota/Lakota Elders on the Treaty Process in Saskatchewan." Ph.D: Dissertation. University of Saskatchewan. https://harvest.usask.ca/items/32fa3b49-9cb4-46b5-ade6-d4246b01d3a7.

Reo, Nicolas J. 2019. "Inawendiwin and Relational Accountability in Anishinaabeg Studies: The Crux of the Biscuit." *Journal of Ethnobiology* 39 (1). https://doi.org/10.2993/0278-0771-39.1.65

RITHIM (Research Improvements Through Harmonization in Manitoba). 2023. "Overview." Research Manitoba. Accessed June 14, 2024. https://www.rithim.ca/overview

Research Manitoba. 2024a. "About Us." Accessed June 14, 2024. https://researchmanitoba.ca/about/about-us/\

—. 2024b. "Board Members." Accessed June 14, 2024. https://researchmanitoba.ca/about/board-members/

—. 2024c. "Manitoba government announces increase to Research Manitoba in 2024 Budget." Accessed June 14, 2024. https://researchmanitoba.ca/manitoba-government-announces-increase-to-research-manitoba-in-2024-budget/

—. 2024d. "Provincial RITHIM Committee (PRC)." Accessed June 14, 2024. https://researchmanitoba.ca/about/provincial-rithim-committee/

Riley, Lorinda, Kristina Hulama, Ko'oelia Ka'eo, Genesia Paolo. 2023. "Wrangling the System: How Tenure Impacts Indigenous Research." *Environment and Planning F* 2 (1–2). Special Edition: Indigenous Research Sovereignty. https://doi.org/10.1177/26349825221142290.

Robertson, Paul, Miriam Jorgensen, and Carrie E. Garrow. 2004. "Indigenizing Evaluation Research: How Lakota Methodologies Are Helping 'Raise the Tipi' in the Oglala Sioux Nation." *The American Indian Quarterly* 28 (3). https://doi.org/10.1353/aiq.2004.0106.

Robinson, Dylan. 2020. *Hungry Listening: Resonant Theory for Indigenous Sound Studies*. Indigenous Americas. University of Minnesota Press.

Rodriguez-Lonebear, Desi. 2016. "Building a Data Revolution in Indian Country." In *Indigenous Data Sovereignty: Toward an Agenda (38).,* edited by Tahu Kukutai and John Taylor. ANU Press. http://www.jstor.org/stable/j.ctt1q1crgf

Rowe, Robyn K, Julie R. Bull, Jennifer D. Walker. 2020. "Indigenous Self-Determination and Data Governance in Canadian Policy Context." In *Indigenous Data Sovereignty and Policy*, 1st ed. edited by Maggie Walter, Tahu Kukutai, Stephanie Russo Carroll, Desi Rodriguez-Lonebear. Routledge. https://doi.org/10.4324/9780429273957

Paterson, Alexander Douglas. 2018. "Anishinaabeg Kinship Diplomacy and Animal Nations: A Critical Review of Political Leadership." Masters Thesis., University of Winnipeg. http://hdl.handle.net/10680/1505

Province of Manitoba. *The Heritage Act,* C.C.S.M.c.H39.

—. *The Sanatorium Board of Manitoba Act*. R.S.M. 1987, c. S12.

—. *The University of Manitoba Act*, C.C.S.M.c.U60.

Simpson, Audra. 2014. *Mohawk Interruptus: Political Life across the Borders of Settler States*. Duke University Press.

Simpson, Leanne Betasamosake. 2011. *Dancing on Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*. Arbeiter Ring Pub.

Simpson, Leanne Betasamosake and Edna Manitowabi. 2013. "Theorizing Resurgence from within Nishnaabeg Thought." In *Centering Anishinaabeg Studies: Understanding the World through Stories.* University of Manitoba Press.

Simpson, Leanne. 2017. *As We Have Always Done: Indigenous Freedom through Radical Resistance*. Indigenous Americas. University of Minnesota Press.

Sinclair, Stephanie. 2024. “Restoring First Nation Birth Knowledge and Practices and the Impact on Mental Wellness: Reclaiming Space.” Ph.D., diss., University of Manitoba. http://hdl.handle.net/1993/38157

Smylie, Janet, and Wanda Phillips-Beck. 2019. “Truth, Respect and Recognition: Addressing Barriers to Indigenous Maternity Care.” *Canadian Medical Association Journal* 191 (8). https://doi.org/10.1503/cmaj.190183.

Starkblanket Gina and Heidi Stark 2018. “Towards a Relational Paradigm – Four Point for Consideration: Knowledge, Gender, land and Modernity.” In *Resurgence and Reconciliation: Indigenous—Settler Relations and Earth Teachings* edited by Michael Asch, John Borrows, and James Tully. University of Toronto Press.

Stiegman, Martha L, and Heather Castleden. 2015. “Leashes and Lies: Navigating the Colonial Tensions of Institutional Ethics of Research Involving Indigenous Peoples in Canada.” *International Indigenous Policy Journal* 6 (3). https://doi.org/10.18584/iipj.2015.6.3.2

Styres, Sandra. 2018. “Literacies of Land.” In *Indigenous and Decolonizing Studies in Education: Mapping the Long View, 1st ed.,* edited by Linda Tuhiwai Smith, Eve Tuck, and K. Wayne Wang. Routledge. https://doi.org/10.4324/9780429505010-2.

Suina, Michele and Chosa, Carnell. T. 2020. “Growing Pueblo data sovereignty.” In *Indigenous Data Sovereignty and Policy*, 1st ed., edited by Maggie Walter, Tahu Kukutai, Stephanie Russo Carroll, and Desi Rodriguez-Lonebear. Routledge. https://doi.org/10.4324/9780429273957

TallBear, Kim. 2014. “Standing With and Speaking as Faith: A Feminist-Indigenous Approach to Inquiry.” *Journal of research practice* 10 (2). Retrieved from https://uml.idm.oclc.org/login?url=https://www.proquest.com/scholarly-journals/standing-with-speaking-as-faith-feminist/docview/2230947090/se-2

TallBear, Kim. 2017. “Beyond the Life/Not-Life Binary: A Feminist-Indigenous Reading of Cryopreservation, Interspecies Thinking, and the New Materialisms.” *Cryopolitics: Frozen Life in a Melting World*. MIT Press. http://www.jstor.org/stable/j.ctt1n2ttqh.13

TallBear, Kim. 2018. “Making Love and Relations Beyond Settler Sex and Family.” *Making Kin Not Population edited by Adele E. Clarke and Donna Haraway*. Prickly Paradigm Press.

Tamtik, Merli. 2024. “Indigenous Peoples and Higher Education Governance: Decolonizing the Ivory Tower.” *Higher Education Policy*, June. https://doi.org/10.1057/s41307-024-00361-4.

Ten Fingers, Keely. 2020. The Significance of a Relations-based Approach to Indigenous Research Ethics and Indigenous Data Sovereignty.” Master’s Thesis., University of Winnipeg. https://winnspace.uwinnipeg.ca/handle/10680/1885

Ten Fingers, Keely. 2005. “Rejecting, Revitalizing, and Reclaiming: First Nations Work to Set the Direction of Research and Policy Development.” *Canadian Journal of Public Health* 96 (S1). https://doi.org/10.1007/BF03405319.

The Global and Mail. 2024. Nova Scotia Mi’kmaq chief launches lawsuit alleging secret medical research. Accessed July 3, 2024. https://www.theglobeandmail.com/canada/article-mikmaq-lawsuit-secret-medical-research/

Toso, Tricia, and Scott Forward. 2023. “Dispatches From Eeyou Istchee: Cree Networks, Digital, and Social Inclusion.” *Social Inclusion* 11 (3). https://doi.org/10.17645/si.v11i3.6797.

Toso, Tricia. n.d. “Toward a reflective equilibrium: The colonial legacy and the role of reconciliation in telecommunications and broadcasting policy.” Communications Radio-Television and Communications Commission Prize for Excellence in Policy Research. Accessed February 26, 2024. https://crtc.gc.ca/eng/acrtc/prx/2020toso.htm

TCPS2 (Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans). 2014. Ottawa, Ontario: Secretariat on Responsible Conduct of Research. Accessed January 10, 2025. https://cdn.dal.ca/content/dam/dalhousie/pdf/sites/noveltechethics/nte_TCPS_2_2014.pdf

TCPS2 (Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans). 2022. Ottawa, Ontario: Secretariat on Responsible Conduct of Research. Accessed on June 14, 2024. https://ethics.gc.ca/eng/policy-politique_tcps2-eptc2_2022.html

Treaty One. 2021. “Hidden agenda, broken promises behind Treaty 1 signing.” Accessed on January 10, 2025. https://treaty1.ca/our-future-is-about-forgiveness-reconciliation/

Truth and Reconciliation Commission of Canada. 2015a. “Truth and Reconciliation Commission of Canada: Calls to Action,” Exhibits, accessed July 31, 2024. https://exhibits.library.utoronto.ca/items/show/2420.

Truth and Reconciliation Commission of Canada. 2015b. “What We Have Learned: Principles of Truth and Reconciliation.” Accessed July 31, 2024. https://nctr.ca/records/reports/

Tsosie, Krystal S, Joseph M. Yracheta, Jessica Kolopenuk, and Janis Geary. 2021. “We Have ‘Gifted’ Enough: Indigenous Genomic Data Sovereignty in Precision Medicine.” *The American Journal of Bioethics* 21 (4): 72–75. https://doi.org/10.1080/15265161.2021.1891347.

Tuck, Eve. 2009. “Suspending Damage: A Letter to Communities.” *Harvard Educations Review* 79(3): 409-428. https://doi-org.uml.idm.oclc.org/10.17763/haer.79.3.n0016675661t3n15

Tuck, Eve and K. Wayne Yang. 2012. “Decolonization is not a metaphor.” *Decolonization: Indigeneity, Education and Society* 1 (1): 1-40. https://jps.library.utoronto.ca/index.php/des/article/view/18630

Tuck, Eve and C. Ree. 2013. “A Glossary of Haunting.” In *Handbook of Autoethnography*, edited by Stacey Holman Jones, Tony E. Adams, and Carolyn Ellis. Left Cost Press, Inc.

Tuck, Eve, and Rubén A Gaztambide-Fernández. 2013. “Curriculum, Replacement, and Settler Futurity.” *Journal of Curriculum Theorizing* 29 (1). https://journal.jctonline.org/index.php/jct/article/view/411

Tuck, Eve, and Marcia McKenzie. 2015. “Relational Validity and the ‘Where’ of Inquiry: Place and Land in Qualitative Research.” *Qualitative Inquiry* 21 (7): 633–38. https://doi.org/10.1177/1077800414563809

Tuhiwai-Smith, Linda, Eve Tuck, and K. Wayne Yang. 2018. *Indigenous and Decolonizing Studies in Education: Mapping the Long View, 1st ed.,* Routledge. https://doi.org/10.4324/9780429505010

Tuhiwai-Smith, Linda. 2021. *Decolonizing Methodologies: Research and Indigenous Peoples*. Zed Books.

U15. n.d. "About Us." Accessed January 10, 2025. https://u15.ca/about-us/

UM News. 2024a. "UM ranks in top 1.4 percentile of world's leading universities, 11th in Canada: Center for World University Rankings" Accessed June 14, 2024. https://news.umanitoba.ca/um-ranks-in-top-1-4-percentile-of-worlds-leading-universities-11th-in-canada-center-for-world-university-rankings/#:~:text=The%20University%20of%20Manitoba%20has,universities%20of%2020%2C966%20institutions%20evaluated.

UM News. 2024b. "UM receives $57 million for vaccine and biomedical research and infrastructure" Accessed June 14, 2024. https://news.umanitoba.ca/um-receives-57-million-for-vaccine-and-biomedical-research-and-infrastructure/

University of Manitoba. 2024a. "2024 UM Annual Financial Report." Accessed November 10, 2024. https://umanitoba.ca/finance/

—. 2024b. "2024-2025 Budget Submissions." Accessed June 14, 2024. https://umanitoba.ca/finance/budgeting

—. 2024c. "Board of Governors." Accessed June 14, 2024. https://umanitoba.ca/governance/board-of-governors

—. 2024d. "Board of Governors Agendas." Accessed June 14, 2024. https://umanitoba.ca/governance/board-governors/agendas

—. 2024e. *Change Through Research*. (University of Manitoba Strategic Research Plan). Accessed June 14, 2024. https://umanitoba.ca/research/

—. 2024f. "Governing Documents: Research |Ethics of Research Involving Humans" Accessed June 14, 2024. https://umanitoba.ca/governance/governing-documents-research

—. 2024g. *Momentum: Leading Change Together* (University of Manitoba Strategic Plan 2024- 2029). Accessed June 14, 2024. https://umanitoba.ca/strategic-plan

—. 2024h. “Our Campuses.” Accessed June 14, 2024. https://www.umanitoba.ca/about-um/our- campuses

—. 2024i. “Research Data Management.” Accessed June 10, 2024.https://umanitoba.ca/research/research-data-management

—. 2024j. “Respectful Rematriation and Repatriation Ceremony at the University of Manitoba.” Recorded in YouTube on June 3, 2024. Accessed June 14, 2024. https://www.youtube.com/watch?v=6z-GSfZ5QPQ

—. 2024k. “Senate Meeting Minutes.” Accessed June 14, 2024. https://umanitoba.ca/governance/senate/minutes

—. 2024l. “Truth and Reconciliation Framework: Time for Action.” Accessed July 2024. https://umanitoba.ca/about-um/um-truth-and-reconciliation-framework

University of Manitoba. 2023a. Economic Impact Report. Accessed June 14, 2024. https://umanitoba.ca/about- um/economic-impact

—. 2023b. *Walking Together: Final Report on Indigenous Senior Leadership Projects.* Accessed June 14, 2024. https://news.umanitoba.ca/walking-together-2/

—. 2023c. *Where We Are Today.* (UM Strategic Plan: What We Heard in Community Consultations). Accessed June 14, 2024. https://news.umanitoba.ca/the-creation-of-ums-new-strategic-plan-where-we-are-today/

—. 2023d “Rethinking Indigenous Research at the University of Manitoba.” Accessed on July 31, 2024. https://umanitoba.ca/sites/default/files/2023-06/ISL6%20Indigenous%20Research%20Report.pdf?

University of Manitoba. 2019a. University of Manitoba Indigenous Senior Leadership: Report and Recommendations to the Provost and Vice-President (Academic).

University of Manitoba. 2019b. “Institutional Cost of Research: Recovery and Distribution.” Accessed November 10th, 2024. https://umanitoba.ca/governance/governing-documents-financial#institutional-costs-of-research-recovery-and-

distribution:~:text=Institutional%20Costs%20of%20Research%3A%20Recovery%20and%20Distribution%20Policy

University of Manitoba. 2016. "Cultural Landscape of the Fort Garry Campus: Landform, Use, and Occupancy Prior to 1900." University of Manitoba: Campus Planning Office. Accessed June 14, 2024. https://umanitoba.ca/facilities/campus-planning-office#indigenous-planning-and-design

University of Toronto. 2023. U of T to cover tuition for students from nine First Nations communities. Accessed July 31, 2024. https://www.utoronto.ca/news/u-t-cover-tuition-students-nine-first-nations-communities

Voth, Daniel. 2020. "Invitations from the Land and Waters." *Canadian Journal of Urban Research*. 29 (1). https://www.jstor.org/stable/10.2307/26929899

Walter, Maggie and, Chris Andersen. 2013. *Indigenous Statistics: A Quantitative Research Methodology*, 1st ed. Routledge. https://doi-org.uml.idm.oclc.org/10.4324/9781315426570

Walter, Maggie and, Stephanie Russo Carroll. 2020. "Indigenous Data Sovereignty, governance and the link to Indigenous Policy." In *Indigenous Data Sovereignty and Policy*, 1st ed., edited by Maggie Walter, Tahu Kukutai, Stephanie Russo Carroll, Desi Rodriguez-Lonebear. Routledge. https://doi.org/10.4324/9780429273957

Walter, Maggie, Tahu Kukutai, Stephanie Russo Carroll, Desi Rodriguez-Lonebear. 2020. *Indigenous Data Sovereignty and Policy*, 1st ed. Routledge. https://doi-org.uml.idm.oclc.org/10.4324/9780429273957

Watts, Vanessa. 2013. "Indigenous Place-Thought & Agency amongst Humans and Non-Humans (First Woman and Sky Woman Go on a European World Tour!)." *Decolonization: Indigeneity, Education, & Society* 2 (1): 20-34. https://jps.library.utoronto.ca/index.php/des/article/view/19145

Watts, Vanessa. 2016. "SMUDGE THIS: ASSIMILATION, STATE-FAVOURED COMMUNITIES AND THE DENIAL OF INDIGENOUS SPIRITUAL LIVES."

International Journal of Child, Youth and Family Studies 7 (1). https://doi.org/10.18357/ijcyfs.71201615676.

Wemigwans, Jennifer. 2018. *A Digital Bundle: Protecting and Promoting Indigenous Knowledge Online*. University of Regina Press.

West, Kiri, Maui Hudson, and Tahu Kukutai. 2020. "Data ethics and data governance from a Māori world view." In *Indigenous Research Ethics: Claiming Research Sovereignty Beyond Deficit and the Colonial Legacy*, 1st ed., edited by Lily George, Juan Tauri, Lindsey Te Ata o Tu MacDonald. (Advances in Research Ethics and Integrity, 6). Emerald Publishing Limited. https://doi.org/10.1108/S2398-6018202006

Whitehead, Joshua. 2022. *Making Love with The Land.* University of Minnesota Press, 2022.

Whyte, Kyle P. 2017. "Food Sovereignty, Justice, and Indigenous Peoples: An Essay on Settler Colonialism and Collective Continuance" *Oxford Handbook on Food Ethics* ed., by A. Barnhill, T. Doggett, and A. Egan. Oxford University Press. SSRN: https://ssrn.com/abstract=2925285

Wolfe, Patrick. 2006. "Settler Colonialism and the Elimination of the Native." *Journal of Genocide Research* 8 (4). https://doi.org/10.1080/14623520601056240

Wildcat, Matt, and Daniel Voth. 2023. "Indigenous Relationality: Definitions and Methods." *AlterNative: An International Journal of Indigenous Peoples* 19 (2). https://doi.org/10.1177/11771801231168380.

Wildcat, Matthew Caldwell. 2020. "Weaving Our Authority Together: Transforming the Prairie Indigenous Political Order." Ph.D. diss.,The University Of British Columbia. https://dx.doi.org/10.14288/1.0390914

Williams, Keith J., Umar Umangay, and Suzanne Brant. 2020. "Advancing Indigenous Research Sovereignty: Public Administration Trends and the Opportunity for Meaningful Conversations in Canadian Research Governance." *International Indigenous Policy Journal* 11 (1). https://doi.org/10.18584/iipj.2020.11.1.10237

Willmott, Kyle. 2023. "Colonial Numbers: Quantification, Indigeneity, and the Politics of Fiscal Surveillance." *Surveillance & Society* 21 (1). https://doi.org/10.24908/ss.v21i1.14609.

Wilson, Angela Cavender, and Eli Taylor. 2005. *Remember This! Dakota Decolonization and the Eli Taylor Narratives*. Contemporary Indigenous Issues. University of Nebraska Press.

Wiwchar, David. 2013. "Genetic Researcher Uses Nuu-chah-nulth Blood for Unapproved Studies in Genetic Anthropology." *Ha-Shilth-Sa.* https://hashilthsa.com/news/2013-07-22/genetic-researcher-uses-nuu-chah-nulth-blood-unapproved-studies-genetic#:~:text=Subscribe-,Genetic%20researcher%20uses%20Nuu%2Dchah%2Dnulth%20blood%20for,unapproved%20studies%20in%20Genetic%20Anthropology&text=For%20the%20hundreds%20of%20Nuu,like%20a%20beacon%20of%20hope.